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# How Sport Tourism Event Image Fit Enhances Residents' Perceptions of Place Image and Their Quality of Life

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**Abstract:** This study developed an exploration model for sport event image fit to predict and explain the place image and quality of life in order to achieve sustainable development goals in rural communities. To validate the model, 294 valid resident responses from a rural community that hosted a sporting event in Taiwan were analyzed with partial least squares structural equations modeling (PLS-SEM). The results showed that image fit contributes to the social environment, entertainment services, and quality of life; four place image dimensions had a significantly positive effect on quality of life. The exploration model was validated, contributing to the knowledge related to Sustainable Development Goals 3 and 11.

**Keywords:** sport tourism events and sustainability; place image; QOL in a community; SDGs

## 1. Introduction

In 2015, 17 Sustainable Development Goals (hereafter referred to as SDGs) were adopted by the United Nations as a plan to promote and transform the world by 2030 [1]. The 17 goals include several concerns—for example, peace and social justice, water, sanitation, poverty, gender equality, climate action, health and well-being, quality education, gender equality, climate action, hunger, energy, and the environment [2]. Although sports are not directly included in the SDGs, they also make important contributions to sustainable development [3]. Sports meet the requirements of sustainable development when they allow tourists and residents to meet the needs of the modern sport community, while at the same time contributing to the strengthening of public access to sports, or to the well-being of the natural and social environment [4].

Sporting events are an indispensable part of today's society. They not only provide entertainment, but also promote economic development, social health, and even international diplomacy [5]. Sporting events are also considered to be able to provide host cities with many intangible benefits, such as the enhancement of community awareness, national or citizen pride, cultural identity, sports participation, and quality of life (hereafter referred to as QOL) [6]. Due to the positive impacts of sporting events, a growing number of communities are planning to develop sporting events, or are fiercely competing as they seek to host them [7]. One of the most important social aspects is the improvement of the place image (PI) of the host, and raising awareness of the place so that the external image can be improved [8]. PI is an important factor for understanding residents' reactions to tourism [9]. However, few empirical studies have investigated the image that residents have of their

place, and even fewer have explored residents' QOL [10–14]. If the development of tourism is to help the local community, consideration must also be paid to the image of residents, not only of tourists. Therefore, PI may be more fitting for capturing the residents' responses to the location changes caused by the development of tourism.

Image fit is regarded as a cognitive variable. It supports the image transmission process and effectively predicts individuals' perceptions, attitudes, and behavioral intentions. Therefore, the use of fit to explain the emotional, cognitive, and intentional responses of residents to the host community or a sporting event can deliver trustworthy evidence to explain the impact of the sporting event on the host city [8,15]. However, few empirical studies have explored the fit between an event and its host city [16]. Thus, the aim of this study was to examine the residents of the hosting place by proposing the following research questions: (a) How were the residents' image fits enhanced when hosting a sporting event, and what were the residents' responses?; (b) How did the relationships contribute to the residents' QOL?

In recent years, scholars and policymakers in the tourism field have realized that it is necessary to measure and monitor positive and negative impacts by going beyond conventional methods. Therefore, the QOL of residents has become a subject of extensive discussion [17]. QOL can be evaluated at different levels: individual, family, society, and country [18]. However, in order to determine the QOL of residents, most studies focus on measurements at the individual level [19]. Nowadays, understanding how the host location forms support for local tourism is generally considered to be the key to sustainable development for tourist destinations [20]. This paper explores residents' PI, QOL, and the fit of hosting the event, thereby using the QOL of residents to explore sustainability in communities, especially in tourism destinations.

Thus, the purpose of this study was to understand residents' PI perceptions by analyzing the outcomes and the antecedent variables of a sporting event, and to identify how the perception influences the residents' QOL. Sustainability was examined as an intermediate paradigm shift in new forms of community, fit, and expected outcomes (QOL) of residents (as well as tourist destinations) [21]. In addition, we hoped to understand the role that residents play in sporting events, such as being ambassadors or spectators [22]. This study used QOL as the outcome variable of the proposed model, which can be used as the basis of sustainability strategies for events.

### 1.1. Image Fit

Gwinner and Eaton [23] proposed that fit can be theorized in terms of function (the product is used in an event) or image (the event image and sponsored brand are similar), and the concept of fit is a variable that strengthens the image transfer process. Speed and Thompson [24] believe that the audience's attitude towards events and sponsors is consistent with that between events and sponsors, which affects the audience's response to sport sponsorship. When individuals believe that sponsors and events fit, they have a better ability to identify whether sponsors sponsored the tournament correctly [8,16]. Furthermore, Koo, Quarterman, and Flynn [25] explored the response of image fit to consumer perception and emotion in their research. Some studies have explored and summarized the effective results of sport sponsorship as a company-based consideration (e.g., return on investment) and as consumer considerations (e.g., increasing brand awareness, enhancing brand image) [26–28]. Therefore, the cognitive and emotional response of the image fit of a brand or a sporting event, as well as the connection of a brand or a sporting event, indicates the benefit of the image fit between brands or sporting events.

In sponsorship-related research, fit is used to examine the occurrence of image transfer between a tournament and its sponsors to analyze consumers' image of and behavioral intentions towards the sponsor's tournament [15,29]. Fit can be used to judge the perception of consumers about sponsors and events, as well as the relationships between them [30]. The phenomenon of image transfer between sport sponsors has been extensively studied. However, the relationship between the image of a sporting event and the host destination is ignored by most scholars [31]. Therefore, fit is

regarded as a cognitive variable, which strengthens the image transmission process, and effectively predicts consumers' perceptions. For example, fit is regarded as an important aspect that explains the relationship individuals have between events and products [23], which can also be applied to event image fit and PI. Indeed, fit is regarded as a cognitive stimulus which facilitates participants' image transmission processes, and subsequently drives participants' positive attitudes and behavioral intentions. As such, fit plays a considerable role in driving the residents' connection to the host city or sports event, which in turn strengthens the cognitive understanding, trustworthiness and positive behavioral intentions regarding the host city [8,15]. However, there are only a few empirical studies that have explored the local fit between the event and the host city [16]. Therefore, this study defines event fit to explain the residents' connection to Taiwan's Rice Heaven Tianzhong Marathon.

### 1.2. Place Image

Schroeder [32] pointed out that the image that local residents have of their community is also very important, since it may affect their political support for tourism development, and also affect the inherent image development of potential tourists regarding the destination. Tourists use information provided by the local residents to get to know the destination. A study has also pointed out that PI affects human attitudes and behavior [9], while another study indicated that residents are regarded as part of the image element, and residents' support for the tourism industry may affect tourists' perceptions of the destination [33]. When considering the issue from another perspective, studies have stated that, in order for place marketing to succeed, residents' satisfaction is as important as that of visitors or investors [34,35]. A study has indicated that the PI is of great importance when it comes to marketing strategies and branding, since the local residents can provide local knowledge and create a better tourist experience [36]. However, studies have found that tourism development affects local residents' QOL [37–39]. Therefore, it is necessary to understand residents' attitudes towards hosting sporting events, but also to make it sustainable tourism within the sporting venues [17]. In line with this, this study used community service, social environment, physical appearance, and entertainment, as proposed by Styliadis [9], as the basis of the design of the PI questionnaire. Therefore, this research defines PI as Taiwan's Rice Heaven Tianzhong Marathon to understand residents' beliefs, thoughts and impressions.

### 1.3. Quality of Life

When a sporting event is held, local residents are arranged to provide volunteer services to create an atmosphere for the local event, and directly interact with consumers of the event; that is, they interact with spectators, athletes, and other event stakeholders [40]. In line with this, the interaction will directly or indirectly affect the QOL of the residents. Jurowski and Brown [41] pointed out in their research that participating residents are precious to the organizers because their views are similar to those of the general public and because, if they are more optimistic about QOL, they will be less negative about the influence of tourism. A study has confirmed that the QOL of local residents has a positive effect on tourism development [37]. Taking into account the fact that, when a sporting event becomes a tourist destination, local residents will meet new people and have greater contact with tourists who may later become friends, this may play a role in residents' wellbeing, which may increase or decrease their QOL [42]. Therefore, residents' views on the overall QOL can be used as a communication platform for certain types of impacts (how to obtain benefits) to create residents' support for large-scale competitions in the country [43]. There is also a study on QOL which examined the changes in residents' attitudes towards tourism over time [17]. Therefore, this study defines QOL as residents' subjective feelings about the sport event hosted in their community regarding their QOL.

## 2. Hypotheses

### 2.1. Residents' Image Fit for Place Image

Fit theory is often used to examine the image transfer of an event and the sponsor to analyze consumers' attitudes toward the sponsor [25,29]. For example, the image that individuals perceive transfers to the brand of the sponsor; that is, the connection of the event's benefits, attributes and attitude is transferred to his or her memory [44]. Therefore, fit is an important variable that supports the transfer process of the image [23,45]. In line with this concept, we can link or associate the relationship of fit and the PI of the host city. Fit is frequently explained with schema theory, which is used as an explanation for understanding how individuals process the image fit of a sporting event, and how fit can lead one's attitude towards the cognition of a sporting event [46]. According to this idea, the residents' image can be explained as follows: the more superior the image fit between residents and the sporting event, the higher the chance that the schema will remain in the residents' memories.

In this study, PI is divided into four dimensions—namely community service, social environment, physical appearance, and entertainment services [9]. According to Styliadis [47], if the perspective image of local communities and local characteristics is ignored, the residents may be dissatisfied. Therefore, understanding the local image of the residents and their participation, planning, sustainable development and tourism marketing will help improve residents' involvement in the tourism marketing and planning process. Thus, it will strengthen the demand for sustainable local marketing. This study focuses on management recommendations which can assist local managers and tourism and should effectively promote or change the local image to enable an increase in attraction to both internal and external audiences. The use of the local community to participate in and plan and exchange activities will enhance residents' support for tourism development. Image fit is often used to assess the relationship between the PI and sporting image [48]. When hosting an event, it is considered as one of the components for attracting tourists, which may offer benefits for the local community. A tourism study has found that the destination of the host and the sporting event (place image) are related to one another in tourists' thoughts, which subsequently affects their cognition regarding the host [49]. Thus, the following hypotheses were proposed as follows:

**Hypothesis 1a (H1a).** *Residents' image fit is positively related to community services.*

**Hypothesis 1b (H1b).** *Residents' image fit is positively related to physical appearance.*

**Hypothesis 1c (H1c).** *Residents' image fit is positively related to social environment.*

**Hypothesis 1d (H1d).** *Residents' image fit is positively related to entertainment services.*

### 2.2. Residents' Image Fit for Quality of Life

The term of fit is extended by the concepts of brand image, image transfer, and image fit in the field of sport sponsorship [50]. Keller (1993) [51] defined brand image as follows: "The association of a brand in memory can reflect the perception of the brand." These brand associations can take the form of attributes, interests and attitudes. Therefore, the image is transferred. This association between the brand and the activity is called "image transfer," which means that, when the individual and the activity's attributes, activity benefits or the attitude toward the event are connected, with the memory of the brand, the image of the event will be moved to the sponsoring brand [44]. According to this concept, assuming that the image of the fit might affect the QOL of local residents, the following hypothesis is proposed as follows:

**Hypothesis 2 (H2).** *Residents' image fit is positively related to QOL.*

### 2.3. Residents' Place Image for Quality of Life

When a sporting event is held, residents arrange volunteer services to create an atmosphere for the local event, and directly interact with individuals at the event; that is, there is interaction between spectators, athletes, and other event stakeholders [40]. This interaction will directly or indirectly affect the QOL of the residents. In their research, Jurowski and Brown [41] pointed out that participating residents are precious to organizers because their views are similar to those of the general public, and because they are more optimistic about the QOL. Schroeder [32] has pointed out that the image of local residents regarding their community is also very important, because this may affect their political support for tourism development, and may also affect the inherent image development of potential tourists to the destination. A study conducted on an event in local communities showed that, when residents are more likely to lean toward the QOL assessment, this forms an attitude towards repeated events over time, and the impact of residents' perceptions of competitions from time to time is very important [17]. However, it is necessary to improve QOL in order to increase residents' support for regular competitions. Therefore, in order to increase residents' support for competitions that happen regularly, the local government agencies and competition organizers are the main focus for communication and the improvement of the overall QOL [17]. The QOL significantly affects the residents' support for competitions. If the residents have a more positive image of the place, they are more likely to transmit positive word of mouth; therefore, if there is no active participation or goodwill, tourism cannot be developed, nor can it flourish [47]. Therefore, assuming that PI will also affect the QOL of local residents, the following hypotheses are proposed as follows:

**Hypothesis 3a (H3a).** *Residents' community services are positively related to QOL.*

**Hypothesis 3b (H3b).** *Residents' physical appearances are positively related to QOL.*

**Hypothesis 3c (H3c).** *Residents' social environment is positively related to QOL.*

**Hypothesis 3d (H3d).** *Residents' entertainment services are positively related to QOL.*

## 3. Methodology

### 3.1. Context of the Study

In this article, we discuss how a sporting event drove the regeneration of a place, and hence the QOL for residents to achieve SDGs 3 and 11 [52]. Sport tourism events have long been seen as a place regeneration mechanism [53]. We chose a sport tourism event organized to achieve the above two goals—the Taiwan Rice Heaven Tianzhong Marathon. The event has been hosted annually for almost 10 years, with the slogan “Running a marathon elsewhere may be the runner's own event, but coming to run the Tianzhong Marathon is an event for our whole township” [54]. It shows that the event is designed not only for runners but also for the residents' happiness. Moreover, the Taiwan Rice Heaven Tianzhong Marathon, the most popular sport event in Taiwan—it is one of the five top international brand marathon events in Taiwan that attracts more than 15,000 participants every year [54]. Taking this into consideration, this study examined the residents' perceptions of their involvement in the marathon event hosted in their hometown, their place, and how the sporting event image fit affects their PI and QOL.

### 3.2. Data Collection and Instruments

The respondents were residents of Tianzhong, Taiwan who participated in the marathon in different roles, such as spectators, volunteers, staff, and organizers. Purposive sampling was employed using the following selected criteria. Participants must be: (1) a local Tianzhong community resident, (2) a resident familiar with the Tianzhong Marathon, and (3) a resident involved in the marathon.

To enhance the randomness and generalizability of the research, we used the skip-interval approach to invite every third participant of the event to complete the survey [55].

We adopted a self-administered questionnaire to collect data. The questionnaire included two parts. The first part was the respondent's profile, while the second part consisted of six 7-point Likert scales adapted from previous studies including image fit, community services, physical appearance, social environment, entertainment services, and QOL [8,9,17]. Before data collection, we adopted a back translation process and invited experts to examine the questionnaire to establish face validity, and conducted a pre-test to check semantics to make sure it was easy for residents to understand the meaning of the scales [56].

### 3.3. Data Collection and Analysis

We distributed the questionnaires online via a local community association over a two-week period during the event. We calculated the sample size by power analysis, using the G\*power analysis. The minimum number of samples for sufficient statistical power is 138 valid responses, with the effect size of 0.15 and power of 0.95 [57]. As such, a total of 294 valid resident responses was collected. Partial least square structural equation modeling (PLS-SEM) was used for the data analysis because it is suitable for studies with a number of constructs, appropriate for studies with small sample sizes (i.e.,  $n \leq 500$ ), and it is better than covariance-based SEM for theory testing [58]. As such, we followed the recent empirical studies to use PLS-SEM to perform the data analysis [59,60]. Firstly, the measurement model was analyzed using the SmartPLS 3.2.8 software [58]. Next, the explanative and analytical quality of the structural model was also assessed [61,62].

## 4. Results

### 4.1. Respondents' Profile

A total of 294 valid residents responded to the survey, maintaining the requirement power at 95%. Common method bias was measured by Harman's single-factor test. The results showed that the first factor resulted in 49.76% for total variance, which is below the 50% threshold [63]. Among the respondents, 75% were females while 25% were males. In terms of age distribution, 32% of the participants fell in the age range of 30-39 years old, and the next largest group was 40-49 years old at 27%.

### 4.2. Measurement Model Assessment

Following Hair Jr et al. [64], to evaluate the PLS measurement model, we examined the outer loadings, composite reliability (CR), the average variance extracted (AVE), and the Heterotrait–Monotrait ratio of correlations (HTMT) to assess internal consistency, convergent validity, and discriminant validity. In Table 1, all the outer loadings exceeded 0.7. The AVE values of all constructs were above 0.50. In Table 2, the HTMT of each construct were from 0.553 to 0.802, all under the requirement of 0.9 [56].

**Table 1.** Assessment of Reliability and Convergent Validity.

Construct	Item	Loading	Composite Reliability	Average Variance Extracted (AVE)
Image Fit (IF)	IF1	0.921	0.871	0.694
	IF2	0.930		
	IF3	0.912		
Community Services (CS)	CS1	0.799	0.897	0.744
	CS2	0.813		
	CS3	0.884		
Physical Appearance (PA)	PA1	0.800	0.902	0.754
	PA2	0.902		
	PA3	0.883		
Social Environment (SE)	SE1	0.883	0.892	0.733
	SE2	0.909		
	SE3	0.811		
Entertainment Services (ES)	ES1	0.831	0.953	0.871
	ES2	0.847		
	ES3	0.889		
Quality of Life (QOL)	QOL1	0.933	0.944	0.848
	QOL2	0.937		
	QOL3	0.930		

**Table 2.** Assessment of Discriminant Validity using HTMT.

Construct	IF	CS	PA	SE	ES
Image Fit (IF)					
Community Services (CS)	0.754				
Physical Appearance (PA)	0.658	0.783			
Social Environment (SE)	0.794	0.748	0.678		
Entertainment Services (ES)	0.621	0.677	0.802	0.637	
Quality of Life (QOL)	0.599	0.662	0.701	0.553	0.704

#### 4.3. Structural Model Assessment

After confirming the measurement model collinearity for each predictor, the VIF values are all below 5 [65,66]. Then, the 5000 subsamples bootstrapping was performed to examine the model path relationships [64]. Table 3 and Figure 1 show that the image fit was positively related to social environment (H1c:  $\beta = 0.614$ ,  $p < 0.001$ ), entertainment services (H1d:  $\beta = 0.487$ ,  $p < 0.05$ ) and quality of life (H2:  $\beta = 0.277$ ,  $p < 0.001$ ), and hence H1c, H1d and H2 are supported. Concurrently, community services (H3a:  $\beta = 0.064$ ,  $p < 0.001$ ), physical appearance (H3b:  $\beta = 0.060$ ,  $p < 0.001$ ), social environment (H3c:  $\beta = 0.393$ ,  $p < 0.001$ ), and entertainment services (H3d:  $\beta = 0.126$ ,  $p < 0.001$ ) have a positive impact on quality of life, supporting H3a, H3b, H3c and H3d. Next, the indirect effect indicated that the relationship between image fit towards quality of life is significantly mediated by social environment (H4c:  $\beta = 0.241$ ,  $p < 0.001$ ) and entertainment services (H4d:  $\beta = 0.061$ ,  $p < 0.05$ ), so H4c and H4d are supported. Conversely, community services and physical appearance did not mediate between image fit and quality of life, so H4a and H4b are not supported.

Table 3. Assessment of the Structural Model.

Hypothesis	Relationship	$\beta$	t-Value	$f^2$	$R^2$	$Q^2$
H1a	IF → CS	0.509	1.079(NS)	0.005	0.259	0.249
H1b	IF → PA	0.576	0.95(NS)	0.004	0.332	0.327
H1c	IF → SE	0.614	6.279 ***	0.181	0.377	0.370
H1d	IF → ES	0.487	2.147 *	0.019	0.237	0.229
H2	IF → QOL	0.277	4.612 ***	0.105	0.599	0.413
H3a	CS → QOL	0.064	12.143 ***	0.349		
H3b	PA → QOL	0.060	13.164 ***	0.496		
H3c	SE → QOL	0.393	14.017 ***	0.606		
H3d	ES → QOL	0.126	10.15 ***	0.311		
H4a	IF → CS → QOL	0.033	1.067 (NS)			
H4b	IF → PA → QOL	0.035	0.945 (NS)			
H4c	IF → SE → QOL	0.241	5.834 ***			
H4d	IF → ES → QOL	0.061	2.151 *			

Note: (i) H1a–H3d: Assessment of Direct Relationships; (ii) H4a–H4d: Assessment of Mediation Relationships; \*  $p < 0.05$ . \*\*\*  $p < 0.001$ . NS: Not significant; (iii) IF: Image Fit, CS: Community Services, PA: Physical Appearance, SE: Social Environment, ES: Entertainment Services, QOL: Quality of Life.

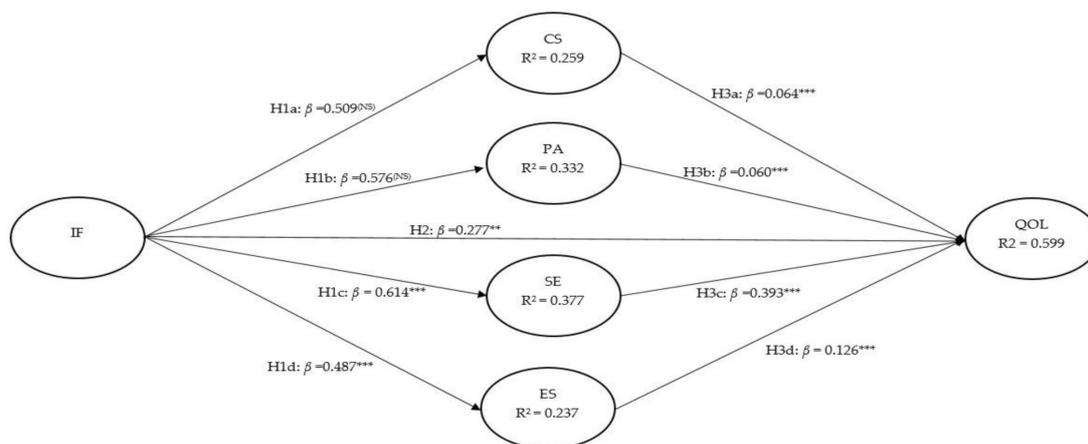


Figure 1. Structural Model Results. Note: (i) \*\*  $p < 0.05$ . \*\*\*  $p < 0.001$ ; (ii) IF: Image Fit, CS: Community Services, PA: Physical Appearance, SE: Social Environment, ES: Entertainment Services, QOL: Quality of Life.

The R square of QOL and social environment to resident during the event period of hosting in the community are above 0.26, indicating that the model is significant [57]. At the same time, the  $f$  square of the path between image fit with social environment, entertainment services, and QOL were significant, signifying their importance to the endogenous variables. We also checked the predictive relevance of the model by using Stone–Geisser’s  $Q^2$  for each PI dimension and QOL to ensure that they are higher than 0 [67]. Then, the predictive relevance was further evaluated by PLSpredict [68]. In Table 4, the  $Q^2$  predict values for all the key target construct’s indicators were found to be positive, and the RMSE for PLS estimated are lower than that of LM. Besides, the PLS  $Q^2$  estimation being larger than the LM model supported the model predictive capability [62].

**Table 4.** Assessment of PLSpredict.

Construct	PLS		LM		PLS-LM	
	RMSE	Q <sup>2</sup>	RMSE	Q <sup>2</sup>	RMSE	Q <sup>2</sup>
QOL1	1.007	17.01	1.02	17.139	−0.014	0.017
QOL2	0.91	13.909	0.92	14.083	−0.008	0.012
QOL3	0.991	16.781	0.998	17.014	−0.005	0.007

Note: QOL: Quality of Life.

## 5. Discussion

The study contributes to the literature on sporting events and SGD knowledge in several ways. First, an exploration model was proposed and validated addressing the lack of literature on the image fit of the event hosted in a community [8,69]. The results confirmed that sports event image fit has a positive and significant effect on two of the four PI dimensions, namely social environment and entertainment services. The results of this study also confirmed the importance of the four PI dimensions in driving QOL, along with the positive relationship between image fit and QOL. As such, the results confirm that image fit is a key predictor in strengthening the social environment, and entertainment services, but its impacts on community services and physical appearance are non-significant. As such, the results of this study confirm the findings of Styliadis, Biran, Sit and Szivas [9] and Styliadis [47], affirming the importance of image fit, as manifested by Oshimi and Harada [8] and Schnitzer, Kössler, Schlemmer and Peters [69], in strengthening social environment and entertainment services. When we examine the individual dimensions of PI, we can understand the effects of the image fit on each PI construct instead of one overall PI dimension [8,70]. In addition, we understand residents' expectations, and that the image fit mostly contributes to the social environment. It may be due to the fact that the sporting event was hosted in a farming village; furthermore, the goal of the event is not only to attract tourists but also to build the community and consensus among the residents.

As for QOL, the effect of place was examined in the previous study [9,47]. We confirmed the same result in the sports and SDG context. We also found that the social environment is a strong predictor of QOL, which is different from another study which evaluated it according to the economic impact [71,72]. This means that the residents want a friendly living environment in their community when hosting a sporting event. The following stronger dimension after SE is entertainment service as, in this study, the event was hosted in a rural area, not a city. The residents perceived the sporting event image fit for the entertainment service image, and then enhanced their QOL during the event period. Since there are few leisure activities in the rural community, the sport event offers residents' leisure opportunities and increases their QOL. The results illustrate that a sporting event can really achieve SDG 3 in a community [73,74].

The image fit can also predict the QOL of residents in the sporting event and SDG context, as the image has a direct effect on QOL and an indirect effect via social environment and entertainment services. This result showed that a sporting event can really enhance the perception of QOL. Considering Fit theory [25,29], fit is a mechanism that transfers the perception of a sport event into attitudes; the current study confirmed the mechanism empirically. We therefore suggest that the event organizers and destination image managers have to consider the characteristics of each place and community when hosting a sporting event to generate and reform the community. In this case, the study context is a farming village, so the organization of the event uses a friendly slogan to form the event image.

Besides practical implications, QOL can be strongly explained by image fit and PI, simultaneously; but it can only explain a medium to small effect by image fit individually or mediated by other PI factors. This implies that there are other factors that affect QOL for residents in the sporting event and SDG context, so we recommend that further studies examine other factors, such as the event's image [69].

## 6. Conclusions

### 6.1. Theoretical Implications

Based on the variables of image fit, this research examined the effects of image fit for a sporting event hosted in a community. Particularly, the purposes of the current study were to predict and explain the effects of image fit for community residents when hosting a sporting event using five variables—community services, physical appearance, social environment, entertainment services, and QOL. The results indicated that 59.9% of QOL was explained. On the other hand, the analysis indicated that the exploratory model explaining the perceptions of residents showed a high predictive power. Based on the fit theory, the result of this study confirms that image fit can explain and predict PI, including social environment and entertainment services. Furthermore, the social environment plays a crucial role between image fit and QOL. Since we know that a friendly atmosphere of a sport event may fit the social environment of a rural community, and that by improving PI and QOL, SDGs 3 and 11 will be promoted. Therefore, fit theory can be implemented in different types of sport events and different types of community.

### 6.2. Managerial Implications

The current study makes several contributions to the understanding of residents' perceptions of their QOL and PI from image fit. These findings suggest managerial implications. First, the sporting event organizer should design and manage the event image to fit the local PI; thus, residents will be aware of their PI to a higher degree. In this case, the resident feels strongly that the image of the event matches the image of the social environment, so the event organizer has to consider the characters of the local community and the preference of the resident, so that the event can fit the place then achieve SDG 11—that is, a safe and inclusive human settlement. Furthermore, the image of the social environment can also facilitate the QOL of the residents; thus a sport tourism event is not only considered for the economic benefits attained by attracting tourists [75], but is also considered for a better social atmosphere to enhance the QOL to ensure achieving SDG 3, the health and well-being of the residents.

Second, the residents who feel more about entertainment services will feel that they have a better QOL, possibly because the sporting event brings them active leisure opportunities. When the residents expect to participate in the marathon, they will be involved in the running activity; thus, they spend more time on active leisure pursuits [76,77]. From this viewpoint, a community can host recurrent sporting events to provide more active leisure opportunities to raise the QOL of the residents.

### 6.3. Limitations and Future Research Suggestions.

The present study has several limitations. First, it only focused on a small-scale sporting event in a rural context; residents may hold differing opinions on mega events in big city contexts. To address this limitation, future studies could conduct surveys for mega-events, such as the Olympic Games in Atlanta City, which has become a new attraction for tourists and has benefited residents' life [78,79]. Second, we made efforts to stratify the sample from each administrative district to present the opinions from the population of local residents. However, the residents play different roles in the sporting event; further studies should design a multi-group investigation to understand the difference from different levels. Finally, we only conducted a cross-sectional investigation in the study; future studies could conduct a longitudinal approach to observe the long-term changes in residents' perceptions of image fit, PI, and QOL.

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## References

1. Kumar, S.; Kumar, N.; Vivekadhish, S. Millennium development goals (MDGS) to sustainable development goals (SDGS): Addressing unfinished agenda and strengthening sustainable development and partnership. *Indian J. Community Med. Off. Publ. Indian Assoc. Prev. Soc. Med.* **2016**, *41*, 1. [[CrossRef](#)] [[PubMed](#)]
2. McArthur, J.W.; Rasmussen, K. Classifying Sustainable Development Goal trajectories: A country-level methodology for identifying which issues and people are getting left behind. *World Dev.* **2019**, *123*, 104608. [[CrossRef](#)] [[PubMed](#)]
3. Lindsey, I.; Darby, P. Sport and the Sustainable Development Goals: Where is the policy coherence? *Int. Rev. Sociol. Sport* **2019**, *54*, 793–812. [[CrossRef](#)]
4. Alvina, K.; Kostyantyn, U.; Larysa, D.; Lidiia, R.; Irina, K.; Alina, U.; Olha, B.; Lolita, D.; Shengying, S. Sustainable development and the Olympic Movement. *J. Phys. Educ. Sport* **2020**, *20*, 403–407.
5. Chien, P.M.; Kelly, S.J.; Gill, C. Identifying objectives for mega-event leveraging: A non-host city case. *Mark. Intell. Plan.* **2018**, *36*, 168–184. [[CrossRef](#)]
6. Chen, K.C.; Gursoy, D.; Lau, K.L.K. Longitudinal impacts of a recurring sport event on local residents with different level of event involvement. *Tour. Manag. Perspect.* **2018**, *28*, 228–238. [[CrossRef](#)]
7. Gursoy, D.; Yolal, M.; Ribeiro, M.A.; Panosso Netto, A. Impact of trust on local residents' mega-event perceptions and their support. *J. Travel Res.* **2017**, *56*, 393–406. [[CrossRef](#)]
8. Oshimi, D.; Harada, M. Host residents' role in sporting events: The city image perspective. *Sport Manag. Rev.* **2019**, *22*, 263–275. [[CrossRef](#)]
9. Styliadis, D.; Biran, A.; Sit, J.; Szivas, E.M. Residents' support for tourism development: The role of residents' place image and perceived tourism impacts. *Tour. Manag.* **2014**, *45*, 260–274. [[CrossRef](#)]
10. Kaplanidou, K.; Jordan, J.S.; Funk, D.; Ridinger, L.L. Recurring sport events and destination image perceptions: Impact on active sport tourist behavioral intentions and place attachment. *J. Sport Manag.* **2012**, *26*, 237–248. [[CrossRef](#)]
11. Nadeau, J.; Heslop, L.; O'Reilly, N.; Luk, P. Destination in a country image context. *Ann. Tour. Res.* **2008**, *35*, 84–106. [[CrossRef](#)]
12. Hsu, C.H.; Wolfe, K.; Kang, S.K. Image assessment for a destination with limited comparative advantages. *Tour. Manag.* **2004**, *25*, 121–126. [[CrossRef](#)]
13. Lin, C.H.; Morais, D.B.; Kerstetter, D.L.; Hou, J.S. Examining the role of cognitive and affective image in predicting choice across natural, developed, and theme-park destinations. *J. Travel Res.* **2007**, *46*, 183–194. [[CrossRef](#)]
14. Ramkissoon, H.; Nunkoo, R. City image and perceived tourism impact: Evidence from Port Louis, Mauritius. *Int. J. Hosp. Tour. Adm.* **2011**, *12*, 123–143. [[CrossRef](#)]
15. Becker-Olsen, K.; Simmons, C.J. When do social sponsorships enhance or dilute equity? Fit, message source, and the persistence of effects. *ACR North Am. Adv.* **2002**, *29*, 287–289.
16. Oshimi, D.; Harada, M. The effects of city image, event fit, and word-of-mouth intention towards the host city of an international sporting event. *Int. J. Sport Manag. Recreat. Tour.* **2016**, *24*, 76–96.
17. Ouyang, Z.; Gursoy, D.; Chen, K.C. It's all about life: Exploring the role of residents' quality of life perceptions on attitudes toward a recurring hallmark event over time. *Tour. Manag.* **2019**, *75*, 99–111. [[CrossRef](#)]
18. Sirgy, M.J. *Handbook of Quality-of-Life Research: An Ethical Marketing Perspective*; Kluwer Academic Publishers: Dordrecht, The Netherlands, 2001.
19. Uysal, M.; Sirgy, M.J.; Woo, E.; Kim, H.L. Quality of life (QOL) and well-being research in tourism. *Tour. Manag.* **2016**, *53*, 244–261. [[CrossRef](#)]
20. Gursoy, D.; Chi, C.G.; Dyer, P. Locals' attitudes toward mass and alternative tourism: The case of Sunshine Coast, Australia. *J. Travel Res.* **2010**, *49*, 381–394. [[CrossRef](#)]
21. Vogt, C.A.; Andereck, K.L.; Pham, K. Designing for quality of life and sustainability. *Ann. Tour. Res.* **2020**, *83*, 102963. [[CrossRef](#)]

22. Hudson, M.; Hawkins, N. A tale of two cities—A commentary on historic and current marketing strategies used by the Liverpool and Glasgow regions. *Place Branding* **2006**, *2*, 155–176. [[CrossRef](#)]
23. Gwinner, K.P.; Eaton, J. Building brand image through event sponsorship: The role of image transfer. *J. Advert.* **1999**, *28*, 47–57. [[CrossRef](#)]
24. Speed, R.; Thompson, P. Determinants of sports sponsorship response. *J. Acad. Mark. Sci.* **2000**, *28*, 226–238. [[CrossRef](#)]
25. Koo, G.Y.; Quarterman, J.; Flynn, L. Effect of perceived sport event and sponsor image fit on consumers' cognition, affect, and behavioral intentions. *Sport Mark. Q.* **2006**, *15*, 80–90.
26. Misra, S.; Beatty, S.E. Celebrity spokesperson and brand congruence: An assessment of recall and affect. *J. Bus. Res.* **1990**, *21*, 159–173. [[CrossRef](#)]
27. Kahle, L.R.; Homer, P.M. Physical attractiveness of the celebrity endorser: A social adaptation perspective. *J. Consum. Res.* **1985**, *11*, 954–961. [[CrossRef](#)]
28. Kamins, M.A. An investigation into the “match-up” hypothesis in celebrity advertising: When beauty may be only skin deep. *J. Advert.* **1990**, *19*, 4–13. [[CrossRef](#)]
29. Gwinner, K.; Bennett, G. The impact of brand cohesiveness and sport identification on brand fit in a sponsorship context. *J. Sport Manag.* **2008**, *22*, 410–426. [[CrossRef](#)]
30. Becker-Olsen, K.L. And now, a word from our sponsor—A look at the effects of sponsored content and banner advertising. *J. Advert.* **2003**, *32*, 17–32. [[CrossRef](#)]
31. Kaplanidou, K.; Vogt, C. The interrelationship between sport event and destination image and sport tourists' behaviours. *J. Sport Tour.* **2007**, *12*, 183–206. [[CrossRef](#)]
32. Schroeder, T. The relationship of residents' image of their state as a tourist destination and their support for tourism. *J. Travel Res.* **1996**, *34*, 71–73. [[CrossRef](#)]
33. Gallarza, M.G.; Saura, I.G.; García, H.C. Destination image: Towards a conceptual framework. *Ann. Tour. Res.* **2002**, *29*, 56–78. [[CrossRef](#)]
34. Kotler, P.; Asplund, C.; Rein, I.; Haider, D. *Marketing Places Europe: How to Attract Investments, Industries, Residents and Visitors to Cities, Communities, Regions, and Nations in Europe*; Financial Times: London, UK, 1999.
35. Paddison, R. City marketing, image reconstruction and urban regeneration. *Urban Stud.* **1993**, *30*, 339–349. [[CrossRef](#)]
36. Campelo, A.; Aitken, R.; Thyne, M.; Gnoth, J. Sense of place: The importance for destination branding. *J. Travel Res.* **2014**, *53*, 154–166. [[CrossRef](#)]
37. Woo, E.; Kim, H.; Uysal, M. Life satisfaction and support for tourism development. *Ann. Tour. Res.* **2015**, *50*, 84–97. [[CrossRef](#)]
38. Liang, Z.X.; Hui, T.K. Residents' quality of life and attitudes toward tourism development in China. *Tour. Manag.* **2016**, *57*, 56–67. [[CrossRef](#)]
39. Buzinde, C.N.; Kalavar, J.M.; Melubo, K. Tourism and community well-being: The case of the Maasai in Tanzania. *Ann. Tour. Res.* **2014**, *44*, 20–35. [[CrossRef](#)]
40. Jones, C. Mega-events and host-region impacts: Determining the true worth of the 1999 Rugby World Cup. *Int. J. Tour. Res.* **2001**, *3*, 241–251. [[CrossRef](#)]
41. Jurowski, C.; Brown, D.O. A comparison of the views of involved versus noninvolved citizens on quality of life and tourism development issues. *J. Hosp. Tour. Res.* **2001**, *25*, 355–370. [[CrossRef](#)]
42. Neal, J.D.; Sirgy, M.J.; Uysal, M. Measuring the effect of tourism services on travelers' quality of life: Further validation. *Soc. Indic. Res.* **2004**, *69*, 243–277. [[CrossRef](#)]
43. Kaplanidou, K.; Karadakis, K.; Gibson, H.; Thapa, B.; Walker, M.; Geldenhuys, S.; Coetzee, W. Quality of life, event impacts, and mega-event support among South African residents before and after the 2010 FIFA World Cup. *J. Travel Res.* **2013**, *52*, 631–645. [[CrossRef](#)]
44. Gwinner, K.P.; Larson, B.V.; Swanson, S.R. Image transfer in corporate event sponsorship: Assessing the impact of team identification and event-sponsor fit. *Int. J. Manag. Mark. Res.* **2009**, *2*, 1–15.
45. Howard, D.R.; Crompton, J.L. Tactics used by sports organizations in the United States to increase ticket sales. *Manag. Leis.* **2004**, *9*, 87–95. [[CrossRef](#)]
46. Fiske, S.T. *Schema-Triggered Affect: Applications to Social Perception, Affect and Cognition, Proceedings of 17th Annual Carnegie Mellon Symposium on Cognition*, 1982; Lawrence Erlbaum: Hillsdale, NJ, USA, 1982; pp. 55–78.
47. Styliadis, D. Residents' place image: A cluster analysis and its links to place attachment and support for tourism. *J. Sustain. Tour.* **2018**, *26*, 1007–1026. [[CrossRef](#)]

48. Hallmann, K.; Breuer, C. Image fit between sport events and their hosting destinations from an active sport tourist perspective and its impact on future behaviour. *J. Sport Tour.* **2010**, *15*, 215–237. [[CrossRef](#)]
49. Deng, C.Q.; Li, M.; Shen, H. Developing a measurement scale for event image. *J. Hosp. Tour. Res.* **2015**, *39*, 245–270. [[CrossRef](#)]
50. Lau, K.C.; Phau, I. Extending symbolic brands using their personality: Examining antecedents and implications towards brand image fit and brand dilution. *Psychol. Mark.* **2007**, *24*, 421–444. [[CrossRef](#)]
51. Keller, K.L. Conceptualizing, measuring, and managing customer-based brand equity. *J. Mark.* **1993**, *57*, 1–22. [[CrossRef](#)]
52. Nations, U. Sustainable Development Goals (SDGs). Available online: <https://sdgs.un.org/goals> (accessed on 6 October 2019).
53. Ritchie, B.W.; Adair, D. *Sport Tourism: Interrelationships, Impacts and Issues*; Channel View Publications: Bristol, UK, 2004; Volume 14.
54. Tianzhongmarathon. About Tianzhongmarathon. Available online: <https://www.tianzhongmarathon.com/blank-1> (accessed on 6 October 2019).
55. Cheung, M.L.; Pires, G.; Rosenberger III, P.J. Exploring synergetic effects of social-media communication and distribution strategy on consumer-based Brand equity. *Asian J. Bus. Res.* **2020**, *10*, 126–149. [[CrossRef](#)]
56. Memon, M.A.; Ting, H.; Ramayah, T.; Chuah, F.; Cheah, J. A review of the methodological misconceptions and guidelines related to the application of structural equation modeling: A Malaysian scenario. *J. Appl. Struct. Equ. Model.* **2017**, *1*, 1–13. [[CrossRef](#)]
57. Cohen, J. *Statistical Power Analysis for the Behavioral Sciences*; Academic Press: Waltham, MA, USA, 2013.
58. Sarstedt, M.; Cheah, J.H. Partial least squares structural equation modeling using SmartPLS: A software review. *J. Mark. Anal.* **2019**, *7*, 196–202. [[CrossRef](#)]
59. Cheung, M.L.; Pires, G.D.; Rosenberger, P.J., III. Exploring consumer–brand engagement: A holistic framework. *Eur. Bus. Rev.* **2020**. [[CrossRef](#)]
60. Cheung, M.L.; Pires, G.; Rosenberger, P.J. The influence of perceived social media marketing elements on consumer–brand engagement and brand knowledge. *Asia Pac. J. Mark. Logist.* **2020**, *32*, 695–720. [[CrossRef](#)]
61. Hair, J.F., Jr.; Sarstedt, M.; Hopkins, L.; Kuppelwieser, V.G. Partial least squares structural equation modeling (PLS-SEM). *Eur. Bus. Rev.* **2014**, *26*, 106–121. [[CrossRef](#)]
62. Shmueli, G.; Sarstedt, M.; Hair, J.F.; Cheah, J.H.; Ting, H.; Vaithilingam, S.; Ringle, C.M. Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *Eur. J. Mark.* **2019**, *53*, 2322–2347. [[CrossRef](#)]
63. Podsakoff, P.M.; MacKenzie, S.B.; Lee, J.Y.; Podsakoff, N.P. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *J. Appl. Psychol.* **2003**, *88*, 879. [[CrossRef](#)] [[PubMed](#)]
64. Hair, J.F., Jr.; Hult, G.T.M.; Ringle, C.; Sarstedt, M. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*; Sage Publications: Thousand Oaks, CA, USA, 2016.
65. Vatcheva, K.P.; Lee, M.; McCormick, J.B.; Rahbar, M.H. Multicollinearity in regression analyses conducted in epidemiologic studies. *Epidemiology* **2016**, *6*, 1–8. [[CrossRef](#)] [[PubMed](#)]
66. Hair, J.F.; Risher, J.J.; Sarstedt, M.; Ringle, C.M. When to use and how to report the results of PLS-SEM. *Eur. Bus. Rev.* **2019**, *31*, 2–24. [[CrossRef](#)]
67. Geisser, S. A predictive approach to the random effect model. *Biometrika* **1974**, *61*, 101–107. [[CrossRef](#)]
68. Shmueli, G.; Ray, S.; Estrada, J.M.V.; Chatla, S.B. The elephant in the room: Predictive performance of PLS models. *J. Bus. Res.* **2016**, *69*, 4552–4564. [[CrossRef](#)]
69. Schnitzer, M.; Kössler, C.; Schlemmer, P.; Peters, M. Influence of event and place image on residents’ attitudes toward and support for events. *J. Hosp. Tour. Res.* **2020**, 1096348020919502. [[CrossRef](#)]
70. Ku, G.C.; Mak, A.H. Exploring the discrepancies in perceived destination images from residents’ and tourists’ perspectives: A revised importance–performance analysis approach. *Asia Pac. J. Tour. Res.* **2017**, *22*, 1124–1138. [[CrossRef](#)]
71. Hsu, C.Y.; Chen, M.Y.; Yang, S.C. Residents’ attitudes toward support for island sustainable tourism. *Sustainability* **2019**, *11*, 5051. [[CrossRef](#)]
72. Sanchez del Rio-Vazquez, M.E.; Rodríguez-Rad, C.J.; Revilla-Camacho, M.Á. Relevance of social, economic, and environmental impacts on residents’ satisfaction with the public administration of tourism. *Sustainability* **2019**, *11*, 6380. [[CrossRef](#)]

73. De Azevedo, A.J.A.; Custódio, M.J.F.; Perna, F.P.A. “Are you happy here?”: The relationship between quality of life and place attachment. *J. Place Manag. Dev.* **2013**, *6*, 102–119. [[CrossRef](#)]
74. Hedlund-de Witt, A. Rethinking sustainable development: Considering how different worldviews envision “development” and “quality of life”. *Sustainability* **2014**, *6*, 8310–8328. [[CrossRef](#)]
75. Malchrowicz-Mosko, E.; Munsters, W. Sport tourism: A growth market considered from a cultural perspective. *Ido Mov. Cult. J. Martial Arts Anthropol.* **2018**, *18*, 25–38.
76. Vehmas, H. Rationale of active leisure: Understanding sport, tourism and leisure choices in the Finnish society. *Ido Mov. Cult* **2010**, *10*, 121–127.
77. Cynarski, W.J.; Obodyński, K.; Porro, N. *Sports, Bodies, Identities and Organizations: Conceptions and Problems*; Wydawnictwo Uniwersytetu Rzeszowskiego: Rzeszów, Poland, 2011.
78. Newman, H.K. *Southern Hospitality: Tourism and the Growth of Atlanta*; University Alabama Press: Tuscaloosa, AL, USA, 1999.
79. Starnes, R.D.; Blevins, B.; Jackson, H.H.; Ownby, T.; Pierce, D.S. *Southern Journeys: Tourism, History, and Culture in the Modern South*; The University of Alabama Press: Tuscaloosa, AL, USA, 2003.



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