

การรับรู้ของผู้อยู่อาศัยและนักวิ่งที่เข้าร่วมกิจกรรมที่มีต่อผลกระทบของ
การจัดกิจกรรมวิ่งมาราธอน – กรณีศึกษาจากการวิ่งไทยแลนด์มาราธอนเมเจอร์
The Perceptions of the Residents and Running Participants in Response to the
Consequence of Mass Running Events: The Case of Thailand Marathon Majors

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บทคัดย่อ

กระแสความนิยมในการวิ่งเป็นปรากฏการณ์ใหม่ที่เกิดขึ้นในสังคมไทย จำนวนกิจกรรมวิ่งมาราธอนลดลง
จำนวนนักวิ่งเพิ่มขึ้นอย่างต่อเนื่องในทุก ๆ ปี การวิ่งส่งผลดีต่อสุขภาพต่อผู้ที่วิ่ง แต่ประโยชน์ของการจัดกิจกรรมวิ่งมาราธอน
ที่มีต่อชุมชนที่ใช้เป็นสถานที่จัดกิจกรรม ตลอดจนการรับรู้ผลกระทบเหล่านั้นยังไม่ได้มีการศึกษามากนัก งานนี้จึงมี
วัตถุประสงค์สำคัญ คือ เพื่อศึกษาการรับรู้ผลกระทบของการจัดกิจกรรมวิ่งมาราธอนโดยสองกลุ่มผู้มีส่วนได้ส่วนเสียสำคัญ
คือ ผู้อยู่อาศัยในชุมชนที่ใช้เป็นสถานที่จัดงาน และนักวิ่งที่เข้าร่วมกิจกรรมวิ่งมาราธอน และเพื่อศึกษา²
ความสัมพันธ์ระหว่างการรับรู้ผลกระทบทางเศรษฐกิจและระดับความเห็นพ้องและความเต็มใจที่จะสนับสนุนการจัดกิจกรรม
ในอนาคต โดยเลือกศึกษาจาก 3 กิจกรรมวิ่งมาราธอนชั้นนำของประเทศไทยหรือ 3 รายการวิ่งที่ได้รับการจัดอยู่ในไทย
แลนด์มาราธอนเมเจอร์ ได้แก่ จอมบึงมาราธอน บางแสน 42 ชลบุรีมาราธอน และบุรีรัมย์มาราธอน และใช้แบบสอบถาม
ในรูปแบบออนไลน์และอฟไลน์ในการเก็บข้อมูล สรุมตัวอย่างตามความสะดวก กลุ่มตัวอย่างประกอบด้วยนักวิ่งที่เข้าร่วม
กิจกรรมวิ่งมาราธอนและผู้อยู่อาศัยในชุมชนที่ใช้เป็นสถานที่จัดกิจกรรม จำนวน 644 คน ข้อมูลที่ได้จะถูกนำมาวิเคราะห์ทางสถิติ

ผลการศึกษาพบว่า นักวิ่งและผู้อยู่อาศัยในชุมชนมีการรับรู้ต่อผลกระทบของการจัดกิจกรรมวิ่งมาราธอนใน
ระดับปานกลางถึงสูง โดยเฉพาะอย่างยิ่งผลกระทบเชิงเศรษฐกิจที่เกี่ยวข้องกับการท่องเที่ยว นอกจานั้น การรับรู้
ผลกระทบเชิงบวกของการจัดกิจกรรมวิ่งมาราธอน มีความสัมพันธ์ในเชิงบวกต่อการยอมรับและความยินดีที่จะสนับสนุน
การจัดกิจกรรมในอนาคต ความเข้าใจต่อทัศนคติและการรับรู้ผลกระทบมีความสำคัญต่อกระบวนการวางแผนจัดกิจกรรม
ซึ่งผู้จัดกิจกรรมสามารถนำข้อมูลดังกล่าวไปประยุกต์ใช้ในการวางแผนและตีสื่อสาร รวมถึงกระบวนการมีส่วนร่วมและ
การสนับสนุนการจัดกิจกรรมได้

คำสำคัญ : ผลกระทบ กิจกรรมวิ่งมาราธอน การรับรู้ของผู้อยู่อาศัย การรับรู้ของนักวิ่งที่เข้าร่วมกิจกรรม

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Abstract

Running boom becomes a new social phenomenon in Thailand. Number of mass running events and running participants rise spectacularly on a yearly basis. Running provides health benefits for those who run. However, the benefits that mass running events bring to community hosting the events as well as how these are perceived are lack of study. Thus, the first research objective is to examine the perceptions in response to the impact of mass running events to the community. The second research objective is to examine the relationship between perceived positive economic and social impacts and the degree of agreement and supportive action.

Three leading mass running events; Chombeung Marathon, Bangsean42 Chonburi Marathon, and Buriram Marathon regarded as Thailand Marathon Majors are chosen as the unit of the study. Online and offline questionnaire surveys are applied to collect data. Convenience sampling technique is applied; 644 informants are runners participating in the running events and residents residing in the hosting area. Statistical analysis via SPSS program is used to analyze the data.

Results show that residents and running participants of the three running events perceive the impacts of the running events at moderate to high level. Especially the economic impacts related to tourism such as create destination image and tourism destination and increase tourism visitations are well perceived. Additionally, positive perceptions towards economic and social impacts are having positive relationship with degree of agreement and willingness to support future events.

The understanding of stakeholders' attitude and perceptions towards the events and their impact is vital in event planning process; thus, it can shape the way event organizers plan and communicate and ultimately encourage participation and supportive action.

Keywords : Impacts of Mass Running Events, Residents' Perception, Running Participants' Perception

1. Background of the study

Mass sport participation events have grown in popularity and number over the decades. These events vary in types, scales and purposes. Among those, mass running events or marathon running events are the most well-known and participated by thousands of people at a time. As the consequence of running boom, number of road running events and city marathons around the world continue to grow from year to year. Number of running participants rise spectacularly on a global basis.

In Thailand, running boom has become a new social phenomenon. There were 700-800 running events held in 2017. From 2018 to 2019, the number increased to 1305, indicating that up to 54 events were held monthly or 12 events in every week (Ratisukpimol, 2018). It is expected that there will be more than up to 3,000 running events in 2020. One-fourth of the population jog or run and 10% of those participate regularly in mass running events (Thaihealthreport, 2020).

Running provides health benefits to those who run. But mass running events may impact diverse stakeholders in many ways. Previous studies focus on the impact of mega or hallmark events. But the studies about the impacts of mass running events and other mass sport participation events are lacking for many reasons. Thus, research objectives are to examine the impact of mass running events to the community perceived by two key stakeholders, namely residents residing in the hosting community and running participants and to examine the relationship between positive perception and the degree of agreement and willingness to support the future events. The understandings about the stakeholders' perceptions may help reduce the conflict and may encourage community participations which eventually helps increase attractiveness of the events. As stated in social exchange theory that when the benefits are well perceived by community, it may lead to acceptance and encourage supportive actions (Fredline, 2005; Kim, Gursoy, & Lee, 2006).

2. Literature Review

2.1 Mass Running Events

Mass running events is a type of mass sport participation event that commonly associated with large participation numbers. These events have gained increasing in popularity, numbers of events and participants. From year to year, mass running events attract numbers of sport tourists and make sport tourism a fast growing segments in international tourism (Getz, 2008).

Since the arrival of running boom, numbers of mass running events increase significantly. Growth in popularity of marathon running rise with over 200% in some country (RunRepeat, 2020). In Thailand, there were more than 700 mass running events held in 2017 and 1,305 to 3,000 events during 2018-2019. And roughly one-fourth of the population exercise by running or walking and 10 percent participate regularly in mass running events (Thaihealthreport, 2020).

2.2 Event Impacts

Hosting an event results in short and long term impacts. Impact of the events can be categorized in term of its duration. Short-term impacts are those that take place during the event, prior and immediately after the event, while long-term may referred to as after-use. Spilling (2000) categorized the main potential long-term impacts of events into four categories, namely, enhancing international awareness, increasing economic activity, enhancing facilities and infrastructure and increasing social and cultural opportunities. Allen et al. (2002) distinguished the impact into four spheres: social and cultural, physical and environmental, political and tourism and economic. Triple bottom line as a framework for measuring and reporting corporate performance including financial, social and environmental performance is suggested to be used to assess the impact of events (Ritchie, 1985; Hall, 1992; Hede, Jago, & Deery, 2002). Some literatures categorized the event impacts into tangible and intangible impacts (Carlsen, Getz, & Soutar, 2000; Dwyer, Mellor, Mistilis, & Mules, 2000).

Among event impacts, economic impacts of sporting events have gained enormous attention in event impact research. Quantitative methods such as cost-benefits analysis, Multiplier analysis or the Input-

Output analysis are applied to measure the economic benefit derived from hosting the event (Burgan & Mules, 2001; Blake, 2005; Dwyer, 2005; Higham, 2005). In some research, expenditure made by sport tourists or organizers are calculated to identify the economic impact (Wilson, 2006; Kotze, 2006; Drakakis & Papadaskalopoulos, 2014). Other economic impacts that have been in research interest include destination image, urban regeneration, business stimulation, employment opportunities and skills development (Chalip & Leyns, 2002; Sherwood, Jago, & Deery, 2005).

On another hand, social impacts of the events have received increasingly interest by academic scholars. Social impact refers to the change of collective and individual value systems, behaviors, community structure, lifestyle and quality of life due to tourism and travel effects (Hall, 1992). Social impacts are difficult to measure objectively or to quantify, therefore qualitative technique or indirect measurement such as the investigation of residents' perception of the impacts is applied to measure social impact (Fredline, Jago, & Deery, 2003; Dywer, 2005). Some scholar developed social impact statements and used the quantitative scale to rate the impacts occurred when staging the event (Green, Hunter, & Moore, 1990; Delamere, Wankel, & Hinch, 2001; Fredline et al., 2003; Kim, 2012; Small, Edwards, & Sheridan, 2005). Others aspects of social impacts that have been studied in previous research include inspirational effect or the trickle-down effect (Weed, Coren, Flore, Mansfield, Wellard, Chatziefstathiou, & Dowse, 2009; Ramchandani & Coleman, 2012), volunteerism effect (Funk & Bruun, 2007), individual and community development as the result of participation and volunteer work (Elstad, 1996; Twynam, Farrell, & Johnston, 2002; Downward & Ralston, 2006; MacLean & Hamm, 2007).

Lastly, the environmental impacts of the events refer to the direct effect of socio-economic activities and natural events on the components of the environment (OECD, 1997). Some previous studies used quantitative approach such as the calculation of carbon footprint to identify the environmental impact. But some scholars suggest qualitative approach since it is less complex and this method provide a rich and detailed picture of how environmental impact is perceived (Toro, Requena, Duarte, & Zamarano, 2013). The environmental impacts from the events include noise and air pollution, garbage problems, damage of natural environment and landscape. However, the scale and gravity of impact depends mainly on the kind of sports and the size of the event (Masterman, 2004).

2.3 Impacts of Mass Running Events

The impacts of mass running events have been examined by a number of studies. Coleman (2003) studied the economic impact of London Marathon 2000 by using survey questionnaires in order to identify the spending pattern of various groups linked to the event and the event account and budget representing amount spent by organizers. Key finding indicated the economic impact defined as the additional expenditure made in London as direct result of the event being staged. The net increase in the London economy was about 25 million pounds (Coleman, 2003). Also, the report of Chicago Marathon revealed that Chicago Marathon made a significant contribution to the Greater Chicago economy with the impact estimated at 143 million dollars. The image of the city as tourist destination was also improved by hosting the event (REAL,

2008). The study of Agrusa, John, and Dan, (2006) on Japanese runners in the Honolulu Marathon found that most of the event participants came from outside and around 20000 had traveled from Japan. These runners made a significant contribution to 53 million dollars' direct expenditure and nearly 87 million dollars' overall impact including induced expenditure during the event. Positive economic impact was also found in smaller-scale mass running event for example in Bristol Half Marathon, Dublin Marathon, Edinburg Marathon and Copenhagen Marathon (Coleman, 2003).

Social impacts have also been studied by academic scholars. Olberding and Olberding (2004) investigated the soft social impacts of the Cincinnati Flying Pig Marathon through participants' perceptions and opinions survey. Results showed that Cincinnati Flying Pig Marathon has created better image of the city among local and non-local participants. It also increased sense of local-pride and creates opportunities for social interaction among more than 30,000 runners and walkers, 4,000 volunteers and 150,000 spectators. Furthermore, it was revealed in the study that the cost or investment in such an event i.e. marathon running can be relatively low, but the impacts on both social and economic assets of a city can be huge. Maenning (2003) studied the displacement effects caused by Berlin Marathon. He found that the displacement effect was minimal. Hotel business and associated activities were displaced by 2%. Sightseeing bus company experienced 13% loss in sales on the event date because of road closures. But this was only 0.07% of the estimated additional expenditure generated by Berlin Marathon.

2.4 Social Exchange Theory

Social exchange theory is extensively utilized as a foundation for event and tourism research in order to investigate residents' attitude or perceptions towards the impact of tourism development or events. Social exchange theory views exchange as a social behavior that may result both in economic and social outcomes. The theory states that people are more likely to engage in exchange with others if they believe they will receive benefits that outweigh their expenses (Gursoy & Kendall, 2006).

Accordingly, residents will evaluate the cost and benefits gained from the event and their overall perception illustrate an internal cost benefit analysis (Fredline, 2005). If residents perceive that benefits outweigh the costs, they will have positive attitude towards future events and are more likely to engage or exhibit supportive behavioral intentions and vice versa (Fredline, 2005; Kim et al., 2006).

3. Research Methodology

Quantitative research approach was applied to this study. Questionnaire surveys were used to assist the data collection from running participants and local residents of the three major marathon events in Thailand, namely Chom Beung Marathon, Bangsean42 Chonburi Marathon and Buriram Marathon. These running events are the most well-known large scale running events in Thailand. Bangsean42 and Buriram Marathon are awarded the World Athletics Label which guarantee the world-class standard of the races. Convenience sampling is applied. 644 valid returned questionnaires from running participants and local residents of the three marathon running events were used for the analysis.

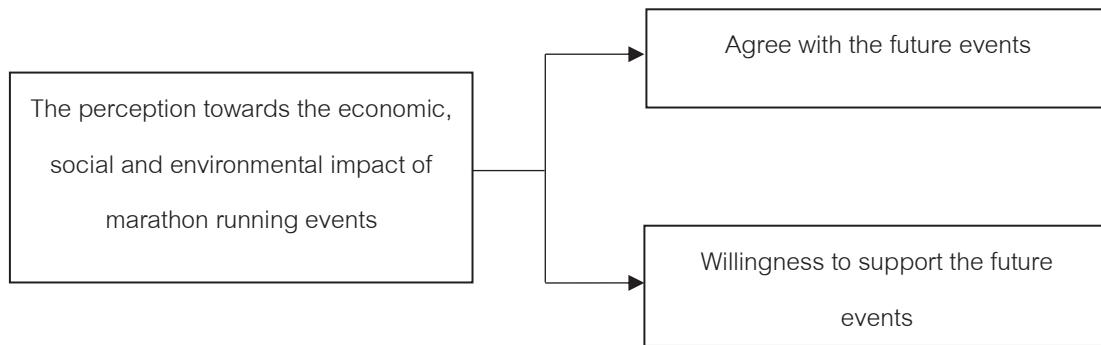
The survey questionnaire consisted of 3 parts. Part 1 included the general questions about awareness and interest of the mass running events, while Part 2 examined the perceived impact of mass running events in three categories, namely economic, social and environmental impacts. 5-points Likert scale ranging from 5 = Strongly agree, 4 = Agree, 3 = Neither agree or disagree, 2 = Disagree to 1 = Strongly disagree were used to evaluated the economic, social and environmental impact statements classified in 2 categories, namely positive and negative impacts. The impact statements were generated from previous research investigating the impact of mega events, special events or festival and research aiming at developing indicator to measure the impact of such events (Green et al., 1990; Delamere et al., 2001; Fredline et al., 2003; Small et al., 2005; Kim, 2012). Part 3 of the questionnaire asked about demographic of the respondents.

The questionnaire was conducted in Thai language and it took 5 to 10 minutes to complete. Respondents received brief information about the study in advance. The survey was voluntary basis and anonymous. Respondents were guaranteed the right to exit the survey. For participating runners, researcher posted the request and the link to access questionnaire online in runners' well-known Facebook Fanpage such as "42.195 we are going to Marathon together" and City Run Club. Online questionnaires were also sent to local business and hotels in the study area by using business directory, however the return rate was relatively low. Majority of the questionnaire for local residents or non-running participants were collected offline or paper-based.

The Index of Objective Congruence (OIC) was conducted in order to guarantee the content validity. The questionnaires were sent to 3 experts from leading Business School. They were asked to determine the content validity score. The questionnaire was improved according to experts' advices. This study was also reviewed by Ethical Research Committee. Pilot test was conducted to ensure the understanding of the questionnaire. The collected questionnaires were statistical analyzed by SPSS program. Perceptions towards the impacts of mass running events from running participants and local residents were compared. The relationships between perceptions towards positive economic and social impacts of mass running events and intention to agree or to support the event were tested.

In addition to the primary data collected by the questionnaire survey, secondary data collected from diverse sources such as press conference of the events, news and informational provided in the event websites or Fanpage are considered, as this may better the understanding about the phenomena of interest.

Figure 1 Research Model of the Study



4. Results and Discussions

The questionnaires were distributed to runners and local residents both online via google form and offline by hand. Some returned questionnaires were deselected as they did not conform with the requirement because the participants were underage or the questionnaires were uncompleted. Data used for the analysis included 99, 100 and 124 or total 323 valid questionnaires from runners participating in Buriram Marathon, Bangsean42 Chonburi Marathon and Chom Bueng Marathon and 95, 100 and 126 or total 321 valid questionnaires from residents residing in the hosting area of Buriram Marathon, Bangsean42 Chonburi Marathon and Chom Bueng Marathon.

The demographic profiles of the respondents are illustrated in Table 1. Respondents consist of runners and residents. They are varying in age, gender and occupation. Majority of the running participants are male and age under 50. They work as company employee, freelance, business owner or government officer, while only small percentage of running participants are students, agriculture or unemployed. This complies with the recent trend of running boom asserting that more young age, working people enjoy running or jogging as leisure activities (Van Bottenberg, Hover, & Scheerder, 2010). Majority of residents responded to the questionnaires are female. Age group of 18-30 years old represents the largest proportion. Most of the respondents are employed. They work as government officers, company employee, freelance or own a business.

Table 1 Demographic Characteristics of the Respondents

Items		Frequency %					
		Buriram Marathon		Bangsean42 Chonburi		Chom Bueng	
Gender		Runners	Residents	Runners	Residents	Runners	Residents
	Male	34.3	32.6	66.0	53.0	66.1	51.6
Female		52.5	53.7	33.0	47.0	33.9	41.6
Do not specify		13.1	12.7	1.0	0	0	0.8
Age	>18-30	45.5	71.6	9.0	43.0	5.6	43.7
	>30-40	24.2	21.1	37.0	23.0	35.5	46.0
	>40-50	19.2	5.3	44.0	16.0	41.9	6.3
	>50-60	11.1	2.1	7.0	18.0	16.9	3.0
	>60	0	0	3.0	0	0	0.8
Occupation	Government officer	15.2	9.5	15.0	18.0	18.5	34.9
	Business owner	13.1	7.4	16.0	8.0	10.5	7.1
	Freelance	23.2	28.4	10.0	31.0	12.9	20.6
	Company employee	29.3	8.4	56.0	8.0	52.4	4.0
	Farmer/ Agriculturer	1.0	6.3	0	0	1.6	3.2
	Students	15.2	33.7	1.0	31.0	1.6	24.6
	Unemployed	3.0	5.3	1.0	0	1.6	5.6
	Others	0	1.1	0	4.0	0	0

The perceptions towards the impact of mass running events of runners participating in each event and residents residing in the hosting venue area of the events are examined. Runners and residents are asked to evaluate the impacts of mass running events using 5-Point Likert Scale. The impact statements include economic, social and environmental impacts. The average score of each impact statements are illustrated in Table 2.

Table 2 Average Scores of the Perceptions towards Economic, Social and Environmental Impacts

Items	Mean					
	Buriram Marathon		Bangsean42		Chom Beung	
	Runners	Residents	Runners	Residents	Runners	Residents
Economic Impacts						
1. Improve infrastructure (e.g. park, public toilet)	3.54	3.29	3.97	3.47	3.80	3.77
2. Improve transport system (e.g. road, bus connection)	3.53	3.59	3.77	3.37	3.86	3.96
3. Improve employment opportunity	3.79	3.26	4.03	3.57	3.83	4.09
4. Increase local income	3.98	3.29	4.36	3.93	4.40	4.21
5. Enhance destination image	3.87	3.19	4.28	3.85	4.29	4.16
6. Increase public awareness of the province/ community as tourism destination	3.93	3.37	4.31	4.28	4.24	4.18
7. Increase tourist visitations	3.92	3.33	4.19	4.23	4.15	4.14
8. Improve tourism infrastructure (e.g. hotels, tourist attractions)	3.80	3.53	3.93	3.86	3.92	4.17
Social Impacts						
9. Create community pride	3.77	3.55	3.86	3.83	4.34	4.17
10. Enhance community unity	3.87	3.38	3.63	3.81	4.28	4.27
11. Increase community quality of life	3.66	3.43	3.32	3.74	3.97	4.25
12. Increase individual quality of life	3.67	2.97	3.28	3.56	3.85	4.06
13. Create opportunity to participate in community decision making	3.62	3.07	3.28	3.41	4.03	4.23
14. Create opportunity to volunteer	3.84	3.38	3.82	3.88	4.27	4.57
15. Increase inspiration for sports/ physical activities	4.04	3.59	4.01	4.08	4.03	4.20
16. Increase recreational/ entertainment opportunities	3.98	3.60	3.86	4.09	4.18	4.20
17. Increase future use of existing recreational and sport facilities	3.81	3.52	3.79	3.87	4.23	4.10

Table 2 Average Scores of the Perceptions towards Economic, Social and Environmental Impacts (Con't)

Items	Mean					
	Buriram Marathon		Bangsean42		Chom Beung	
	Runners	Residents	Runners	Residents	Runners	Residents
18. Increase local interest as tourism destination	3.76	3.40	3.57	4.02	4.15	4.14
19. Increased local interest in the region's culture and history	3.68	3.12	3.32	3.77	3.96	4.07
20. Acquirement of experience in hosting mass sport event	3.68	2.81	3.47	3.60	4.10	4.20
21. Acquirement of knowledge in organizing mass sport event	3.67	3.17	3.36	3.59	3.93	4.12
22. Acquirement of knowledge about sports/ physical activities	3.69	3.40	3.37	3.83	3.97	4.24
23. Create crowded in the city	3.79	3.42	3.73	3.92	3.98	4.20
24. Lead to traffic congestions	3.43	3.77	3.80	3.69	3.46	3.96
25. Increase crime in the city	2.61	2.58	2.56	2.58	2.01	1.92
26. Cause inconvenience from road closures	3.23	3.45	3.52	3.46	2.87	3.46
27. Increase price of goods and services	3.23	3.29	3.26	3.10	2.83	1.71
28. Bring conflict between participants of mass running events and local residents	2.82	2.31	2.68	2.59	2.31	1.50
29. Bring conflict between those who support and do not support the mass running event	2.70	2.71	2.70	2.49	2.36	1.52
Environmental Impacts						
30. Create air pollution	2.41	2.41	2.26	1.88	2.05	1.50
31. Create noise pollution	2.98	2.96	2.85	2.07	2.41	1.62
32. Increase amount of litter and waste	3.38	2.84	3.33	3.03	3.31	3.57
33. Damage in natural environments and landscape	2.73	2.59	2.64	2.09	2.36	1.91

Results show that in the case of Buriram Marathon held in Buriram Province, the average score of "Increase Local Income" (3.98), "Increase Public Awareness of the Province/ Community as Tourism Destination" (3.93) and "Increase Tourist Visitation" (3.92) are the top three highest positive economic impact evaluated by running participants of Buriram Marathon, while for Buriram residents, the average score of "Improve Transport System" (3.59), "Improve Tourism Infrastructure" (3.53) and "Increase Public Awareness of the Province/ Community as Tourism Destination" are the top three highest. Additionally, running participants of Buriram Marathon rated "Increase Inspiration for Sports/ Physical Activities" (4.04), "Increase Recreational/ Entertainment Opportunities" (3.98) and "Enhance Community Unity" (3.87) as the top three highest positive social impacts, while Buriram residents rated the "Increase Recreational/ Entertainment Opportunities" (3.60), "Increase Inspiration for Sports/ Physical Activities" (3.59) and "Create Community Pride" (3.55) as the top three highest positive social impacts. For negative impacts, running participants rated "Create Crowded in the City" (3.79), "Lead to Traffic Congestions" (3.43) and "Increase Amount of Litter and Waste" as the top three highest scores. The scores rated by residents are slightly different i.e. the top three average scores are "Lead to Traffic Congestions" (3.77), "Cause Inconvenience from Road Closures" (3.45) and "Create Crowded in the City" (3.29).

Buriram Marathon belongs to one of the World's leading road races with Silver Label awarded by the World Athletics. The event was founded by Mr. Newin Chidchob in 2017, who aimed to transform Buriram to Sports City. The marathon event draws large number of participants accompanied by family and friends to the province. Hotels and restaurants are fully occupied during the event. Many sports tourists also visit city tourist attractions. And to stage large scale events and to comply the strictly standard of the World Athletic Label Road Races, Buriram province has improved its infrastructure and tourism facilities. Grab Car, Airbnb or homestay are encouraged to strengthen the transportation and lodging networks in the city (Lerksirinukul, 2019).

Nowadays, Buriram province become a leading sports city in Thailand and Buriram Marathon is one of the best running events in Thailand. This creates great community pride. And due to its popularity, the event inspires both local and non-local people to train, so that they can once participate in this world's leading race. Lastly, Buriram Marathon is embedded in the province event calendar and slowly becomes community tradition. The local communities and businesses are encouraged to take part as staff, volunteers or sponsors. Thus, the community unity is enhanced and perceived as positive social impacts of Buriram Marathon. Nevertheless, to comply with the standard required by the World Athletics, the race course must be closed to vehicular traffic. This causes the inconveniences for both event participants and local residents. Additionally, large number of participants gathering in the city at the same time makes the city crowded, leads to traffic jam and increase amount of litter and waste. Therefore, both running participants and residents perceive these issues as negative impacts (Jantori & Pongponrat, 2022).

For Bangsean42 Chonburi Marathon, the top three average score of positive economic impacts rated by running participants include "Increase Local Income" (4.36), "Increase Public Awareness of the

Province/ Community as Tourism Destination" (4.31) and "Enhance Destination Image" (4.28), while residents residing in the hosting venue area and around Chonburi province rated "Increase Public Awareness of the Province/ Community as Tourism Destination" (4.28), "Increase Tourist Visitations" (4.23) and "Increase Local Income" (3.93) as the top three highest score. For positive social impacts, running participants rated "Increase Inspiration for Sports/ Physical Activities" (4.01), "Create Community Pride" (3.86) and "Increase Recreational/ Entertainment Opportunities" (3.86) as the top three highest average score, while residents residing in the hosting venue area rated "Increase Recreational/ Entertainment Opportunities" (4.09), "Increase Inspiration for Sports/ Physical Activities" (4.08) and "Increase Local Interest as Tourism Destination" (4.02) as the top three. Both running participants and residents rated "Create Crowded in the City", "Lead to Traffic Congestions" and "Cause Inconvenience from Road Closures" as the major negative impacts, but the rankings are slightly different between each group.

Results confirm that increasing local income generated by masses of sports tourists belongs to major economic impacts that is well perceived by both running participants and residents of the events. Interesting is also the fact that running participants and residents rated the tourism related impacts with relatively high score. Bangsean race series including Bangsean21, Bangsean42 Chonburi Marathon, and Bangsean10 have been good show case for the city. They draw tourists to get back and to experience the new development and image of the city. Many sport tourists become repeat tourists afterwards. And thus, these impacts are perceived with high average scores. Additionally, Bangsean42 Chonburi Marathon and the race series of Bangsean are fixed in the city event calendar. They become new recreational and entertainment opportunities. The events create healthy and sport ambient that inspire local people to engage more in physical activities and encourage runners to train, so that they can later participate in these world class events. Similar to the case of Buriram Marathon, crowd, traffic congestions and inconvenience from road closures are perceived as top negative impacts rated by both running participants Bangsean42 Chonburi Marathon and residents residing in the hosting venue.

Lastly, the Chom Bueng Marathon, the top three economic impacts rated by the running participants of the event include "Increase Local Income" (4.40), "Enhance Destination Image" (4.29) and "Increase Public Awareness of the Province/ Community as Tourism Destination" (4.24), while the local residents of Chom Bueng district and Muang district of Ratchaburi rated "Increase Local Income" (4.21), "Increase Public Awareness of the Province/ Community as Tourism Destination" (4.18) and "Improve Tourism Infrastructure" (4.17) as the top three economic impacts, followed by "Enhance Destination Image" (4.16) and "Increase Tourist Visitations" (4.14). For the positive social impacts, the top three highest average score rated by running participants include "Create Community Pride" (4.34), "Enhance Community Unity" (4.28) and "Create Opportunity to Volunteer" (4.27), while residents rated, "Create Opportunity to Volunteer" (4.52), "Enhance Community Unity" (4.27) and "Increase Community Quality of Life" (4.25) as the top three positive social impacts. Both running participants and residents rated "Create Crowded in the City", "Lead to Traffic

Congestions" and "Increase Amount of Litter and Waste" as the top three negative impacts created by Chom Bueng Marathon.

Chom Bueng Marathon is running event held in Chom Bueng district, Ratchaburi province for 36 consecutive years. The marathon event generates more income for local people and better the employment opportunities. It also better the destination image and makes Chom Bueng district become a tourism destination. Interesting in this case is that the residents also perceive improve infrastructure as another impact with a relatively high average score. This is because, the Chom Bueng Marathon has experienced rising numbers of participants since 2015 and to increase the standard and quality of the event, the district is forced to improve its infrastructure, which in return benefits in increasing community the quality of life (Jantori & Pongponrat, 2022). Additionally, Chom Bueng Marathon is famous as Folks' event with global standard. The event is organized by several pillars including Muban Chombueng Rajabhat University; Chombueng Village Institute Foundation; local communities and runners, or in another word, the event is organized by community with great number of volunteers are involved. Therefore, both running participants and residents perceive creating opportunity for volunteer and enhancing community unity as important positive social impacts, while crowd, traffic congestions and increasing amount of litter and wastes are perceived as major drawbacks of the event (Chom Bueng Marathon, 2020).

The study also examines the degree of agreement and willingness to support future events by asking the question "*Would you agree, if your community organize this Marathon Running Event in the following years?*" and "*Would you support this Marathon Running Event in the following years?*". 5-point Likert Scale ranging from strongly disagree to very agree are used to answer the questions. The average scores are shown in Table 3.

Table 3 Average Scores of Degrees of Agreement and Willingness to Support Future Events

Items	Mean					
	Buriram Marathon		Bangsean42		Chom Bueng	
	Runners	Residents	Runners	Resident	Runners	Residents
S						
1. Agree with the future events	3.93	3.40	4.50	3.95	4.73	4.29
<i>t</i>	3.933		4.804		5.983	
<i>Sig (2-tailed)</i>	.000		.000		.000	
2. Support the future events	3.94	3.34	4.42	3.85	4.69	4.44
<i>t</i>	4.796		4.916		3.203	
<i>Sig (2-tailed)</i>	.000		.000		.002	

Result shows that both runners and residents of the three selected running events agree with the future events and are willing to support future events with moderate to high average scores. The average scores of degrees of agreement and willingness to support future events rated by runners and residents in the same location are different at 5% significant level. Runners participating in each event tend to agree more and express higher willingness to support future events than residents residing in the hosting venue area, as they are not directly impacted by the events.

Additionally, the study examines the relationship between positive perceptions towards economic and social impacts and the degree of agreement and willingness to support future events by conducting the bivariate correlation analysis. Results in Tables 4 and 5 indicate that there exist positive linear relationships between each economic impact and each social impact and the degree of agreement and willingness to support future events. This complies with the social exchange theory asserting that people are more likely to engage in exchange with others, if they believe they will receive benefits that outweigh their expenses (Fredline, 2005; Gursoy & Kendall, 2006; Kim et al., 2006). Running and participants perceive positive impacts of the mass running events occurred in their community in many aspects, hence, they tend to welcome the upcoming events and indicate their willingness to support the mass running event held in their community.

Table 4 Summary of Bivariate Pearson Correlation – Positive economic Impacts and Degree of Agreement and Willingness to Support future Events

	1	2	3	4	5	6	7	8	9	10
1. Infra	1									
2. Transport	.642**	1								
3. Job	.495**	.518**	1							
4. Income	.384**	.420**	.544**	1						
5. Image	.468**	.422**	.538**	.699**	1					
6. TourismCity	.381**	.284**	.447**	.665**	.674**	1				
7. Visitation	.363**	.388**	.453**	.602**	.634**	.719**	1			
8. TourismInfra	.501**	.567**	.469**	.512**	.497**	.480**	.578**	1		
9. Agree	.251**	.230**	.358**	.397*	.438**	.437**	.440**	.244**	1	
10. Support	.291**	.353**	.424**	.473**	.465**	.448**	.467**	.349**	.771**	1

** Correlation is significant at the 0.01 level (2-tailed).

(Variables: 1. Improve infrastructure (e.g. park, public toilet) 2. improve transport system (e.g. road, bus connection) 3. Improve employment opportunity 4. Increase local income 5. Enhance destination image 6. Increase public awareness of the province/ community as tourism destination 7. Increase tourist visitations 8. Improve tourism infrastructure (e.g. hotels, tourist attractions) 9. Agree with the future events 10. Support the future events)

Table 5 Summary of Bivariate Pearson Correlation – Positive Social Impacts and Degree of Agreement and Willingness to Support future Events

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.Pride	1															
2.Unity	.721**	1														
3.CommuLife	.662**	.625**	1													
4.IndividualLife	.307**	.365**	.273**	1												
5.Engagement	.364**	.469**	.525**	.418**	1											
6.Volunteer	.500**	.520**	.537**	.344**	.487**	1										
7.Inspiration	.455**	.429**	.481**	.331**	.412**	.576**	1									
8.Recreational	.540**	.525**	.498**	.300**	.369**	.513**	.663**	1								
9.Futureuse	.492**	.434**	.496**	.279**	.338**	.531**	.570**	.654**	1							
10.InterestTourism	.551**	.562**	.528**	.283**	.432**	.494**	.478**	.572**	.572**	.601**	1					
11.InterestCulture	.353**	.394***	.454**	.315**	.502**	.391**	.389**	.439**	.577**	.619**	.619**	1				
12.HostExperience	.321**	.431**	.387**	.371**	.517**	.427**	.355**	.356**	.345**	.544**	.603**	.603**	1			
13.KnowledgeEvent	.374**	.482**	.547**	.362**	.546**	.446**	.364**	.512**	.496**	.502**	.573**	.612**	.612**	1		
14.KnowledgeSport	.451**	.500**	.539**	.394**	.484**	.488**	.523**	.512**	.515**	.577**	.549**	.540**	.540**	.695**	1	
15.Agree	.343**	.399**	.351**	.216**	.314**	.363**	.359**	.328**	.295**	.354**	.307**	.344**	.344**	.284**	.297**	1
16.Support	.363**	.411**	.391**	.286**	.355**	.326**	.309**	.379**	.367**	.400**	.407**	.438**	.438**	.455**	.396**	.771**

** Correlation is significant at the 0.01 level (2-tailed).

(Variables: 1. Create community pride 2. Enhance community unity 3. Increase community quality of life 4. Increase individual quality of life 5. Create opportunity to participate in community decision making 6. Create opportunity to volunteer 7. Increase inspiration for sports/ physical activities 8. Increase recreational/ entertainment opportunities 9. Increase future use of existing recreational and sport facilities 10. increased local interest in the region's culture and history 11. Increased local interest in the region's culture and history 12. acquirement of experience in hosting mass sport event 13. acquirement of knowledge in organizing mass sport event 14. Acquirement of knowledge about sports/ physical activities 15. Agree with the future events 16. Support the future events

Additionally, multiple regression analysis with stepwise method is conducted in order to explain the relationship between dependent variable, namely the residents' degree of agreement and perception toward positive economic and social impacts as independent variables and another analysis for the residents' willingness to support future events and perception toward positive economic and social impacts. The results of multiple regression analysis are shown in the Tables 6-7.

Table 6 Summary of Multiple Regression Analysis for Predicting Variable: Agree with the Future Events

Variable	b	Beta	t-value	p value
Enhance destination image	.136	.145	2.072	.039
Increase inspiration for sports	.159	.164	2.982	.003
Increase tourist visitations	.203	.209	3.048	.003
enhance community unity	.203	.181	2.869	.004
Improve tourism infrastructure	-.163	-.174	-2.754	.006
Improve employment opportunity	.144	.157	2.649	.008
Constant	1.305		5.262	.000
R = 0.556	$R^2 = 0.309$	F = 22.922	p value < 0.001	

Table 7 Summary of Multiple Regression Analysis for Predicting Variable: Support the Future Events

Variable	b	Beta	t-value	p value
Enhance destination image	.131	.136	2.093	.037
Acquirement of knowledge in organizing mass sport event	.151	.160	2.653	.008
Improve employment opportunity	.165	.175	3.081	.002
Increase tourist visitations	.165	.164	2.647	.009
Acquirement of experience in hosting mass sport event	.107	.141	2.349	.019
Constant	1.233		5.667	.000
R = 0.592	$R^2 = 0.350$	F = 33.304	p value < 0.001	

The regression analysis confirms that some economic and social impacts can predict the degree of agreement and supportive action. Strong predictors for variable Agree include enhance destination image, increase inspiration for sports/ physical activities, increase tourist visitations, enhance community unity, improve tourism infrastructure, improve employment opportunity, while strong predictors of the dependent

variable Support are enhance destination image, acquirement of knowledge in organizing mass sport event, improve employment opportunity, increase tourist visitations, acquirement of experience in hosting mass sport event. Thus, the assumption from the social exchange theory is applicable in this study.

The predictors of the dependent variable Agree include enhance destination image, increase inspiration for sports/ physical activities, increase tourist visitations, enhance community unity, improve tourism infrastructure, improve employment opportunity, while predictors of the dependent variable Support include enhance destination image, acquirement of knowledge in organizing mass sport event, improve employment opportunity, increase tourist visitations, acquirement of experience in hosting mass sport event.

These indicate that as the value of the independent variable increases, the mean of the dependent variable (degree of agreement/ willingness to support) tends to increase. The general form of the equation to predict variable Agree can be formulated as $Agree = 1.305 + 0.136(Image) + 0.159(Inspiration) + 0.203(Visitation) + 0.203(Unity) - 0.163(TourismInfra) + 0.144(Job)$. This model can explain 30.9% of the variation in the dependent variable ($R^2 = .309$). While the general form of the equation to predict variable Support can be formulated as $Support = 1.233 + 0.131(Image) + 0.151(KnowlegeEvent) + 0.165(Job) + 0.165(Visitation) + 0.107(HostExperience)$. This model can explain 35% of the variation in the dependent variable ($R^2 = .350$). The overall models are useful in predicting variables.

5. Conclusion and Implications

The study illustrates runners' and residents' perceptions towards the impact of marathon running events. It implies that the events generate both positive and negative impacts to communities. The positive economic and social impacts are strongly perceived with moderate to high average scores among running participants and residents residing in the hosting venue area, while the negative impacts are perceived with low to moderate average scores. Additionally, the impacts of mass running events vary from short-term to longer-term. Negative impacts such as crowd, traffic congestions, road closures and amount of litter and waste are temporary and normally solved after the events. But some positive impacts remain longer, as these are embedded in community culture or behavioral change. This implies that mass running events are not just fun events serving only specific group of stakeholders. These events can in fact generate long lasting impacts to the community as a whole and wider range of stakeholders can benefit.

Furthermore, the positive economic impacts are having a positive linear relationship with the degree of agreement and supportive action for future events. This implies that running participants and residents tend to agree with the future events, as they perceive positive impacts that outweigh their cost or negative impacts. They also indicate the willingness to support future events, when they perceive positive impacts. This confirms the assumption of social exchange theory and leads to further implications for event organizers or initiators of marathon running events or other mass sport participation events, that in order to encourage more community participation and reduce resistances, it is essential to continuously communicate the benefits of the events such as enhancing destination image, increasing tourist visitations, improving employment opportunities and

tourism infrastructure as well as acquiring knowledge and experiencing in hosting mass sport events as these represents the strong predictors to level of agreement and willingness to support future events.

7. Contributions and Future Research

Study results provide empirical evidence indicating that mass running events as the product of sport tourism are on a good track of development. Their positive impacts are well perceived and future events are most likely to be welcomed and supported. Nevertheless, it is still essential for mass sporting event organizers or government authorities to consider residents' opinions and understand residents' perceptions towards the event and its impact when planning the events, as residents can affect the event or can be affected by the event. The opinions and feedbacks from running participants are also vital, since these are the direct customer of the events. Their feedbacks can help improve the event in term of standard and quality and at the same time, they can help promote the future events.

Nevertheless, this study is not without limitations. Findings may not be able to generalize due to the characteristics of the selected cases and sample size. The impacts statements are framed specifically for marathon running events, others mass participation sport events with different characteristics may require some adaptations. And the perception towards the impacts may differ due to the types and characteristics of the event being hosted in the community. Thus, more research on other kinds of mass participation sporting events such as biking, swimming, triathlon well as more case studies across communities or countries are recommended.

Additionally, qualitative study which enables researcher to gather in-depth insights and quantitative study with larger sample size as well as the research on direct impact measurement of mass running events and longitudinal study of the impacts of mass participation sporting events are highly encouraged as future research. These can provide fruitful information and fill up research gap, as mass sport participation events and mass running events are still the social phenomenon in many countries around the world and also in Thailand, but research in this area remain scarce.

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