■ 論　　文

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MOTIVATION OF SPORTS EVENT PARTICIPANTS IN TOURIST AREAS

− Survey of the Chura Shima Okinawa Century Run 2011 −

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Abstract

The objective of this study was to understand motive and constraints among sports event participants in tourist areas. We conducted a questionnaire survey of road racing cyclists in the Chura Shima Okinawa Century Run 2011. Multiple regression analysis of the impact of sports participation motive, tourism motive, and constraints on participation satisfaction and intent to participate again indicated that interest in cycling, a subfactor of sports participation motive, is related to participation satisfaction. A separate multiple regression analysis showed that intent to participate again is positively impacted by sense of release and stimulation, both sports participation subfactors, and negatively impacted by disinterest of close relations / low appeal as resort destination, a constraint subfactor. These results suggest that intent to repeat participation may increase with the atypical experience of participating in a cycling tour in a resort area, but tend to decrease with disinterest among close relations and lack of appeal as a resort destination.

Introduction

With the popularity of major sports events like the Olympics abroad and civic marathons held here in Japan, there has been increasing interest in travel for the purpose of sports participation and spectatorship. While research on this specific

kind of travel behavior has relied on the concepts, definitions, and frameworks that have been amassed in general tourism and travel studies, a new genre of sports tourism has also emerged (Harada, 2009; Hinch & Higham, 2001; Kudo & Nogawa, 2002; Kurtzman & Zauhar, 2003; Ninomiya, 2009). As part of a series of legislation aimed at boosting tourism in Japan, the Japan Tourism Agency has drawn up a basic policy specifically for the promotion of sports tourism. The objective in combing sports with tourism is to create new appeal in travel, to actualize Japan's diversity of regional tourism resources, and to revitalize inbound travel and domestic tourism, and by purposely merging the two together, to present a clear reason to travel to specific locations and encourage a new sense of value and emotion while promoting new business and the environment (Sports Tourism Promotion Conference, 2011).

Literature review

Although there have been various definitions of sports tourism (e.g. Hinch & Higham, 2001; Nogawa & Kudo, 1998), two common points stand out: travel for the primary purpose of observing or participating in sports events and travel outside of the sphere of daily life (Kudo & Nogawa, 2002).

One of the approaches to the study of travel motive among tourists draws on Crompton's (1979) theoretical conceptualization of push and pull factors, the former consisting of escape from routine, exploration, self-evaluation, relaxation, prestige, regression, enhancement of relationships, and social interaction, and the latter consisting of novelty and education. In subsequent empirical studies, Kozak (2002), for example, found that travel motive differs depending on tourist nationality and destination. Pearce and Lee (2005) proposed that travel motive is composed of the 14 factors of novelty, escape/relaxation, relationship enhancement, autonomy, nature, self-development (involvement in the local site), stimulation, self-enhancement (personal enlightenment), relationships (sense of security), self-actualization, isolation, nostalgia, romance, and recognition, and that tourists with little travel experience tend to emphasize stimulation, self-development, self-actualization, sense of security, nostalgia, romance, and recognition while tourists with more extensive travel experience tend to emphasize self-development through involvement in the local destination and exploration of nature. In Japan, Hayashi and Fujiwara (2008) presented a 7-factor construct for Japanese tourists abroad (stimulation, cultural experience, local exchange, health recovery, nature experience, unexpectability, and

self-expansion) and found that motive shifted with age from a desire for novelty to a desire for authenticity.

The subject of psychological studies related to motive in sports tourism fall into two main categories—as discussed by Sato (2009) —tourists who participate in sports events as spectators, and tourists who engage in leisure and recreational sport activities themselves. There have been a number of studies related to sport watching motivation. For example, Pritchard, Funk, and Alexandris (2009) surveyed people listed on Major League baseball mailing lists and found that spectator motivation had a direct impact on watching games at the ballpark and an indirect impact through consumption of baseball related media information. Mahony, Nakazawa, Funk, James and Gladden (2002) found that spectator motivation among Japan-League professional soccer fans consisted of the 7 factors of vicarious achievement, drama, community pride, attachment to players, attachment to soccer, attachment to team, and aesthetics. Petrick and other researchers have proposed a psychological model based on a number of surveys of golf travelers and Caribbean cruise tourists in which the factors of satisfaction level and previous travel to the destination have a direct impact on intent to revisit, and influence intent to revisit even when mediated by perceived value (overall evaluation of the usefulness of the experience based on the perception of what is gained and what is paid)(Petrick, 2004a, 2004b; Petrick & Backman, 2002; Petrick, Morais & Norman, 2001).

Research on sports tourists who engage in leisure and recreational activities themselves suggest that satisfaction and intent to revisit are often the goals established as dependent variables and explanatory variables are used to uncover these dependent variables (Sato, 2009). Specifically, Nogawa (1992) conducted an empirical study of Japanese sports tourism in the case of the Honolulu Marathon and found that participants tended to emphasize enjoyment over competition, and that among the first time participant majority, a strong intent to participate again was not reflected in actual behavior. Sato, Harada and Onishi (2009) studied the mechanisms behind intent to revisit among sports excursionists (day trippers) and sports tourists (overnighters or travelers staying for 24 hours or more) in the Niseko area of Hokkaido and found that perceived value—the overall evaluation of the product usefulness based on perceptions of what is spent and gained—had no influence on intent to revist among sports excursionists but had a positive impact on sport tourists, intent to revisit was not influenced by. Outside of Japan, Funk and Bruun (2007) and Funk, Toohey and Bruun (2007) surveyed participants in the Gold Coast Airport

Marathon and concluded that participation in international sports events is affected by previous sports involvement, destination image and travel motivation. McGehee, Yoon and Cardenas (2003) surveyed running club members and found that a high level of involvement in running increased participation in overnight road races and more running related spending.

While there is thus a fair amount of research on motivation in sport spectatorship and sport participation tourism, oftentimes people may be unable to travel despite having strong motivation due to financial burden or difficulty securing time off from work. That is, leisure must be approached as a product of the interactive decision making process between participation motive and constraints (Crawford & Godbey, 1987; Crawford, Jackson & Godbey, 1991; Jackson, Crawford & Godbey, 1993; Hayashi, 2011). Crawford and Godbey (1987) present a hierarchical model of intrapersonal, interpersonal, and structural constraints that interplay in the decision making process attached to leisure participation (Crawford et al., 1991). In empirical studies, Trail, Robinson and Kim (2008) conducted confirmatory factor analysis of college student data and concluded that structural constraints on watching college football could be divided into six factors related to the stadium (kiosks, toilets, seats, cleanliness, staff professionalism, parking) and nine other factors (alternative sports entertainment, games on radio and television, alternative leisure activities, weather, social commitments, stadium location, lack of team success, work and school commitments). They also found that men went to the stadium less if they had other sports event options and if the team was performing poorly and that women went to the stadium less in the case of bad weather. Kim and Trail (2010) differentiated between internal and external motivation and constraints in their survey of women's professional basketball spectators and found that the internal motivation of team attachment, internal constraint of lack of team success and external constraint of alternative leisure most explained stadium spectatorship (Kim & Trail, 2010). In another study, Kim and Chalip (2004) surveyed members of American soccer clubs about interest in the World Cup to be held in Korea and intent to watch the games on site. They found that financial constraints did not impact intent to watch games on site and that a desire to learn about the host country influenced interest in the event and intent to watch games. In a survey of registrants of the Japan Rugby Football Union Member's Club, Nishio (2011) referenced questionnaire items concerning constraints used by Trail, et al. (2008) and conducted factor analysis of data from people who had not attended a Rugby World Cup in the past but were considering

it in the future. He found 7 constraint factors: companions, cultural differences/ distance, uncertainty, alternative leisure, safety, the state of the sport, and financial issues. Further, although not specifically concerned with sport tourists, Huang and Hsu (2009) employed a structural equation model to consider comprehensively how motivation among Chinese tourists to visit Hong Kong from mainland China, past experience, and constraints affected attitudes and intentions about visiting Hong Kong again. The three factors of novelty, relaxation, and satisfaction influenced intent to revisit, mediated by attitudes about visiting again, and past visits had a positive direct effect while disinterest had a negative direct effect on intent to revisit.

Having spun out from developments in travel and tourism studies, the field of sports tourism is still in the early stages worldwide, and the only literature that relates specifically to Japan are those few examples we have already introduced here. It is meaningful to continue with psychological approaches to both tourism and sports in considering the motivations of sports event participants. Especially for sports events hosted in tourist areas, it is clear that motivation is a matter not only of participation in the event itself but also a matter of travel motive. It is still unclear, however, how these are related and how they are impacted by constraints. Research on Japanese subjects specifically includes studies on the Honolulu marathon by Nishio, Okamoto and Ishimori (2013). They used a structural equation model to determine the influence of sports participation motive, tourism motive, and constraints on participation satisfaction and intent to participate again in the Honolulu Marathon and found that for sports participation motive subfactors interest in the event had a large positive impact on participation satisfaction and intent to participate again, and that for constraints subfactors, lack of sightseeing information lowered satisfaction level while lack of event information lowered intent to revisit. What makes this study especially informative is the inclusion of participation motive, travel motive, and constraints together. The Honolulu Marathon, however, is an established event with special brand value and a large number of Japanese participants, and the subjects in this study were limited to participants who traveled to Hawaii as part of packaged tours. In this study, we have selected Okinawa as one of Japan's prime tourist destinations to investigate sports participation motive, travel motive, and participation constraints among cyclists in the second Chura Shima Okinawa Century Run 2011 (the"Century Run") and to determine how these factors affect satisfaction with participation and the intent to participate again. Our intention is to contribute meaningful data to the field of sports tourism.

Methodology

The Century Run

The Century Run is a new cycling road race that was held for the first time in January 2010. It is sponsored by the Chura Shima Okinawa Century Run Executive Committee and co-sponsored by Okinawa prefecture and the Okinawa Convention & Visitors Bureau. There are a number of courses ranging from 50km for beginners to 160km for advanced cyclists, with all races ending within the day. We chose to study the Century Run rather than the more established Tour de Okinawa, which has been held every November since 1989, because of our interest in the psychological motives of sports event participation among people who are not necessarily competitively oriented.

Study period and procedure

This study was conducted with the support of the main sponsor on site at the Century Run held on January 15, 2011. We solicited voluntary participation in our survey after each race. Individuals who agreed to participate were given a questionnaire to complete on the spot.

Survey respondents

We collected responses from 199 people (168 men, 31 women), or 13.6% of the 1,461 cyclists who participated and were residents of Japan. 5.0% of the respondents were under 20 years old, 10.1% were in their 20s, 39.2% were in their 30s, 28.6% were in their 40s, 12.6% were in their 50s, and 4.5% were in their 60s. 89 people were residents of Okinawa and 110 were residents of other prefectures.

Questionnaire

The first 30 questionnaire items were related to demographic factors such as sex, age, place of residence, and competitive cycling history. The next 25 items measured motivation to participate in a cycling race and were based on items used by Funk & Bruun (2007) and Funk, et al. (2007) to determine motive in sports participation. Motive to travel to Okinawa was measured next (limited to non-residents) with 27 items drawn from Funk, et al. (2007) on motive to travel, Hayashi and Fujiwara (2008) on motive to travel abroad, Lee and Crompton (1992) on travel for novelty and exploration, Pearce (2005) on motive to travel, and Sasaki (2005) on motive to

travel. We added items related to shopping and dining to tailor to Japanese tourist traits. Both sports participation motive and travel motive were measured on a 7-point scale ranging from 1. "Totally disagree" to 7. "Very much an issue." We also used a 7-point scale from 1. "Not at all an issue" to 7. "Very much an issue" for 26 items pertaining to constraints based on Trail et al. (2008) and a 7-point scale from 1. "Very unsatisfied" to 7. "Very satisfied" for 3 items related to level of satisfaction with participation in the event (overall event management, cycling participation and support, and sightseeing and lodging in Okinawa). Likewise, we used a 7-point scale for 3 items on intent to participate again in the Century Run ("I would participate in the Century Run in the future," "I would choose Okinawa over other cycling event venues," and "I would choose participation in the Century Run over other travel"), 1 item on intent to visit Okinawa again ("I would choose Okinawa over other travel destinations"), and 1 item on intent to participate in cycling events in other regions in Japan ("Sado Long Ride and other domestic cycling events").

Results

Competitive cycling history and races entered by event participants

25.9% of the respondents had a competitive cycling history of less than one year, 31.2% had one to three years, 19.4% had three to five years, and 23.6% had five years or more. More than half could thus be considered beginners with less than three years of competitive cycling experience. 26.4% of non-residents and 47.1% of residents had not participated in a race before. 28.6% of non-residents and only 7.1% of residents had participated in five or more past races. In other words, residents made up a high proportion of beginner level participants.

Among residents, 63.3% participated in the intermediate level 100 km course while only 11.4% competed in the advanced level 160 km course. Among non-residents, 49.5% participated in the 100 km course and 30.1% competed in the 160 km race.

Results of factor analysis

Exploratory factor analysis (maximum likelihood/promax rotation) of the 25 items for sports participation motive resulted in four factors with eigenvalues of 1 and above. We removed four of the 25 items that had low communality or had high loading on two or more factors and then conducted a second exploratory factor

analysis using the same method on the remaining 21 items. We extracted four factors with eigenvalues of 1 or above (Table 1).

We named the first factor *sense of release & stimulation* for the 8 items such as "I want a change in life" and "I need a sense of release from my daily routine" that were related to a desire to experience release or stimulation apart from daily routine. The second factor was *interest in cycling* for the six items such as "I am interested in cycling" and "I have a strong interest in cycling" that indicated favorable attitudes. We called the third factor *preference for cycling* for the 4 items including "I would have regrets if I did not participate" and "cycling has more value than other leisure activities" that indicate a preference for cycling over other leisure pursuits. The fourth factor was *shared experience* for the three items such as "I want to share a sense of joy with other participants" and "I want to share a sense of accomplishment with other participants" that relate to sharing a common experience of joy and accomplishment with other participants and supporters.

Table1. Results of factor analysis for sports participation motive (maximum likelihood, promax rotation)

Factors(α) and items	1	2	3	4	*Mean*	*SD*
sense of release & stimulation(α=.931)						
I need a sense of release from my daily routine	**1.066**	.060	−.121	−.221	5.54	1.23
I want a change in life	**.962**	−.003	−.079	−.074	5.40	1.35
I want to take a bike ride in a different setting	**.854**	.081	−.203	−.023	5.63	1.28
I want to find a new sel through cycling	**.740**	−.143	.095	.161	5.22	1.34
I want to enjoy a feeling of accomplishment though cycling	**.583**	.097	.168	.034	5.89	1.01
I want to fell pride of myself thorugh cycling	**.577**	−.145	.258	.141	5.36	1.35
I want to be stimulated by cycling	**.575**	−.026	.190	.157	5.47	1.24
I want to create a sense of contentment through cycling	**.469**	.047	.272	.024	5.38	1.33
Interst in Cycling(α=.935)						
I am interested in cycling	.073	**1.035**	−.133	−.031	5.91	1.00
Cycling is attractive	−.034	**.994**	−.018	−.006	5.85	1.05
I like cycling	.039	**.904**	−.005	−.055	5.91	1.05
Cycling has significant value	−.143	**.718**	.182	.163	5.68	1.06
I have a strong interest in cycling	−.003	**.613**	.262	.013	5.66	1.03
I want to enjoy cycling	.259	**.387**	−.079	.234	6.01	0.82
preference for cycling(α=.853)						
I would have regrets if I did not participate in cycling	−.066	−.129	**.987**	−.018	4.81	1.38
Cycling is important	.061	.125	**.795**	−.121	5.20	1.21
Cycling has more value than other leisure activities	−.030	.131	**.756**	−.121	5.53	1.16
I want to parrticipate in cycling with the stakes raised	.002	.250	**.543**	.062	4.98	1.34
shared experience(α=.851)						
I want to share a sense of joy with other participants	−.137	.037	−.080	**1.019**	5.79	1.05
I want to share a sense of joy with supporters	.046	.036	−.127	**.879**	5.63	1.07
I want to share a sense of accomplishment with other participants	.266	−.050	.115	**.534**	5.58	1.24
factor correlation 1	—					
2	.450	—				
3	.647	.602	—			
4	.623	.494	.599	—		

We next conducted factor analysis (maximum likelihood/promax rotation) on the 27 travel motive items. We extracted six factors with eigenvalues of 1 or greater.

After eliminating one of the 27 items for low communality, we again conducted factor analysis on the remaining 26 items using the same method. Six factors with eigenvalues of 1 and above were extracted (Table 2). We named the first factor *escape from routine* for the 7 items such as "I want to experience something new in Okinawa" and "I want to escape from daily routine" that indicate a desire to get away from daily life and relax by traveling to Okinawa. The second factor was cultural study for the 4 items such as "I want to learn about Okinawan music and art" and "I want to learn about Okinawan culture" that are related to a desire for cultural learning. The third factor was *environmental & cultural enjoyment* for 5 high loaded items including "I want to enjoy Okinawa's food culture" and "I want to experience a different culture in Okinawa" that centered on enjoyment of cultural life in Okinawa. The fourth factor was *shopping* for the 3 items such as "I want to enjoy shopping in Okinawa" and "I want to buy local gifts in Okinawa" that were related to consumer objectives. The fifth factor was *personal growth* for the 4 items including "I want an opportunity to change my outlook on life" and "I want to experience personal development" that were related to personal growth through travel. The sixth factor was *family & friends* for the 3 items such as "I want to relax in Okinawa with family and friends" and "I want to have a good time in Okinawa with family and friends" that indicated a desire to interact with and enhance relationships with friends and family.

Table2. Results of factor analysis for travel motive (maximum likelihood/promax rotation)

Factors(α) and items	1	2	3	4	5	6	*Mean*	*SD*
escape from routine(α=.934)								
I want to change daily routine	**.937**	−.069	−.070	.080	.007	−.044	5.61	1.13
I want to experience something new in Okinawa	**.892**	−.106	.133	.178	−.101	−.106	5.87	1.07
I want to have exiting trip in Okinawa	**.890**	.252	−.157	−.035	.067	−.093	5.40	1.27
I want to relax phisically	**.880**	.060	−.134	.140	−.051	−.038	5.44	1.23
I want to escape from daily routine	**.851**	−.165	.130	−.014	−.065	.071	5.66	1.19
I want to relax mentally	**.766**	−.122	.147	−.121	.027	.059	5.72	1.15
I want to meet new people in Okinawa	**.633**	.283	−.035	−.194	.175	−.064	5.26	1.32
cultural study(α=.924)								
I want to learn about Okinawan music and art	−.036	**1.052**	−.005	.023	−.144	−.026	4.57	1.41
I want to visit museum in Okinawa	−.084	**.972**	.056	−.036	−.112	.005	4.68	1.40
I want to learn about Okinawan culture	.139	**.856**	−.066	.071	−.111	.108	4.99	1.30
I want to learn how to cook local foods in Okinawa	−.188	**.483**	.371	.167	.267	−.165	4.82	1.35
environmental & cultural enjoyment for(α=.892)								
I want to enjoy Okinawa's food culture	−.044	.146	**1.022**	.034	−.085	−.135	5.76	1.05
I want to enjoy local food in Okinawa	.016	−.036	**.981**	.076	.004	−.048	5.81	1.04
I want to experience a different culture in Okinawa	.143	.123	**.402**	−.101	.160	.257	5.72	0.97
I want to enjoy nature in Okinawa	.247	−.139	**.391**	.001	.021	.303	6.03	0.84
I want to enjoy subtropical climate in Okinawa	.184	.050	**.347**	−.076	−.013	.176	5.71	1.09
shopping(α=.859)								
I want to enjoy shopping in Okinawa	.076	.039	.054	**.806**	.100	.024	4.78	1.33
I want to enjoy window-shopping in Okinawa	−.053	.089	−.132	**.790**	.252	−.135	4.37	1.43
I want to buy local gifts in Okinawa	.125	−.079	.210	**.773**	−.184	.200	5.19	1.21
personal growth(α=.893)								
I want an opportunity to change my outlook on life	−.024	−.094	−.110	.052	**1.067**	.022	4.43	1.61
I want to experience personal development	.027	−.195	.156	.010	**.913**	−.019	4.82	1.50
I want to rethink myself in Okinawa	−.004	.075	−.145	.287	**.724**	.041	4.41	1.56
I want to share a sense of joy with people in Okinawa	.197	.291	.250	−.200	**.299**	.092	5.50	1.21
family & friends (α=.938)								
I want to relax in Okinawa with family and friends	−.095	−.029	−.056	.011	.027	**1.093**	5.40	1.10
I want to have a good time in Okinawa with family and friends	.017	.038	−.009	.032	−.048	**.960**	5.49	1.13
I want to enhance relationships with friends and family in Okinawa	.033	.283	−.020	.113	.145	**.510**	5.06	1.23
factor correlation 1	—							
2	.421	—						
3	.607	.493	—					
4	.172	.335	.169	—				
5	.450	.680	.405	.535	—			
6	.670	.511	.719	.294	.544	—		

We next conducted exploratory factor analysis (maximum likelihood/promax rotation) on the 26 constraint items. We extracted five factors with eigenvalues of 1 or greater. After eliminating two of the 26 items for low communality, we again conducted exploratory factor analysis on the remaining 24 items using the same method. 5 factors were extracted (Table 3). We named the first factor *disinterest of friends and family / lack of appeal as a resort destination* for the 5 heavily loaded items including "My family has no interest in participating in this race" and "Okinawa is a not an appealing resort destination" that were related to disinterest among family and friends and lack of touristic appeal. The second factor was *time and expense* for the 7 items such as "It is difficult to get an extended amount of time off" and "It is expensive" that were related to time and money restrictions. The third factor was *insecurity* for the 6 items such as "I may not be able to enjoy myself" and "I am worried about arranging travel and lodgings" that were related to anxiety about the event and travel planning. The fourth factor was *safety concerns* for the 3 items such as "safety in Okinawa" and "public order in Okinawa" that related to concerns about safety. The fifth factor was *weather and transportation* for the 3 items such as "the climate is different" and "I have to fly in an airplane " that were related to

environmental differences and anxiety about traveling.

In the analyses below, we calculated total scores for items with high loading on subfactors for each of the sports participation motive, travel motive , and constraint scales and used these as subscale scores.

Table3. Results of factor analysis for constraints (maximum likelihood/promax rotation)

Factors(α) and items	1	2	3	4	5	*Mean*	*SD*
disinterest of friends and family / lack of appeal as a resort destination(α=.906)							
My family has no interest in participating in this race	**.846**	.116	.210	−.071	−.173	3.05	1.66
There might be no amusement besides cycling	**.753**	−.045	.062	−.025	.190	2.63	1.53
My friend have no interest in participating in this race	**.732**	.193	.227	−.022	−.194	3.09	1.63
Okinawa is a not an appealing resort destination	**.564**	−.111	.129	.058	.323	2.52	1.52
I have to take care of my family member at home	**.519**	−.196	.055	.098	.175	2.33	1.65
time and expense(α=.878)							
I can't arrange my vacation time with a accompanying person	−.055	**.875**	.011	−.093	−.018	4.44	1.58
It is difficult to get an extended amount of time off	−.130	**.799**	.002	−.052	.022	4.66	1.66
It is difficult to get somesone of my friends to take with	.367	**.725**	−.242	.005	.030	4.04	1.69
It is difficult to get somesone of my family members to take with	.354	**.695**	−.243	−.045	.053	3.99	1.67
It is expensive	−.099	**.654**	.123	.196	−.150	4.77	1.44
It is far	−.261	**.522**	.393	−.167	.319	3.78	1.72
I am worried about future income	.098	**.412**	−.099	.157	.233	4.05	1.52
insecurity (α=.927)							
I may not be able tocomplete the full distance	.318	−.094	**.764**	−.143	−.123	3.38	1.78
I may not be able to enjoy cycling	.225	−.082	**.758**	.043	−.143	3.09	1.63
I am worried about arranging travel and lodgings	.217	.065	**.481**	.053	.213	2.80	1.57
I don't know howt to apply the event	.273	−.150	**.463**	−.066	.341	2.72	1.63
I may not be able to enjoy myself in Okinawa	.320	.016	**.429**	.141	.198	2.70	1.50
I am worried about demostrating my ability in Okinawa	.104	.162	**.406**	.398	−.025	2.90	1.63
safety concerns(α=.917)							
Safety in Okinawa	−.021	−.078	−.100	**1.056**	.015	2.96	1.48
Public order in Okinawa	−.008	.008	−.029	**.949**	.038	2.93	1.54
I want to spend my money on other leisure activities	.268	.052	.227	**.439**	−.118	3.11	1.45
weather and transportation(α=.909)							
The climate is different	.057	−.010	−.057	−.066	**1.018**	2.97	1.67
The environment is different	.138	.022	−.196	.073	**.917**	3.09	1.67
I have to fly in an airplane	−.262	.249	.209	.126	**.566**	3.31	1.92
factor correlation 1	—						
2	.406	—					
3	.532	.350	—				
4	.608	.440	.673	—			
5	.538	.581	.625	.667	—		

Reliability coefficients for the 3 items for participation satisfaction and 3 items for intent to participate again in the Century Run were α=.815 and α=.878, respectively. Reliability coefficients for the two scales for participation satisfaction and intent to participate again were both above .80. With this confirmation of the internal consistency of these scales, we used the total score from each of the scales as scale scores for the following analyses.

Results of multiple regression analysis

Using sports participation motive, constraints, and the demographic factors of sex, age, place of residence, and cycling history as explanatory variables, we conducted multiple regression analysis on the dependent variables of satisfaction with

participation in the Century Run, intent to participate again, and intent to participate in events in other regions in Japan. For place of residence, we input dummy explanatory variables by using 0 for residents and 1 for non-residents.

For participation satisfaction, interest in cycling had the only positive impact while place of residence, age, and yearly cycling related expenses had a negative impact (Table4). While satisfaction increased with higher degrees of interest in cycling, it tended to drop for non-residents and older participants as well as for higher spenders.

Table4. Results of multiple regression analysis (stepwise method) with participation satisfaction as the dependent variable

explanatory variables	β
interest in cycling	.325 ***
place of residence	−.361 ***
age	−.206 *
yearly cycling related expenses	−.208 *
R^2 = .441*** (F(4,105) = 7.21, p<.001)	

*p<.05; **p<.01; ***p<.001

Multiple regression analysis using intent to participate again as an objective variable indicated that high motivation based on a sense of release and stimulation and a preference for cycling led to stronger intent to participate again (Table5). On the other hand, disinterest among close relations and the perception of insufficient resort appeal led to lower intent to repeat participation in the future. In terms of demographic factors, participants residing outside of Okinawa tended to have greater intent to participate again.

Table5. Results of multiple regression analysis (stepwise method) with intent to participate again as the dependent variable

explanatory variables	β
a sense of release and stimulation	.377 ***
disinterest of friends and family / lack of appeal as a resort destination	−.264 ***
place of residence	.214 ***
preference for cycling	.201 **
R^2 = .421*** (F(4,108) = 19.61, p<.001)	

**p<.01; ***p<.001

Multiple regression analysis using intent to participate in events in other regions in Japan as an objective variable indicated a positive impact from preference for cycling and time and expense and a negative impact from place of residence and disinterest of close relations / lack of appeal as a resort destination (Table6). Participants who had a strong preference for cycling and perceptions of time and expense restrictions had stronger intent to participate in events in other regions. In contrast, residents and participants who perceived disinterest among close relations and found no appeal in resort destinations tended to be passive about participation in other domestic races.

Table6. Results of multiple regression analysis (stepwise method) with intent to participate in events in other regions as the dependent variable

explanatory variables	β
preference for cycling	.453 ***
place of residence	−.315 ***
time and expense	.274 **
disinterest of friends and family / lack of appeal as a resort destination	−.195 *
R^2 = .441*** (F(4,101) = 19.96, p<.001)	

*p<.05; **p<.01; ***p<.001

We next conducted multiple regression analysis of non-resident data using travel motive as an explanatory variable (Table7). Results indicate that participation satisfaction is positively impacted by escape from routine, a subfactor of travel motive, and negatively impacted by age.

Table7. Results of multiple regression analysis (stepwise method) with non-resident participation satisfaction as the dependent variable

explanatory variables	β
escape from routine	.371 **
age	−.239 *
R^2 = .263*** (F(2,69) = 12.30, p<.001)	

*p<.05; **p<.01

Non-resident intent to participate again in the Century Run was significantly positively impacted by preference for cycling, number of past cycling events, and cultural learning (Table 8). Intent to participate again was also higher under sports participation motive with stronger preference for cycling and greater number of

cycling events, and under travel motive, with stronger cultural learning motives.

Table8. Results of multiple regression analysis (stepwise method) with non-resident intent to participate again as the dependent variable

explanatory variables	β
preference for cycling	.430 ***
number of past cycling events	.249 *
cultural learning	.235 *
R^2 = .530*** (F(3,61) = 10.97 p<.001)	

*p<.05; ***p<.001

Discussion

Factor analysis for sports participation motive revealed four factors: *release/ stimulation, interest in cycling, preference for cycling, and shared experience*. Of these 4 factors, *interest in cycling* and *preference for cycling* correspond in substance to the two factors of running involvement and degree of running event motive presented in the study by Funk et al. (2007), which we drew on in drafting the items used to measure sports participation motive in this study. *Release/stimulation* and *shared experience*, however, are unique to this study. The respondents in our survey appeared to emphasize achieving a sense of release or stimulation and shared experience through their participation in the race.

Six factors were extracted for travel motive: *escape from routine, cultural study, environmental & cultural enjoyment, shopping, personal growth*, and *friends and family*. These results are partially consistent with the proposal of Hayashi and Fujiwara (2008) of a 7-factor construct (stimulation, cultural experience, local exchange, health recovery, nature experience, unexpectability, and self-expansion) for the motivation of Japanese tourists abroad. Although stimulation and health recovery might fall under the category of *escape from routine* that we have used in this study, we can conclude that travel motive appears to be consistent in the case of travel abroad and in the case of domestic travel to Okinawa-- a geographically distant destination with a unique climate and independent Ryukyu culture and traditions. Of the seven travel motive factors outlined by Funk et al. (2007)-- social interaction, escape, prestige, diversion, cultural experience, intellectual inquiry, and culture learning—the substance of social interaction, culture learning, and cultural experience correspond respectively with the factors of *friends & family, cultural*

study, and *environmental & cultural enjoyment* in our study. This suggests that there is some level of international consistency in the factors that constitute motivation to travel abroad.

The results of our factor analysis on constraints also had a degree of consistency with the five factors of event information, tourist information, travel companions, safety/cultural differences, and financial issues that were extracted by Nishio, Okamoto and Ishimori (2013) in their survey of Honolulu Marathon participants. This suggests that with the exception of niche sports, participants in sports events share many of the same constraints.

Results of multiple regression analysis indicated that interest in cycling positively impacts satisfaction with event participation. This is perhaps because stronger interest in cycling leads to stronger commitment, which then results in a greater level of satisfaction. Place of residence had a negative impact. The reason that residents had a greater level of satisfaction compared to non-residents is probably related to the fact that residents could participate with greater ease. Age also had a negative impact. Lower satisfaction levels in older participants may reflect physical fatigue due to strong wind conditions on the day of the event. Yearly cycling related expenditures had a negative impact as well, possibly indicating that the event did not satisfy competitive cycling enthusiasts.

Multiple regression analysis using intent to participate again as an objective variable indicated that respondents who had high release/stimulation motive and a strong perception of time and expense constraints had greater intentions to participate again in the future. This suggests that the Century Run was successful in stimulating a desire to return among participants who sought release or stimulation through the atypical experience of participating in a cycling event in Okinawa. While place of residence had a negative impact on satisfaction, as non-residents had more intent to participate again. Of the participants who were residents of Okinawa, 47.1% were participating in a cycling event for the first time, and only 18.6% had participated in three or more events in the past. In contrast, 26.4% of non-residents were first-timers and 51.7% had experience with three or more events in the past. Although beginner level resident participants came away with a high level of satisfaction and were able to take a light-hearted approach to the event, this did not necessarily tie into a strong intent to participate again. Disinterest of close relations / low appeal as a resort destination had a negative impact and acted as strong constraint against repeat participation. Although it may seem inconsistent that a strong perception of time and

expense constraints would lead to stronger intent to participate, these results suggest that respondents viewed the event as a valuable experience in terms of the time and expenses sacrificed, and therefore had a desire to participate again if given the opportunity.

Multiple regression analysis with intent to participate in events in other regions as a dependent variable indicated that preference for cycling and time and expense had a positive impact while place of residence and disinterest of close relations / lack of appeal as a resort destination had a negative impact. This may reflect interest in more competitive events in other regions among cycling enthusiasts, and interest in less costly events among respondents with time and expense constraints. Although Kim and Chalip (2004) concluded that financial constraints did not influence intent among American soccer club members to watch the World Cup on-site in Korea, our results indicate that time and expense constraints do have a certain function. This may be reflective of working conditions in Japan, where it is difficult to take extended vacation time.

Non-resident participation satisfaction was positively impacted by *escape from routine*, a subfactor of travel motive. This indicates that travel motive is partly related to satisfaction with events. Non-resident intent to participate again was positively impacted by preference for cycling and number of past cycling events as well as the travel motive subfactor of cultural learning. That is, intent to participate again involves not only sports participation motive, but also the travel motive of cultural learning in Okinawa. This suggests that it would be meaningful to consider the impact of travel motive together with participation motive in studies of sports events at tourist destinations.

Conclusion

The results suggest that intent to repeat participation may increase with the atypical experience of participating in a cycling tour in a resort area, but tend to decrease with disinterest among close relations and lack of appeal as a resort destination. Future studies should be expanded to include sports events other than marathons and cycling races. Considering that there were a small number of participants from abroad in the Century Run, it would also be pertinent to consider differences in sports and travel motives between participants from overseas and Japanese participants from outside of Okinawa. Nakamura, Okamoto, Egashira and

Kaneko (2010) have stated that the success of sports events should be considered not only from the demand side of client-participants, but also from the supply side in terms of marketing strategy. They cite the case of the Tour du Okinawa, in which the formation of a NPO ensured a stable source of funding through subsidies and revenue from sales of event paraphernalia, and the hiring of experts supported an autonomous system of event management that successfully led to increased participation. Likewise, we should consider marketing in tandem with participant satisfaction to achieve a more comprehensive understanding of the Century Run.

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