



Hungarian University of Agriculture and Life Sciences

**Destination Sustainability and Citizens' Perceptions of Hosting
Global Mega-Sport Events: The Qatar World Cup 2022**

DOI: 10.54598/006400

Doctoral (PhD) dissertation

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2024

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ABBREVIATIONS

ANOVA	Analysis of Variance
ATT	Attribute
CE	Circular Economy
DS	Destination Sustainability
EV	Electric Vehicles
FFC	FIFA Football World Cup
FGD	Focus Group Discussion
FIFA	World Football Federation
GCC	Gulf Cooperation Council
G-E	Giga-Events
G-SE	Giga-Sport Events
IPCC	Intergovernmental Panel on Climate Change
iDSA	Initial Destination Sustainability Attribute
KSA	Kingdom of Saudi Arabia
M-E	Mega-Events
M-SE	Mega-Sport Events
OECD	Organization for Economic Co-operation and Development
OG	Olympic Games
PI	Psychic Income
PV	Personal valuation
PVDS	Personal valuation of destination sustainability
QF	Qatar Foundation
QNS	Qatar National Strategy
QNV	Qatar National Vision
QoL	Quality of Life
RAA	Ras Abu Aboud
Residents	Non-nationals
RO	Research Objective
SA	Sustainability Awareness
SET	Social Exchange Theory

SR	Social Responsibility
SSI	Semi-Structured Interview
SWOG	Summer & Winter Olympic Games
TDSA	Tourism Destination Sustainable Attribute
TRA	Theory of Reasoned Actions
UAE	United Aarab Emirates
UN	United Nations
UN SDG	United Nations Sustainable Development Goals
UN WTO	World Tourism Organization
UNEP	United Nation Environment Program
WT Trade-off	Willingness to trade off
WTP	Willingness to pay

1 INTRODUCTION

1.1 Significance of the Study

The topic is timely as the hosting of the first mega-sport World Cup event took place in the Arab World, giving it the name of the Arab's World Cup. The importance of this paper is also due to its focus on an under-researched multidisciplinary topic worthy of more academic attention within and outside of tourism sustainability and sport dimensions. The study focuses on important emerging topics such as sustainability, ecotourism, mega-sport events, circular economy, cultural impacts of tourism, demand-side perception of hosting tourism, psychic income and sport events. It also covers an area that lacks research in these topics and adds to the field of science new understanding of tourism and destination sustainability in oil-producing rich Arabian Gulf countries with emerging economy and openness to host global events and global tourism after a long era of conservatism and relative closedness. Although it is about Qatar only, KSA and UAE for instance, are walking in the same direction, and this study can be replicable on both and other countries with similar characteristics. Furthermore, although Bahrain, Oman, and Kuwait have a longer history of being open to tourism at different levels, this depth of research is still in need in these GCC Countries. Qatar was chosen as a case study to narrow the focus of the study and come out with deep understanding of the subject researched. Qatar successfully hosted FIFA World Cup 2022, marking the largest global event ever hosted in the Arabian Gulf Region, and opening the gate for more global sport events to be hosted by Qatar and other Arabian Gulf States in the future. This was confirmed in the newly released Qatar strategic Vision 2024-2030, as well as more cooperations between the neighbors such as Kingdom of Saudi Arabia and UAE in contesting to host the Olympic Games. The Arabian Gulf Region, also known as the Arabian Peninsula or the GCC (Gulf Cooperating Countries), is a unique destination for its historic, religious, cultural, natural, luxurious, diversification and entertainment importance.

Hosting Mega-sport or Giga-sport events is gaining more importance and receiving more attention by more countries for its potential to bring about economic development, but also destination marketing and mass tourism and opportunities for building national legacy and global desirable image. It is also thought to have potential impact on intercultural exchange, mutual respect, religious dialogue, and international peace, especially with current wars across the globe.

The strong political will to host the events and bring mass tourism in hundreds of thousands if not millions necessitates understanding possible impacts on sustainability with its three pillars, but also the destination sustainability being the host of these gigantic events, with what it brings about of international attention negative and positive, and impact of tourists coming from different cultures and places and not necessarily acquainted to the lifestyle, culture and values of the region, which are held high by the local communities in host destination. The study addresses impact on destination sustainability and tackles it from demand-side perception focusing on Citizens who are the ones subjected to cultural and social impacts more than others, as well as environmental and economic impacts, not to ignore political impacts. Yet they have not received much attention from literature for a long time. Mega-sport events such as World Expos have the potential to develop long term socio-economic impacts on events destinations (Magno & Dossena, 2020). Many researchers mostly studied the external impacts of the mega-event (Malfas et al., 2004), analyzing economic impacts of mega-sport events, focusing on the economic consequences but mostly overlooking the total and multidimensional perceptions of residents (Kim & Walker, 2012; Kim et al., 2015). Also, not much attention was paid to the medium-term impacts on the quality of life (QOL) of the local communities in the hosting destinations. This study aims to fill this gap and build on a few studies that tackled this aspect. Little attention is given in literature to social and cultural impacts of hosting mega-sport events on local communities in general, and especially in MENA Region, as Ishac & Swart (2022) noted, when they attempted to fill the gap by studying youth perception in Qatar. Nevertheless, they focused on non-Qatari youth, possibly because

majority of residents in Qatar are expats, or due to ease of researching non-nationals. This adds to the importance of my work as it reads the perception of Qatari nationals, a very important influential group that is receiving little attention by literature. This paper is addressing a small gap in an already existing gap in research in tourism and destination sustainability emphasizing the cultural sustainability pillar and from indigenous people's point of view. Figure 2. Illustrates the interdisciplinary nature of the study.

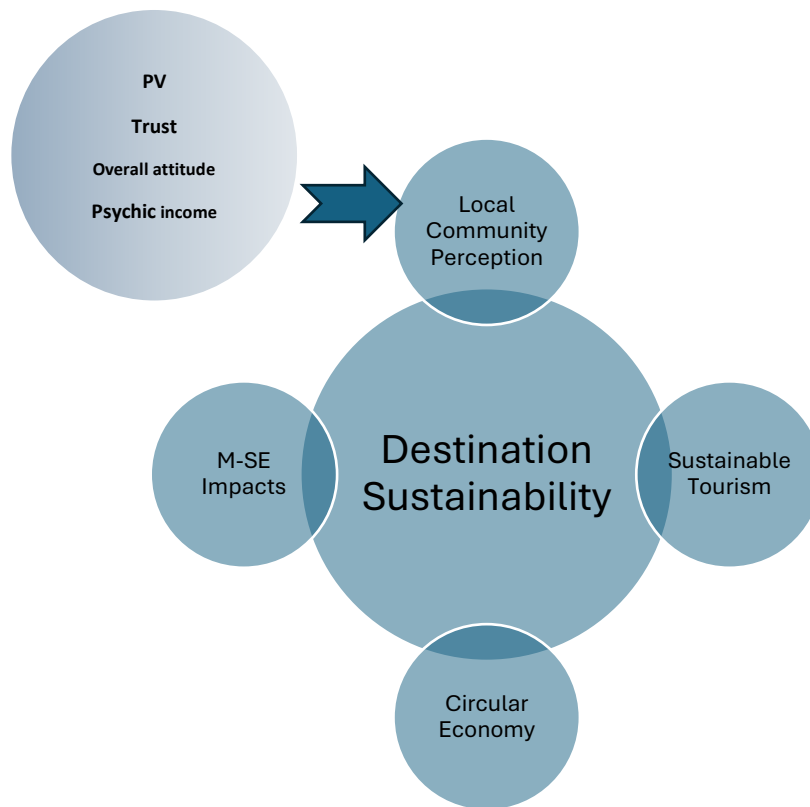


Figure 1 The interdisciplinary nature of the study
Source: Author's own construction

1.2 Problem Statement and Justification

Many countries and cities from all over the world compete to host mega-sport events (M-SE) for the potential benefits that come with the high media exposure including economic and political benefits. Nations outside the Western Center that did not consider having a chance to host such an event before 2022 Qatar World Cup, are now considering competing for the hosting of future FIFA Football World Cup (FFC), and other M-SE such as the Olympics. With hosting such a gigantic event, comes also potential adverse impacts on the sustainability of host destinations. The perception of local communities of the impacts of hosting and hence their support to the hosting needs to be studied and understood, to be included in the plans for hosting from early stages. Failure to do so can result in negative legacy and inconsistency between the perception of the government and the people. Also knowing the perception of impacts can highlight areas for awareness programs regarding understanding destination sustainability and the attributes that the government is investing in to fulfill the country's vision. For the State of Qatar, it is important that policies, legislations and local community walk together to fulfill the QV2030 that is based on sustainable development and prosperity. In parallel, impacts of mediating variables such as psychic income, and trust need to be understood fully. Moreover, the personal valuation of destination

sustainability and its effect on perception of impacts as well as the socio-demographic variables – all need to be studied and understood in relevance to Citizens’ support of hosting future M-SE. As far as I know, no single study attempted to investigate the link between all these variables that are affecting the decision to support. For any nation considering hosting a M-SE, especially in the Arabian Gulf Region with its cultural, historical, political, economic and environmental specificity, hosting a Mega or Giga -Sport Event might bring negative legacies that are not intended, whilst positive legacies are attainable with understanding and catering for the different vital factors and attributes of destination sustainability and Citizens’ expectations and aspirations.

In addition, the uniqueness of the M-SE hosting in the Arabian Gulf Region and the scarcity of research interest before that in impacts of destination sustainability in MENA Region in general give more importance for starting to fill the research gap and provide scientifically based recommendations to decision-makers regarding future hosting.

1.3 Research Procedure – Flow Chart

To give a summarized overall view of the study, a flowchart (figure 1) is shown below introducing a graphical representation of the research process. Extensive bibliometric analyses and literature review are presented in chapter two to offer a deeper understanding of different concepts related to destination sustainability (DS), Mega-Sport events (M-SE) and research constructs. Document analysis, systematic review and qualitative research methods were also used, in addition to the main empirical study and its constructs that were also explained in the literature review chapter. The connections and possible interrelations between the various topics are thoroughly examined and illustrated.

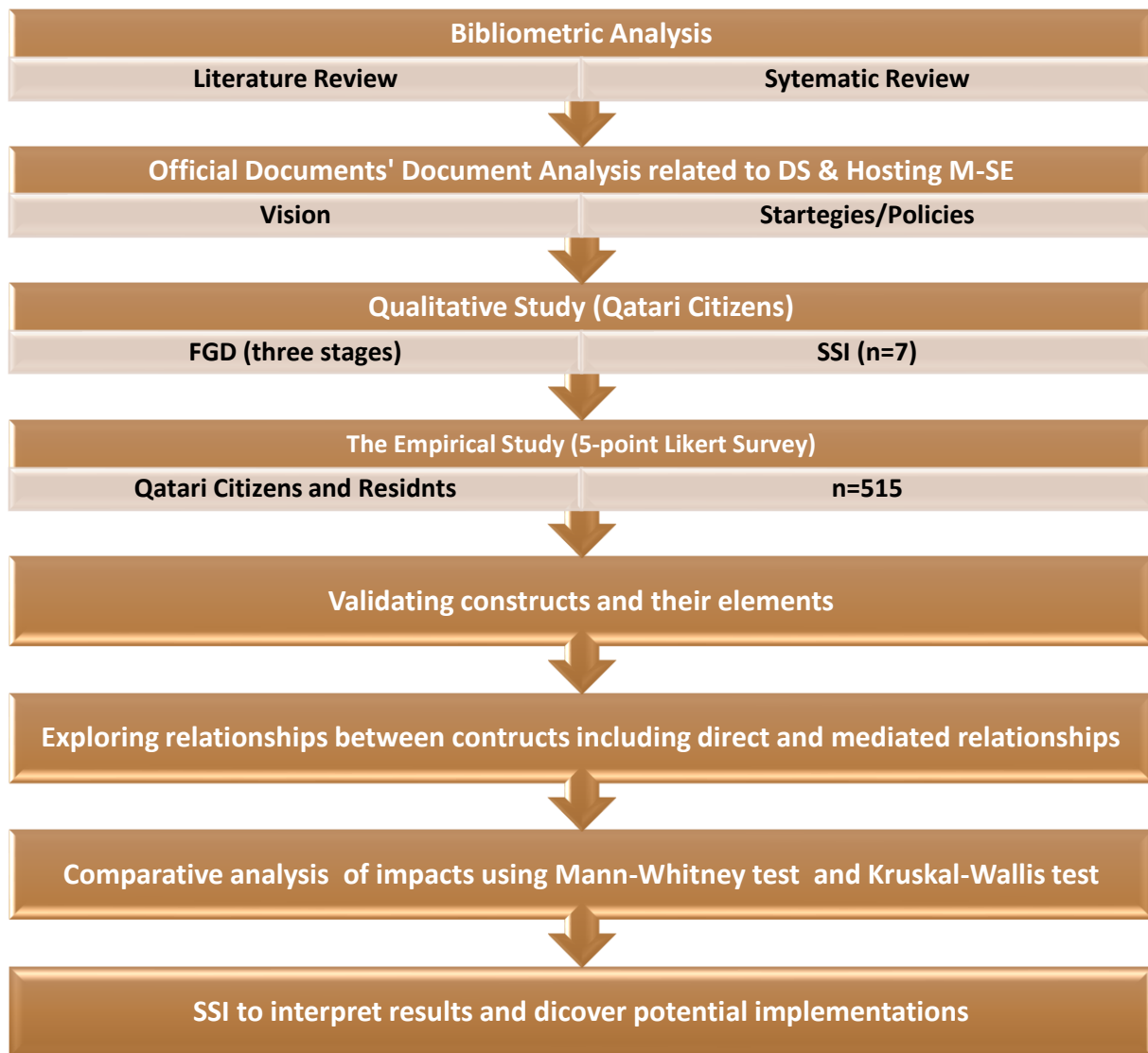


Figure 2. Research Flow Chart
Source: Author's own construction

After forming the overall understanding of the topic to be studied, through a comprehensive review, and deciding on initial destination sustainability attributes and potential relationships to test Citizens' perception of hosting M-SE in their country, triangulation with mix qualitative and quantitative method was used. For partial completion of the research, FGD, SSI and an online questionnaire were conducted on samples of the population in Qatar, to gain direct insights into their perception of impacts of hosting M-SE on DS. Together they provide more comprehensive and deep understanding of the research constructs and elements. The data collected by the empirical study was measured and quantified objectively, analyzed statistically, and then interpreted in conjunction with the qualitative methods' findings. The findings from the 5-point Likert scale questionnaire were analyzed in different levels, such as main and mediator constructs, and direct and indirect impacts to test the hypotheses of the study, as explained in chapters three, four and five.

1.4 Research Gap

This topic was chosen to fill a gap in knowledge in tourism destination sustainability in oil-producing countries with established infrastructure for luxurious tourism that is not necessarily

sustainable, and more likely to be based on linear economy of more consumption of resources and products and production of waste. Further, it reads perception of local community that is characterized with strong deeply rooted Islamic culture and Arabic identity, regarding hosting a M-SE and its potential impacts on their culture, society, environment, economy and country image as a tourism destination. Also, it reviews tourism vision and policies for sustainability management and marketing and compares that to demand-based perspective from the local community, giving recommendations for the government and its relevant institutes, and potentially for future DMM, and M-E organizing entities. This is done by studying locals' perception of impacts on DS resulting from hosting M-SE, showcasing Qatar World Cup 2022.

This study focuses on the impact of M-SEs on tourism DS. It addresses the three sustainability pillars (economic, environmental, and socio-cultural) and emphasizes destination image-building, which is frequently utilized as a rationale for wagering on holding these events due to the anticipated exposure and destination marketing that some believe comes naturally from holding such well-known sporting events that are frequently attended by hundreds of thousands of people and watched by millions or even billions of people worldwide. The study also makes use of examples from the most recent M-SE, which took place in the state of Qatar, the first Arabian nation to be granted the right to host a World Cup competition, towards the end of 2022.

The dissertation's structure aligns with the academic standards of a doctoral thesis, ensuring that all essential components are addressed. Following the introduction, the research objectives are clearly outlined in Chapter Two. To build a thorough understanding of the study and establish the foundation for formulating research hypotheses, the dissertation proceeds with an extensive bibliometric analysis. This analysis investigates key themes, trends, and scholarly contributions within the research domain and is further complemented by a detailed literature review, systematic review and document analysis in Chapter Three. This chapter critically evaluates existing studies, identifies research gaps, and presents the theoretical frameworks that underpin the study.

Chapter Four focuses on the research methodology, detailing a comprehensive multi-method approach that combines qualitative and quantitative methods. This includes bibliometric analysis, systematic reviews (SR), focus group discussions (FGD), document analysis (DA), semi-structured interviews (SSI), and empirical quantitative study. Each method is thoroughly described, with an emphasis on its specific role in addressing the research objectives and testing the hypotheses.

Chapter Five presents the core findings and discussion, synthesizing the results from both qualitative and quantitative analyses. Insights from FGDs and SSIs are integrated with quantitative data obtained through surveys and structured interviews. The hypotheses are rigorously tested using advanced statistical techniques, exploring both direct and indirect effects within the proposed research model. The discussions provide in-depth analysis and connect the findings to existing literature, offering insightful information about the connection between M-SEs, destination sustainability, and the perceptions of local communities.

Finally, Chapter Six delivers a comprehensive conclusion summarizing the main findings and theoretical and practical ramifications. It addresses the study's limitations, such as its focus on Qatar and the potential challenges of generalizing the results to other contexts. This chapter also provides practical recommendations for policymakers, event organizers, and researchers, with a focus on strategies to enhance destination sustainability and foster community support for M-SEs. Additionally, it identifies future research directions to bridge existing gaps and expand knowledge in this interdisciplinary field. The new scientific results are presented separately in Chapter 7, followed by the Appendices in Chapter 8. The references, the questionnaire used in the study, several detailed tables, and acknowledgment are included in Chapter 8.

2 OBJECTIVES TO ACHIEVE

2.1 Objectives of the Study

The dissertation studies the perception of the impact of hosting mega-sport events (M-SE) on destination sustainability (DS). The population under study is local community in the state of Qatar in response to hosting FIFA Football World Cup 2022 in Qatar. The research has two main objectives: (1) To understand their perception of positive and negative impacts on destination sustainability from hosting, and possibly link it to institutional trust, personal valuation of DS, Psychic income, and support for the hosting of the event, and future M-SE (2) To give recommendations to multiply the benefits for future hosting in the Qatar, and the Arabian Gulf Region and other relevant similar destinations, and reduce the negative impacts and lost opportunities on destination sustainability, resulting from hosting a mega-sport event. To peruse a thorough understanding of the study, the following sub-objectives are established:

1. To conduct a comprehensive review of the literature on mega-sport events (M-SE) and their perceived impacts on destination sustainability (DS), including bibliometric and systematic analyses, and to identify relevant theoretical frameworks such as the Theory of Reasoned Action and Social Exchange Theory.
2. To investigate local residents' perceptions of hosting M-SE in relation to DS using both secondary (official documents) and primary data, while considering socio-demographic, political, and contextual factors that may influence support.
3. To re-apply and validate an expanded version of the triple bottom line impact framework (Prayag et al., 2013) through analysis of the FIFA 2022 case study using the ReSOLVE framework and circular economy principles
4. To examine the roles of institutional trust, psychic income, and personal valuation of DS in shaping perceptions and support for hosting M-SE, including direct and mediating effects.
5. To analyze generational and individual differences in the valuation of sustainability impacts and their influence on trust, perceived impacts, and support.
6. To propose and validate an integrated model for understanding local community perceptions of M-SE impacts, incorporating psychic income and sustainability values as mediators.
7. To interpret findings with local stakeholders and explore their practical implications for future event planning and policy-making

2.2 Research Questions

In link to the research objectives objectives (RO) of the study, this research is pursuing answering the study questions as follows:

1. What are the most important impacts of destination sustainability on an Arabian Gulf Country from the perspective of citizens and residents? (linked to RO2, RO3)
2. What are the key attributes influencing citizens' (residents') perception of the impacts of hosting a mega-sport event in Qatar? (linked to RO2, RO4)
3. What factors influence citizens' (residents') support for hosting a mega-sport event in Qatar? (linked to RO2, RO4)
4. Which types of DS impacts (economic, environmental, socio-cultural) carry more weight in shaping both perception and support for hosting M-SEs? Are citizens more sensitive to negative than positive DS impacts, and how does this vary across impact types? (linked to RO3, RO4)
5. Does institutional trust override perceived impacts in influencing support for hosting, and to what extent? (linked to RO4, RO6)

6. What is the level of personal valuation of DS among citizens and residents, and how is it shaped by sociodemographic variables? (linked to RO4, RO5)
7. How do DS valuation weights influence perceived impacts, institutional trust, psychic income, and support for hosting among Citizens (Residents)? (linked to RO4, RO5, RO6)

3 LITERATURE REVIEW

This section provides extensive literature reviews of the main topics of the subject matter including M-SE, destination sustainability, potential impacts of DS from hosting an M-SE, the dimensions of the study and theoretical models used. It is worth noting that a substantial amount of the LR was published in an article (Al-Muhannadi et al., 2024) in the Journal of Infrastructure, Policy and Development (EnPress) in 2024, especially in relevance to the impacts of hosting on DS.

M-SE are global by nature and concern all nations with an interest in particular sports such as football, running and swimming. M-SEs have been there for more than a century, with a clear bias in hosting, towards Western countries. Dowse & Fletcher (2018) noticed a global shift in hosting global M-SE in destinations outside the Western world. Griffin (2019: 1000) argues that as Qatar won the bid for hosting 2022 World Cup, FIFA has finally acknowledged MENA Region and the Islamic World, to “traverse one of the last civilizational bridges left”, which could indicate a long-term impact on the GCC, and even MENA Region and worldwide. Although Omer (2023) did not find a consistent pattern of impact on the economies of countries hosting the tournament or winning it, in his study covering three World Cup tournaments for the period (2010-2018), it might be a bit early to confirm the findings from Qatar’s chapter of the World Cup. Omer (2023:75) predicted that “Qatar's most generous spending in the history of football has reflected positively on many Qatari economic sectors”, with expectations of more increase in the first half of 2023. The hosting of M-SE is seen as a showcase of economic (Yamashita, 2021) or political (Brannagan,2013; Al-Dosari ,2021; Brannagan & Reiche ,2022) power. However, impacts of hosting such events on the local community manifest in many forms negative and positive such as impacting local culture (Besculides et al., 2002; Karadakis & Kaplanidou, 2012; Kim & Walker, 2012; Gibson et al., 2008 & 2014; Al-Emadi et al., 2017; Mair et al., 2021; Ishac et al., 2022 ; Raso & Cherubini; Al-Emadi et al., 2024) or creating a life-changing opportunities while reaching out and expanding globally (Al-Emadi et al, 2017). Negative impacts have received growing interest in literature focusing on the impacts or the perception of those impacts by local community at the host destination. Some of the impacts mentioned are traffic issues, security risks, economic costs, and environmental attributes as examples of negative impacts found in hosting M-SE (Chankuna, 2022). Hosting an M-SE anywhere is expected to have impacts on destination sustainability. However, considering hosting M-SE in Qatar, it is worth noting that Qataris value their national identity and its uniqueness amongst a “wider mosaic of Muslim and Arab identities” and long to share it globally (Griffin,2019: 1000). M-SE have developed away from mere tournaments, into potent drivers of social and economic transformation, with tourism emerging as one of the main winners from this mutually beneficial connection (Raso & Cherubini, 2024). Tourism has the potential of bringing benefits as well as negative consequences to host destinations, especially in relevance to the environment and local communities.

According to united Nation’s World Tourism Organization (UNWTO,2024): “tourism takes full account of its current and future economic, social and environmental impacts, addressing the need of visitors, the industry, the environment, and host communities”. This definition suggests harmony and balance between the three pillars to guarantee tourism’s long-term sustainability. Further, it targets a high level of tourist satisfaction, while education takes place to motivate sustainability (See figure 3.). For evolving from sustainability marketing to sustainability application and practicing, “an inclusive resilience-based framework could be attained with strong political will and stakeholders’ full awareness and participation in decision-making from the early stages” (Al-Muhannadi, 2020). It was predicted that tourism sustainability and the involvement of destinations’ residents would form the new world tourism economy order (Sharma et al., 2021) (p. 9).



Figure 3. Representation of Sustainable Tourism according to UNWTO definition
Author's edition

3.1 Mega-sport events

The following bibliometric analysis and results were published in a literature last year (Al-Muhannadi et al., 2024). The analysis was conducted using key words: "Mega-sport*" or "mega sport*" or "mega event*" or "mega-event*" (Topic), in the timespan:1975-2024, refined by article or review article, language "English". A total of 1938 articles are found, with a total of 32423 citations, with an average of 16.73 citations per item, with an h-index of 75. The most cited article is "Event tourism: Definition, evolution, and research", authored by Getz, Donald (Getz,2008), with a total citation of 1079. Most of the citations are between the years 2016 and 2021. Together with Page, Getz coauthored the second cited article (Getz & Page, 2016) with 468 citations, most of them between the years 2019 and 2022. Their paper title is "Progress and Prospects for event tourism research". Getz (2008) reviewed 'event tourism' from business and scientific research interests. A framework for event tourism research gaps was proposed together with implications for the event tourism business. The literature (Getz, 2008) proposes a framework to understand and create knowledge relating to event tourism, and discusses event tourism, and event and tourism management. Heerdt & Roorda (2023) consider M-SE to be unique from a certain perspective.

Mega-sport events (M-SE) refer to large-scale ambulatory competitions of fixed duration and high profile, bringing top athletes together with substantial expected reward for winners, that come with huge expenses, a large number of attendees, and have remarkable environmental and socio-cultural impacts, and broad mediated extent (Hiller, 2000; Horne, 2007; Mills & Rosentraub, 2013; Müller, 2015b). Examples of M-SE are the Summer and Winter Olympic Games (SWOG), the FIFA Football World Cup (FFC), the Asian Games, and the European Football Championship (Al-Muhannadi et al., 2024). M-SEs happens around the globe hosting important tournaments for the

region or the world, such as the SWOG which were staged first in 1924 in France for both the Summer and the Winter Olympics of that year. The FFC was first held in 1930 in Uruguay. Many articles studied, from different perspectives, the rich existence of data from past M-SE, to analyze their impact on tourism and DS generally (Al-Muhannadi et al., 2024). Events are considered as instigators for planning destinations' tourism, development, and marketing (Getz, 2008), requiring knowledge of event and tourism management, and commitment to the destination's tourism planning process. These events attract high international media coverage and gains for both the economy and the global profile of the hosting destination (Buarque, 2015).

3.2 FIFA World Cup

FIFA stands for the International Federation of Association Football (French: *Fédération Internationale de Football Association*). It is an international self-regulatory governing entity established in 1904 including different football tournaments. One is Fustal World Cup, which is an indoor football-oriented contest played on a hard court with a smaller ball and only five players in each team. It also includes the sand football contest that started first with female teams. Men's international matches began only in 1993, while women's matches began in 2009. The third is Association Football. FIFA has half a dozen confederations subordinate to it. One of them was established more than 13 decades ago, which is The South American Football Confederation (CONMEBOL). This brings many tournaments under FIFA, but the most elite and prestigious global ones are the FIFA World Cup and the FIFA Women's World Cup. Overtaking the Olympic Games, the men's World Cup is the most watched sporting event worldwide, attracting huge media attention worldwide. The first FIFA tournament took place in the year 1930 in Uruguay from 13 to 30 July 1930. It was the only tournament ever to feature two Hispanic teams in the Finale, and by 2009, the finale of FIFA became the most widely viewed and followed single M-SE globally. The Russia 21st FFC was watched by about 3.57 billion, almost 50% of World population.

The FIFA Cup in this study is the men's FIFA World Cup that takes place once every four years, and it will be referred to from now forward as FFC. FCC is a global competition among the senior men's national teams of the members of FIFA, and it has been played every four years since the inception tournament in 1930, except for the 4th and 5th which were postponed during WW2. The first FFC was hosted by Uruguay, which also won the World Cup in that tournament. The tournaments were hosted by 17 countries till today, and the cup was won by only 8 countries. While Italy, France, and Brazil hosted the event twice, Brazil won the Cup five times, Germany and Italy four times and Argentina three times. Table 1 below shows the years, hosts, and champions of all previous FIFA World Cup. The 23rd FFC is expected to be staged jointly by Canada, the United States and Mexico, making Mexico first to host the event in three FFCs.

Only a few other international M-S and other events, besides the FFC, can command the full focus of world leaders and the public, making the FFC tournaments probably the most influential international sports events (Adelowo ,2022). According to Statista (2024), participants in FFC have been growing in number over time, starting with less than 10K in 1930s growing to 25K in 1950s, and from 40K in 1970s to 50K in 1980s, reaching 60K in 2000s to reach 2M in 2018 and 2022.

Table 1 List of all FFC tournaments showing hosts, the year and the winner for each.

FFC#	YEAR	HOST(S)	CHAMPION
1	1930	Uruguay	Uruguay
2	1934	Italy	Italy
3	1938	France	Italy
4	1950	Brazil	Uruguay
5	1954	Switzerland	Germany
6	1958	Sweden	Brazil
7	1962	Cheli	Brazil
8	1966	England	England
9	1970	Mexico	Brazil
10	1974	West Germany	Germany
11	1978	Argentina	Argentina
12	1982	Spain	Italy
13	1986	Mexico	Argentina
14	1990	Italy	Germany
15	1994	USA	Brazil
16	1998	France	France
17	2002	South Korea& Japan	Brazil
18	2006	Germany	Italy
19	2010	South Africa	Spain
20	2014	Brazil	Germany
21	2018	Russia	France
22	2022	Qatar	Argentina

Author's edition as published previously in Al-Muhannadi et al. (2024), based on FIFA (2024);
Wikipedia (2024)

3.3 FIFA World Cup Qatar 2022

The FIFA World Cup is the biggest major mega-sport competition globally for almost a century, yet 2022 was its first time to be hosted in MENA Region. The 22nd FFC was hosted by Qatar between 20 November, to 18 December 2022, after a dozen year of declaration as the host of the event. It was only the second FFC with games held exclusively in Asia, following the 2002 FFC in 2002, that was hosted between Japan & S.Korea, while being the first FFC hosted by an Arab and Islamic Country. Qatar was the first country to host the event from the MENA Region. Although Qatar has no records of winning any World cups, the GCC small state succeeded in hosting the 22nd edition of the FIFA FFC in 2022, with a strong sense of national pride by succeeding and excelling despite some prior western criticism. The games were held from 20

November to 18 December 2022. A total of five host cities and eight stadiums were used during the tournament (Lusail Iconic Stadium in Lusail, Al Bayt Stadium in Al Khor, Al Janoub Stadium in Al Wakrah, Ahmad Bin Ali Stadium, Khalifa International Stadium and Education City Stadium in Al Rayyan and Stadium 974 and Al Thumama Stadium in Doha). Amongst which Lusail Iconic Stadium was the largest, and arguably the most expensive, boasting a capacity of 80,000 followed by Al Bayt Stadium with a capacity of 60,000. Among these stadiums, seven have been built brand-new, costing around \$6.5 billion, while Khalifa International Stadium has been operational since 1976. The 22nd FFC Qatar was spectated in its state-of-art stadia by 3.4 million spectators, compared to 3 million in the previous FFC that was considered as a historic M-SE. The games were broadcasted on more than 30 online channels, and 18Sports channels available by FIFA for subscribing. “The final achieved a global reach of close to 1.5 billion viewers (up from 1.12 billion in 2018), with the opening match registering a global reach of over 550 million.” (FIFA, 2023). The 22nd edition of the FFC yield the highest scores with 172 goals, breaking the record of 171 achieved by two previous editions, the 20th and the 16th editions of the Cup.

The 2022 FFC was held with 80 national teams competing 48 games for the FFC. The Qatar 22nd FFC cumulative attendance of 2.45 M spectators, with around 89K attending a single game (Brazil Vs Argentina), and was watched by about 5 billion. This M-SE gained different unique themes for its health, safety, technological advancement, host region, costs, politics, and organization.

Several aspects made Qatar FFC a very special mega-sport in the history of FIFA and also M-SE in general. It was hosted by a region outside the usual European and First World regions. It opened for an indigenous culture that suffers from misunderstanding and stereotyping, especially by Western media. It brought a new spatial model for FFC tournaments (Meza Talavera et al. 2019) with all tournaments occurring in one small country. It is the second to be held by merely Asian countries, and the first FFC in the Arab World (Russo et al., 2022), making the 22nd FFC a cultural ramification with a long-lasting national legacy (Griffin, 2019). It is also the most expensive FFC projected to cost \$220 billion and generate US\$17 billion in economic benefits for the host nation (Wilby et al., 2022). The environmental sustainability agenda was way ahead of any previous one, and the social and cultural sustainability aspects were well considered and documented prior to the event. The use of technological advancement was huge in all stages and details of preparation and conducting the event. The safety and security aspects were incomparable to any previous mega-events. Qatar FIFA was the first carbon-neutral FFC (Meza Talavera et al. 2019), “the most digital World Cup of all” (Yasmeen, 2022). Not to mention the scarcity of literature regarding sports in Qatar (Brannagan & Giulianotti ,2014) that instigated scholars to fill the gap.

3.4 Destination Sustainability (DS)

With the magnitude of preparations and audience, and increasing interest in hosting M-SE, it is just natural to consider potential impacts on host countries, including but not limited to mass tourism potential impact. Destination sustainability during and after hosting events and their accompanying tourism is an interesting topic for research. This is both because of potential impacts and also opportunities for benefits.

Destination sustainability management is important for ensuring tourism sustainability, vibrant branding and image building, fair-distribution benefits of tourism, creation of competitive advancement, and improving tourism yield (UNWTO, 2007:9). Although sustainability has been discussed intensively in literature regarding tourism, and so as sustainable consumption and communication inside the broad domain of marketing, yet destination sustainability attributes have not received the same attention. Further, the understanding, experience, importance and visibility of traits of destination sustainability is not fully understood by demand-side entities even when the supply-side entities consider them as priorities (Aydin & Alvarez, 2020). Moreover, the degree to which local communities feel and consult sustainability attributes in their support of hosting M-

SE in their country is not very clear. Shedding light on this gap could have useful recommendations for governments and relevant entities for their destination sustainability planning and destination sustainability communication towards understanding local community prospective and strengthening two-way communication with them. Aydin & Alvarez (2020) discussed the topic in relevance to tourists' perception and highlighted destination sustainability attributes, while Tölkes (2020) investigated sustainability communication.

Destination Sustainability Communication may yield in marketing the destination or smaller destinations within it from sustainability perspectives, which can succeed not only in attracting more responsible tourists but also can act as a motivator for further sustainability in tourism development (Buhalis, 2000). Research indicates challenges in sustainability communication. FUR (2014) showed that close to 45% of his sample expressed absence of sustainability information, and a similar percentage asks to increase the visibility and accessibility of sustainable tourism products. Tölkes (2020) elaborated in forming an understanding of sustainability communication, based on the role that effective sustainability communication plays, in incorporating the demand and the supply of tourism products. level of communication is also required to shift the focus of consumers to the newly established sustainable solutions and their sustainability attributes and added value (Belz & Peattie, 2012). All can apply to the tourism authority's communication of its destination sustainability important attributes before, during, and after the M-SE in a way that appeals to what is considered important by the local communities, and the tourists' expectations and aspirations. Further, it makes one wonder about how citizens view the presence, worth, and uniqueness of product and service offerings by the authority towards destination sustainability during hosting M-SE, and also the potential impacts of hosting. Linking hosting M-SE with destination sustainability, sustainability communication, and promoting a two-way communication with understanding local community perspective is an important part of my research.

Destination sustainability communication (Tölkes, 2020) and marketing (Villarino and Font, 2015) need to make the target audience the center of their deliverables and emphasize on destination sustainability traits that facilitate the creation of unforgettable pleasurable tourism experience (Hanna et al., 2018), with taking sustainability into considerations but also with least negative impacts and maximum positive impact on destination sustainability. Destination sustainability or the definition of a sustainable destination has been debated in literature, with a common agreement for the inclusion of protecting resources from depletion, appropriate destination management, economic growth locally, and positive impacts for the local communities (Cucculelli et al., 2016; Hanna et al., 2018). Although in the case of M-SE, the focus is not on a business effort to market its products and items as environmentally friendly to gain a competitive advantage, destination image and destination marketing can fall in a similar situation. Destination's authority and mega-sport organizers and promoters tend to use sustainability as an important tool for marketing the event and so the host of the event. Green marketing or sustainability marketing can be seen as a kind of marketing where products are advertised as being ecologically sustainable. It involves advertising strategies to raise awareness while taking some actions that seem to reduce the environmental impacts of the product such changing the packaging to eco - friendly ones (Diglel & Yazdanifard, 2014; AMIRI & SHARAF, 2023), such as biodegradable instead of plastic, while meeting consumers' needs and demands while promoting the system and policies of the entity which produces and trades in the eco-friendly product items (Polonsky, 1994).

Green washing is a concept used by pro-environmental NGOs and consumers unions to describe the process by which businesses use the environment to market their products, knowing that there is a demand for sustainable products and environmentally conscious lifestyle, without necessarily shifting to sustainable manufacturing and services. Therefore, criteria and measures were put together by UN agencies, standardization organization, and scholars for sustainability products services and practices including buildings, transport, and events in the case of hosting M-SE and tourism in general. Examples are GSCM certifications and ISO 14001:2015. Event's organizers,

and hosts, tend to acquire these certifications and publish them in their sustainability reports of the event.

The destination sustainability attributes are related to the triple dimensions of sustainable development (namely environmental, economic and socio-cultural), and tourism sustainability dimensions. Aydin & Alvarez (2020) adopted attributes from literature regarding destination sustainability and customized them to put the target audience (tourists) in the center. I adopted some of these attributes and adjusted them within the context of Qatar's local community and citizens. That includes "Capital leakage and linkage" for instance from economic sustainability dimension, "Respect for culture and local values" from socio-cultural sustainability dimension, and "Natural resources preservation" from environmental sustainability dimension. Additional attributes were added in relevance to potential impacts of hosting M-SE adopted from literature such as "intercultural exchange opportunity" as will be shown in table of constructs (TableA4, in Appendix 8.8).

3.5 Tourism Destination Sustainability and Mega-sport events

Tourism sustainability has been a hot topic both for academia and the tourism industry, with the latter being at the forefront of fast-growing industries with potential positive economic and social impacts, but also with adverse externalities that needed sustainability principles to counteract. Several terms are used to express that role including sustainable tourism, responsible tourism, ecotourism, destination sustainability, and circular tourism. Mihalic (Mihalic, 2016) introduces the term "responsustainable tourism" to include both values and actions.

Tourism is considered the most growing industry seeking economic development by attracting more tourists every year, but also with externalities of negative environmental and social impacts. Tourism sustainability has been an interesting topic of research and debate for the past five decades. Recent research links lessons and restrictions imposed by the pandemic to the opportunity that the tourism industry now has to shift to a circular sustainable business. More and more attention is paid to the relationship with Mother Nature, and to finding ways to avoid environmental and social impacts in all possible tourist activities and processes starting from the design stage, according to circular economy principles (Juma et al., 2020). New trends in sustainable tourism which started to gain importance, especially with COVID restrictions and concerns, are staycation and slow tourism, both implying spending more time to appreciate local or neighboring nature and offerings than simply traveling at speed. Linking destination sustainability and tourists' experience and memories is highlighted in literature (e.g. Miles, 2010; Pera, 2014; Hanna et al., 2018; Solís-Radilla et al, 2019; Richards, 2011; Aydin & Alvarez, 2020; Moliner-Tena et al, 2021).

Sports tourism and M-SE are gaining growing interest in literature and among cities. One reason for hosting M-SE or Mega-event is the expected flow of fans from different places making the host a touristic destination at the time of the event and serves as an introduction to the destination for potential plans. Mega-sport tourism received some literature interest in terms of its impact on host cities, as well as the host countries, and regions. Impacts are often related to the mass tourism created at the event's site, mostly on economic impacts and less on cultural impacts. Environmental impact was touched on in some literature. According to Preuss (Preuss, 2015a), motivations for hosting a M-SE are manifold, most of which concerned opportunities for favorable development rather than the event itself. In a book published in 2022 titled "Entering the Global Arena: emerging states, soft power strategies, and sports mega-events", Grix & Lee (Grix et al., 2019a) (p. 97) referred to the case study of Qatar and its small size as "an outlier" compared to several much larger countries hosting the FFC like Russia, India, Brazil, China, and South Africa.

Contrasting it with the other case studies, Grix & Lee (Grix et al., 2019a) consider Qatar as a new player based on Qatari athletes and teams' short history of competing in M-SE. Despite this argument, however, there is no conclusive tie between a country's performance in games and its ability to host a mega-sport event. There is no direct relationship for instance between football results and the global market value according to Geyer-Klingenberg et al. (Geyer-Klingenberg et al., 2018), who conducted a comprehensive review to analyze research that addressed the correlation between stock market behavior and football matches, concluding that victory is insignificant. This was concluded using Meta-regression analysis based on, a sample of responses of over 1100 empirical estimates of the stock market to football games gathered from thirty-seven main research combined (Geyer-Klingenberg et al., 2018) (p. 2171), as their results showed no evidence to support that winning a game has a major impact on other teams or national football teams. Furthermore, Qatar is considered among the most active states in terms of sports, globally, derived from its huge investment, acquisition, and hosting of regionally and globally important sports events. This and more made Qatar, in the opinion of Grix & Lee (Grix et al., 2019a), an interesting case study for state-driven sports politics.

While studying mega-sport tourism impacts on destinations hosting global events, it is imperative that a clear understanding is acquired of destination sustainability that is affected by the impacts, negative and positive, of hosting gigantic global events and thereby accommodating hundreds of thousands of tourists from different places and cultures for days, possibly weeks, providing their needs as sports fans, but also as individuals and groups, and attempting to make it a memorable positive experience for each one of them, but with a successful outcome for the host, while minimizing adverse environmental impacts, on destination's economy and local communities. According to Dolles & Söderman (Dolles & Söderman, 2008) (p. 149): It is important to recognize the contribution that sports, and M-SE make to sustainable development, as this is an economy with unprecedented international communication and impact. Hosting global mega-sport tournaments was argued to impact host countries in both negative and positive ways by different literature. The International Federation of Football Association (FIFA) World Cup Football games and Olympic games were found to impact host countries in different ways, ranging from short-term during the actual event, to long-term effects on the host country's reputation, its environment, or its people. Similarly, positive impacts were examined and discussed in the literature with a focus on the growth of tourism, economy, host cities infrastructure, and destination branding. Qatar's experience was analyzed in light of the literature review as well as current reports, news, and official releases. This was analyzed to form an understanding of FFC 2022 impacts on Qatar as the host country holding the most recent tournament. The importance of reflecting on Qatar extends to it being the first MENA region country to host the FFC, as well as other significant factors such as being an Islamic Arabian Gulf country with strong cultural traditions and values, great wealth and advancement, and from being a small state with the limited land surface area around 11500 square kilometer (PSA, 2021), and a small population of less than 3 million (Qatar PSA, 2023), while expected to accommodate hundreds of thousands of international sports fans – all making the experience and possible impacts unique.

3.6 Impacts of Mega-Sport Events on Destination Sustainability

Running a bibliometric analysis in Web of Science Core Collection database, using "Mega sport events" or "mega-sport events*" (Topic) AND "impact*" (Topic) and English (Languages) and Open Access, in a period of (1975-2024), only 46 publications were found with Sum of the Times Cited of 872, an average of 18.96 citations per item, and an h-index of 15. The most cited article is "The impact of mega-sport events on tourist arrivals" authored by Fourie, Johan, and Santana-Gallego, Maria (Fourie & Santana-Gallego, 2011). It was cited 283 times mostly between (2016-2022). The reviewed literature covers a wide range of impacts including environmental (e.g. Hodeck et al., 2021; Abu-Omar et al., 2022; Piccerillo et al., 2023; Wilby et al., 2023; Jones, 2008),

economic (e.g. Cornelissen et al., 2011; Kim & Kaplanidou, 2019 ; Cerezo-Esteve et al., 2022), and social (e.g. Stone & Sharpley, 2011; Liu et al., 2017; Taks et al., 2018; Ribeiro, 2018; Al-Emadi et al., 2022; Cai ,2022; Su et al., 2024).

Some articles focused on tourism (Mhanna et al., 2019; Lequeux-Dinca et al., 2022) and its relevant aspects such as tourism arrivals and their characteristics (Fourie & Santana-Gallego, 2011; Kwiatkowski et al., 2018; Hautbois et al., 2019; Duignan & Pappalepore, 2019), and host destination image and branding (Smith, 2002; Ribeiro et al, 2021; Andersson, 2021; Jeong & Kim, 2019; Satish et al., 2024).

Some literature focuses on psychic income (Kim & Walker, 2012; Mutz, 2017; Sullivan, 2018; Weight et al., 2019), the sport itself (Herold et al., 2020; Solanellas & Camps, 2017; Teare & Taks,2021; Teare et al., 2024; Huang et al., 2021) and health (Watanabe et al., 2022). perception and support receive good attention (Wood et al., 2018; Kim & Manoli, 2022; Kim et al., 2024; Kinoshita et al., 2024), and so as legacy (Preuss, 2007; Hartman & Zandberg, 2015; Cleland et al., 2020; Knott& Tinaz,2022; Ishac et al., 2022; Dickson et al., 2024).

Some scholars focus their work on understanding the negative impacts of hosting an M-SE and attempt to understand common mistakes in planning an M-SE and then proposing ways to deal with them. Müller (2015a) discusses what he called ‘mega-event syndrome’ and explains it with a set of symptoms that affect M-SE planning when they happen simultaneously. Overpromising benefits and underestimating costs are among the symptoms. Other symptoms are modifying the urban planning necessities to be event-specific and interfering with regulations and legislations to support the event including misuse of public resources. Ludvigsen et al. (2022) states that M-SEs need not be categorically exalted as they come together with growing criticism and disapproval. The authors also have a list of their negative impacts including enormous financial expenses, their physical, social, and spatial impacts on public space and their inability to bring about the promised legacy. According to Getz & Page (2016) the main drive for events is the anticipated economic outcome, which makes it important to explore impacts on individuals and society, and to understand the impacts on the environment and the local culture. In a systematic literature review spanning 30 years of articles published since 1990, Elahi et al. (2021) found that impacts related to the three pillars of sustainability, as well as tourism, heritage, image, media, hygiene were discussed in literature, but other topics such as those related to recreation, psychology, and commercials, were rare. Figure 4. shows a summary of potential impacts from the literature review conducted.

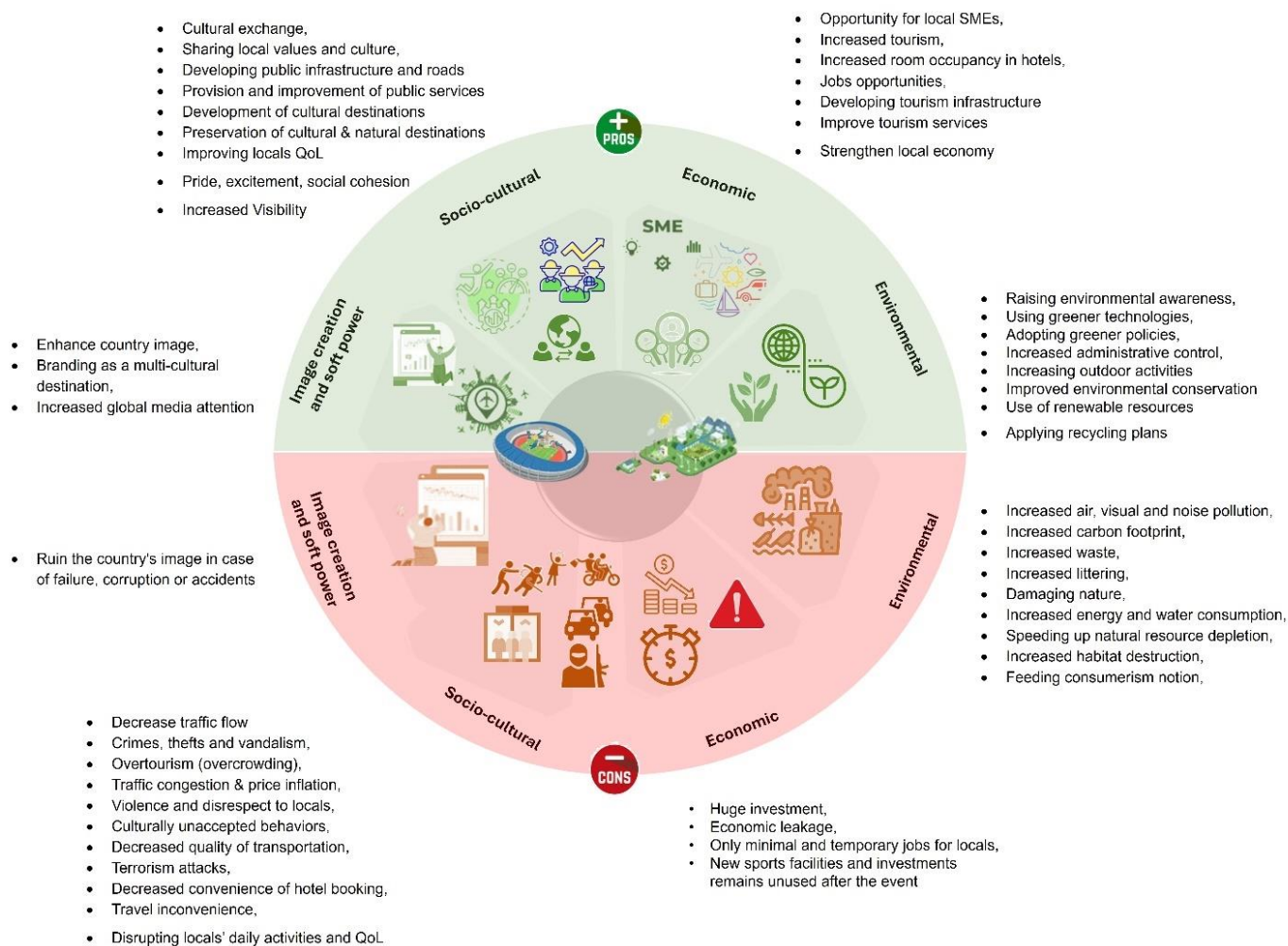


Figure 4 Summary of potential impacts from literature review
Author's edition (Al-Muhannadi et al., 2024)

3.6.1 Growth and impacts of mega-sport tourism

Mega-sport tourism events take place in different capitals of the world hosting global and regional major events such as the SWOG, and the World Cup. Numerous studies have examined extensive data from past events, aiming to understand their impact on tourism and the host destination as a whole from various perspectives.

Getz (Getz, 2008) looked at the growth of event research and studies, and highlighted various principal themes around the topic, which was further expanded to disciplines creating an event knowledge base (Getz & Page, 2016) created for a purpose with planned events in tourism in mind, handled now primarily by professionals and entrepreneurs after a long history of being the domain of private citizens and community projects (Getz & Page, 2016) (p. 594), with sports events being one of the four main categories highlighted, besides business, cultural, and environmental. While venues with specialized uses, such as stadiums, arenas, and athletic greenspaces are required for sports events, (Getz & Page, 2016), Zhou et al. (Zhou et al., 2023) found that tourism performance has 22 particular performance measures, such as those related to tourists' experience and satisfaction with services, facilities, and transport provided. Organizing a M-SE therefore is a complex mission that necessitates comprehensive planning, knowing that success hinges on the participants' satisfaction (Al-Buenain et al., 2024). Qatar has established a high standard for mega-sport tourism through its provision and quality of services, as well as other

tourism performance indicators. This achievement is likely to pose a challenge for future hosts of such events, as will be demonstrated in our paper. As found in my previously published work (Al-Muhannadi et al., 2024), Qatari citizens, out of cultural customs of generosity and hospitality, provided free food to fans at cultural centers, fan zones, shopping centers, and stadiums. Many also hosted fans for meals on their way from stadiums to accommodation. Qatar offered free high-quality transportation and internet. However, the same shows that the event impacted the local city and the locals to behave in a way that is new for them, in face of a gigantic event that is also new for them. In my opinion, Citizens' generous hospitality surprised the fans who did not expect that, but it also surprised the organizers and other citizens who saw it or heard of it.

A (global) mega-event usually is planned for at least once a year, someplace around the globe, but for any city or country, hosting the event is a rare occurrence (Fourie & Santana-Gallego, 2011), which encourages competition to win the bid of hosting, suggesting that the costs of hosting are outweighed by the benefits gained whether shown or hidden. Hosting M-SE is considered a privilege by some cities for building a global image using the large sports spectators and globally with a large media coverage (D. Liu & Wilson, 2014) (p. 12). According to Dolles & Söderman (Dolles & Söderman, 2008) (p. 147), M-SE are becoming central stages representing not only competition for excellence between athletes but also providing hosting destinations with a generally accepted method of showcasing and advancing their national identities and cultures worldwide.

However, Preuss (Preuss, 2015a) points out that M-SE requires substantial investments in city infrastructure, which could serve as an asset or a burden to the city and its stakeholders afterward. even though a country or a city could be driven by certain reasons to compete in staging a mega-sport event, (Dolles & Söderman, 2008) (p. 154) they often argue that the expected economic benefit is their main drive (Maennig, 2017). According to Müller (2015a), the exaggerated oversized infrastructure cost often outweighs benefits of hosting a M-SE and with little use after the event.

Regarding the importance of holding M-SE as tools for destination sustainability, Ban Ki-Moon, the eighth Secretary-General of the United Nations (Ki-moon, 2016) considers M-SE a vehicle to gather millions of fans to enjoy the talents of thousands of sports competitors, with huge press coverage and inspiring individuals from everywhere, adding the competitive value of winning the bid to host the event. Ban Ki-Moon believed M-SE's impact extends beyond sports, promoting sustainability, better education, and supporting peace and human rights (Al-Muhannadi et al., 2024).

Destinations have various motives to bid for the rights to host appealing M-SE, dictating appropriate widespread methods to understand them, where a significant amount of scholarly work has gone into creating models and procedures for evaluating the economic effects of M-SE. (Dolles & Söderman, 2008) (p. 154). While some researchers (D. Liu & Wilson, 2014) highlight the importance of exploring the long-term benefits of hosting global mega-sport tournaments; or else, no nation will be eager to stage any future mega-sport tournament. Müller et al. (Müller et al., 2023), drawing three different scenarios, argued that mega-sport global events like the Summer and Winter Olympic events and the World Cup are at a critical divergence status demanding different bidding and hosting policies. In researching the growth of the SWOG and the Football World Cup being the largest tourist events, utilizing a dataset comprising all occurrences from 1964 to 2018, Müller et al. (Müller et al., 2023:1) stated that in the previous half-century, the three M-SE have increased roughly sixty times in size, or thirteen times faster than the global GDP. Table A0. (Appendix 8.4) presents systematic review of the most relevant literature reviewed in this dissertation.

3.6.2 Economic Impacts of hosting Mega-sport events

Economic impacts of hosting M-SE have been receiving high interest in literatures ranging between benefits for host destination, the high expenses of hosting and the calculation and miscalculations of economic impacts. Without going through the details of methods and frameworks to quantify the economic impacts of M-SE that can give more coherence described by Agha (Agha & Taks, 2015) and clarity, many articles were found to show interest in the economic impacts of M-SE from various perspectives. Some investigated the impact of winning the tournament in detail. According to Geyer-Klingenberg et al. (Geyer-Klingenberg et al., 2018) for instance, there is no conclusive tie between football results and the global market value.

Focusing on the impacts of hosting the M-SE, according to Gratton et al. (Gratton et al., 2000) staging mega-sports events generally implicates the host country contributing part of the expenses, in expectation of benefits to its economy. However, there was significant inconsistency in benefits and difficulty in predicting them before hosting the M-SE.

While the justification used often for bidding on M-SE is their expected positive economic impact, public relations campaigns often highlight these benefits to persuade important stakeholders and the public that the proposed M-SE will benefit the local and regional economy, while negative financial effects can be absorbed through an increase in taxes (Maennig, 2017). Football is a widely followed sport with significant influence both locally and globally. World Cup tournaments attract attention from millions of people around the world (Al-Muhannadi et al., 2024). While Andreff (Andreff, 2008) views sports tourism as both a sporting and economic success story with the growing economic importance of sport on the global economy and national economies in terms of GDP, the sports sector accounts for around 2% of global GDP (World Economic Forum, 2009), on average, and M-SE resulted in an 8% increment in anticipated tourism in the same year (Fourie & Santana-Gallego, 2011:1369). A calculated net economic gain of more than US \$ 1.1 billion was estimated for the South African economy from hosting FIFA 2010, per the arrival of 230K fans and tourists for the tournament, and the construction capital of around US \$671 million (Grant Thornton, 2004). It is argued by (Maennig, 2017:3). Matheson (Matheson, 2006) that sports promoters often claim that M-SE bring financial benefit to destinations winning the bid to host them, as rich sports fan tourists will arrive in mass numbers to the destination hosting the events, giving business to hotels, restaurants, and local businesses, and lavishing them with money. Some literature suggests that certain substantial costs are deliberately excluded to inflate reported revenue (Al-Muhannadi et al., 2024). The Salt Lake City Winter Olympics in 2002 was considered profitable for instance, but this result was based on calculations that excluded the expenses in millions by U.S. military-funded security (Matheson, 2006:3). The Athens government had to pay an additional 1.5 billion for security for the 2004 Summer Olympics (McBride & Manno, 2021). Event promoters often use tailored reports that promise huge financial returns for host cities. One should question the accuracy of these reports, especially since they are funded by event organizers or those who would benefit from public subsidies (Al-Muhannadi et al., 2024). The most crucial lesson learned for countries considering hosting M-SE, therefore, is to be critical of provided economic impact estimates by organizations that could benefit from presenting exaggerated figures, as it is therefore essential for hosting governments to thoroughly investigate the source of such reports in light of the publisher's potential economic gain (Matheson, 2006; Wilby et al., 2023). In line with this reasoning, it is understandable that the promoters of the same event use these figures to justify obtaining significant public subsidies for hosting the mega-sport event. Essentially, the actual economic benefits derived from M-SE are used as leverage to secure substantial public funding for hosting such events (Al-Muhannadi et al., 2024). However, many unbiased scholarly investigations into mega-events economics reveal that positive economic impacts are far less than those presented studies (Andreff, 2012; Matheson, 2006a; Whitson & Horne, 2006; Wilby et al., 2023). However, Liu (Y. Liu, 2013) argues that positive long-term economic impacts of the World Cup can be seen in developed as well as developing countries,

although to different extents between them. QFFC was anticipated to cost US\$220 billion and generate more than US\$17 billion for the host economy (Wilby et al., 2023). No previous FFC cost matched these figures. Qatar mostly spent on infrastructure, including roads, highways, and its first metro system, connecting the capital's key tourist and business sites (Al-Muhannadi et al., 2024). To succeed in hosting FFC 2022, according to Henderson (Henderson, 2014) although Qatar invested heavily in its sports infrastructure, events programme, and tourism to achieve desired returns such as social benefits for its local community, success is not guaranteed and further, there is a risk of negative impacts. Additionally, Barclay (Barclay, 2009a) (p. 66) concluded with a strong statement about considering impact studies and analyses of M-SE as “less-than-accurate” with overstating benefits underestimating costs and misusing multipliers. Economic impact studies conducted mainly by events’ boosters or organizers aiming to justify funding figures, are themselves predictive or ex ante estimates (Barclay, 2009a). Their estimate is made mainly via details of the construction of infrastructure such as sporting facilities, and commercial activities during the hosting of mega-sports, with consideration to expected numbers of sports fans, and expected duration of their stay, and their average expected spending (Matheson, 2006). What adds to the flaw of this estimation is adding up these expected costs for estimating a ‘direct economic impact’, which awards it rejection by many scholars (Barclay, 2009b).

Furthermore, most pre-predicted or estimated costs are short of accounting for hidden costs such as needed continuous maintenance and upkeeping costs of large stadiums (Whitson & Horne, 2006) and long-term costs in hotels, constructed to accommodate mega-sport fans, as demands for rooms fall drastically after the end of the event (Humphreys & Prokopowicz, 2007), leading to business collapse within a few years, as of the bankruptcy of 40% of full-service hotels in Lillehammer after the 1994 Winter Olympics (Teigland, 1999).

One can go too pragmatic and consider the possibility of the negative effects of building new roads and making more areas easily accessible through negatively impacting people living on rental at those areas that got suddenly popular due to new roads, as expressed by Barget and Gouguet (Barget & Gouguet, 2007), where rents can become unaffordable for less fortunate groups of people.

However, according to local economists: the FFC is considered the most prominent opportunity for tourism investment in Qatar, including events, services, culture, heritage, desert safari, food, health, leisure, free activities, entertainment, sport, recreation, tour organization, accommodation, and transport (Dizon, 2021; Gallardo Vázquez, 2023). According to Nyikana et al. (Nyikana et al., 2014) succeeding in hosting M-SE results in economic benefits for the host including amplified tourism revenue and added city visibility as a potential tourism destination.

Host destinations of M-SE could benefit positively from a long-term enhancement in tourism demand, but the tourism revenues might not compensate for the huge spending needed for hosting the event (Solberg & Preuss, 2007b). Overrated economic gains are often estimated by boosters of M-SE, but there is a concern raised by others including researchers, regarding public debt and what is called the ‘opportunity cost’ that is associated with using public funds on magnificent infrastructure projects like architecturally stunning stadiums (Whitson & Horne, 2006) (p. 73), as hosting M-SE will dictate huge investments in sports facilities, not to mention non-sport destination infrastructure (Solberg & Preuss, 2007). Further, if a profitable economic change is achieved, it is not easily attributed to the increased number of visitors, as it can be a result of positive shifts in supply (Solberg & Preuss, 2007). Also, the calculations of economic gains and losses of M-SE often lack transparency and tend to be complex with the inclusion of what is referred to as other costs including opportunity costs which adds to the complexity (Whitson & Horne, 2006) (p. 87). Provision of goods and services though can often be counted as a positive attribute of hosting M-SE, to answer the demand from tourists, together with local demand once these goods and services are provided locally, making the hosting fall into public goods, which can together justify the pursuit of mass tourism (Solberg & Preuss, 2007). However, free-rider incentives to gain governmental funding are often presented using this justification (Solberg & Preuss, 2007). Therefore, winning the bid to host M-SE can be seen as a winner’s curse, given all

that seems to be linked to costs such as delayed completion, financial deficit, cost overruns, project revisions, and debt (Andreff, 2012).

In the 22nd FFC, it came of no surprise that throughout the M-SE hosting's preparations, Qatar invested heavily in city and tourism (Al-Muhannadi et al., 2024). According to Statista (Statista, 2022), FIFA declared that expenditures towards the FFC are around 1.7 billion U.S. dollars, with a budget of US\$322 million for the tournament's operational expenses. As it was found afterward, preparations and staging of the Qatar 2022 FFC as mentioned earlier cost \$220 billion (Omer, 2023; Mohammed & Walid, 2022), and the return was expected as US\$17 billion to the host economy (Wilby et al., 2023; Omer, 2023). It is hard to match any expected revenue from an event with those figures. According to Singh (2022), FIFA made US\$7.5 billion from the sale of tickets throughout FFC 2022, compared to US\$6.5 billion earned from the 2018 FFC in Russia. Other estimates, however, varied from US\$1 billion to US\$6.5 billion. (Wilby et al., 2023).

For Qatar, while no direct revenue may cover the substantial costs, the anticipated benefits are associated with indirect gains rather than immediate financial returns; further, Qatar stated that the majority of the expenditure was allocated to building infrastructure, aligning with its long-term plans for tourism, and local development in transport, culture, and other services (Al-Muhannadi et al., 2024). The impacts on small and medium-sized enterprises (SMEs), the country's image, and future tourism appear to be the focal points, some of which have already started to materialize. According to Al Thani (2021a:1729), sport plays a crucial role in Qatar's international presence and participation, as Qatar hosted other major sports events in the past such as the 2006 Asian Games (XV Asiad), AFC Cup 2011, and the 2014 World Swimming Championship, in addition to financing league sports teams like FC Barcelona. This was attributed to considering Qatar among the most active countries in sports as mentioned earlier by Grix & Lee (Grix et al., 2019a:97), for its limitless urge to host and own sports events and investments globally. While some use this argument to question the ability of the Arabian Gulf State to host the 22nd FFC, it actually highlights Qatar's commitment and dedication to hosting and sponsoring global sports events. However, some economists (e.g. Omer, 2023) believe that the most generous expenditure in the history of football has mirrored positively on Qatari economic sectors and predicted that the economic positive impacts to multiply in the first half of 2023.

On a smaller scale and closer to local community economic impacts, economic values felt on the ground increased by the total value of the properties in Qatar sold in December 2022 increased by 124% (PSA, 2022) and reported an increase in sales, hotel occupancies, and other tourism profits. Qatari SMEs owners reported significant sales increases, with some achieving a decade's revenue in under a month (Al-Muhannadi et al., 2024). This includes shops selling traditional falconry equipment and dress. The positive destination image promoted on social media may boost future tourism. Qatar received a million visitors during the hosting of Qatar's FFC (FIFA, 2022x), with Qatari tourism businesses regarding this M-SE as an unparalleled opportunity for Qatar to attract a significant number of tourists from across the globe, presenting a critical moment for the tourism authority to capitalize on and develop Qatar into a prominent tourism destination regionally and internationally (Al-Muhannadi et al., 2024). This is considered an important result of a study conducted by Nyikana et al. (Nyikana et al., 2014) illustrating that successfully conducted mega-events have long-term positive impacts on hosting destinations, as many fans rated key tourism facilities as good and planned to revisit after enjoying a successful mega-event at the host destination. This study (Nyikana et al., 2014) also stressed the importance of using the full marketing momentum resulting from hosting the event before the focus moves to other destinations. According to Bujdosó & Dávid (Bujdosó & Dávid, 2013), tourists seeking recreation often welcome change, even if for a short time, from their metropolitan lifestyle and experience a sort of activity, with the remarkable global growth of adventure tourism. Capitalizing on the Qatar's FFC legacy, varied tourist types can be attracted with distinct appeals (Al-Muhannadi et al., 2024). At the start of 2023, Qatar authorities extended the validity of the Hayya card—offering a visa and free public transport—until spring 2024, potentially capitalizing on the momentum from its excellence in hosting the M-SE. The opportunity and challenge would present themselves in

implementations that incorporate goals and plans for seasonal tourism and the deployment of fitting symbol systems (Bujdosó & Dávid, 2013:44). Qatar aimed to enhance its global image and participation by hosting the most expensive tournament in FIFA history as some might see it, however, official tourism statistics now show that Qatar also reaped economic benefits from the 2022 M-SE (Al-Muhannadi et al., 2024). According to Qatar Tourism (2024) published statistics, the number of arrivals to Qatar in the first quarter of 2024, has reached 1.627 million by air, land, and sea. From Al-Muhannadi et al. (2024), it is calculated to be a 40% increase from 2023's 1,163 million tourists, marking around 400% growth from 2022's first quarter of 316,000 visitors before FIFA 2022. Further, accommodation demand has risen by 37% from 2023, reaching 2.6 million room nights, which is 62% higher than 2019's pre-pandemic level. According to The World Travel & Tourism Council's 2024 Economic Impact Research, a new record was set with some 81 billion Qatari Riyal contribution by the travel & tourism sector to the Qatari economy in 2023, upped to 90.8 billion Qatari Riyal in 2024 representing 11.3% of the total Qatari economy and supporting around 16% of the total workforce (WTTC, 2024a). According to Bibolov et al (2024), the success in building a tourist destination image and increasing visibility during the hosting of FIFA 2022, is the drive for the remarkable increase in tourist arrivals to Qatar in 2023, backed by applying Qatar's tourism strategy. Further, tourism is expected to increase in the medium-term and even long-term (Bibolov et al, 2024), for the hosting is considered to have brought growing positive impacts to Qatar's national economy as well as the regional economies. According to Qatar's official plans and building on its competitive advantage such as green technology cluster that it showcased in Qatar WFF, 6 million annual tourists are targeted by 2030 (QNDS3, 2024). During the hosting of the M-SE, Qatar received around 1 million visitors with US\$2.3–4.1 billion revenue of their spending and other event-related sales broadcasting which equates to US\$1.6– 2.4 billion, as gross value added (Bibolov et al, 2024).

Further, positive psychic income, although referring to non-monetary benefits, is also used to justify public subsidy of hosting and expensive M-SE facilities, by highlighting the added values felt by locals at the destination hosting the event (Crompton, 2004). The added value includes the long-term social and psychological benefits to the athletics entity and the neighborhood, compared to the tangible effect of new facilities or temporary economic gain (Weight et al., 2021). However, the positive impacts on quality of life of locals in hosting destinations due to hosting a sport event were realized by early studies (such as Gibson, 1998). Consequently, psychic income redirects calculations of benefits towards locals at the host destination, and their perceived benefits, to the event itself or attachments to teams or athletes, instead of benefits expected from foreign fans arriving at the event (Weight et al., 2021; Crompton, 2004). In short, it is the benefit perceived from within and not from outside. Similarly, social impacts are seen to have positive impacts on various entities such as residents and tourists, unlike pure economic benefits to host destinations that are shown to be non-realistic (Kim et al, 2015).

3.6.3 Environmental Impacts

Attention to the environmental impacts of sport goes very far back with studies like Stoddart (Stoddart, 1990) highlighting environmental issues concerning the construction and maintenance of golf courses, and Lenskyj (Lenskyj, 2002; Lenskyj, 1998) attempting to study the multifaceted link between sport and the environment, followed by rapid growth in the last two decades with different focus on environmental and also social impacts of sport, and the greening of sport. The former was followed for instance by many studies such as Millington & Wilson (Millington & Wilson, 2019) to examine the concept of sustainable development and its relevance to golf. The latter has also been examined by many researchers, particularly regarding its negative social impacts. However, the subject still requires further research (Al-Muhannadi et al., 2024). The positive impacts of hosting M-SE and their accompanying tourism are more obvious than the negative ones (Liu & Wilson, 2014).

Environmental impacts of M-SE have been receiving growing attention recently and it was noted that despite recent calls to reduce events' environmental impacts, there is a scarcity of thorough assessments, analyses, and reporting mechanisms on environmental sustainability in the sports industry (Mallen, Stevens, et al., 2010b). Trendafilova et al. (Trendafilova et al., 2013) however interviewed sports executives and examined 122 websites and organizational documents, and 56 media reports. They showed how professional sports organizations integrate environmental management practices, influenced by media in motivating the extent of sustainability efforts (Al-Muhannadi et al., 2024). Trendafilova et al. (Trendafilova et al., 2014), however, concluded that there is a shift in sports organizations' mindset over time toward current environmental initiatives implementation and continuous development. This was due to changing social values, rising stakeholder expectations, and the potential to improve efficiency and sustainability (Dijkstra-Silva et al., 2017; Al-Muhannadi et al., 2024). By providing cases from the UK, Collins et al. (Collins et al., 2009) suggested using Ecological Footprint analysis and Environmental Input-Output modeling to explore the environmental impacts of M-SE in general (Cheng et al., 2023).

Nevertheless, Mallen et al. (Mallen, Adams, et al., 2010a) argues that the environmental performance impact is weak to moderate even when organizers demonstrate a high level of effort towards initiating environmental sustainability in such events and is not accompanied by environmental sustainability policies and programs due to their prevention organization barriers: structural, systemic, or cultural. In their work to assess the environmental impacts of mega sports events, with their environmental and socio-economic legacy components, Collins et al. (Collins et al., 2009) state that while the role of sustainable development is felt by public and private organizations, there is a noticeable increase in realization of the environmental impacts of M-SE, but with difficulties in quantitatively assessing them, due to the complexity of M-SE and their occurrence over extended periods.

Graham et al. (Graham et al., 2018) (p. 422) argue that there are significant obstacles to implementing environmental sustainability in sports as an independent study and as a module. This literature discusses solutions for these challenges and provides guidance on how to develop an education program focused on managing both sports and the environment (Al-Muhannadi et al., 2024). This was acknowledged by others like Daddi et al. (Daddi et al., 2022) stating that despite academic and practical interest in sports and sustainability topics, very few research examined which solutions to minimize the environmental impact of popular sports events like football have been applied. Trendafilova et al. (Trendafilova et al., 2014) (p. 9), in looking at current and future trends in environmental sustainability and sport, and challenges facing adopting environmental programs, suggested that by dealing with environmental externalities in their work processes in a proactive manner, M-SE organizers can increase their organizational legitimacy, avoid legal consequences, save money, and also build more stable relationships with key stakeholders, including matters related to their resources and outreach functions. Trendafilova et al. (2014:9) predicted that due to stakeholder pressure and societal norms, government intervention, and certification requirements, the current emphasis on the greening of sports will persist. Accordingly, cooperation and partnership between industry and sports entities will be essential with sustainable sport being the way forward (Kowalski & Sowier-Kasprzyk, 2009). Forming partnerships to incorporate events into marketing campaigns between sports organizations, planners, and non-sports stakeholders can potentially increase sports participation (Chalip et al., 2017:1).

M-SE, with its linked activities at the host destination, and by participants and promoters, have a potential for considerable environmental impacts. Traveling from far places and using all sorts of transport including airplanes, to participate in the venue carry significant negative environmental impacts including greenhouse gases emission impacting global warming (Sotiriadou & Hill, 2015). Additionally, natural resources are used to produce a wide range of products, including apparel, sporting goods, and equipment. Literature interest in environmental impacts on air, soil, water and biodiversity, of hosting M-SE ranges from short-term impacts such as noise (Govender et al., 2012

), air (Locke , 2019; Collins et al., 2012; Fairley et al, 2011 ; Sotiriadou & Hill, 2015) and waste pollution created by mass tourism (Shokri et al., 2013), during the course of the event, and long-term impacts such as impacts of massive construction (Cerezo-Esteve et al., 2022), and deterioration of biodiversity and natural resources (Fermeglia , 2017; Fairley et al, 2011) . In a literature review (Cerezo-Esteve et al., 2022) spanning two decades starting 2001, negative impacts were found to cover more than 62% of addressed impacts versus less than 33% of positive impacts. Some of the documented positive impacts are improvement in city infrastructure, air quality, and environmental awareness and reduction in pollution such as soil contamination in preparation for the event.

Beside the mention of “Greenwashing” in few articles, direct negative environmental impacts from hosting the 22nd FFC on Qatar was not a focus in literature. However, several literatures elaborated on positive environmental impacts. FIFA reports and other literature highlighted positive environmental initiatives whereas from an environmental sustainability protective, Qatar seems to have added a new dimension to the environmental sustainability of FFC hosting, including the stadium made of recycled containers (Kucukvar et al., 2021), and the circularity that was implemented at the design stage of construction so that no waste is created, and that all stadiums’ facilities and equipment are disseminated after the end of the event, and given a new life by being sent to other countries to serve new purposes. Tree Nursery Project planting high tolerance trees with a potential role in offsetting carbon emissions created during the hosting of the event, resulting in reducing CO2 emissions by 23,482 tons CO2-eqv per year (Spanos et al, 2021:215). Nevertheless, previous literature investigating the 2008 Beijing Summer Olympics, showed that air quality readings returned to normal post-event (Shen et al., 2011; Zhang et al., 2016; Cerezo-Esteve et al., 2022) despite the tree planting initiative (Zhang et al., 2016) and the air pollution during the event (Cai & XIE, 2011). Further, tree planting projects were found falling short from achieving its objectives and even abandoned after the end of the event such as in the case of 2014 FFC held in Brazil with only 5% of original plane (Crabb, 2018). However, the Qatari initiative includes several best practices such as the use of treated sewage water irrigation, and the circularity and conservation of water, energy and material. This has the potential to result in long-lasting impact on Qatar environmental sustainability including reduction of the heat stress, and air particulate matter in the surrounding space (Spanos et al, 2021), and not just priding FIFA with the first carbon-neutral M-SE worldwide.

Potential impacts (Figure 5.) on DS in Qatar as a result of hosting the 22nd FFC is deduced from the LR, including socio-economic gains in particular for SMEs, including destination image and destination marketing, as well as impacts on the other dimensions of sustainability (socio-cultural and environmental).

FIFA 2022 was the first voluntary carbon offsetting scheme in the MENA Region to offset the inevitable greenhouse emissions of the event (FIFA, 2022) (p. 7). In practice, circular economy approaches were used in the construction of infrastructure, stadiums, and other FIFA-related facilities including the use of sustainable building designs to limit environmental impacts and minimize energy and water waste, while establishing local standards and know-how expertise, for production lines, green construction; greenhouse gas emissions and waste management while inviting green solutions, and promoting recycling (Kucukvar et al., 2021; Al-Hamrani et al, 2021; Lundberg, 2023; Al Sholi et al., 2023). The distance between the capital’s center and any stadium is less than 50 kilometers, making Qatar’s FIFA the most geographically compact FIFA event since the first event took place almost a century ago (FIFA, 2022x). Qatar also provided eco-friendly transportation via its transport partner Mawasalat Karwa which had over 850 electric buses operating with zero-carbon emissions and were noise-free as public transport for the use of fans visiting Qatar during the tournament (Evangelista, 2023). This is part of a bigger eco-friendly plan by the Qatar General Electricity & Water Corporation (Kahramaa) and Ministry of Transport in cooperation with the U.S.-Qatar Business Council to set up 200 to 500 charging points for electric cars across Qatar in 2022, as Qatar is set to have 100% electric public transportation by

2030 (Menatalla, 2021). Kahramaa was set to supply, install, and operate some 37 (aiming to 100) electric vehicle charging units at 22 Woqod stations in and around Doha the capital, as well as other locations in Al-Wakrah, Al-Khor, and border outlets (Menatalla, 2021). A sophisticated IT infrastructure and technologies were used in the Qatar chapter of FFC, with a digital twin (DT) technology that receives live data from dozens of thousands of “Internet of Things” (IoT) devices (Glebova et al., 2023). A centralized command center manages sensors and automated operations, such as security, cooling, flow, and ventilation, at the eight Qatar FIFA stadiums. Renewable solar energy helps maintain air-conditioned seats at 21°C, enhancing efficiency, speed, accuracy, and sustainability through energy and materials optimization (Al-Muhannadi et al., 2024). Al Thumamah Stadium, one of these venues, is recognized by FIFA as a model for innovative research in sustainable technology. Furthermore, all eight stadiums were awarded GSAS Sustainable Building certification before the tournament, and six of them were awarded GSAS Sustainable Operations certification (FIFA, 2022d). Published FIFA Environmental Sustainability reports (FIFA, 2022s) of its 22nd edition include details of processes and results Qatar achieved in each of the eight stadiums. In own LR in a previously published article (Al-Muhannadi et al., 2024): the details primarily focusing on energy and water efficiency, waste elimination, pollution control, and nature regeneration to meet GSCM certifications and Qatar’s sustainability vision. For example, over 70% of Al Bayt Stadium's exterior lighting is powered by solar energy. All Qatar 2022 stadiums use up to 70% more energy-efficient LED lights. At Al Janoub Stadium, air conditioner water is recycled for restrooms, and 90% of its waste, along with Al Rayyan Stadium's, is reused. Al Thumama Stadium features over 80% natural vegetation, Education City Stadium sources more than half its materials locally, and Lusail Stadium has effective waste management with on-site recycling. Due to modular design, 170,000 seats can be donated from these stadiums. Public transport, including buses, trams, and Doha Metro, connects the stadiums to reduce emissions. A network of shaded trails supports walking and cycling between facilities. According to Ogutu et al. (Ogutu et al., 2023) research in organizational sustainability management is considered an emerging topic with a need to investigate the role of technology and innovation in promoting sustainable practices. In own previously published work (Al-Muhannadi et al., 2024), CE principles applied in the Qatar FFC are highlighted using the six segments of the ReSOLVE Framework, as illustrated in (Table 2), as CE is inherently regenerative, replacing the unsustainable linear economy, paying attention to aiming to zero-waste, and extending materials and energy lifecycles, and preserving natural resources and reducing pollution. Because the circular economy considers the holistic long-term planning processes (Fogarassy et al., 2017), ReSOLVE Framework takes the core principles of circularity and applies them to six segments of actions (MacArthur Foundation, 2012; MacArthur - MacKinsey, 2015; Al-Muhannadi et al., 2024): Regenerate, share, optimize, loop, virtualize and exchange. "Regenerate" promotes nature's biocapacity. "Share" encourages leasing and renting to reduce waste. "Optimize" maximizes energy and material use with sustainable technologies like precision farming. "Loop" keeps everything in the cycle by composting organic components and reusing inorganic ones. "Virtualize" saves materials and energy by using virtual spaces, like e-brochures in tourism. Lastly, "exchange" switches processes and tools to more sustainable options. According to Lundberg, (2023), the 22nd FFC had the most extensive sustainability strategy in FIFA’s history, making hosting the event a catalyst for Environmental Sustainability in Qatar. According to Inside FIFA (2024) the event practiced recycling for its non-degradable waste materials, and manufactured event uniforms for its staff and 20K volunteers of recycled materials including materials from previous events. Food in stadiums was not wasted. Many individuals, in need, received daily supplies of food via local specialized NGOs, while leftovers from the consumed food were composted together with biodegradable safe tableware from stadiums and other event’s facilities.

Table 2 CE Principles at Qatar ‘s FFC using the “ReSOLVE Framework” approach applied to DS’s circular development blocks.

Segment of “ReSOLVE Framework”	Circularity’s added-value	Tourist experience’s added-value	Tourist firm’s added-value	DS’s added-value
Regenerate	Tree Nursery Project	<ul style="list-style-type: none"> • Beauty and fresh air • Good post in social media 	<ul style="list-style-type: none"> • A tourist destination with a sustainability story 	<ul style="list-style-type: none"> • Reduction of temperature • CO2 offsetting • Habitat for native birds • Cities breathing lung • A recreational destination
	Using old oil containers and waste to build stadiums	<ul style="list-style-type: none"> • Feel own contribution to sustainability by participation 	<ul style="list-style-type: none"> • Add to story-telling list regarding Qatar’s FIFA & Qatar’s legacy 	<ul style="list-style-type: none"> • Minimization of waste and pressure on nature • Promoting environmental awareness
	Archaeological sites educational tourism (Zubarah)	<ul style="list-style-type: none"> • Acquire knowledge and understanding of local’s culture & its old civilization 	<ul style="list-style-type: none"> • Marketing • Channel of communication 	<ul style="list-style-type: none"> • Preservation and regeneration of natural and socio-cultural locations • Destination Branding
	Providing open beaches for recreational purposes for locals and visitors	<ul style="list-style-type: none"> • enjoy nature tourism with minimizing impact 	<ul style="list-style-type: none"> • More ecotourism destinations in their offering of Qatar’s tourism 	<ul style="list-style-type: none"> • Promoting responsible nature leisure and in-country tourism
	Creating open recreational areas such as Oxygen-Park & nature-based	<ul style="list-style-type: none"> • Leisure time experience in a healthy environment 	<ul style="list-style-type: none"> • More ecotourism destinations in their offering of Qatar’s tourism 	<ul style="list-style-type: none"> • More sustainable natural locations for strengthening preservation of the environment
Share	Lease & rental of buses and cars (optimization of energy and materials)	<ul style="list-style-type: none"> • Feel good when they know 	<ul style="list-style-type: none"> • Enhancing destination marketing 	<ul style="list-style-type: none"> • Practicing CE schemes to save the environment while reducing overheads • Less issues to deal with post-event
	Alternative lodging by lease of chartered cruise-ships	<ul style="list-style-type: none"> • More choices • Different experience 	<ul style="list-style-type: none"> • Money saving • enhancing communication • More ecotourism attraction 	<ul style="list-style-type: none"> • less impact on QoL for local community • reduce overdevelopment • less negative impacts
	Tourists and locals are encouraged to use advanced public transport with no cost	<ul style="list-style-type: none"> • ease • avoid congestion, • save time, • opportunity to meet locals 	<ul style="list-style-type: none"> • Easier management of groups • Reduce cost • Better time management 	<ul style="list-style-type: none"> • Reduce congestion and air emission • Reduce impacts of hosting
Optimize	79% of waste generated during construction was reused & recycled	<ul style="list-style-type: none"> • Feel-good when they know 	<ul style="list-style-type: none"> • Good story for the tourist information communication about the stadiums 	<ul style="list-style-type: none"> • Reduce negative impacts on destination sustainability by waste reduction & adopting material optimization technologies
	30% more energy efficiency stadiums than international benchmarks including cooling and ventilation systems	<ul style="list-style-type: none"> • Feel-good when they know 	<ul style="list-style-type: none"> • Good story for the tourist information communication about the stadiums & Qatar 	<ul style="list-style-type: none"> • Energy optimization and reduction of hosting carbon footprint
	40% less water was used than the international benchmark	<ul style="list-style-type: none"> • Feel-good when they know 	<ul style="list-style-type: none"> • Good story for the tourist information communication about the stadiums & Qatar 	<ul style="list-style-type: none"> • Maximize water optimization and conservation of natural resources

	15% construction supplies from sustainably resourced materials	<ul style="list-style-type: none"> • Feel-good when they know 	<ul style="list-style-type: none"> • Good story for the tourist information communication about the stadiums & Qatar 	<ul style="list-style-type: none"> • Save money • Look greener
	The short distance between stadiums	<ul style="list-style-type: none"> • Can easily attend several games in one day 	<ul style="list-style-type: none"> • Ease in management and overhead 	<ul style="list-style-type: none"> • Reduction of hosting carbon emission and road congestions
Loop	Seats designed for circularity to be disassembled and relocated - 170 K stadium seats from 6 stadiums to be donated for other purposes	<ul style="list-style-type: none"> • Learning about stadium sustainability • Feel-good about participating in Qatar's chapter of FFC 	<ul style="list-style-type: none"> • Channels of communication • Extend resources 	<ul style="list-style-type: none"> • Waste reduction by keeping materials and blocks useful and flowing continuously in closed loops. • Promote destination sustainability image
	Planting trees around stadiums to mitigate rise in temperature while irrigating with harvested rainwater	<ul style="list-style-type: none"> • Aesthetic beauty • Feel-good 	<ul style="list-style-type: none"> • Aesthetic value to the program 	Climate change mitigation Improving local community's QoL
	Solar power systems providing partial energy needs for stadiums and main buildings, to be increased with time	<ul style="list-style-type: none"> • Feel-good and surer about participation in the event 	<ul style="list-style-type: none"> • Good story for the tourist information communication about the stadiums & Qatar 	<ul style="list-style-type: none"> • Reduce non-renewable energy use and reduce emission
Virtualize	E-brochures, city guides, FIFA information, and information banks, with smart points around the Capital & with mobile applications	<ul style="list-style-type: none"> • Ease of learning about destination and event 	<ul style="list-style-type: none"> • Wider audience • Save money • Less overhead 	<ul style="list-style-type: none"> • Destination knowledge communication in different levels with ease and high accessibility
	Wi-fi connection with no cost	<ul style="list-style-type: none"> • Cost reduction & ease communication 	<ul style="list-style-type: none"> • Overhead and cost reduction • Smoother operations 	<ul style="list-style-type: none"> • Adds to destination's offering and tourists' satisfaction
	Using Digital Twin (DT) and smart control technologies to increase speed, efficiency of energy and materials	<ul style="list-style-type: none"> • feel safe • enjoy the hi-tech experience 	<ul style="list-style-type: none"> • better communication • Reducing the overhead 	<ul style="list-style-type: none"> • Safety and security promotion • Advancement in technology utilization for sustainability • Preventing negative impacts such as theft and vandalism
	e-marketing via the virtual event moto "La'eeb" popping in different sites virtually aiding and guiding	<ul style="list-style-type: none"> • Ease, • Accessibility & • Excitement 	<ul style="list-style-type: none"> • Wider audience 	<ul style="list-style-type: none"> • Destination branding • Cultural celebration
	e-communications with teams and fans regarding programs and events	<ul style="list-style-type: none"> • Ease and convenience and • staying updated 	<ul style="list-style-type: none"> • Communication enhancement, • Save money and time 	<ul style="list-style-type: none"> • Better organization and control of mass tourism
Exchange	Metro for fans instead of taxis and private car rental & New road system dedicating a lane for teams' buses	<ul style="list-style-type: none"> • Fans staying together in large groups • Opportunity for meeting locals • Reducing their holiday's carbon emission 	<ul style="list-style-type: none"> • Save money • Less overhead • Opportunities for mingling with local communities • Opportunity for better visitor's information • opportunity for togetherness 	<ul style="list-style-type: none"> • Reduction of air, soil, and sound pollution & • Reduction of carbon footprint • Reduction of road congestion • Minimal disruption to normal daily life of residents
	Portacabins and ship accommodations instead of	<ul style="list-style-type: none"> • More affordable prices • Feel good about lowering their environmental impact 	<ul style="list-style-type: none"> • more alternatives with different rates and options 	<ul style="list-style-type: none"> • Avoiding unnecessary externalities of overdevelopment and construction

	overdevelopment and construction			
	Use compostable table utensils & compost them with food waste	<ul style="list-style-type: none"> • Feel good 	<ul style="list-style-type: none"> • A sustainability story to share with tourists 	<ul style="list-style-type: none"> • Reduction of waste • Increase soil fertility • Spread sustainability practices • Promote environmental DS
	Building walkways between Souq Waqif, Mshairib, and other leisure destinations	<ul style="list-style-type: none"> • Walking in fresh air, • Saving transport expenses, • Easy access & more comprehensive experience • Healthier • Acting responsibly 	<ul style="list-style-type: none"> • Save money • Less overhead • Opportunities for mingling with local communities • Opportunity for better interpretation and introduction of local culture • Ease of keeping groups together 	<ul style="list-style-type: none"> • Improving city's connectedness • Reducing emissions • Reducing roads congestion • Increasing small cultural destination visits • Spreading services along connected destinations and improving quality in each • DS marketing
	LED and energy-efficient equipment	<ul style="list-style-type: none"> • Feel-good once knew about it 	<ul style="list-style-type: none"> • Segment of Uniqueness of Qatar FIFA 	<ul style="list-style-type: none"> • Support Environmental DS
	Prohibiting smoking in stadiums' perimeter	<ul style="list-style-type: none"> • Avoid passive smoking and so promote health 	<ul style="list-style-type: none"> • Add to story-telling list regarding Qatar's FIFA & Qatar's legacy 	<ul style="list-style-type: none"> • Reduction of health impacts and add to the uniqueness of Qatar
	Legislations restricting spiritual drinks in certain locations including all stadia premises	<ul style="list-style-type: none"> • Vandalism and violence often associated with tournaments almost absent • Allow a safe atmosphere for families especially women and children 	<ul style="list-style-type: none"> • Add to story-telling list regarding Qatar's FIFA & Qatar's legacy • Reduction of uncivilised incidents between fans 	<ul style="list-style-type: none"> • Sustainability communication by featuring ladies and families expressing their thrill and admiration • less negative effect on socio-cultural DS • Respecting Qatari nationals and their identity and values • Promoting institutional-trust for potential M-SE
	Japanese fans cleaning the stadium after their team lost the game	<ul style="list-style-type: none"> • Raising awareness regarding tourists' responsibility towards host destination sustainability 	<ul style="list-style-type: none"> • Cultural exchange and education • Add to story-telling list regarding Qatar's FIFA's legacy 	<ul style="list-style-type: none"> • Highlighting good cases and lessons to promote positive tourists' interaction with destination • Promoting DS
	Qatari Citizens opening their Majlis to receive any group of tourists for meals after games	<ul style="list-style-type: none"> • Save money • Have an exchange with locals • Live a local Qatari dine-in experience • Creating relationships 	<ul style="list-style-type: none"> • Open a channel for long-term communication and revisit • New marketing tool with no expense 	<ul style="list-style-type: none"> • Destination branding for generosity, local community hospitality, welcoming, and openness
	Uniforms made from recycled materials, bags from signage from previous events.	<ul style="list-style-type: none"> • Feel good about their participation 	<ul style="list-style-type: none"> • A story of DS to share with tourists • Boosting national pride & confidence 	<ul style="list-style-type: none"> • Destination branding for sustainability practices • Promote awareness • National pride in sustainability and hosting

Source: Own edition from Al-Muhannadi et al. (2024) based on MacArthur - McKinsey (2015), Czikkely et al. (2018:202); Al-Muhannadi (2020); Kucukvar et al. (2021); FIFA (2022c); FIFA (2022z)

3.6.4 Socio-cultural Impacts

In a systematic review and evaluation of social impacts of M-SE focusing on narrative review and research agenda literature, Mair et al. (2021:1), found issues in consensus on measurement and focus upon both negative and positive impacts. Main impacts found in most literature revolve around “education and skills, destination branding, social cohesion, environmental sustainability and sport development”.

Interestingly, the intention to travel to a destination hosting a mega-sport event, which is a positive indication of an increase in tourism, negatively impacts the local community with travel inconvenience and price inflation (D. Liu & Wilson, 2014). The quality of life of local communities at the host destination is thought to be directly impacted by hosting a M-SE (Taks et al., 2015:1), through sparking multiple effects instantly or after a while, to either fade shortly or remain for much longer time forming lasting impacts or ‘legacies’. The “feel good” effect is seen as desired social impact in early literature. Maennig & Porsche (2008) considered it one of the most observable positive impacts during the 2006 FIFA tournament and the hosting was considered among the most important events in German history. Liu (2013) mentioned the effect on the local community, together with the international perception of profit towards any host nation of M-SE. Al-Emadi et al. (Al-Emadi et al., 2022) surveyed Qatar’s local community's perception of holding the event, some eight years before it was held. Their sample included Qatari Citizens and Residents, who were both found to be excited about the forthcoming M-SE in 2022. The sense of social unity and boosting national unity and pride was mentioned by some scholars amongst social impacts on the local community of hosting M-SE (Heere et al., 2013; Mair et al., 2023).

Qatar aims for the FFC’s legacy by advancing labor’s human rights. M-SE legacy addresses the sports events’ actual impacts on the host destination, including permanent infrastructure and public enhancement, value-added destination image, and benefits to tourism (Gratton & Preuss, 2008)(p. 1926). This includes both positive legacy and negative impacts that can manifest with time, even though measuring the true legacy of an event could require up to twenty years (Gratton & Preuss, 2008) (p. 1833). However, Collins et al.(Collins et al., 2009) noted the challenge in the quantitative assessment of socio-economic legacy components for the elongated period required, and also for its complexity. According to Fourie & Santana-Gallego (Fourie & Santana-Gallego, 2011)(p. 1364), new world tourism patterns appear to have been molded by M-SE, with Promoting fresh travel destinations and establishing them with ‘lasting legacies. At the end of the 22nd FFC, Qatar has a fully operational metro system with high standards in reliability, time-efficiency, and affordability for its people, with minimal impact on the environment.

Also, Qatar established impressive public parks to promote a healthy lifestyle for its people and visitors, such as Oxygen Park, with its water features, which acts as the green lung of the education city, divided into two "zones": an amphitheater, individual gardens, and a multipurpose field for sports are located on the western side, while a semi-covered running track and children's playground are located on the eastern side (Qatar Foundation, 2024). Furthermore, Qatar has developed open beaches, along with hotels, shopping malls, and recreational and cultural sites for public enjoyment (Al-Muhannadi et al., 2024). In addition, the country has improved its road infrastructure and established a new airport, which has been acclaimed as the "World's Best Airport" by the World Airport Awards in 2024. FIFA 2022 yields well-trained youth in events and tourism, and reformed consumer and labor law (Al Thani, 2021). Qatar’s FFC stadia are state-of-the-art venues for sports and cultural events. Some of their facilities and equipment are donated to other nations during earthquakes or financial crises, benefiting from its preset designs to serve this purpose. Future research could explore how Qatari citizens perceive the legacy of donating these national assets. Although the event is brief, the changes it brings about may have a significant impact on the host destination. (Preuss, 2015b:18).

The 2022 FFC was expected to act as a motivation for constructive initiatives, and the Qatari side utilized the World Cup as an incentive for social enhancements such as labor reforms (Al Thani,

2021) , which has been a hot topic in the media, together with addressing accusations that were circulated in Western sources about the ability of Qatar to host the gigantic event.

Some 17,000 young residents had the opportunity to volunteer and be trained for this important once in a lifetime global event in their country, together with 3,000 international volunteers from 150 countries (FIFA, 2022x). It is my opinion that the established infrastructure and success in hosting the 22nd FFC have set Qatar as destination for a responsustable types of ecotourism such as “staycation” and “slow tourism”. This is applicable and beneficial for Qatar as well as communities of adjacent nations and other GCC states. The notion and practices of “slow tourism” was enjoyed by the nation and tourists: residents and visitors, at the time of the M-SE, and predicted to continue after the event. All these predictions suggest areas for further research. Some social impacts observed during the hosting could influence future M-SEs, such as the full accommodation and integration of individuals with special needs, and the creation of a safe and pleasant environment for family participation and enjoyment. Locals and visitors seem to have benefited from the desired impacts (Al-Muhannadi et al., 2024).

Qatar’s FFC showed strong social responsibility and sustainability. The opening ceremony featured Morgan Freeman and Ghanim Al Muftah, a Qatari YouTuber with special needs. All World Cup stadiums had wheelchair spaces and accessible facilities, including at airports, transport vehicles, parking areas, and stadium compartments. Volunteers were trained to support and empower people with disabilities (AL-Muhannadi et al., 2024). In addition, three of the eight stadiums had sensory rooms for people with intellectual disabilities, a perfect environment where kids with autism and neurobehavioral disorders can watch the games in a secure area furnished with all the latest equipment and gadgets (Ataullah, 2022a). Moreover, inclusiveness of visual-impaired was made easy with Bonocle technology using a portable, single-cell Braille device that acts as a controller for smartphones and allowing them to share the experience in detail (QSTP, 2024).

From a cultural impact’s perspective, in M-SE, embracing local culture’s core values is a prerequisite for generating positive impacts (Misener & Mason, 2006). A tiny nation with deeply rooted Islamic and Arabic culture, was expected to compromise its values to host an FFC M-SE. Yet, Qatar showcased its traditions and identity through various aspects of the 2022 FFC, including the “La’eeb mascot” in traditional dress, and the celebration of Arabic language and Islamic traditions at the opening and closing ceremonies. Additionally, adherence to nation’s traditions was demonstrated in the scheduling of games and ceremonies around prayer time, and in banning alcohol consumption outside designated zones and respecting prayer time in the scheduling or games and ceremonies (Al-Muhannadi et al., 2024). This seems to answer the pre-event concern raised by some literature (e.g. Matheson. 2006) regarding the big challenge facing Qatar while pursuing to satisfy FIFA requirements for a mega-sport global event, which could mean having to sacrifice its unique identity and cultural essence. Al-Muhannadi et al. (2024) suggested further studies are needed to understand the socio-cultural impacts of hosting the M-SE in Qatar, nevertheless, efforts to reduce negative socio-cultural impacts on the local community have been evident. Additionally, the history of Qatar and the stories of its people are shared through museums, cultural centers, and developed archaeological sites that welcome visitors. For example, the Qatari World Heritage Site in Zubarah features an interpretation center that showcases the story of pearl diving. Msheireb is another notable tourist attraction, with historical museums serving as points of cultural interaction within a contemporary architectural setting, complemented by specialized cafes.

From an accommodations side, a carbon-neutral policy was applied with the use of adaptable accommodation to handle the temporary sharp increase in demand for accommodation during the event, such as floating hotels in the form of two repurposed chartered cruise ships of 4,000 cabins, functioning as floating hotels, which is an example of the various solutions that avoided unnecessary overdevelopment (FIFA, 2022). The Doha Metro network, built to link FFC stadia with tourist and business districts for the tournament, is expected to reduce traffic and air and noise pollution over time. The tournament's excitement and heavy traffic encouraged the Qatari

community to try the metro and adopt greener public transport (Al-Muhannadi et al., 2024). The Qatar FFC implemented a tobacco-free regulation on top of an alcohol-free regulation to safeguard the health of hundreds of thousands of players, spectators, organizers, staff, and volunteering groups from passive smoking. This helped to establish a family-friendly safe event, particularly for ladies and kids. Qatari ladies featured in various media, bringing female fans to their homes and serving them traditional Qatari cuisine. Qatari families and groups of local women attended the games in the stadiums and took part in cultural events. This demonstrated the hospitality and generosity of Qatar as well as the tournament's cultural integration. However, the buses bought to carry fans did not wind up as waste, and the same is true of the caravans and mobile cabins, which were all prepared to be donated to other countries that needed them (Al-Muhannadi et al., 2024). Items used in the M-SE such as cars and electronics were all offered for sale, and many Qatari families were able to buy them for a fraction of the original cost. The majority of the structures created, aside from those designated for dismantling and donation, are anticipated to continue offering services and a sense of pride to the populace. Examples include the metro, which offers quick and easy access to the majority of major sites in Qatar, as well as public beaches and leisure spaces. Additionally, the new resorts and hotels may offer the Qatari community more opulent venues for their short vacations and cultural and private celebrations (Al-Muhannadi et al., 2024). The illustrated “feel-good” effect mentioned in some literature (Maennig & Porsche, 2008) might be applicable here, with a sense of pride in how Qatar looks and what it can provide for its people and visitors. All of these could be worthwhile future research topics.

Matheson (Matheson, 2006) in his early study on the impacts of M-SE on local and regional economies doubted the belief that general infrastructure upgrades made just to accommodate the global tournament will inevitably spur economic expansion, while games specific infrastructure possibly will have no use after the event. Conversely, the donation of parts of the facility used for transporting and accommodating fans “**repurposed**” all those equipment, extending positive impacts of the M-SE to other geographical locations while showcasing SR in promoting a global human development agenda, while Qatari nationals expressed “feel good” for helping People in other places and even demanded it. In response to urgent situations in February 2023, 10,000 mobile cabins and caravans were shipped to areas hit by earthquakes in Turkey and Syria (Howell, 2023), also fleets of buses are set to be donated to Lebanon to help with their transport crisis to answer a request from Lebanese top officials (Sakina, 2022). Concluding from their systematic literature review and bibliometric analysis studying tourism-environmental degradation nexus, Shahbaz et al. (Shahbaz et al., 2021) (p. 58241) recommended a research collaboration amongst developed and developing nations for initiating sustainable tourism reform. Such reforms have the potential to maximize the benefit of hosting an M-SE learning from a small nation in Asia holding deeply-rooted traditions and values, that helped in succeeding and building a unique, yet sharable, experience, being the latest host of FFC “could use the momentum of world attention to lead the way for international cooperation in this direction” (Al-Muhannadi et al., 2024:28). A summary in Figure 5. illustrates potential positive and negative impacts of hosting a M-SE on the destination sustainability in Qatar according to literature review and document analysis. It shows many potential benefits that can be developed further to promote destination sustainability with public participation and community-based initiatives.

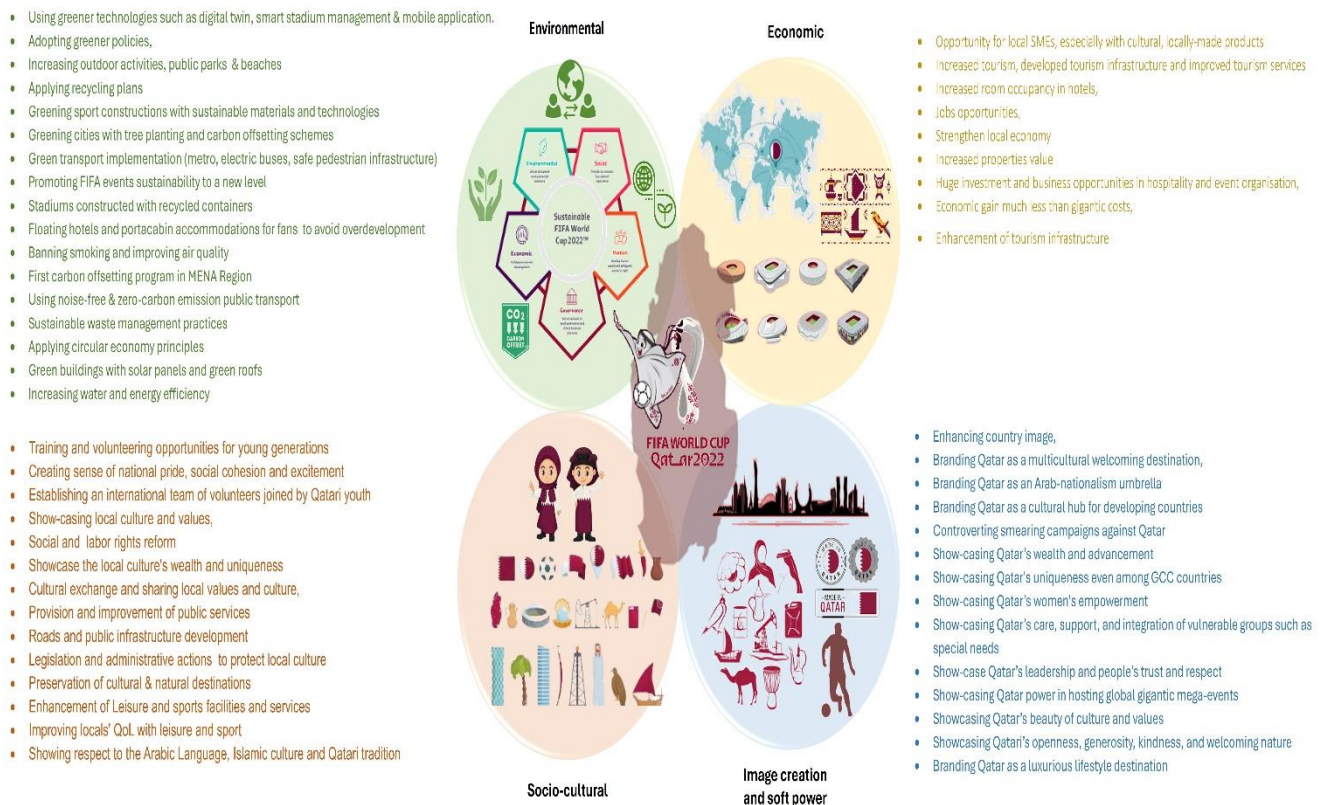


Figure 5. Potential impacts of hosting Qatar FFC on DS in Qatar

Source: Author's edition

3.7 Others Impacts

Besides the three pillars of sustainability, hosting an M-SE is shown to have impacts on other aspects of life and business as shown in the literature. Although I was intrigued to include some of these impacts under the three main impacts, it made more sense to list them independently and shed some light on each. The main ones are technological advancement, psychic income, legacy and public diplomacy.

3.7.1 Public diplomacy and empowerment

Public diplomacy aims to “intensive exchange of information, neutralization of clichés and prejudices about one’s nation, popularization of one’s foreign policy and social system, strengthening of one’s country’s positive image” (Plavsak 2002: 113). “Furthering understanding through communication” progressed rapidly with the digital age, providing individuals and groups fast and reliable means to share information globally, setting the forum for advocacy groups and “ordinary” Citizens to practice Grassroot public diplomacy, with diplomacy as an international relationship expanding its activities beyond states to include individuals and groups (Payne et al., 2011:45&69). Although governments like USA are seen to use public diplomacy, especially via NGOs, to communicate and spread their foreign policy agenda (Payne, 2009). One example of grassroots public diplomacy brought up by Payne (2009:32) is a digital community project created by four Turkish individuals to encourage global dialogue by building user-generated content by real people that have been strengthening a good image of Turkey and bringing Turkish experience to an international communications sphere. Disempowerment is the other side of the coin with soft empowerment, as nations can receive the opposite effect of what they aimed for while using soft diplomacy. Disempowerment generally happens in three ways according to (Brannagan & Giulianotti, 2018): when states are perceived as breaking international laws and regulations; when

they are perceived as disregarding international conventions or standards for global development; and/or when they are perceived as having direct and detrimental effects on other individual nations or communities of nations.

3.7.2 Green technology advancement

Qatar FFC named “the most digital World Cup of all”, with latest smart technology and digital services ensuring that fans can create their individual experiences of the event (Yasmeen, 2022), with taking measures for sustainability. Qatar showed advanced green technology implementations in the tournaments’ stadiums, and outside, where both technical together with non-technical features are used. Some smart technological applications in Qatar FFC were seen for first time globally such as those related to the VAR, smart stadiums and connected football fitted with sensors collecting real time data, to name a few.

Semi-Automated Offside Technology (SAOT) and Al Rihla (Arabic for the journey) technology detection when a player is offside, making kick point detection extremely accurate with the use of inertial measurement unit (IMU) sensor that provided significant time reduction for making offside decisions via the Var (Inside FIFA, 2022x). Other technologies used to promote the environmental sustainability of the tournament include advanced cooling technology, green transportation and renewable energy technologies. The Stadiums cooling advanced technology features insulation and "targeted cooling" in cycle with the cooling system, where stadium's sensors will maintain a steady temperature and modify airflow to accommodate seating in the sun or shade, applied to seven of the eight stadiums (Inside FIFA, 2022a). Temperature in Summer can easily surpass 40 degrees Celsius (68 Fahrenheit), with a subtropical hot dry desert climate (Weather Online, 2024). Therefore, and to be able to make full use of stadiums all year long, each stadium is cooled to a comfortable temperature of around 20 degrees Celsius (Inside FIFA, 2022a).

Warm air recycled into the stadium's cooling system via an air-circulation technology, cleansed by water, chilled again, filtered out, distributed, and then redistributed out again by the jets, using AIR2O's flagship hybrid HVAC units were initially installed in the fan zone to provide with presumed energy efficient 100% fresh air-cooling solution (PRWeb, 2022). With Qatar’s climate conditions, being one of the twenty hottest countries on earth (World Population Review, 2024), smart colling technology allows sporting events to be held all-year round. Looking at the matter in light of the heat issue in France Olympics 2024 and athletes’ complaints of intolerable heat amongst other issues, it is easier to understand motivation for Qatar to find an advanced technology solution for the heat. It is not easy to provide comfort to participants including athletes while reducing carbon emissions. Therefore, advanced green technology was implemented in Qatar FFC to achieve both.

Stadium 973 was built using modular design with steel frames and cargo containers, allowing it to be disassembled completely with no waste. Qatar FFC catered for participants with visual impairments using ‘Bonocle’ innovation for converting digital content into Braille (Mada, 2024), allowing them a unique experience of the event for the first time, with semi wearable device that communicate with smartphones and other devices. The audio descriptive commentary enabled the audience at the stadiums with visual imparity to share the tournament experience with details such as facial expressions of players when missing a chance to score and fans reactions.

Renewable energy applications are used in stadiums, parks, and other places in Qatar including the intensive use of solar energy especially for lightings. Water treatment and recycling techniques are used all over the stadiums and their surrounding areas, especially for the tree nursing project. Transportation is known for its CO₂ and other emission, however in Qatar FFC e-mobility technologies was used for greening event’s transportation for teams and others, such hybrid and electric vehicles (EV), being forefront of greenhouse reduction innovation with potential support to destination sustainability neutrality (Al-Buenain et al., 2021; Inside FIFA, 2024). The spatial compact model around just one city area helped in pursuing the first carbon-neutral FFC (Meza Talavera et al., 2019).

3.7.3 Legacy

Events' legacy has become a key aspect in mega-sport hosting and marketing and countries seem to consider it seriously in their preparations plans for the M-SE. The state of Qatar for instance, established in 2011 the Supreme Committee for Delivery & Legacy just after it was granted the hosting of the 22nd FFC, mandating it the delivery of the infrastructure including operation, and the creation of a lasting legacy nationally and globally for the forthcoming M-SE.

The notion Event legacy was suggested to Preuss (2007) for calculating the sustained impact of sporting events and claimed that intended and unintended impacts on host destinations makes the event legacy not limited to sporting impacts. Tangible and intangible social benefits to the host city and people is expected to result from hosting M-SE (Stone & Sharpley, 2011; Ishac et al., 2022). Impacts can be positive, but also negative. Literature listed all sorts of expected or recorded negative and positive impacts, and it was logical to study the long-lasting impacts on host destinations of M-SE. However, Ritchie et al. (2020) built on the temporal and spatial studies on impacts of M-SE, by exploring perceived legacy from the view of a non-host community (Rio) for the Olympic Games (2012). They found the perceived legacy to change with time, reaching its maximum during the event, and starting to reduce after that. Further, perception of legacy in general showed positive change, especially in relevance to economy and community.

Impacts of hosting an M-SE on the perceived QoL could differ amongst residents depending on different variables such as perceived atmosphere and domain of QoL. In their longitudinal research assessing the impacts on in QoL of locals at a host destination of mega-sport events, Pfitzner & Koenigstorfe (2016) during and after the 20th FCC in Rio that co-hosted the event, showed no change during the event. But, after the event impacts, participants who indicated receiving desired atmosphere had more positive view regarding QoL (socially and environmentally) after the event than what they had at the start of the event. On the other hand, the health domain of QoL was viewed to be reducing as the event ended, especially amongst those with elevated perceived atmosphere.

Magno & Dossena (2020) found that M-SE has positive impacts on QoL of local community, and that community pride has mediation effect between QoL and impacts from economy, infrastructure, image and perspectives. Al-Emadi et al (2016) made a distinction between personal quality of life PQoL and community quality of life (CQoL) in their study about residents' perception of impacts of hosting a M-SE.

The term "Event legacy" in M-SE is an expression of the lasting positive meaningful impacts it could have on the hosting destination, its people, event's participants and other entities involved. The impact can affect the three pillars of sustainability or some of them, extending to a long time after the event ends.

3.8 Dimensions of the study

3.8.1 Personal valuation of destination sustainability

Personal valuation of destination sustainability (PV) is an author's defined term to describe a personal stand regarding destination sustainability that could be seen as a combination of the person's awareness, concern, consciousness and willingness to make trade-offs for destination sustainability including environmental, socio-cultural and economic aspects, that is expected to impact local community perception of impacts. In short and for this dissertation, PV is the personal interest amongst citizens, knowledge and care about sustainability of Qatar.

3.8.2 Local community support for hosting

Local community support for hosting a M-SE is a very important factor in the successful outcome of the event (Gursoy et al., 2016; Máté & Kajos, 2023) and can influence the political support bidding and funding the hosting (Preuss & Solberg, 2007) and therefore has been receiving scholar's attention. Lorde et al. (2011) claims that the use of the triple bottom line paradigm did not help available studies in understanding perceived impacts of M-SE. Following the model proposed by Prayag et al. (2013) for connecting the locals' perception of impacts, their attitude and their support to hosting the mega-sport event, both SET and TRA were used, to form an understanding of support, using a triple bottom line impact framework. Therefore, instead of testing merely the three dimensions of sustainability impacts, positive and negative of each were separated, making six groups of impacts instead of three. Evaluation of resident's perception of each is expected to show differential impacts on the overall attitude and support.

3.8.3 Psychic income

Psychic income (PI) can be defined as imputed income, a reward, psychological advantages, intangible subjective benefits, joy or satisfaction that is non-monetary or non-material, with increasing self-esteem, pleasure, prestige, feeling of power and fame, or felt QoL, while doing a job or a service, due to the added value it brings to an individual or a group without the need for any materialistic or monetary personal benefit in return, as seen in watching or hosting many sports events. (Crompton, 2004; Kim & Walker, 2012; Ishac et al., 2022; Weight et al., 2019; Merriam Webster, 2024; Collins Dictionary, 2024). In the context of M-SE, the psychic impact refers to the positive emotional and mental effects that the local community in the host country feels from being attached to a team or event, even if they are not present or actively engaged in its planning (Kim & Walker, 2012). Psychic income is often used by economists and psychologists and has received interest from scholars for their role in understanding and quantifying the impacts felt by local communities of hosting a M-SE (Slabbert & Oberholzer, 2011; Ishac, 2022). The Psychic income paradigm includes numerous components such as emotional attachment to the event, enhanced personal self-esteem, and community pride from the media exposure the M-SE's host often receives (Finn, 2020). Other components are pride from increased visibility and ability to stage gigantic tournaments, enhanced collective self-esteem, and emotional investment in sport-related events (Kim and Walker, 2012). Residents of host countries of M-SE develop a sense of pride in response to advancement brought about in their country's preparation for the hosting of such an international event, as this can result in social capital changes and many benefits (Stone & Sharpley, 2011). Crompton's psychic income paradigm within sport communities (Crompton, 2004) includes seven components: 1) community pride as a result of increased community visibility, (2) excitement felt from visitors, (3) emotional involvement with a team, (4) tangible focus for social bonding, (5) pride in efforts to resuscitate deteriorated areas, (6) civic pride from being a major league city, and (7) enhanced collective self-esteem. This was empirically tested, particularly within the mega-event context by Kim & Walker (2012) confirming that residents thought there were generally positive rewards to hosting a sporting tournament, and they showed support to stage the Super Bowl. Kim & Walker (2012) concluded their study by presenting and testing an enhanced five-dimension framework.

To understand the impacts of hosting an M-SE on the psychic income of residents, Cai (2022) used social capital and social identity theories. The findings show that a marathon tournament can enhance psychic income via social capital and social identity. Some researchers used additional components. Liu (2017) Developed a measure for the psychic income associated with hosting the Olympic Games using increased visibility and collective self-esteem. The emotional psychic income was also added by other researchers as the eighth component. The challenge for host countries remains in turning this non-monetary income of the mega-sport hosting from short-lasting pleasure to sustained social resources. Gibson et al., (2014) studied psychic income as

enhanced community spirit and pride, enhanced sense of national pride and patriotism, “feel good” amongst locals, and bringing community together. Psychic income perception by local community regarding hosting a M-SE, however, can change with time and circumstances. In the OG 2016, their psychic income before the tournament starts was shown to be less than that for after the tournament (Mourão et al., 2022). According to Ishac et al. (2022) only very few research studies studied psychics income in relevance to perceived impacts of M-SE in MENA Region. In their research, they measured psychic income perceived by Qatari Citizens and two other groups of non-nationals residents and compared the three groups for their perceived psychic income. Interestingly, the characteristics of sports enthusiasts and their perception of economic impacts were found to be important predictors of psychic income (Weight et al., 2019), in a study conducted in a college town in New York. Respondents to the survey characterized with higher education and being single, compared to their counterparts, showed high perceived psychic income. Further, in their investigation of psychic impacts in relevance to Small Scale Sports Event, Ghaderi et al. (2021) found validity in several components of psychic impacts: community pride and image, community attachment, event excitement, cultural confidence, and community excitement. Weight et al. (2019:134) argue that psychic income applies on local communities at destinations hosting M-SE “inclusive of fans and non-fans alike”. In my qualitative and quantitative surveys, I did not make any distinction between participants in relation to their special interest in football, or being fans or not. In empirical research, to measure psychic income, some items in the scale developed by Kim and Walker (2012) and modified by Ishac et al. (2018) were adopted. Thus, the items in the survey measuring psychic income cover five different dimensions: Community pride as a result of enhanced image (CP), Enhanced community attachment (CA), Event excitement (EE), Pride in efforts to improve community infrastructure (CI), community excitement (CE), as shown in Figure 6. In my research I tested impacts of psychic income mainly based on these five-dimension frameworks, as mediating effect between Citizens’ perception of impacts on DS and their support for the hosting of the M-SE. Psychic income can be impacted by demographic variables as mentioned by previous studies (Ishac et al, 2022; Ma et al., 2023).

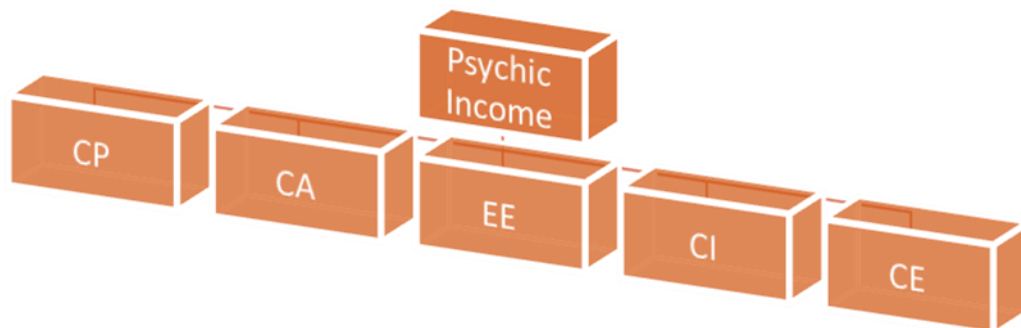


Figure 6: Psychic income framework used in the study based on Crompton, 2004; Kim & Walker (2012) and modified by Ishac et al. (2018)

Note: Community pride as a result of enhanced image (CP), Enhanced community attachment (CA), Event excitement (EE), Pride in efforts to improve community infrastructure (CI), community excitement (CE)

3.8.4 Attitude

Attitude can be understood as a psychological tendency to favor something over another after internal evaluation (Eagly & Chaiken, 2007). However, support for hosting an M-SE and the attitude of residents towards hosting have been used interchangeably by some scholars, while the distinction was not very clear for some. In my work, I distinguish between them and study attitude as a link between perception of impacts and support for the event. Scholars pursue linking attitudes to impacts in relevance to sport long time back (e.g. Ritchie & Smith, 1991). Attitude could be

understood as an indication of inner opinion, belief, feeling, or evaluation of a case or phenomenon or circumstances. Else, as Eagly & Chaiken (2007) found it to be a psychological tendency shown in evaluation. While support is the way people behave or react under those circumstances, in observable measurable amenable activities or conduct that are referred to as behavior. An example is having a favorable attitude towards football and can lead to voting for hosting a sport event in the country. The attitudes of an individual determine their behavior (Fishbein & Ajzen, 1975). Drawing from both SET and TRA, the impact perceived by the local community at host destination antecedents to overall attitudes while support is a consequence of overall attitude (Gursoy et al., 2016). On other words, overall attitude mediates the relationship between residents perceived (environmental, economic and socio-cultural negative and positive impacts) impacts and their support to the hosting of M-SE (Gursoy et al., 2016). Accordingly, I framed some hypotheses around the presumption that mediators affect the relationship between perception and support, suggesting an indirect link between the positive and negative (socio-cultural, environmental, and economic) impacts of hosting the M-SE, and support for the event, with overall attitude mediating the link.

3.8.5 Institutional Trust

Institutional trust refers to the belief a person has in his own government or other institutions that they will make the best decisions to the benefit of the people, or an expected qualities from decision makers to advance local society gains in an exchange situation (Gursoy et al., 2016). Besides the direct effect between perceived impacts by local community and their support to hosting the MSE under question, exogenous factors have influence on support such as the residents' trust in their government (Gursoy et al., 2018), and trust in organizing committee (Gursoy et al., 2016). Institutional trust can serve the legitimacy of official decisions that impact the local community (Nunkoo & Gursoy, 2012), giving that decisions of hosting a M-SE are often made by a small committee (Minnaert 2012) of politicians, which therefore, grant trust the power to impact support directly and indirectly (Nunkoo & Ramkissoon, 2011) such as residents supporting the government's decision to host a M-SE without being involved in the process. Citizens' perception of the impacts of hosting could therefore be impacted by the level of trust they have for the decision makers (Gursoy et al., 2016).

According to Gursory et al. (2016): although success in hosting mega- sport events needs community support, communities are not involved in decision making process including the submission of bids for hosting a these mega-events. Furthermore, the decision-making processes of bidding and hosting the events usually lack transparency and involve only a small group of politicians (Minnaert 2012) with set priorities to global flows rather than local communities. In this tone, Butler & Aicher (2015) explains the violent clashes of protesters with security officials in Brazil, just before hosting the World Cup 2014 with the mismanagement of funds and increased taxes in relevance to the hosting. Reflecting this to the case of Qatar, Citizens and Residents suffered nothing of that nature as the perception is that the state took full responsibility of hosting costs. In their pioneer research testing a theoretical structural equation modeling exploring the relationships between corruption, transparency, knowledge, and public trust in the context of a mega-sport event, Nunkoo et al. (2018: 155) found that "public trust in government is determined by the respondents' perceptions of corruption and transparency and their level of knowledge about the roles of government and the local organizing committee in the mega-event". This again could be added to the analysis of Citizen's perception in Qatar. Nunkoo et al. (2018) also found that level of trust in the local organizing committee impacts participant's trust in their government. Gursoy et al (2016) found that local residents' trust in their government is a significant determinant of impact perceptions. On the other hand, no significant relationship was found between residents' trust in their government and support. This could be explained by the presence of a mediator between the two, namely impact perceptions, according to Gursoy et al (2016). Similarly, a

positive relationship was found between participants' trust in the organizing committee, and so as a positive impact perception. However, no significant relationship was found between participants' trust in the organizing committee and negative impact perceptions. The study also Trust in the organizing indicated significant positive impact on support.

Gursoy et al (2016:1) concluded with clear suggestion that a successful hosting of an M-SE necessitate that "all stakeholders trust the government and the organizing committee because lack of trust within the community hosting a mega-event may have significant negative consequences for the planning process and may turn the process into a highly charged political and social exercise". Residents' trust in those individuals can influence their perceptions of impacts and their support. Drawing from the SET, trust is a precondition for locals' participation in future exchanges that could hold risk and uncertainty in its consequences (Gursoy et al., 2016).

3.9 Study Area

The state of Qatar is one of six Arabic Islamic states in the Arabian Peninsula forming the Gulf Cooperation Council (GCC) and referred to often as the Arabian Gulf Countries, or in short, the Gulf States. The region known for its strong Arabic tradition and Islamic values, with rich history being home for Prophet Muhammad and the first capital of the Arab Empire through most of the Rashidun Ruling. Before that and for centuries, the Arabian Peninsula was the land for Arab tribes, poetry regional contests and a religious scared land even before Islam. The Arabic population in the Arabian Gulf countries take great pride in their ethnicity and belonging to known Arabic tribes, and in protecting the traditions and conventions that form important part of societal accepted norms of behavior up to date. Environmentally, it is an arid area with no surface water, and high dependence of water desalination from the sea for all purposes except drinking and cooking that consumes bottled water from aquifer or imported, but recently the quality of water supplied to household is safe and drinkable after several stages of treatment. The economy depends mostly on oil and gas, with public projects and plans to diversify the economy away from this nonrenewable resource. In the 1960s, significant offshore oil and gas fields were discovered in Qatar, putting the country amongst the world's largest producers of crude oil and the chief exporter of liquefied natural gas by supplying 30% of World annual demand (Brannagan & Giulianotti, 2018).

3.9.1 Qatar Bio

Qatar is an independent Arabian Gulf State governed by Al-Thani Tribe since 1850, before its independence from the British Empire in 1971. It is a small peninsula with a total surface area of 11,521 Km², a total population of 2.8 million at the end of May 2022 (Qatar GCO,2023), with Only 15 per cent as Qatari Nationals, and a population growth of -2.6 in 2021 (World Bank, 2023), while the rest are expatriates, many of whom are from other Arab states, the Philippines, and the Indian subcontinent (MEED, 2023a). The State of Qatar is located on the eastern coast of the Arabian Peninsula, having land borders only with Saudi Arabia and into the Arabian Gulf, with several islands including Halul, Shraouh and Al-Asshat (Qatar GCO,2023).

Qatar is an oil-producing country producing 1.9 million barrels of oil a day and has the third-largest proven gas reserves in the world after Iran and Russia, with reserves totaled 25.1 trillion cubic meters in 2012, and the largest exporter and transhipper of liquefied natural gas since 2006, making Qatar's quarterly earnings from gas exports overtaking those of oil in 2008 (MEED, 2023a). Qatar GDP in 2021 was \$ 179.68 Billion, GDP Per Capita of \$ 66,838.4, annual GDP Growth of 1.6%, and an estimated unemployment of 0.3%, according to the World Bank (2023). According to Qatar PSA (2023a), GDP at the current price in January 2023 is 228.423 billion QR. According to World Bank (2024), GPD in 2022 was US\$ 235.77 billion, with GDP per capita of 87,480.4. The Arabian Gulf State is considered one of the wealthiest nations (Brannagan & Giulianotti, 2018).

Qatar Foundation for Education, Science and Community Development (QF) is an independent non-profit organization **located in Western Doha the Capital**, that was set up in 1995 by Qatar's emir Sheikh Hamad bin Khalifa Al-Thani to lead the state's transformation into a modern, knowledge-based economy by 2030 (QF, 2023). A trust fund of unknown size, financed by the vast national oil and gas revenue funds the Qatar Foundation (MEED, 2012). **A board of directors and a board of trustees oversee Qatar foundation, chaired by the emir's consort** (MEED, 2012 ; QF, 2023). Most national projects and entities are run directly or indirectly by Qatar foundation, such as Qatar Tourism and Qatar Planning and Statistics Authority. At the time FIFA announced that Qatar will host FIFA 2022, the Royal family was there to receive the news.

History in hosting

Qatar is an international sports hub, according to the Government Communication Office (GCO, 2024), which is part of the Council of Ministers. Qatar has been active in hosting multiple global sports tournaments in the last two decades, being the “venue of choice” (GCO, 2024) for prominent championships such as the 2006 Asian Games, and the 48th Artistic Gymnastics World Championships that Qatar hosted in the Aspire Academy Dome in year 2018 between October 25th and November 3rd in its Capital, organized by the International Gymnastics Federation (FIG). In the same year, the 12th International Handball Federation Super Globe was held at the Duhail Handball Sports Hall between the 16th to 19th of October, where 8 teams from 5 confederations played in Doha for the ninth straight time, competing for the coveted trophy (IHF, 2018). Many others were hosted by Qatar such as the 2019 ANOC World Beach Games, FIFA Arab Cup Qatar 2021, and the 2024 World Aquatics Championships TM. Table 3. shows the complete list of sporting events hosted by Qatar in the last 19 years. Furthermore, Qatar hosts some international championships every year such as the ExxonMobil Qatar Open (tennis), the Commercial Bank Qatar Masters (golf) and the MotoGP Superbike Championship (GCO,2024).

Table 3 List of sporting events hosted by the State of Qatar in the last two decades.

Major sport event	year	Notes
Asian Games	2006	
Men's Handball World Championship	2015	
AIBA World Boxing Championship	2015	
The 48th Artistic Gymnastics World Championships	2018	
The International Handball Federation Super Globe	2010 to 2018	Hosted for 9 times straight
ANOC World Beach Games	2019	
IAAF World Athletics Championships	2019	
FIFA Club World Cup Qatar	2019 TM	
FIFA Club World Cup Qatar	2020	
The IJF Masters 2020	2020	
FIFA Arab Cup Qatar 2021 TM ,	2021	Held for the first time under the auspices of FIFA
Formula One Qatar Grand Prix	2021	
Formula One Qatar Grand Prix	2023	
The AFC Asian Cup Qatar 2023 TM	2023	
World Aquatics Championships.	2024	
FIFA World Cup Qatar 2022 TM	2022	Most watched event

Source: Author's edition. based on GCO(2024) & FIG (2024)

Qatar has been showing clear interest in hosting regional and global major events. In the ASIAD 2012, the son of the head of state was seen in unforgettable moments of risk climbing the mountain on his horse to light the flame, in a show of not only horsewhip but of Arabic tradition and Arabian horses. Having Qatari branding on every M-SE Qatar hosted was noticed but only grew to astonishment in the 2022 World Cup FIFA Tournaments.

3.9.2 Qatar Hosting the 22nd FFC

The Qatar FFC took place between November and December 2022, after substantial pressure from some countries to halt the hosting, and considerable internal social concerns regarding the possible adverse impacts on local society's culture, traditions, lifestyle, and integrity.

Running a bibliometric analysis in Web of Science Core Collection database, using "Qatar" (Topic) AND "Mega sport* " or "mega-sport*" (Topic) AND "FIFA World Cup" (Topic) and English (Languages) and Open Access and English (Languages), in time span of (1975-2024), only 13 publications were found with Sum of the Times Cited of 139, an average of 10.69 citations per item, and an h-index of 7. The most cited article is "Sustainability in Mega-Events: Beyond Qatar 2022" which was published in the "Sustainability" Journal in 2019, two years before the other 12 articles, with 47 citations only, mostly in the year of hosting the Qatar 2022 FFC, and the year before and after. The article is authored by Meza Talavera, Abel; Al-Ghamdi, Sami G. and Koç, Muammer, who have not published other follow-up articles on the topic since then.

However, from a search in Google Scholar, I found many more publications. Some of those articles were published a few years before Meza Talavera et al. (2019) but none have more citations. Also, I found some authors who published quite a few articles on the subject matter and seem to be keen on discovering specific research niches and cracking a benchmark in their research being the first to research it such as Al-Emadi co-authoring six publications in the subject matter, focusing on impacts and perception. Brannagan co-authored several articles focusing on soft power and role of sport.

In total, dozens of literatures are discussed in this review in relevance to hosting M-SE by Qatar. Almost all of them study one particular mega-sport event, i.e. FIFA 2022. The only exception is Ishac & Swart (2022) that studies perception of youth concerning IAAF 2019. It was expected to find that the main topics covered in the published papers are the impacts of hosting and locals' perceptions. An unexpected topic, that was not seen often in other papers related to M-SE, is challenging Qatar's ability to host the event and even studying other countries' potential to host it instead. This can be seen in view of 'Islamophobia' and the fact that FIFA never staged an event in the Arabian Gulf or even in MENA Region before, together with a possible political agenda for publishing such papers that is all off the scope of my dissertation. Therefore, in the systematic review table of published literature, only papers related to locals' perceptions are included (Table 4). However, A second table of published literature was also constructed and kept in the appendix (Table A1 in Appendix 8.5) to illustrate the variety of topics covered.

There is a shortage in research in MENA Region investigating how hosting a M-SE influences the perception of local communities at host destinations, especially concerning their quality of life (QoL) (Al-Emadi et al., 2017 & Al-Emadi et al., 2022), and psychic income in general (Ishac et al., 2022).

Literature researching locals' perceptions of impacts in relevance to hosting M-SE often examines subgroups of residents (Madrigal, 1995; Zhou & Ap, 2009; Ma et al., 2013; Ishac et al., 2022). Categories and subgroups include residents of certain cities, nationality, socio-demographic factors, Citizenship, place of birth and length of residency. From literature researching the topic in Qatar, most of them studied Citizens and Residents in Qatar (e.g. Ishac & Swart, 2022; Ishac et al., 2022; Al-Emadi et al., 2022 & 2024). Some categorized the residents into three sub-categories Arab- residents and non-Arab residents, in addition to the Qatari Citizens (e.g. Ishac et al., 2022). My study, however, focuses on Qatari nationals to understand their perception in depth.

Residents' perception was researched by several scholars after the event. I found 3 literatures that attempted to read residents' perceptions before the event (Al-Emadi et al., 2017; Ishac et al., 2022 & Al-Emadi et al., 2022).

Al-Emadi et al. (2017) seems to be the first study to examine the perception of hosting impact on community quality of life (QoL). Ishac et al. (2022) gathered data from host city residents (n=280)

only six months before the event. Al-Emadi et al. (2022) collected their data almost three years before the event, while Al-Emadi et al. (2017) collected their data eight years prior to the event, to be exact in October 2014. All studies sampled Citizens as well as foreign Residents, with the first one sampling Citizens (n= 1,058) and white-collar expatriates (n= 1,105) only. Ishac et al. (2022) have simply two categories: Citizens and foreign residents or expatriates, while Al-Emadi et al. (2022) further divided foreign residents into Arab and non-Arab.

Ishac et al. (2022) studied residents' perceptions of the five dimensions of psychic income and found a positive association. The community attachment dimension was found to have contributed the most to the total psychic income, followed by community pride and event excitement (Ishac et al., 2022:2001). Results show significant variation between Citizens and foreign Residents regarding the weight of the positive impact of two dimensions: community attachment, and event excitement. The study also looked at co-hosting, confirming the usefulness of the involvement of neighboring nations in hosting FIFA 2022, which also walks in the same direction for FIFA's future hosting plans of the 23rd and the 24th FFC. Al-Emadi et al. (2022) investigate Qatar's residents' attitudes and perceptions of the socio-cultural impacts of hosting the 2022 FFC, to understand the legacy dimensions of hosting the event. Using social exchange theory (SET), a questionnaire was distributed in 2019, to Qatar's citizens (n= 1018) and foreign residents (n=1014) to study their perceptions and attitudes in 21 social and cultural impact items concerning the forthcoming 22nd FFC. The study found both groups in support of hosting the 22nd FFC. However, road congestion, pollution, inflation in prices of goods, and everyday livelihood were raised as concerns. Furthermore, citizens' perception predictors of the event differ from those of foreign residents. Al-Emadi et al. (2017:1) found that socio-cultural aspects have more influence on the perception of residents than environmental, economic, including community and personal QoL, event's excitement, and support for hosting the 22nd FFC. Al-Emadi et al. (2024) found a significant link between socio-demographic traits of locals especially gender, nationality and educational level and support for the 22nd FFC.

These studies have several recommendations relevant to my dissertation. Appiah Kusi & Osei (2023) also tackled the euphoric excitement that often accompanies M-SE and in particular football cup, with a lasting memorable effect.

Non-host city perception and behavior in relevance to Qatar FFC was investigated by some literature such as Appiah Kusi & Osei (2023). Impacts seem to be exceeding the expected positive benefits to the direct neighbors in the Arabian Peninsula, as Appiah Kusi & Osei (2023) studied fans' consumer behavior in Ghana towards the 22nd FFC, with WTP more for food and drinks at the games. However, in their city they will not watch games at restaurants or bars. The study concluded with the necessity of creating open space or park with mounted giant screens to show the games, for leveraging the sale amongst businesses in Ghana during the 2020 World Cup weeks. Chankuna (2022) studies the socio-economic Impacts perception of non-host cities concerning the 22nd FFC, based on expected huge socio-economic impacts. The study recognizes the rarity of research on perception from distal non-host city side, towards M-SE compared to proximal non-host perception which is receiving more attention. The residents' perception at Chon Buri Sports City of the impacts of FIFA 2022 include community pride and development and economic gains, but also road congestion issues, ecological externalities, security issues, and financial expenditure. According to Chankuna (2022), this is a much less negative perception than that found in different non-host cities.

Brannagan (2013) discusses the importance of sports in QNV2030, self-claiming being the first sociological study that involves main figures and entities related to the sports cycle in Qatar, with a focus on analyzing the main drives for growing attention to sports, and the politics for hosting the 22nd FFC. The author interviewed entities like Qatar's Olympic and World Cup committees, the International Centre for Sports Security, the Aspire Academy of Sporting Excellence, and the international sports broadcaster (Brannagan, 2013). Sports in Qatar was found to have much more

importance than that shown in past literature. Furthermore, hosting a M-SE (i.e. 22nd FFC) is a means for achieving socio-political goals in topics such as health and well-being, global tourism, developing strong socio-economic local and international projects, and country image related to stereotyping, and being an oriental state.

Some literatures published in the years following awarding Qatar the hosting of the event continued to **doubt Qatar ability** to succeed in hosting the event or to achieve the desired objectives from the hosting such as Henderson (2014) suggesting that there is no guarantee for Success, while there is a possibility of undesirable outcomes.

Abeza et al., (2020) tackles allegations made against awarding the World Cup 2022 to Qatar, concerning “human rights violations and state-sponsored terrorism”.

Russ et al., (2022) considers Qatar hosting the tournament as a precedence in MENA Region to drive promoting important infrastructural changes in the country but not without social challenges resulting from intense negative coverage of some international media, that might affect the host country’s positive legacies.

On the other hand, and according to Griffin (2019) Qatar must prove that the open, tolerant, and just society it portrays to the rest of the world is real, in order to make a memorable legacy for Qatar and FIFA, with realizing that applying necessary reforms without scarifying the essence of Qatar’s identity is challenging.

Some literature focuses on predicting what will happen in the 22nd FFC. Some focused on whether the event will succeed and other details of how the performance will be. Al-Buenain et al. (2024) attempted to predict football fans' arrival at the event using a Machine Learning Approach. Based on the belief that the success of M-SE is influenced by satisfying guests, optimizing plans for ensuring fans’ positive experience requires accurate prediction of how many arrivals are expected from what country. Serdar & Al-Ghamdi (2021) assessed Qatar’s road networks for their resilience during the hosting of the 22nd FCC M-SE. It used case studies to evaluate 3 post-flood interventions and concluded with advising to use a critical-links-first strategy and therefore give policy recommendations for expanding the options for improving recovery processes and allocation of resources for M-SE hosted in Qatar. Interestingly, the abstract refers to FIFA World Cup in Qatar, 2018. The event was held in 2022.

Potential impacts on Qatar as the destination hosting the M-SE were discussed by several literature such as Yasmeen (2022) and Russo et al. (2022). Economic, socio-cultural and other impacts were discussed such as health impacts, psychic income, and impacts of soft power of the state of Qatar. Building on the unique global influence World Cup has on leaders and Citizens and drawing from FIFA declaring 2022 World Cup as "Healthy 2022 World Cup-Creating Legacy for Sport and Health", success in hosting the tournament could be “a model and legacy for future sporting or social events” (Adelowo, 2022:1). Studying impacts of hosting on destination economic sustainability, Omer (2023) compares the GDP growth rates over a span of five years including the year of hosting in the middle. The study covers host countries of the last three previous FFC: namely Brazil, South Africa and Russia. It also includes the countries hat won the cup in each of the three tournaments: namely Spain, Germany and France respectively. Hence, prediction of impacts on Qatar for hosting the 22nd World Cup, and Argentina for winning it, is anticipated by trend analysis of the previous events. The reconsults did not exhibit a recurring trend or a significant positive effect of hosting the event on the economic growth of the host nations of FFC under study till the year 2022. Yet, some increase in the GDP was shown for the hosts of the last two events and even for Qatar, with different levels. Regarding the impacts of winning the World Cup, no decisive conclusions can be drawn either, as one country shows improvement and another shows deterioration of their economy’s indicators. Champion of 2014 FFC shows slight economic improvement after winning, while Spain the winner of 2010 FFC shows deterioration in comparison to the pre-sinning year and post-winning year. Omer (2023) also predicted that

economic growth in Qatar will increase starting first half of year 2023, and the huge investment in hosting FIFA 2022 will pay off.

Yasmeen (2022) address measuring the performance and impact of the 22nd FFC. With expected 1.2 million fans to fly to Doha to attend the mega-sport event, data was collected through a survey at a Euromonitor Google-designed website for individual visitors to the World Cup, sampling tourists from different continents (n=1.5k), traveling from China, the USA, UK, Latin America, and various places. The study aimed to answer questions related to the enhancement of **visitors' experience** and to the importance and impacts of hosting, both on the host country and the entire region. The authors state that the arrival of visitors from different places and categories will have many impacts even after the event is over and that these impacts will benefit Qatar as well as the region, as visitors for instance are likely to plan their tourism for the region's exploration and not just Qatar. Almost 40% of the participants in the survey indicated a willingness to do just that if it was affordable and did not involve long traveling. The authors predict that investors such as brands would be enthusiastic to capitalize on so-called "World Cup fever" with more than 5 billion following Qatar FFC, in order to gain longstanding perception with participants via innovative virtual portals, marketing activities, and collaboration. TechnologyHQ (2022) addresses economic impacts after hosting the World Cup. Positive impacts predicted are economic growth, increase in political power, tourism and hospitality sector's expansion, advancement of SMEs, and significant growth in the travel and mobility Sector. The modern schemes in infrastructure of the capital for instance is expected to have swift visible economic impacts on Doha, with state-of-art sport and fans facilities to elevate fan's experience in Qatar's FFC. Even more, hosting the event has the potential for restoration of Qatari commercial bonds and bridges internationally as well as developing stronger ones building on Arab unity.

AL-Dosari (2020) studies the impact of M-SE on **tourism**, taking Qatar's FFC as a case study. The study investigates the perceived benefits and tourism development activities related to the hosting of the event. It also examines the dependency of tourism development on income and tourism size of the 22nd FFC. The author claims that the study is the first to anticipate the impacts of hosting the 22nd FFC on tourism development and activities in Qatar (AL-Dosari, 2020). The results indicate the importance of supportive tourism infrastructure in maximizing the positive impacts of hosting a M-SE, and other stakeholders' participation in terms of the provision of services and goods such as accommodation and entertainment. Hence, policymakers could invest in destination image building and branding while planning the hosting. People's perception of benefits from hosting was found to be positive, as most of the participants in the survey thought Qataris would receive great benefits from the hosting of the event. In addition, the study claims to have proven that hosting has a significant positive impact on tourism development and activities. It also indicates the positive economic impact of the large number of arrivals to watch the games during the event but also looking for things to do and to buy, in addition to the potential to attract more tourism.

Issues related to tourism and hospitality management of Qatar FIFA 2022 were discussed by Russo et al. (2022) which was published before the event took place. The paper predicted social obstacles and possible negative image implications, that could jeopardize efforts made and huge investments in tourism infrastructure and attractions and prevent expected legacy from manifesting due partially to the pressure of international brand investors and the possibility of withdrawal of their contribution and sponsorship, which was instigated by negative western media campaigns. This in turn can impact the success of the event and tourism, possibly ruining the opportunity to build on the M-SE that was never hosted in the region before. The paper assumes that hosting the M-SE is the main instigator for Qatar's effort to attract international tourists through the country's image and infrastructure transformation. Based on the assumption that better awareness is more likely to have an impact on how people perceive the character of a host destination of a mega-sport event, Kaplanidou et al. (2016) conducted a study on US residents' perception. The study found that participants with better awareness of the location of the host for the 22nd FFC showed also a more

positive perception of the safety, hygiene, and tourism products quality of Qatar. Andersson et al. (2021) studied the impact of the host country's image by mega-sport football events. The study analyzed Qatar's FFC and two other events: Russia's 2018 FFC and France's 2016 UEFA European Football Championship.

Kucukvar et al., 2021 studied the application of **circular economy** design in Qatar's FFC and highlighted the socio-economic advantages of implementing CE and sharing economy in creating a post-event legacy and promoting sustainability in the FFC, and also for promoting the UN 2030 Agenda for SD. It claims to be the first to conduct a full social life-cycle impact assessment (S-LCIA) for the reusable container stadiums especially made for FFC in Qatar, with Ras Bu Aboud Stadium (RAA) as a case study. Circular economy (CE)'s cradle-to-cradle method was applied in the construction and other phases, the impact on health was studied. This includes studying the way water and energy were used in the stadium and also materials production and how waste and end-of-life management were handled. The author highlights the commitment shown by the host country to advancing sustainability of FFC and presenting a carbon-neutral M-SE. The Carbon-Neutral response to the UN2030 2030 Agenda for SD is also discussed by Spanos et al. (2021), but from Qatar's tree nursery initiative prospective. The initiative aims to "offset carbon emissions utilizing the carbon sequestration potential" is evaluated using readings from water and energy consumption, fertilizer use, which includes the use water treatment and water desalination. Results from analysis of use of treated sewage water showed a carbon-emission reduction, while with use of treated sewage water together with of particular fertilizers, the tree nursery project showed carbon reduction potential of about 22%.

Qatar FFC adaptation of green technologies and **carbon-neutral** strategies, designs and solutions were discussed in several articles from different prospectives and focus. Al-Buenain et al. (2021) discuss electric vehicles (EV) and their potential contribution neutrality and supporting sustainability public policy, comparing them to vehicles using natural gas. The study highlighted the importance of relevant and meaningful public incentives and substantial subsidies for e-mobility technologies to facilitate a shift to green transport scheme. The study also discusses the potential positive impact for adopting of EV in Qatar on reducing net carbon emission.

Focusing on the requirements of hosting M-SE and setting high goals for its success could result in compromising the requirements and QoL for the local community and resulting in some unwanted social impacts. Elgahani & Furlan (2018) state that the speed by which Qatar must be ready for hosting the FFC event in time and in best way could have negative impacts on the necessary urban planning of Qatar cities. Brannag et al. (2023) tackle social impacts focusing on the reactions of the local community to what the article considers as the transformation of Qatari national and cultural identity. The transformation includes mass social change and identity hybridization in Qatar. The study is based on document analysis and interviewing Qatari nationals and individuals involved in work related to local sports, culture, education, and policy sectors. Four themes are discussed, including the transformation of the human-built environment, and its perceived cultural impacts and event's infrastructure as part of Qatari heritage. The perception of Qatari nationals, being cultural minority in their homeland, and ways they withstood undesirable changes, despite the difficulties faced as a result of hosting FFC, while actively upholding their festive culture (Brannag et al., 2023).

Table 4. Systematic review of Local community Perception of hosting FIFA 2022 in Qatar

perspective	METHOD & Theory	RESULTS	IMPLICATION/ CONCLUSION	Aim	Author (year)
cross-cultural attitudes of Qataris and expatriates in Qatar	a stratified random sampling : N=2,154 questionnaires were returned from national (1,020) and non-national (1,134) residents.	Both groups showed high QOL perceptions. Asian expat. show more openness to socializing with Citizens and Arab expat.	highlight acculturation process in host societies of M-SE such as the 22 nd FFC.	to examine cross-cultural attitudes, interaction, socializing and acculturation amongst residents in Qatar, towards a more harmonic society, that can support 22 nd FFC delivery and preparations. claim it is the first to investigate the cultural interaction between residents, aiming to anticipate possible issues impacting their experience	Diop et al. (2018)
Impact perception Among residents	scale survey : sample (n=2163) of Citizens & white-collar foreign workers in October 2014	Socio-cultural impacts found to be the influential impact on residents' attitudes, support, excitement and evaluation of QoL in relation to hosting the tournament.	the importance for residents to counterbalance investment costs, <ul style="list-style-type: none"> improve QoL & social & cultural values 	to evaluate the impact on residents' perception of the hosting's preparations in Qatar: Studying attitude, personal and community QoL, excitement about hosting the event, & support	Al-Emadi et al. (2017)
	Drawing on social exchange theory SET	All in support of hosting with concerns about : road congestion, pollution, price inflation, and increase overall living's cost . nationality differences about perceived significant predictors of M-SE.	implications for M-SE and future research An impact scale with 21 social and cultural impact items.	to study their attitude & perceptions of the social and cultural impacts of the hosting & to identify legacy dimensions of the hosting.	Al-Emadi et al. (2022).
	Social Exchange Theory (SET) and the Social Representation Theory (SRT) – Using the same previous survey as AL-Emadi et al. (2022)	Strong positive relationship between residents' gender, nationality and educational attained & perception of hosted M-SE	recommendations for policy makers and management of M-SE to improve strategic planning for hosting M-SE.	to understand resident interests and attitudes: study residents' attitudes towards hosting the 22 nd FFC and evaluate their interest and level of support or opposition	Al-Emadi et al. (2024)
Residents' perception Co-hosting	A survey distributed in Qatar (n=2 80), 6 months before the event, to study the five dimensions of psychic income. Using confirmatory factor analysis (CFA) & structural equation modelling (SEM)	Positive link with the community attachment & community pride & event excitement with variation between Citizens and others	Usefulness of Co-hosting with neighbors.	examining Qatar residents' (citizens, Arab and non-Arab residents) perceptions of psychic income dimensions associated with hosting	Ishac et al., 2022
Awareness & Impact on Tourism Tourists Perceptions	online data of US resident's perception through Amazon application	higher awareness of the host (Qatar) and higher perception of potential tourism destination	Creating more destination awareness using the M-SE platform for promotions	examining the impact of awareness of hosting the 22 nd FFC, on tourists' perception of Qatar's & neighbors' destination's image.	Kaplanido u et al. (2016).

Source: Author's edition from the literature review

Al-Emadi et al (2017) found **socio-cultural impacts** to have more influence on the attitude and support of the local community in Qatar toward hosting the 22nd FFC. Interestingly, the study found that their excitement and perception of quality of life is also impacted by socio-cultural impacts. Diop et al. (2018) studied cross-cultural attitudes of national and non-national residents in the host of the 22nd FFC, investigating the mechanism of their interaction, socializing, and acculturation for the creation of better societal harmony, a crucial driver for the mega-sport tournament's hosting and execution. Using a stratified random sampling, a total of 2,154 questionnaires were returned from national and non-national residents. The authors claim it is the first to investigate the cultural interaction between residents, to anticipate possible issues that may impact their experience of the event. Results showed different levels of openness to social interactions between different groups. Asian non-national residents for instance showed more openness toward nationals. An implication of the study is to strategize smooth social assimilation and integration for all resident groups to build more productivity and effectiveness within the local societal human resources scheme. Griffin (2019) argues the impact of awarding the state of Qatar the hosting of the 22nd FFC will create a national lasting legacy and fulfill Qatar's aspiration for a legitimate global role that adds to its uniqueness within the Arab and Islamic Worlds.

Griffin (2019) discusses the challenge facing Qatar in preserving its identity and uniqueness while answering international mega-sport requirements, stating that if achieved, Qataris will have a socio-cultural national legacy to share with pride within the Arabian Peninsula and wider Islamic World.

Khalifa (2020) aiming to evaluate the influence of Mega-sport tournaments on **human rights**, a case study method is used, studying Qatar's FFC. A questionnaire was distributed randomly to individuals involved in work related to 2022 FFC, and inputs of 400 participants were analyzed using multiple linear regression on SPSS. Results indicate the availability of human-rights guidelines in line with international human rights instruments, with opportunities for their promotion, and dealing with challenges including the Kafala Scheme, and unregulated recruitment agencies. The author claims that Qatari religion and traditions form an obstacle to advancing human rights. Building on the fact that hosting M-SE is not an obligation for any country, the author stresses the importance of building a functional road system and supporting infrastructure for the residents. However, if a mega-sport is hosted, then it is considered an opportunity for human rights promotion, and with that comes the responsibility of all stakeholders to ensure that within their scope of work. The study recommends legislative criteria for enhancing sustainability and human rights for the benefit of residents and foreign labor. Since his study tackled the human rights of migrant workers only, the author acknowledges the need for research covering both long-term impacts on environmental sustainability and the human rights of residents. The author also considers his literature to be a distinct contribution from theoretical, practical, and political aspects. Heerdt & Roorda (2023) discusses human rights issues in relevance to Qatar and focus on lessons Learned and the how the Netherlands and its economic activities in Qatar contributed to dealing with alleged abuses in mega-sport tournaments

Mentioning human rights, Fruh et al. (2022) claim that the 22nd FFC in Qatar is sportswashing and propose resistance strategies for athletes and different stakeholders that can lead to failing the event. What is interesting about this article is how it was written as a textbook for organized campaigns aiming to fail the mega-sport event, while it condemns the use of sport for political objectives. Furthermore, it merely stated that there are moral concerns without proving that and then dealt with it as if it were a proven fact. To the contrary, Griffin (2019) argues that accusations made against Qatar have yet to be proven and no outcome of any investigation is significant enough to result in either Russia or Qatar losing the hosting of FFC 21 and 22 respectively. Contrary to Fruh et al (2022) opinion, Griffin (2019:1002) addresses the global importance of hosting the 22nd FFC, for challenging the "colonial grand narratives long propagated as fact" in Western culture strengthening the stereotyping of Arabs as the "Other, an uncivilized, non-Christian, exotic and inferior entity". The author tackles Western media bias and how positive

reporting of Qatar or its World Cup since the award of hosting, especially UK broadsheet media, is almost absent. This was confirmed by Swart & Hussain (2023:199) in their document analysis that found “Orientalist and neo-Orientalist bias” against Qatar, that was presented by various Western media platforms as “strange” and “dangerous” among other negative prejudice smearing allegations. Qatar’s hosting a FIFA M-SE is therefore a late but important decision of FIFA to fill an important gap for global inclusion.

Adelowo (2022) discusses the **health and safety aspects** of the 22nd FFC, impacting current and potential Strategies and Legacy for M-SE. It reviews the negative effects of the outbreak of pandemics and therefore how crucial it is to strategize comprehensively and scientifically to ensure accomplishing the goals of Qatar FFC. The event was meant to twin health with sport and revive the worldwide discussion about the pandemic of COVID-19 and NCDs diseases that were thought to be wreaking havoc everywhere. Hence, this M-SE in Qatar was planned as a venue for promoting and sustaining a healthy lifestyle and a shift from current unhealthy behaviors to avoid the spread of diseases, through implementing safe and strategies at the venue that can set a new standard for events to follow. Nevertheless, the study claims that achieving that would require methodical, integrated, and scientific planning and execution.

Drawing from global influence expected from mega-sports, FIFA World Cup Qatar 2022 was themed "Healthy 2022 World Cup-Creating Legacy for Sport and Health", aiming to have the healthiest, safest, and most successful mega-sport in recent history, being one of the first global M-SE after the Covid-19 Pandemic (Adelowo, 2022).

Investigating potential benefits and losses Qatar may endure by hosting the mega-sport event, some literature found or rather predicted that the hosting will be beneficial while others thought the opposite. In an empirical study, Henderson (2014) investigated the impacts on tourism. Economic diversification and tourism development plans are often explained by expectations that hosting a M-SE resembles a tourism attraction with the potential to draw mass tourism large numbers of travelers with boosting destination image, national branding, and international bonds. The latter is an aim of the state of Qatar according to Henderson (2014) together with positive local social impacts, which explains why the heavy investment in its sporting and tourism infrastructure, hosting sport tournaments. Yet, the study claims that there is no guarantee that Qatar will succeed in hosting the mega-sport event, and there is a possibility for negative impacts. The study raises questions and suggests that the way they will be addressed by the host, will determine whether opportunities will be utilized, and challenges will be addressed to achieve the aspiration of Qatar.

Soft diplomacy or soft power in relevance to the 22nd FFC was discussed in quite a few publications such as (Brannagan & Giulianotti, 2014; Henderson, 2014; Brannagan & Giulianotti, 2018; Kaplanidou et al., 2016; Grix et al., 2019; Al-Dosari, 2021 & Al Thani, 2021). Brannagan & Giulianotti (2014) express the scarcity of scholarly studies exploring sports in the Host country of 2022 FCC. This could explain the several publications Brannagan co-authored aiming to fill the gap in literature. While Brannagan & Giulianotti (2018) covered the soft power and disempowerment in relevance to Qatar FFC, Brannagan (2013) analyzes the importance of Sports in QNV2030, and Brannagan & Giulianotti (2014) discuss Qatar’s soft power using different notions such as progress & modernization and health & well-being. Brannagan (2013) aimed to be the first engagement of its kind with leading sports entities and individuals in Qatar from a sociological perspective.

While scholars studying international relations at the state level have found great influence in the notion of soft power, Brannagan & Giulianotti (2018) argue that the notion has been subjected to critical examination, underscoring the necessity for its substantive and analytical improvement. According to the authors, disempowerment can take place for a nation if being viewed in violation of international treaties or global development standards or inflecting negative impacts on a group of people. The study concludes that awarding Qatar the hosting of the 22nd FFC stimulated

criticizing it using these themes. The high ambitions of Qatar and its swiftly evolving international relationships are considered by the authors to have caused negative impacts on Qatar and its people, referring also to the Arabian Gulf crises between Qatar and some of its neighbors. Impacts mentioned include tourism. However, the study also acknowledges the positive impacts including showing the nation's resilience as it faced these hardships strengthening its soft power in the process.

Presuming Qatar is actively seeking greater engagement with the international community, Henderson (2014) discusses the possibility of the significant role played by mega-sports in tourism development and economic diversification strategies by attracting mass tourism and enhancing destination image, national branding, and foreign relations. Based on their study on the perception of FIFA 2022, Kaplanidou et al. (2016) suggest developing appropriate strategies to use the event as a marketing tool for Qatar and to build more destination awareness among potential tourists, with targeted destination image messages to encourage their willingness to fly to Qatar.

In his work to move beyond realist analysis, toward cultural sports diplomacy, Al-Dosari (2021) recognizes the significant role that sport plays in achieving political and international relations goals, but with no clear relationship between soft power and hosting M-SE. Recognizing the publications that followed the "Realist School of International Relations Theory" to understand Qatar's motivation to join sporting diplomacy.

Grix et al. (2019) claim that Qatar is using soft political power on global arena by hosting the 22nd FFC and criticize Qatar using some Western views and assuming that it forms a "severe international critique" of Qatar's internal social and political life. They also present Qatar as a showcase for intervention between sporting and political agendas, dwelling in how this can lead to backfiring and disempowerment. Al Thani (2021) tackles Qatar's soft power from a social reform aspect. He discusses how soft power was channeled by the host of the 22nd FFC to build an international image by addressing the foreign labor issue. By investigating the positive effect of staging the M-SE on promoting foreign labor rights and social legacies in Qatar, and whether this was utilized to fulfill Qatar's soft power ambitions. The study argues that while foreign labor's human rights in Qatar were under inspection, Qatar used methods for demonstrating accountability and pledge for global development and human rights criteria, restoring its soft power impact throughout this exercise. Serdar & Al-Ghamdi (2023) discuss their proposed framework of resilience-oriented recovery of flooded road networks during M-SE. For some odd reason, the publication has a reference to the event as FIFA World Cup 2018. In addition, few literatures on Qatar FIFA 2022 were found to be irrelevant to my study, such as medical cases.

Beside literatures focusing on the impact of the event or authors' thoughts about Qatar as the host, I found a few literatures discussing future plans for after the event. Elgahani & Furlan (2018) propose that Qatar should adopt urban regeneration strategies after hosting the FFC mega-sport event, to achieve compatibility of planning for the event and planning for the country's development including repurposing plans, acknowledging that preparation for hosting a M-SE while considering the local requirements for urban planning can be very challenging. This was based on investigating previous hosts of M-SE to study their urban growth strategies post-events and taking London as a case study. Al-Emadi et al. (2017) suggests that their research longitudinal design that benchmarked event impacts and quality of life perceptions way before the start of the event, needs to be explored more in future studies, looking at potential prospective fluctuations of influence of these impacts on the variant groups of the local community. Their literature seems to have built benchmarks for attitudes, and event support as well that can support improving planning of the event. Moreover, the literature anticipated that issues related to FIFA's leaders' corruption allegations could have reflections on residents' perceptions and support. Sustainability Beyond the event was also discussed by the most cited article in Qatar FFC, Meza Talavera et al. (2019) that was published three years before the event. Acknowledging the uniqueness of hosting a global mega-sport event, and leaving a long-lasting positive legacy, Meza Talavera et al. (2019) consider

the long-lasting environmental and socio-economic as important challenges and therefore addressing the link between M-SE and sustainability, to scientifically analyze previous major events and reflect this on the case of the 22nd FFC. By evaluating challenges, opportunities, and progress, it was shown that sustainability was targeted via implementing environmentally friendly solutions, carbon-neutrality targets, urban development principles, and cherishing the notion of a national legacy guided by QNV2030, envisioning Qatar's sustainable development. The holistic synthesis used of those sustainability aspects and comparing the Qatar FCC to other FFCs can provide an early indication if more measures are required to elevate the sustainability level and long-lasting beneficial influence of the event, and each stakeholder involved. This can lead to lessons learned for more successful organization and planning of future mega-sport tournaments from a holistic perspective.

Other papers covered topics with **no direct relevance** to my topic such as medical and health situations related to the event which is outside the scope of my study. Awan & Bhatti (2023) reported a medical case of symmetrical posterior lower limb bruises in a man from Qatar half a day after he attended a game at an FFC stadium in Doha, and Salman et al. (2023) studied the trauma and orthopedic surgery response at the event and Omari et al, 2023 studies some hand Injuries requiring surgical intervention during the event. Another study (Chowdhury et al., 2023) published in the same year tackled health issues in relevance to M-SE in general. It discussed whether M-SE comprise possible risk for the spread of a pandemic like Coronavirus. The study examined the Tokyo 2020 Olympics and Paralympics to recommend better procedures for forthcoming M-SE, concluding that an M-SE is safe to host providing the following precautionary measures. The health system of the host of the 22nd FFC was put under investigation by Alinier et al. (2023) with a large-scale tabletop plan to examine its readiness to deal with serious health cases while hosting the mega-sport event. This is important for Qatar due to its small geographical surface area while it is expected to host fans comprising 50% of its population, flying to attend the World Cup competition from everywhere. This article concerns crisis management, bringing lessons from the field to provide insight and stimulation to other scholars and educators.

3.10 The Theoretical Framework and Hypothesis Development of the Study

3.10.1 Social exchange Theory and Theory of Reasoned Actions

The Social Exchange Theory (SET) is based on the assumption that a person tends to get involved in an exchange if (s)he is expecting more gains than losses from that involvement or in anticipation of reciprocal benefit, and in relevance to mega-sport events: they will support it if their gains from those events are more than their losses (Máté & Kajos, 2023). SET has been used by scholars to understand local community support for hosting mega-sport events, due to its flexibility in analyzing conflicting feedback (Ap, 1992) drawing from experimental and psychological outputs (Waite, 2003; Gursoy & Kendall, 2006; Prayag et al., 2013; Ishac et al; 2022; Al-Emadi et al., 2022). SET has been used long to explore local community support for tourism related projects and events (Perdue et al., 1990; Zhou & Ap, 2009; Prayag et al., 2013). The triple pillars of sustainability are considered as the main elements for exchange (Andriotis & Vaughan, 2003) considering positive and negative impacts. Ishac & swart (2022) used SET to study the key variables impacting the local community's perception of hosting M-SE focusing on young generation. SET is used to explain local community perception of negative and positive impacts of hosting a mega-sport event. Familiarity of the game for instance was found to create a positive perception about hosting the event (Vetitnev & Bobina, 2015). In my study, SET was used to understand Qatari Citizens' attitudes toward hosting the 22nd FFC event in their country and impacts of that hosting. SET is a useful concept contributing to understanding the complexity by which Citizens at host destination weigh emotions and interactions in addition to cost and benefit

while processing these attitudes (Rua, 2021; Revilla et al., 2023). Moreover, according to SET, success in hosting the event necessitates community support which necessitates trust [in the ones making the decisions] in situations that seem to be risky and unpredictable in relevance to hosting (Gursoy et al., 2016). Theory of Reasoned Actions TRA was first presented by Fishbein and Ajzen (1977) and further explained by Ajzen and Fishbein (1977 & 1980) to understand and predict the voluntary choices persons take guided by reasons, motivations and rationality, which was confirmed by other researchers (e.g. Sheppard et al., 1988), and formulated by Han and Kim (2010) as planned actions. It is used often to study the willingness to pay or to make trade-offs for sustainability. Theory of reasoned action (TRA) was used in my dissertation to predict perception of impacts and therefore support from Citizens' personal valuation of destination sustainability. Citizens' awareness, and willingness to make trade-offs for destination sustainability among other personal traits were first examined in the empirical study, and the results were analyzed against perception of negative impacts and therefore support for hosting M-SE. It is also used to predict support from Citizens' perception of impacts, and Citizens' trust in their government.

3.10.2 Theoretical Model

The theoretical model of the study (Figure 7) encompasses 11 dimensions, six of which are directly related to DS and focus on assessing the positive and negative environmental (ENV), economic (ECO), and socio-cultural (CUL) impacts of hosting M-SE. Additional dimensions influencing support for hosting M-SE include personal valuation of destination sustainability (PVDS), psychic income (PI), trust in government, and trust in the organizing committee. Furthermore, the model accounts for the indirect effects of PVDS on support, mediated through perceptions of the positive and negative environmental, economic, and socio-cultural impacts of hosting such events.

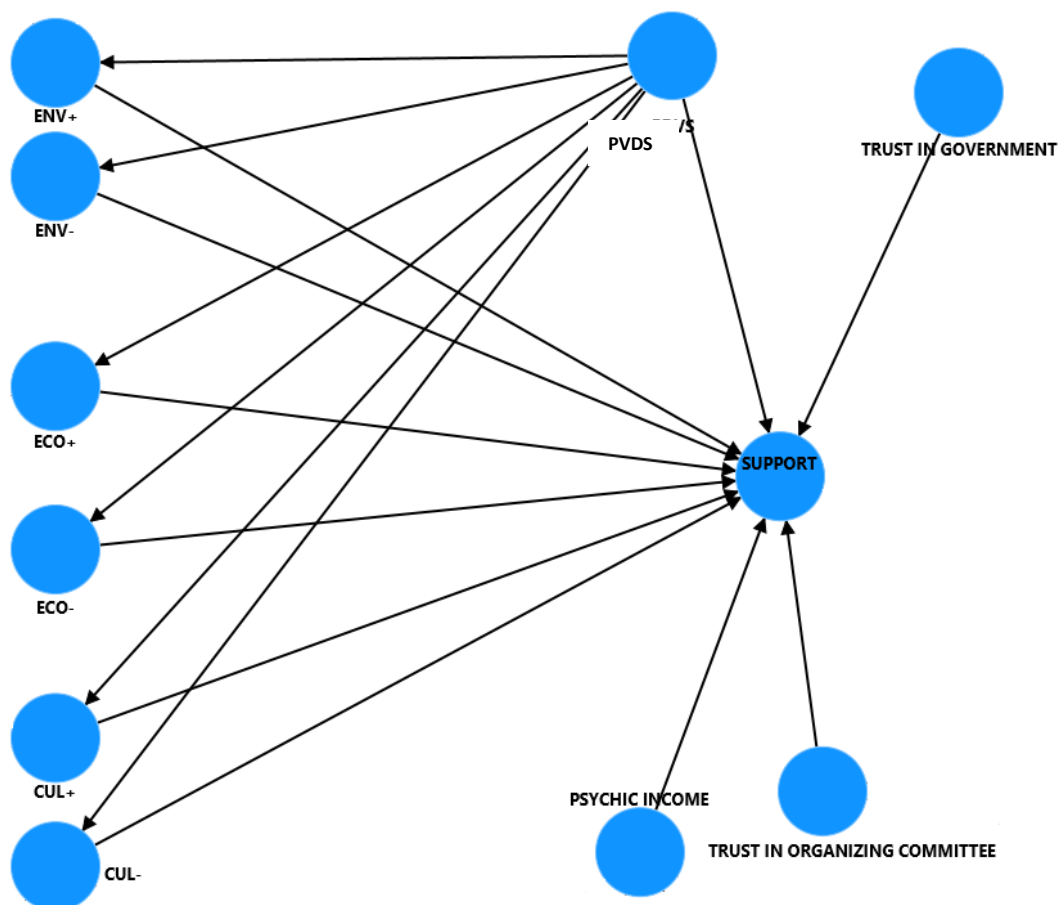


Figure 7. Theoretical Model of the study
Source: Author's editing

3.10.3 Hypotheses

Based on the above, the study comprises the following hypotheses to examine the direct and mediating effects of the variables and answer the research questions.

Hypothesis 1. Differences exist between Qatari Citizens and Residents in their perceptions of the positive and negative socio-cultural, economic, and environmental impacts of hosting M-SE. These differences extend to their personal valuation of destination sustainability, levels of trust in the government and organizing committee, psychic income felt due to hosting the M-SE, and overall support for hosting such events.

Hypothesis 2 – A higher perception of positive environmental impacts from hosting M-SE among Citizens (Residents) increases their support for hosting such events.

Hypothesis 3 – A higher perception of negative environmental impacts from hosting M-SE among Citizens (Residents) decreases their support for hosting such events.

Hypothesis 4 – A higher level of Citizens' (Residents') perception of the positive economic impacts of hosting M-SE on destination sustainability positively influences their support for hosting such events.

Hypothesis 5 – A higher level of Citizens' (Residents') perception of the negative economic impacts of hosting M-SE on destination sustainability reduces their support for hosting such events.

Hypothesis 6 – A higher level of Citizens' (Residents') perception of the positive socio-cultural impacts of hosting M-SE on destination sustainability increases their support for hosting such events.

Hypothesis 7 – A higher level of Citizens' (Residents') perception of the negative socio-cultural impacts of hosting M-SE on destination sustainability reduces their support for hosting such events.

Hypothesis 8 – A higher level of Citizens' (Residents') personal valuation of destination sustainability positively influences their support for hosting M-SE.

Hypothesis 9 – Citizens' (Residents') personal valuation of destination sustainability indirectly affects their support for hosting mega-sport events (M-SE) through their perceptions of the events' environmental (9a, 9b), economic (9c, 9d), and socio-cultural (9e, 9f) impacts, both positive and negative

Hypothesis 10 – A higher level of Citizens' (Residents') sense of psychic income positively influences their support for hosting M-SE.

Hypothesis 11 – A higher level of trust in government among Citizens (Residents) has a positive effect on their support for hosting M-SE.

Hypothesis 12 – A higher level of trust in the organizing committee among Citizens (Residents) has a positive effect on their support for hosting M-SE.

Hypothesis 13 – Significant differences exist among groups of Citizens (Residents) categorized by gender, generation, educational level, and ages of their children, in their perceptions of the negative and positive environmental, economic, and socio-cultural impacts of hosting M-SE, their psychic income, their personal valuation of destination sustainability (PVDS), and their support for these events.

Noting that: in this dissertation, “Citizens” is used to refer to members of the local community in Qatar holding Qatari passport (Nationals). Residents is used to refer to individuals living in Qatar for study or work or other reasons, without being nationals (Not holding Qatari passport). The listed hypotheses corresponding to the study's theoretical model are illustrated below in Figure 8. Below.

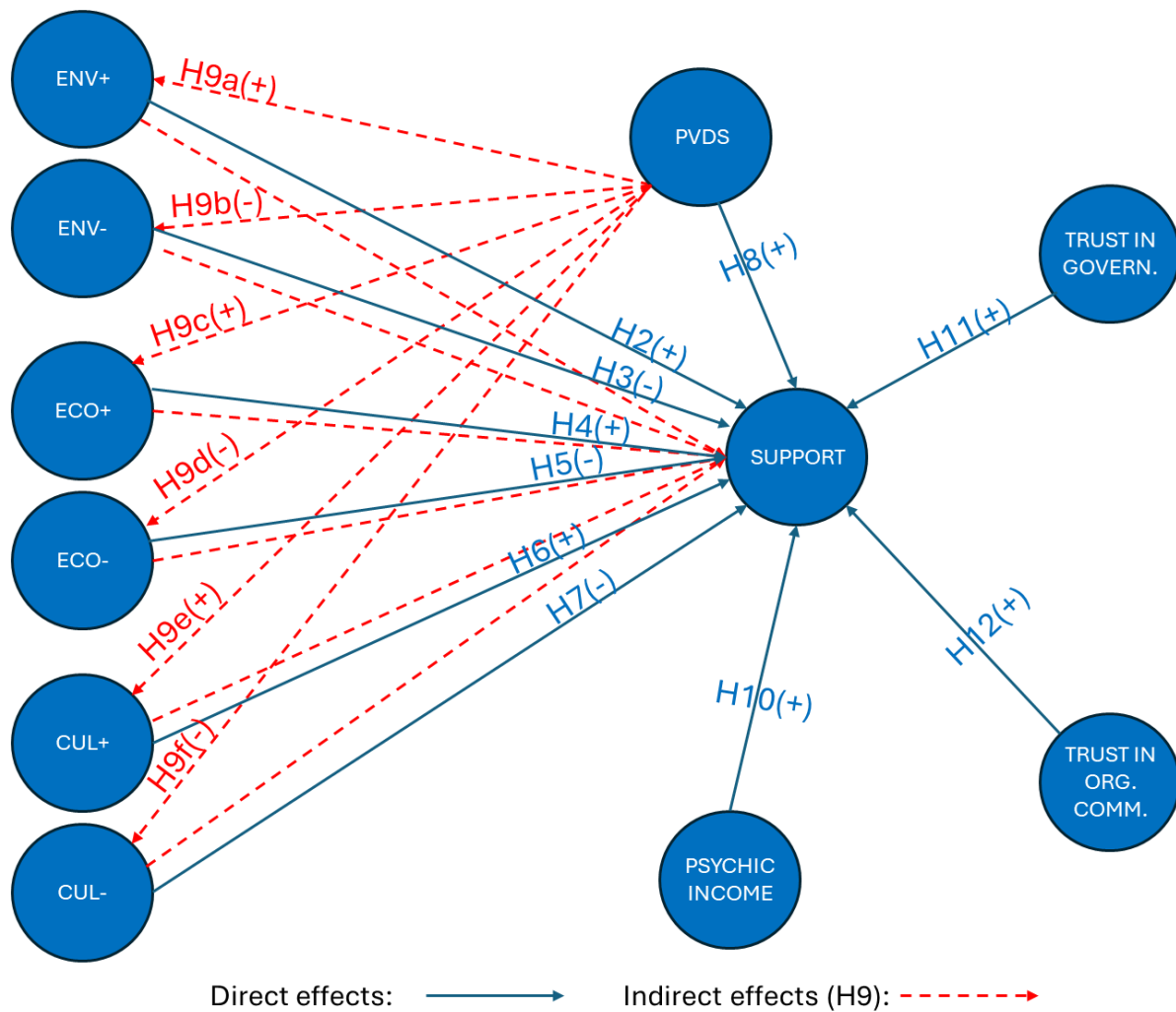


Figure 8. The System of Hypotheses Corresponding to the Study's Structural Model

Hypotheses 2-12 center on the structural model, examining several key relationships. These include the direct effects of perceived positive and negative environmental, economic, and socio-cultural impacts on support for M-SE, as well as the effect of trust in the government and the organizing committee and the perceived level of psychic income. Furthermore, they investigate both the direct and indirect effects of personal valuation of destination sustainability on support for M-SE.

4 MATERIALS AND METHODS

This chapter gives an overview of the methods and materials used to conduct this research. It describes different methods used to conduct research. As the study uses different methods quantitative and qualitative, the chapter has five main sections matching the different methods used. Each section has its own subdivisions, especially the empirical part of the study, which is the focus. This chapter ends with a summary of results from all subsections. The “Changes and Reflection” and “Research Ethical Principles” are kept in the Appendix.

4.1 Research Process

The study follows a triangulation research method that involves using multiple approaches, and mixed methods of research, conducting a quantitative survey, followed and preceded by qualitative research involving Focus Group Discussions (FGD) and Semi-Structured Interviews (SSI) to gather non-numeric data in-depth and analyze the phenomenon under investigation (See Figure 9.).

The study builds on previous studies of demand-based perception of destination sustainability (Aydın & Alvarez, 2020; Tölkes, 2020), and residents' impacts perception (Ritchie et al., 2009; Kim et al., 2017; Scheu & Preuss, 2018; Oshimi & Harada, 2019; Yamashita, 2021; Vibber & Lovari, 2022), trust impacts (Gursoy et al., 2016), mediated effect of overall attitude (Prayag et al., 2013), and extend the study of Psychic income (Crompton, 2004; Kim & Walker, 2012; Ishac et al., 2022). The study uses both focus group discussion (qualitative) and Likert scale survey (quantitative) to read Qatari community (Citizens') perception. It also uses semi-structured interview qualitative methods with experts for interpretation of the results and understanding potential implementations of the study. Bibliometric analysis (Pbl) and literature review are used at the beginning to form a broad understanding of the topic and find potential research gaps. This was also used at a later stage to form deeper comprehension of the specific study areas selected topic and subtopics such as perception in relevance to M-SE, and published article regarding the 2022 World Cup. Document analysis (DA) was conducted on key public documents (namely the national vision and the strategy) in relevance to sustainability and local community participation (LCP). Systematic Review (SR) was used to address narrow research questions such as literature published about the 22nd FFC, in a focused and rigorous manner, to present an understanding of the focus of those literature and whether similar studies to my research exist and compare their methods and results.

Destination sustainability attributes used in the study are adopted from previous studies (mainly Aydın and Alvarez, 2020) and adjusted according to results from the DA and the FGD. Their weight from local's perception is then tested by the 5-point Likert Scale.

Attention in literature for the last two decades has been emphasizing the potential of triangulation in contributing to the broad understanding of social phenomena (Mertens & Hesse-Biber, 2012; Turner et al., 2016). The study uses a triangulated qualitative and quantitative mixed method to form a comprehensive understanding of the perception of the local community in Qatar regarding the potential impacts of hosting M-SE on destination sustainability. Multiple methods triangulations: “documentary, informant interviews and questionnaire survey” are recommended by researchers (Chang (1996 cited in Bui, 2009)). Getz (2008) recommended the employment of both qualitative and quantitative methods in studying events' social, environmental, and cultural impacts. Combination of methodologies is considered better for addressing the complexities of social phenomena (Greene & Caracelli, 1989; Maxcy, 2003; Teddlie & Tashakkori, 2010; Lieber & Weisner, 2010; Plano Clark & Badiie 2010). Data integration is a fundamental component in mixed methods analysis and conceptualization, allowing a stronger analytic density, through the combination of quantitative and qualitative data triangulation acquired from diverse sources, in mixed methods research to integrate the two fundamental ways of thinking about social

phenomena, and expedite comparisons to unearth the consistency of measures (Fielding, 2012). Triangulation has the benefit of expanding the validity and reliability of a study results through joining multiple investigators and information sources (Denzin, 2009; Johnson & Onwuegbuzie, 2004; Mertens & Hesse-Biber, 2012)

The documentary method was used to collect government documents from different sources that provided background information and political goals served by hosting M-SE. The semi-structured interviews conducted with key experts to acquire more qualitative socio-cultural and socio-political insight into results interpretation and possibilities for future implementation. The 5-point Likert scale survey was used to generate quantitative data for reading the local community perceptions in respect to hosting M-SE. FGD method was used before, during and after the start of the 2022 World Cup tournament, to get preliminary understanding of citizens' perception, and how it changed during and after the event. The findings of the FGD helped both to develop the DSA and research dimensions and to interpret the results from the questionnaire (See Figure 10.).

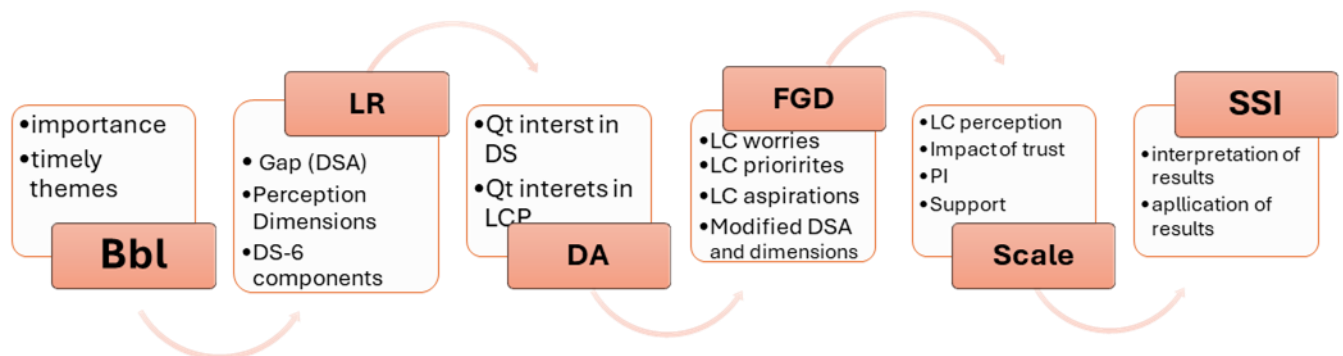


Figure 9. Schematic diagram of the method used in the research including expected results from each

The research uses both primary and secondary data. Mixed research methods used to combine the strength and advantages of quantitative and qualitative methods, in triangulation research techniques within a single framework (Table 5.).

Table 5. Different methods used in the research and their expected outputs

Method	Subject studied	O/p Data type	Expected O/P	Type
Bbl & LR	Literature	Secondary data	DSA & Study Dimensions	Qualitative
DA	QV2030; QNS	Secondary data	Enhanced DSA	Qualitative
FGD	Qatari Citizens	Primary Data	Finalized DSA & enhanced study Dimensions	Qualitative & Quantitative
Scale	Qatari Citizens	Primary Data	Weight of important DSA and dimensions	Quantitative
LR & SR	Literature about FIFA 2022	Secondary data	Results comparison	Qualitative
In depth SSI	Experts from Qatar	Primary Data	Interpretation & Implementation ideas	Qualitative

Source: Author's construction

The study process comprises twelve phases for fulfilling its goal. The phases engage (1) Identifying the research problem, (2) Method development to identify possibilities, (3) Defining research DSA and dimensions (4)Formulating research design, (5) design of FGD question , (6) conducting FGD and extending its scope, (7) analyzing findings and verifying DSA list and dimensions and finalizing them locally, (8) Survey development and data-collection, (9) Analyzing data through statistical techniques, (10) Results presentation and discussion, (11) Interpreting findings and discussing ways of implementation with experts in SSI, (12) Finalizing discussion and drawing conclusion and recommendations for implementation. Figure 1. (in Chapter 1) shows phases of the study process. Figure 10. shows the main steps in the method of the study.

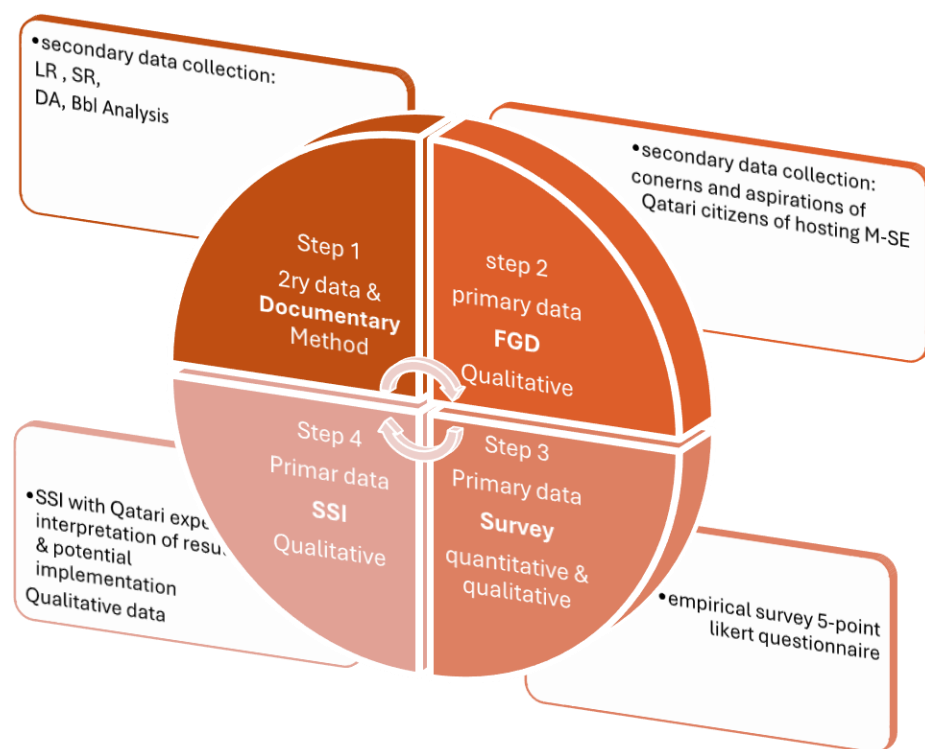


Figure 10. Type of methods applied and data used in the study

Source: Author's construction

These twelve phases are explained below-

To collect data on the fields of research studied, a bibliometric analysis (Bbl Analysis) followed by comprehensive literature review (LR) of the existing literature was conducted in all intersecting topics (tourism sustainability, M-SE, impacts, perception), to find research gaps and define the problem.

To find the solution for the problem, an approach including using suggested secondary data from LR, investigating Qatari's official (Qt) interest in destination sustainability during and after hosting of M-SE, and obtaining primary data from Qatar to compare to found secondary data from previous steps.

Based on the findings from LR, a list of initial destination sustainability attributes (iDSA) is constructed and possible other research dimensions.

To understand the importance of DSA for the study area policy, vision and strategy, a document analysis of main official documents is conducted, and DSA confirmed,

Based on the findings from LR, and document analysis (DA), a focus group discussions (FGD) questions designed and conducted on different groups of Citizens.

Based on the findings from the FGD, DSA are finalized, and the dimensions of the study identified, and a conceptual model is presented.

Hypotheses were developed in order to test the validity of the proposed model.

To collect data to test the hypotheses, a well-structured and closed-ended 5-point Likert scale questionnaire was designed, building on existing models and studies from the LR, and findings from FGD.

A sample from the population is decided, questionnaires distributed online, and data collected.

With the help of proper statistical techniques, data was generated and analyzed.

To interpret findings and find ways for implementations, SSI are conducted with local experts in the fields of research, tourism and sports

The data analysis findings were analyzed and discussed in order to draw conclusions, in relevance to other studies covered in the LR & SR, and compared outputs from different methods FGD, SSI and the survey.

4.2 Research tools

The research first tool is bibliometric analysis tool, followed by literature review of most cited articles to build a thorough background knowledge and comprehension of the topic, and explore research gaps. Document analysis (DA) and systematic review (SR) were also used to narrow the research gap and explore research dimensions. FGD tool with open-ended set of questions is used as a preliminary study to investigate in-depth Citizens' perception before and after the start of the M-SE. After the establishment of the table of constructs (and elements) and hypotheses, a close-ended structured 5-point Likert scale questionnaire with preset answers for participants to choose from. Using close-ended questions entailed the risk of not fully reflecting respondent's view or obtaining in-depth information. Nevertheless, close-ended questions are quicker and easier to answer from respondents' side, and also less effort and skills needed from researcher side to manage in analysis, comparison, and coding of data (Nelson-Gray et al, 1989; Hyman & Sierra, 2016; Kim et al., 2017; Frew et al., 2003; Malhotra and Dash, 2011). In my survey, a few open-ended questions are also used to invite clarifications of some points, due to the nature of the study, and to give room for elaboration by concerned individuals, without overwhelming other participants. Therefore, the open-ended questions are all made optional, while the closed-ended questions are mandatory. The FGD, however, provided me with in-depth information that came in use especially at the discussion and interpretation of the results. The SSI has a pre-set open-ended question as well, following the presentation of the results of my study. Being aware of the risks of both open-ended and close-ended questions, the use of mixed methods helped in acquiring in-depth knowledge with the ability to draw quantitative results from the questionnaire.

4.3 Bibliometric Analysis

Bibliometric analysis (Bbl) was conducted in literature concerning M-SE to find important themes and emerging research directions within the field.

In order to guarantee a thorough examination and rigorous analysis of the pertinent studies, a number of methodical procedures were followed. The process is illustrated in Figure 11.

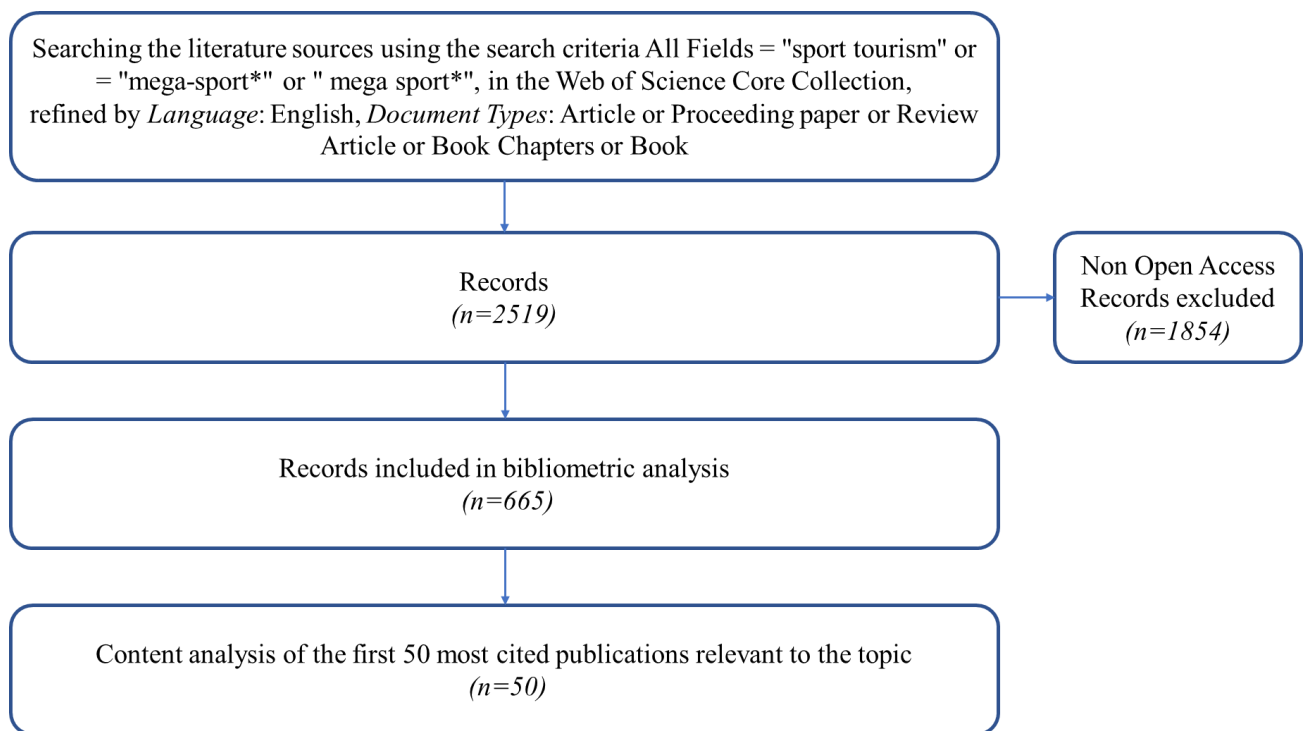


Figure 11. Flowchart of Data extraction for bibliometric analysis and literature review
Source: Author’s own construction published in Al-Muhannadi et al. (2024)

The research conducted and published in my joint previous publication (Al-Muhannadi et al., 2024) focused on M-SE’ impacts on DS, especially in terms of the three pillars of sustainability. Extraction of data from the Core Collection of Web of Science was used for Bbl (Donthu et al. 2021). This started with logical search for literature on mega-sport and sport tourism: All Fields=ALL =("mega-sport") All Fields="sport tourism" or = "mega-sport*" or " mega sport*".

2519 documents were filtered with the language being (English), and document type being (journal articles, conference papers, book chapters, and review articles). For the Bbl, a sum of 665 Open Access articles were selected. With “keywords” identified by the author and utilizing VOSviewer software (Effendi et al. 2021), a Bbl of these literatures was conducted using.

A thorough analysis of more than 50 most cited literature took place to extract details on the impacts on the three pillars of sustainability. The results from each study were critically analyzed and synthesized at this phase.

Findings from LR were cross-referenced with recent reports, news articles, and official announcements related to the 22nd FFC ensuring accuracy and validity.

LR follows the Bbl, together with DA of published official main documents, reports, statistics, and statements. The findings of that were thoroughly studied together with those from earlier LR to fully understand the possible impacts on Qatar in relation to staging the 22nd FIFA World Cup.

The analysis's first section aims to comprehend the key concerns in the subject of tourism sustainability (TS), emerging trends, obstacles, and successful implementations of TS. It encompasses decades of identifying sustainable tourism, investigating it theoretically, and testing it in real-world scenarios. It also contains terms that scholars have used in parallel and complementary ways to address the need for tourists to behave responsibly or to close a conceptual gap regarding sustainability in relation to travel and destinations.

The second portion of the analysis seeks to identify research gaps in the area of connecting M-SE events to tourism, specifically tourism sustainability, by examining the body of existing scientific work in this area. It primarily focuses on FFC competitions and SWOG, which is the biggest international sporting event and has the ability to draw large crowds of tourists to the host nations or capitals.

Secondary data including SDG and potential research dimensions are then tested, verified and adjusted in the empirical part of the research including FGD. This is followed by the empirical study using 5-point scale survey and then a qualitative study with SSI.

4.4 Document Analysis and Systematic Review

Document analysis (DA) is a staple qualitative research method or a systematic procedure of studying Organizational and institutional documents for reviewing, examining, evaluating, and interpreting printed and electronic documents for eliciting meaning, gaining understanding, and developing empirical knowledge (Bowen, 2009). DA is frequently employed in triangulation research methodologies together with other qualitative research methods (Denzin, 1970 in Bowen, 2009). In order to understand the priorities in destination sustainability attributes from the official perception, document analysis (DA) was conducted using the most important official and legally binding documents in the state of Qatar; namely Qatar National Vision 2030 (QNV2030) & Third Qatar National Development Strategy 2024–2030 (QNDS3). The documents illustrate the national vision and strategy for the state of Qatar; while stating that achieving it is a national responsibility in cooperations between all sectors (QNDS3, 2024:34). The documents used are the latest publications, and they cover a span of six years starting now. They also contain higher guidance from the constitution, the head of the state and top policy makers such as the Prime Minister and the co-founder and chair of the Qatar Foundation for education, science and community development that is defined as driving regional innovation and entrepreneurship, social development, education, and preparation for future challenges. The two documents are correlated, as Qatar's National Vision provides the foundation for the formulation of a National Strategy (QNDS3, 2024: 8), and the latter aims to achieve the goals and aspirations of the vision or QNV2030 (QNDS3, 2024:10).

A document analysis is conducted on both documents to understand the relevance to destination sustainability attributes obtained from literature review.

A systematic review (SR) is a scholarly text using predefined methodology and criteria to address a particular research question in a focused and rigorous manner, to produce new knowledge to answer that question. The focus on preset research questions is one distinction of SR from literature review (LR).

In my research, systematic review was used after conducting bibliometric analysis and finding a list of good literature in each of the subtopics such as locals' perception and impacts of hosting a M-SE. The purpose of each SR was either to find theories and methods used by other researchers, or to make a list of potential impacts

4.5 Focus Groups Discussions

Focus groups or focus group discussions (FGD) are used in studies in many fields such as social science, library science and marketing. FGD are research method and currently considered essential practice of qualitative social research (Sánchez-Oro et al., 2021) and primarily considered a confirmatory research technique for confirming or refuting preexisting beliefs, making them ideal for conducting explanatory research, where you explore why something occurs when limited information is available (George, 2023). They can be used both to explore and explain social phenomena (Stalmeijer et al., 2014). A focus groups consist of a small group, between five and nine people, in interaction, guided semi-directionally by a moderator, lasting about an hour and a half, and articulated as a device for interpersonal communication, for the production and analysis of the group's discourse (Sánchez-Oro et al., 2021). The moderator or leader of focus group discussions facilitates asking the questions and removing ambiguity and maintains focus on the research area. One possible use of focus groups is the opportunity to obtain primary data through verbal and non-verbal channels, and to approach the research area from different perspectives (Klagge, 2018) as observing the group's dynamic, their answers, and their body language can guide future research on customers' decisions, products, and services, and debated issues (George, 2023).

A focus group discussion method was conducted to sense the local community's perception towards hosting the tournament, prior and post the tournament. A small group of participants brought together to discuss pre-set topics in a semi-moderated session, and the groups were chosen due to predefined sociodemographic characters, which were mainly geographic spread through designated cities that have FFC stadiums or allocated to host foreign fans crowds. Also, citizenship was an important criterion, as the FGD focused only on Qatari community. The questions were simple and straight forward and designed to shed light on their concerns and aspirations regarding hosting the gigantic event in their country and their neighborhood.

The study is based mainly in bibliometric analysis to understand the impacts of hosting mega sport tourism to reflect it on the case of Qatar for hosting the 22nd FFC. Document analysis of relevant published materials followed to shed light on probable impacts based on what "actually" took place. A preliminary focus group discussion was carried out as a pre-event and another one post-event to get an idea of social impacts. The results of the latter were used in conjunction with the previous findings.

The importance of evaluating perceived impacts before the start of the M-SE was emphasized by previous studies of impacts of hosting (e.g. Vetitnev & Bobina, 2015; Ishac et al, 2022) as it can shed light on residents' expectations. The pre-event FGD includes similar questions to the post-event for the purpose of comparing perceptions before and after the M-SE occurred, and its success was felt by Citizens. Also new questions were added to the second set of FGDs, learning from results from the first set, aiming to verify interesting views that were manifested by some participants in the first set. But also new questions were added to form a bigger picture of post-event perception. The questions were asked in Arabic, the mother tongue language of the participants. Table 6. below shows the post-event conducted questions with English translation. Table 7. shows the pre-event conducted questions with English translation.

Table 6. Post-event : Questions conducted in Arabic with English translation

English translation	Question as asked in Arabic
(1) did you have concerns before the event? What are they?	١. هل كانت لديك مخاوف قبل الفيفا كمواطن ستتم البطولة في بلدك؟ ماهي؟
(2) were these concerns addressed in the event? Explain please	٢. هل الفيفا كما تمت ، أكدت ام انهدت مخاوف ماقبل الفيفا لديك؟
(3) have Qatar benefited from the event? What are the benefits? How did you feel?	٣. هل حققت فيفا مكاسب لبلدك ولك؟ ماهي؟
(4) did you or someone you know participate in making a success? How?	٤. هل ساهمت انت او احد تعرفه في تحقيق تلك المكاسب؟ كيف؟
5) will you welcome hosting more mega sport activities in Qatar? Why?	٥. هل ترحب باقامة بطولات رياضية كبرى اخرى في بلدك؟ لماذا؟
6) Did hosting the world cup benefit you or people you know personally or collectively? What are the benefits?	٦. هل حققت فيفا لك انت او معارفك مكاسب شخصية او جماعية؟ ماهي؟

Source: Author's construction

Table 7. Pre-event - Questions asked in the FG (In Arabic) with English translation

English translation	Question as asked in Arabic
(1) Do you have concerns about hosting 2022 FIFA World Cup in Qatar?	١. هل لديك مخاوف قبل الفيفا كمواطن ستتم البطولة في بلدك؟ ماهي؟
(2) Why are these concerns important?	٣. ما أهمية هذه المخاوف؟
(3) Do you think hosting the event can benefit the country? In which way?	٣. هل استضافة المونديال من الممكن أن ينفع بلدك؟ كيف؟
(4) Do you think Qatar will succeed in hosting the 22 nd FFC? If so, then why?	٤. هل تعتقد أن قطر ستجح في استضافة الفعالية؟ لماذا؟
(5) Do you know La'eeb? What are your thoughts about him?	٥. هل تعرف لعيب؟ ما أفكارك حوله؟

Source: Author's own construction

4.6 Empirical quantitative study

When using 5-point or 7-point Likert questions, participants are given a chance to answer difficult questions that they are not sure of by choosing the center point (Bui, 2009). There is a risk in getting many answers choosing the center point for any questions, as participants find this the easiest way to answer questions that they are undecided on, leading possibly to bias and inferior findings (Dawes, 2008). In order to avoid this bias, 6-point Likert questions is an option that will stop providing the easy choice for participants to go for the center point (Gwinner, 2006 cited in Dawes, 2008). However, using a 6-point Likert survey increases chances of putting participants under pressure, or forcing participants to agree or disagree even when they are indifferent regarding the question asked. Although using a 6-point Likert scale can produce more precise results, as there is no room to opt to neutrality, it could bring incorrect representation of actual thoughts or feelings of participants. Further, it could lead to sudden termination of the survey due to discomfort.

The survey was **designed** based on both secondary and primary data. The secondary data was collected from the literature review and the document review, while the primary data collected using a qualitative FGD to create the quantitative scale questionnaire that results in primary data to answer the research questions.

The objective of the scale and the empirical research is to examine the effects between research dimensions. Locals play an important role in the success of hosting a M-SE (Sharma et al, 2008; Gurosy et al, 2016). Therefore, knowing their perception, concerns and aspirations from an early stage of planning the hosting is very important for the host government. Hence, the research is carried out as follows. There are five main groups of constructs in the study, including variables from SET and TRA. The first group is perceptions of impacts, and second is influencers of perception. The third is mediating constructs and third is support for hosting. The fifth is profiling participants according to their valuation of DS. Table A4 (In the Appendix 8.8) shows the study constructs and their respected attributes.

The elements in the table of constructs represent the questions in the questionnaire for data collection based on participants' answers. By employing a 5-point Likert scale design, the participants have the chance to choose the level of agreement or disagreement with the statements that are related to the constructs of the study. The Likert (1931) scale is used widely as a tool to evaluate attitude, beliefs and behavior (Taherdoost, 2019). As the choice based on Likert (1931) ranges between "Strongly Agree" and "Strongly Disagree" with "Neutral" in the middle, and "Agree" being the second choice, while "disagree" being the fourth choice, the participants have five levels to choose from. And as the survey is reached via a link on-line with anonymity, the participants have the freedom to mark their choices with no immediate pressure from researcher's side that could have created a bias, either to please the researcher, to look good, or to avoid being linked to a certain answer. The questionnaire used is designed by the researcher based on several previous literature as indicated in Table A4 (In the Appendix 8.8). The survey has five main categories, visible to the participants to increase their focus and reduce the feeling of length. The first category of questions focuses on personal valuation of DS, while the last ends with a question for the first category but constitutes mainly questions related to building a socio-demographic profile for participants including their nationality, just to ensure that the analysis is conducted for Citizens. The second question in the second category explores DS attributes and perception of impacts. The third category constitutes institutional trust, and the fourth measures overall attribute and support for the hosting. The fourth also explores the level of psychic income. The questionnaire was designed, reviewed and tested first in English (Appendix 8.2), then translated to Arabic, pretested, edited accordingly and the final validated version (Appendix 8.3) was distributed to the sample population. The English Questionnaire was updated accordingly.

4.7 Data Collection and Sampling

Designing a questionnaire is a complex, multi-step process that requires careful consideration of many details. Surveys can vary greatly in the topics they cover, the level of detail they seek, and the way questions are phrased. Early questions in a survey can influence how respondents answer later ones, and researchers often need to measure changes over time, aligning new questions with those asked in past surveys (Pew, 2024). Questionnaire design entails creating the format and questions for the survey instrument for gathering data about a specific subject (Pew, 2024).

Validated questionnaires, which have been tested and proven reliable and valid, should be used with the intended respondents. Validation ensures the questionnaire has been thoroughly tested with a representative sample (TSANG, 2017).

A valid close-ended questionnaire is hard to write (Hyman & Sierra, 2015; Kim et al., 2017) as it should ask what it intends to ask, and only that, with clarity and no possibility of confusion. To achieve this, the questionnaire was reviewed by the “content expert” during the pilot test, in addition to 10-20 individuals from the target population for pre-testing as recommended (Peterson, 2000). The participants in my pilot test were from different socio-demographic groups. Based on pilot test results and feedback (Tsang et al., 2017), I will revise the questionnaire before conducting the full sampling. As the intention to distribute the questionnaire through social media mainly, a simple link is provided leading to the questionnaire, where the participants have the option to read an introduction first, including a covering letter, or to just go ahead and fill the questionnaire. The option is given to show more respect to participants’ choices and time constraints. The covering letter mentioned the importance of the participants’ role in supporting sustainability and achieving the SDGs in Qatar. Although Data were collected using personal interviews by Gursoy et al. (2016), I used social media to distribute and collect questionnaires as it seems more appropriate for Qatari community and more likely to yield responses, as was confirmed from the FGD. Famous social media accounts were approached and asked to distribute the questionnaires and encourage their followers to respond to them. The choice of accounts was also to target different categories of the local community. One challenge is distributing questionnaires via social media and asking people to forward the link to their lists, is the difficulty to track the progress. I can ask some individuals to remind them of their lists about the questionnaire after a week, but for most of the distributed chains, this will not be possible. For ensuring statistically significant research findings, self-administered questionnaires were used (Saunders & Kulchitsky, 2021). If the initial distribution did not yield enough responses, additional key distributors were contacted, and previous participants were reminded. The questionnaire is a second step after the FGD. It is also a third step, if I consider the collection of secondary data from BA, LR, DA and SR. The fourth step is the SSI, to help interpret results generated from the previous steps. Especially the empirical study.

Sampling refers to the process of selecting a portion of the target population under research. The research target population is Qatari Citizens from different age groups, educational levels, career, professions, and cities. The study seeks Citizens’ perception of impacts on DS of hosting a M-SE in their country. Therefore, the survey attempted to build a DS valuation profile for each participant, as the researcher cannot assume any pre-knowledge of the wide range participants awareness and concerns for environmental DS for instance.

The sample was drawn from diverse groups in social media such as students, housewives, military, diplomats, researchers, teachers, NGOs, tourism group, businessmen and women, directors, academics, media center, divers, health workers, volunteers, exclusive Qatari nationals’ groups. The sample also included Qatari tribes from different governorate namely Doha, Al Rayyan, Umm Salal, Al Khor & Dakhira, Al Wakrah, Al Daayen, Al Shamal, and Al Al Sheehaniya (Qatar MME,

2024). Al Shamal was challenging, but it also was approached and included in the study. Participants occupations include medical staff, teachers, university professors, engineers, accountants, lawyers, social workers, and technicians. People working in public and private sectors participated, as well working in the army, police, diplomatic jobs and owning their own businesses. Retired, housewives and unemployed people also were among participants as well as students at universities and schools. The sampling process aimed at diversifying the sample from gender, age group, educational level, occupation and residential area.

The researcher built a network of individuals with access to different social media groups, and they will be referenced in this paper as the key distributors. They were given the link with a brief invitation to participate in Arabic. Each of them was encouraged to approach more groups in their sphere of contact and ask them to help in disseminating the link in their groups. An example is a researcher in the environmental field. He filled in the questionnaire and shared the link in his sea turtle research team and asked each to share it with their families and contacts. Another key distributor is an NGO leader. She filled in the questionnaire, and shared it with her NGO members, list of trainees, and other NGOs they are in contact with.

A snowball sampling approach was also used for finding participants from Al-Shamal Governorate who are rare or hard-to-reach both because of their geographical location at the top north and being the least populated governorate. For reaching them, existing participants and main distributors of the link were asked to send the link to as many as they know from there.

Preparing data for analysis and inference conclusion is a necessary process before starting the data analysis. It involves the handling of data, review, improving readability, cleaning, coding and excluding outliers for ensuring consistency (Hair et al., 2010). Table A7 (Appendix) shows elements used in the 5-point Likert Survey.

4.8 Sample Description

4.8.1 Sociodemographic Data of Citizen Sample

Out of valid 367 Citizens participants in the empirical study, 53.1% were females, and 74.7% were either from generations Y and X. 80.1% of the Citizens participants attained tertiary and higher education, and 95.1% have average and above household income (Table 8). 64.6% are married, and 61.3% have children under their responsibility. 53.1% are among working power, 29% are in managerial and higher jobs. Less than 34% of Citizen participants indicated that they volunteered with NGOs or other initiatives for environmental purposes or community development. More than 43% of Citizens participants live in Doha the capital, and 74.7% are in three of the eight governorates, namely: Al Rayyan, Al Khor and Doha. Around 50% of Citizens choose destinations for natural or cultural interest, while 10% prefer sports destinations (Table 9).

Table 8. Sociodemographic characteristics of the Citizens (n=367) in the sample

	Category	Number of respondents	percentage
Gender	Male	172	46.9
	Female	195	53.1
Age (generation)	Builders & Baby Boomers (1901-1964)	37	10.1
	Generation X (1965-1980)	109	29.7
	Generation Y (1981-1996)	165	45.0
	Generation Z (1997-2021)	56	15.3
Education	Pre-Tertiary	73	19.9
	Tertiary and Higher Education	294	80.1
Occupation	Student	33	9.0
	Housewife	24	6.5
	Retired	35	9.5
	Technician	21	5.7
	Specialist	130	35.4
	Manager and above	44	12.0
	Unemployed	22	6.0
	Else	58	15.8
Economic status	Below average	18	4.9
	Average	210	57.2
	Above Average	139	37.9
Marital status	Currently married	237	64.6
	Currently single	130	35.4
age of dependent children	None	142	38.7
	0-9	97	26.4
	10-18	72	19.6
	19-24	56	15.3
Municipality	Doha	159	43.3
	Al Rayyan	48	13.1
	Al Khor	21	5.7
	Al Wakrah	67	18.3
	Umm Slal	16	4.4
	Al Dha'yen	25	6.8
	Al Shamal	13	3.5
	Al Shahaneya	18	4.9
Volunteering for sustainability	Yes	124	33.8
	No	243	66.2

Source: Author's edition of results of the study

Looking at destination preferences in the Citizens participants, the analysis of the empirical study (Table 9.) showed that most of Citizens in the sample (around 65%) indicated natural and leisure

destinations are their preferred destinations, with almost 10% indicating sport destinations and 15% indicating cultural destinations. More than three quarters of the residents indicated that their preferred destinations are inside Qatar itself.

Table 9. Tourism destination preferences for the Citizens (n=367) in the sample

Variable	Category	Number of respondents	Percentage
Preferred destinations	leisure	110	30.0
	natural	127	34.6
	cultural	55	15.0
	religious	16	4.4
	sports	37	10.1
	others	22	6.0
Inside Qatar?	yes	210	57.2
	No	157	42.8

Source: Author's construction from empirical results

In the current model, 9 of the 10 constructs are used. Each construct includes 2 to 5 items (Figure 17; Figure 15 and Figure 16). For Citizens, the lowest value of Mean was 2.4 in the case of 'Personal Valuation of SD' and the highest was 4.4 in three constructs: 'Trust in Government', Positive Socio-cultural Impacts and 'Positive Economic Impacts ' which is considered as satisfactory. For residents, the lowest value of Mean was 2.4 in the case of 'Negative Environmental Impacts', and the highest was 4.5 in the case of: 'Psychic income'.

4.8.2 Sociodemographic Data of Resident Sample

The residents' participants (n=148) sociodemographic characteristics are shown in Table 10. below. Female to male ration is around 53%, with clear bias towards ages between 18 and 59, constituting together around 80% of residents' participants. The older generations constitute around 8%, with the youngest generation (Gen Z) constitutes around 12%. From social status, 80% percent of the residents are married, with about 64% having children below 18 years of age. From economic status, around 65% of residents indicated average, and similar percentages indicate above (about 17%) and above (about 18%) average. More than 81% of residents attained Tertiary Education and above, and around 5% are students. 42.2% of residents are working, with 5.4% of residents in managerial jobs and above. More than half of the residents live in Doha, followed by Al Rayan (around 18%) and then Al Wakrah (around 12%), with the least percentage (2%) in Al Shamal.

Table 10. Sociodemographic characteristics of the residents (n=148) in the sample

Variable	Category	Number of respondents	percentage
Gender	Male	70	47.3
	Female	78	52.7
Age (Generation)	Builders & Baby Boomers (1901-1964)	12	8.1
	Generation X (1965-1980)	60	40.5
	Generation Y (1981-1996)	58	39.2
	Generation Z (1997-2021)	18	12.2
Education	Pre-Tertiary	28	18.9
	Tertiary and Higher Education	120	81.1
Occupation	Student	7	4.7
	Housewife	31	20.9
	Retired	4	2.7
	Technician	13	8.8
	Specialist	40	27.0
	Manager and above	8	5.4
	Unemployed	22	10.8
	Else	58	19.6
Economic status	Below average	26	17.6
	Average	97	65.5
	Above Average	25	16.9
Marital status	Currently married	117	79.1
	Currently single	31	20.9
age of dependent children	None	31	20.9
	0-9	46	31.1
	10-18	49	33.1
	19-24	22	14.9
Municipality	Doha	75	50.7
	Al Rayyan	26	17.6
	Al Khor	7	4.7
	Al Wakrah	18	12.2
	Umm Salal	5	3.4
	Al Dhaayen	9	6.1
	Al Shamal	5	3.4
	Al Shahaniya	3	2.0
Volunteering for sustainability	Yes	56	37.8
	No	92	62.2

Source: Author's edit from results of the study

Looking at destination preferences in the residents' participants, the analysis of the empirical study (Table 11.) showed that most of the Residents in the sample (around 68%) indicated natural and leisure destinations are their preferred destinations, with almost 16% indicating sport destinations, 10% indicating cultural destinations and 3.4% indicating religious destinations. More than three quarters of the Residents indicated that their preferred destinations are inside Qatar itself.

Table 11. Tourism destination preferences for the Residents (n=148) in the sample

Variable	Category	Number of respondents	Percentage
Type of destinations liked in last 5 years	leisure	58	39.2
	natural	42	28.4
	cultural	15	10.1
	religious	5	3.4
	sports	24	16.2
	others	4	2.7
Inside Qatar?	yes	210	57.2
	No	157	42.8

Source: Author's construction from empirical results

4.9 Data Analysis

The fit of the predefined research dimensions to the observed data was examined using Confirmatory Factor Analysis (CFA) within the framework of Covariance-based Structural Equation Modeling (CM-SEM) and implemented using SmartPLS software. SmartPLS supports the creation of graphical CFA models. In the CFA process, the acceptability of factor loadings is crucial for determining the model's validity. Factor loadings of 0.6 or higher indicate that the given items significantly contribute to measuring the dimension. Such items can be regarded as reliable indicators for the latent construct representing the research dimension (Gallagher & Brown, 2013)

Subsequently, the internal consistency of the dimensions identified in the literature was evaluated. Several metrics are available for assessing the reliability of constructs. One commonly used metric is Cronbach's alpha (Netemeyer et. al,2003), which evaluates the reliability of a dimension (construct or scale) by comparing the sum of the individual variances of items used to measure the dimension with the variance of the construct itself. A good Cronbach's alpha value is typically 0.7 or higher, indicating strong internal consistency (Tavakol & Dennick, 2011). Lower values suggest that the items may not consistently measure the same construct.

Composite Reliability (CR) is another indicator of internal consistency, similar to Cronbach's alpha. It measures the shared variance of the items within each latent construct. In the model, every latent variable (dimension) must achieve a CR value of at least 0.7 (Brunner & Süß, 2005).

To validate the dimensions further, additional metrics were utilized. The Average Variance Extracted (AVE) indicates the proportion of variance in the items explained by the latent construct. AVE values above 0.5 are generally considered acceptable, as they suggest that more than half of the variance is captured by the latent construct (Hair et al., 2010).

Discriminant validity assesses the extent to which different constructs are distinct from one another. A common metric for this is the Fornell-Larcker criterion (Fornell & Larcker, 1981), which states that the square root of each construct's AVE value should be greater than the correlation between that construct and any other construct.

To statistically test the relationships hypothesized in the theoretical model, Structural Equation Modeling (SEM) was employed using the Partial Least Squares (PLS) path analysis method with SmartPLS software. SEM has been widely applied in various studies (Kim & Kaplanidou, 2019; Duan et al., 2020; Jeong & Kim, 2019; Jiang et al., 2017; Xu et al., 2022; Máté & Kajos, 2023) exploring public perception and support for M-SE.

SEM comprises two primary components:

1. **Measurement Model:** Examines the relationship between latent variables (e.g., theoretical constructs like PVDS or Psychic Income) and observed variables (e.g., questionnaire items such as measuring Awareness or Excitement).
2. **Structural Model:** Focuses on relationships among latent variables and tests the fit of theoretical model assumptions to the data.

For assessing the fit of the structural model, the following acceptance ranges are applied:

- **Chi-square/degree of freedom ratio (χ^2/df):** Ideally, this ratio should be below 3; however, values under 5 may be deemed acceptable based on the complexity of the model (Byrne, 2010).
- **Root Mean Square Error of Approximation (RMSEA):** Values below 0.08 are generally accepted (Hu & Bentler, 1999).
- **Comparative Fit Index (CFI):** This index is considered acceptable if it reaches 0.9 or higher.
- **Tucker-Lewis Index (TLI):** This index is considered acceptable if it reaches 0.9 or higher.

The One-Sample Kolmogorov-Smirnov test results ($p < 0.05$ for most groups) reveal that the distribution of values for the analyzed research dimensions significantly deviates from normality. As a result, the Mann-Whitney nonparametric test was utilized to investigate significance in variation between males and females, individuals with pre-tertiary education and those with tertiary or higher education, as well as those who have volunteered in an NGO or social initiative versus those who have not.

To assess differences in research dimensions across generations, income groups, and groups categorized by the age of children, the Kruskal-Wallis test was applied. This nonparametric test evaluates differences among three or more independent groups for a continuous variable that does not conform to a normal distribution. When significant differences were detected by the Kruskal-Wallis test, the Dunn-Bonferroni post hoc test was performed to detect which precise groups exhibited significant variations.

4.10 Semi-Structured Interviews

To interpret the results from the 5-point Likert Scale, semi-structured interviews (SSI) are conducted with local experts in Qatar in the fields of research, tourism, legacy, education and sport. Five experts were interviewed in five different individual interviews. The SSI also aims to find potential implementation of the research. A set of open-ended questions were set prior to the interviews, based on areas needing clarifications in the results of the questionnaire, but also

discrepancies between results of the FGD and the Scale. Also, there are discrepancies between my results and results from similar research conducted before. The target originally was to have one FGD with different experts, which could have added an element of exchange and timely dialogue between the experts, but due to difficulty booking more than an hour from each, and because I wanted to benefit from the deep knowledge of each in his field, the choice was separate one-to-one SSI. It is essential for instance to provide equal chance for all to feel free to speak and express. Semi-structured interviews can be lengthy and boring, and participants will share more if they are comfortable and feel appreciated.

The researcher assumes that the tourism management authority is the one in charge of decisions related to tourism, and that their views and perspectives are significant. A similar assumption, with many differentiated details, is made about different experts to be the authority in their field. According to Frechtling and Sharp (1997), the use of SSI as a data collection method starts with a similar assumption implying significance and clarity of interviewees, and their ability to positively affect the research and produce rich, detailed data for analysis. Cook and Crang (1995) and Schoenberger (1991) agree that the Potentials of SSI for providing more scope for elaboration and general discussions can allow differences between responses to be compared, instead of reading the same question for each participant. However, it is important to be aware of potential bias from this research method, as there is an influence of the researcher applying the semi-structured interview method. It is important that the interviewer does not dictate or imply answers or interfere in the internal flow of thoughts, which requires high skills and self-control in many cases. Looking at the list of personal human characteristics of potential bias that can impact the neutrality of the findings, listed by Denzin et al. (2009), we can see why some scholars were not in favor of qualitative research methods. The list includes the interviewer's gender, social category, and cultural background; in addition to the interview's context (Jong & Jung, 2015). While the environment can be controlled with preplanning and consultation, it is hard to find a solution for the race and the gender of the interviewer. My approach is to choose researchers who are generally calm, good listeners, pleasant to converse with, and have the ability to learn and work in improving their interviewing skills, if I needed more researchers to help. Meanwhile, I worked on improving my skills and tested it with a group of friends before the real SSI. Another expected challenge could arise from gender imbalance amongst researchers and experts. In previous research, females were noted to be underrepresented in tourism fields, especially at senior positions (Bui, 2009). However, the researcher did not face many issues with conducting SSI, as the plan is to have them on-line. This method could also deal with any gender issue such as female being relatively less willing to engage in questions from a male, as found in some studies (Bui, 2009; Galam, 2015). Therefore, I conducted all SSI myself just like I did with FGD. The researcher naturally has deep knowledge of the subject matter and what is required from the SSI, in addition to the ability to see opportunities for elaboration when an interesting point is raised by an interviewee. This could be very important, in particular for implementation possibilities.

I studied and analyzed the primary and secondary data first before going into the rigorous process of designing the SSI method. However, I did not have to worry about details of researching neutral places that are acceptable and comfortable for each group (Bowling, 2002), as the SSI were conducted online. I only made sure the time set is suitable for the interviewee and that the setting of the on-line meeting allows the interviewee to use any sort of presentation tools if needed. I prefer to record the interviews after getting the permission of the participants but also take short notes for leading the interview further, such as the interest of certain participants, or the sensitivity of a certain one towards a topic. This helps to keep the positive inviting stimulating atmosphere for all, to get more useful information and make best use of reinterview. It is always good to choose an interviewer with calm, neutral but inviting characters, if I need to have someone assisting me, being aware that interviewees do not always focus on the specific points which need utmost attention and skill to be invite them back to the main topics with courtesy. Meanwhile, I consulted participants regarding the best time for them and whether they preferred having an SSI with

another expert. My choice of on-line platform is Zoom as I have a professional account with limitless time and features.

4.11 Research ethical principles

The scale survey was distributed online with complete freedom for those who received the link to participate or not, and no one could know if they did or not. If any participant started to fill in the questionnaire, then decided to stop, nothing can force him/her to continue, and their inputs are disregarded. The questionnaire application is set with ensured complete anonymity, disabling from the setting all features that can collect automatically any personal data about the participants such as location, name, or exact job. A clear statement of that is put explicitly in the welcoming introduction to the survey's participants. The FGD are all conducted by the researcher herself, except for one, and no official notes were kept in the records regarding their names, addresses, contact data or any other personal information. Only the necessary sociodemographic description of participants of each group was recorded on paper such as two females, or four three are postgraduates. Although the SSI and FGD meetings are voice-recorded, that's when permission was explicitly granted, only statements meant to be reported by the participants are reported. Any statement that was said "off record" was not included in the research, even if it holds a value in better understanding and interpretation of the results. Recorded materials are kept, but not to be shared in full or part, even in the future, without seeking permission from the relevant participant.

4.12 Changes and Reflection

Although I thought the research was well-designed and well thought of ahead of time, issues appeared in different stages, and changes in the set actions took place to solve those unexpected issues. FGD for instance started as a face-to-face process, but then with time, I had to shift to on-line meetings. The change was necessary, especially for the post-event part of the FGD, as I left Qatar by then. If I were to do the FGD again, I would do much more FGD pre-event and dedicate three or more for children alone without the presence of their parents. From the data collected via the questionnaire I sense the availability of interesting inputs from the younger half of Gen Z. I am planning a follow-up post-event between 2026-2027 to compare the reflection to different questions after 4-5 years of the event. My interest is more in perception of impacts, especially after the France Olympics. From some notes in the questionnaires, I can sense an interesting conversation and conversion in locals' perception of hosting after following another M-SE in a European country that was critical about Qatar hosting the FFC event. Another issue is regarding the expected ease and speed of participation. Given the number and the welcome FGD received, I expected that on-line questionnaires would receive an even more welcome. Filling a questionnaire online, in my judgement, would be a convenient way for participants, as they can finish it in less than ten minutes, any time of the day, at home or anywhere. To my surprise, the number of hits to the link was disappointing, even worse, 50% of total attempted access to the questionnaire ended without completing the questionnaire. The questionnaire was put to the public only after a thorough process of testing and validation. The questions of the questionnaire were validated by three professionals and tested by ten to twenty individuals from different age groups, backgrounds and educational levels, and all their comments were considered in an edited version of the questionnaire that they found fluent, engaging and easy to understand, when they tested it again. However, new comments surfaced at the data collection stage concerning the length of the questionnaire, and that people are not fond of filling in questionnaires to start with. Nevertheless, I had to handle the unexpected issue with both patience and wisdom. I invited a discussion of the issue with several of the survey's key distributors of the link. I set both a group, and one-to-one for some, brainstorming online meetings to analyze the issue and come up with suggestions to increase the number of filled questionnaires. Two of the seven meetings produced a set of

suggestions that I considered, together with more commitment from the key distributors to the success of the survey. One of the changes or new strategies I used to increase the participation is to print a simplified version of the questionnaire and send a few dozen for some of my key distributors who agreed to the process. The new strategy has proven success at the last stage of data collection. There are a few drawbacks to this strategy though, including the possibility of missing data, which was not an option in the on-line version. Another drawback is the necessity to enter the data in the system which proves to be a hectic process for one person to read the questions and answers for each participant and enter them and then review the entered data and verify each entry. It took a huge amount of time from the researcher's side, however, the follow-up process on the on-line participation was time consuming as well.

Lessons extracted from the experience include the importance of personal follow-up, and not accepting no response as a decision against participation, but rather to use it to start a conversation about the importance of the study of supporting scientific research in general. The experience fortunately, introduced me to experts in fields relevant to the research focus, and set the stage for detailed in-depth SSI with them to both interpret the results and suggest potential implementations for the research in the State of Qatar.

5 RESULTS AND DISCUSSION

This chapter presents the findings concerning the study hypotheses, offers an analysis of the findings, and links findings from the different methods used. Although the focus is on the empirical study, the results from the qualitative studies are also important and presented in separate sections. Results from document analysis of official documents, focus group discussions (FGD), and semi-structured interviews (SSI) are among the results below. At the end, a section discusses the results together to better understand the study's subject matter. The chapter concludes with a summary of the main scientific results of the study.

5.1 Bibliometric Analysis

Four clusters were determined based on the co-occurrence of keywords (Figure 12.). Co-occurrence is denoted by the thickness of the connecting lines between keywords. Different circle sizes indicate the relative importance of different keywords and key phrases: circles with larger diameters indicate concepts that appear more frequently. The association relationship between the two keywords was determined by comparing the number of co-occurrences with the series of individual occurrences when forming clusters.

There are a variety of keywords in the green cluster, including satisfaction, experience, impact, social media, work, motivation, behavior, culture, involvement, loyalty, and perspective, which are interrelated to illustrate the global impact of Mega-Sport Global Events (MSGEs). These events influence satisfaction, experience, social media engagement, work motivation, behavior, culture, involvement, loyalty, and perspectives of various stakeholders.

The blue cluster refers to the role of education and higher education on the perception of the impacts of tourism and MSGEs. As well as providing opportunities for learning, community engagement, and economic growth, these events present challenges that require careful management and collaboration among stakeholders.

The yellow keywords cluster demonstrates the interconnectedness of management practices, knowledge management, and strategic planning in addressing MSGEs' challenges. The hospitality industry can ensure positive outcomes for both businesses and the host communities by emphasizing sustainability, community engagement, and effective governance.

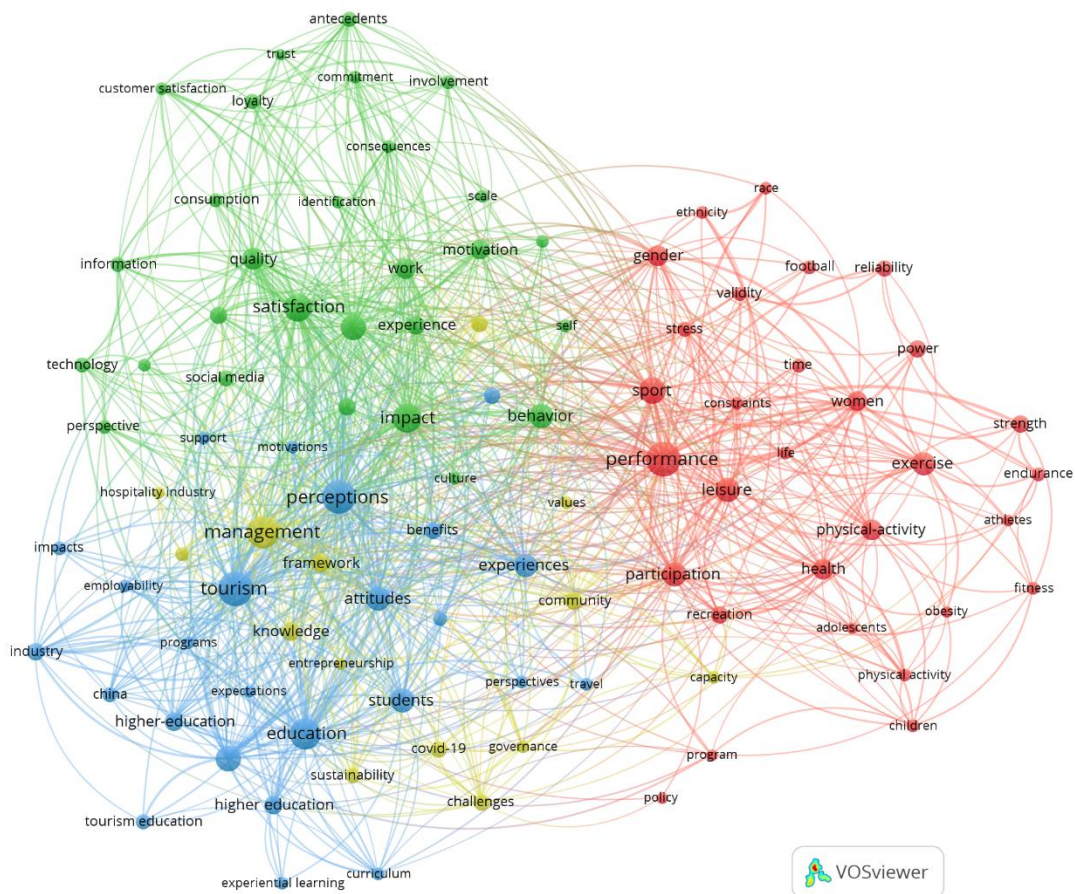


Figure 12. Keyword network of publications in the field of sports tourism and mega sports
Source: author's edition based on the Web of Science Core Collection database, n=665

A red keyword cluster refers to MSGEs having a multidimensional impact on performance, leisure, physical activity, participation, recreation, and health. In addition to elevating athletic performance and inspiring wider participation in physical activities, these events are also beneficial for community health and recreation. These events promote active and healthy lifestyles through their integration into local culture. This comprehensive impact underscores the importance of strategic planning and engaging the community to ensure hosting such events for benefit-maximization.

5.2 Document analysis of official documents.

In order to understand the priorities in destination sustainability attributes from the official perception, document analysis was conducted using the most important official and legally binding documents in the state of Qatar; namely Qatar National Vision 2030 (QNV2030) & Third Qatar National and Development Strategy 2024–2030 (QNDS3). The documents illustrate the national vision and strategy for the state of Qatar, while stating that achieving it a national responsibility in cooperations between all sectors (QNDS3, 2024:34). The documents used are the latest publications, and they cover a span of six years starting now. They also contain higher guidance from the constitution, the head of the state and top policy makers such as the Prime Minister and co-founder and chair of the Qatar Foundation for education, science and community development that is defined as driving regional innovation and entrepreneurship, social development, education, and preparation for future challenges. The two documents are correlated as Qatar's National Vision provides the foundation for the formulation of a National Strategy (QNDS3, 2024: 8), and the latter aims to achieve the goals and aspirations of the vision or QNV2030 (QNDS3, 2024:10).

A document analysis took place of both documents to understand the relevance to destination sustainability attributes obtained from literature review. Compared to the three pillars of sustainability; namely economic, social and environmental, the vision (QNV) is stated to rest on four pillars. The fourth (additional) pillar is related to human development aiming to enabling Qataris a sustainable prosperous society. Normally human development could be considered as part of social sustainability. For some (for instance Poussard , 2002) social development is considered as part of human development, based on the focus of the social pillar on the reinforcement of human and social capital , ensuring for instance that no social imbalance results from economic growth, making social sustainability a main element of a sustainable human development. Nevertheless, in QNV2030 (2008), social development and human development are discussed separately as two different pillars the national vision (QNV2030) rests on. Social development is intended by the QNV to produce “a just and caring society based on high moral standards, and capable of playing a significant role in the global partnership for development” (QNV2030, 2008:11). This includes both openness to the outer world and building the local society on solid grounds following international moral standards, by providing first-rate education that is used for human development.

Throughout the documents, there is an emphasis on community involvement and consultation. This adds to the importance of my research that studies the perception of Citizens in relevance to tourism plans and hosting of global events, and their impacts on the sustainability of Qatar from the three sustainability pillars perspective. Stakeholders’ engagement and even participation is mentioned in the QNDS3 as shown in Table A2 (in the Appendix). Further, National Strategy was developed in consultation and in full and broad stakeholder partnership with all stakeholders, especially civil society, the private sector, ministries and government agencies, with ensuring clear understanding of the vision (QNDS3, 2024:34).

5.3 Focus Group Discussions Results

Qatari Citizen’s perception of hosting the 22nd World Cup in their country seems to vary from before hosting the event to the time when the event started and after the event. In general, their faith in their government and leadership was clear, and seemed to be strengthened after the event started. Participants were asked to explain their views. Some elaborated while some were preservative and cautious. The results were summarized in tables to provide a point of reference and comparison. Figure 1 represents the fears and worries participants in FGD shared. Table 12. shows a description of participants in each FGD regarding age, educational level, gender and hometown.

The focus group method was used for the ease and speed of organizing them for the sake of publishing the first paper in the topic, but also for the purpose of obtaining primary data capturing Citizens’ views and values regarding the research questions through verbal and non-verbal channels, and to inform the author regarding relevant issues for a more in-depth quantitative study. The output of the FGD was used as primary data to build and further develop a large-scale Likert survey. The author conducted seven FGDs with 5-8 participants in each group with the aid of an FGD guide or facilitator. Each focus group had 5-8 participants and lasted for 1-2 hours. The pre-event focus groups were face-to-face, while the post-event ones were virtual using zoom online platform, all conducted by the author of the paper, except one. The author finds virtual meetings to be more focused and more productive. This could be attributed to the fact that each one of the participants is sitting in an isolated quite place trying to focus on the discussion solely, while in the pre-event meetings, participants were distracted by side talks, people and pets around, their mobiles, and hospitality.

Table 12. Description and characteristics of participants in each FGD

FG	FG1	FG2	FG3	FG4	FG5	FG6	FG7
Education	5 BSc 1 higher	2 BSc 3 higher	2 BSc 3 higher	5 high	1 none 2 BSc 2 BSc	1 sch. 4 BSc	4 Scl 1 BSc
Gender	F	M	2F 3M	M	F	F	F
Age Group	19-65	28-70	24-65	45-70	22-90	32-65	19-52
City	Wakra	Mix	Al Khor	Mix	Al Rayyan	Bani Hajer	Doha
Closest Stadium	Al Janoub		Al Bayt		Khalifa International	Education City	974 & Thumama
Teams Residents & Training	England		Mexico		Iran	Spain	Most of them

Source: Author's own construction

(BSc : higher: postgraduate, Graduate, Sch: High School, None: never received any schooling)

The discussion questions were written and discussed in Arabic and illustrated in local dialect when needed. The questions asked pre-event are: (1) Do you have concerns about hosting 2022 FIFA World Cup in Qatar? What are these concerns, if any. (2) Why are these concerns important? (3) Do you think hosting the event can benefit the country? In which way? (4) Do you think Qatar will succeed in hosting it? And why? (5) Do you know La'eeb? What are your thoughts about him? The questions asked at the post-event are: (1) Did you have concerns before the event? What are they? (2) Were these concerns addressed in the event? Explain please. (3) have Qatar benefited from the event? What are the benefits? How did you feel? (4) Did you and someone you know participate in making a success? How? (5) will you welcome hosting more mega sport activities in Qatar? Why? 6) Did hosting the world cup benefit you or people you know personally or collectively? What are the benefits?

The first set of focus group meetings were held on October 2022, and the second set were held on January 2023. The participants involved were mostly females with ages ranging between 18 and 60 years old. The groups were highly motivated by the group moderator with each member willing to participate openly and even contradict others in a positive manner.

Two working sessions within the focus group were organized, the first one before, and the second after the end of tournaments. The researcher conducted a preliminary three focus group discussions before the event took place and then three after the event. The discussion took place with three different groups from three different main areas in Qatar. Discussion was friendly and semi-structured, asking each question and allowing the participants to express their thoughts and feelings about it. All questions are to understand how they feel about Qatar hosting the 2022 FIFA World Cup but breaking it into five smaller questions each time.

All participants were from Qatari families. The groups were from Al Wakra, Doha and Al Rayyan. A month before the event, all participants from the three groups expressed concern one way or another, while some expressed a look forward to the new beaches, restaurants and public places that will be opened. Participants from Doha expressed more concern about traffic, and those from Al Wakra about foreign (mainly European) football fans. Some were even praying that the event

should not take place for some reason, as Qatar really does not need that. It was noticed though that younger generation (below 30 years), have more curiosity than worry and are glad that university work will be on-line and might end earlier. The main concerns raised were: 1. Actions and behaviors from visitors that might go against Qatari traditions and beliefs, 2. Rules and regulations that might change not to upset them, 3. Younger generations learning bad habits and behaviors, 4. Heavy traffic, 5. Thefts and crimes, 6. Overcrowding, 7. Security problems caused by visitors, 8. Terrorist attacks using the crowd, 9. Foreigners showing disrespect to locals and their culture, 10. Negative impacts and of European smearing campaigns, 11. Drunk people at the stadiums and on the roads, 12. New experiment for FIFA in a GCC country, 13. Closeness of stadiums and possible traffic and issues, 14. Qatar's name if event did not succeed, 15. People's reaction to huge number of foreign crowds walking in their neighborhoods and 16. Accommodation might not be enough. See Figure 13 below for comparison between answers of different groups.

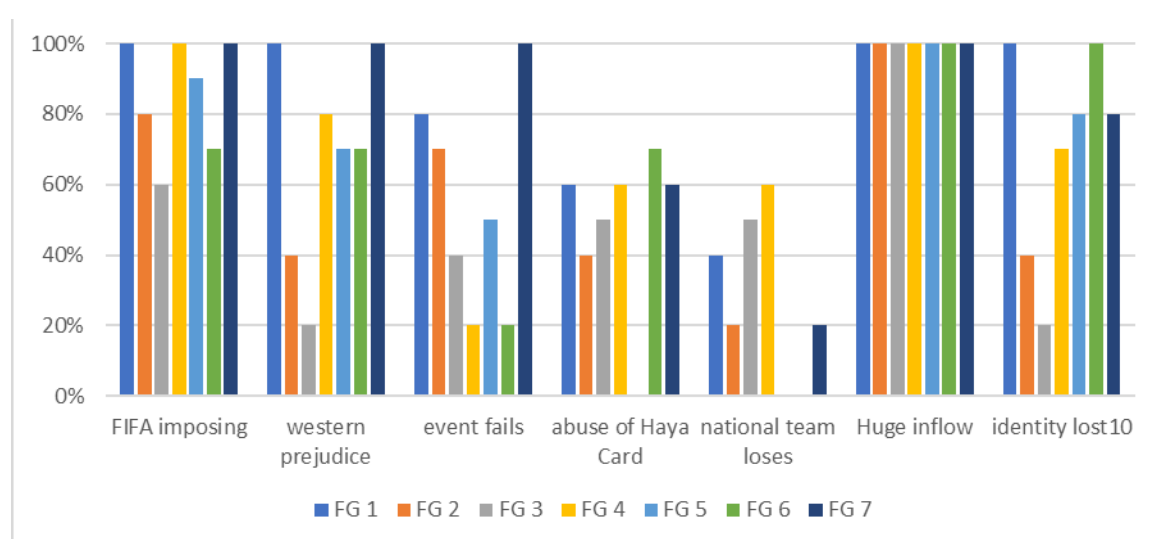


Figure 13. Fears and concerns categories expressed by Qatari Citizens prior event in FGD by percentage of participants within each group

Source : Author's own construction

As an answer for whether their concerns remained after the start of the event, the answer was “No” by all participants in all groups. All participants' thoughts and concerns were addressed, and that they felt reassured that nothing wrong would be allowed to happen. The shift happened with announcements that took place just before the start of the event, especially including alcohol consumption policy. At the opening ceremony, there was a clear highlight of the Qatari identity and Qatari traditions including Islamic teachings, and they felt as if their country is not taken from them for the sake of satisfying foreigners as one participant put it. Almost all think that Qatar benefited from the event and the benefits are good international image (all), economic benefits (some) , more tourism (most), showed its identity and culture with pride (all), supported the Palestinian case (most), introduced Islam (most), putting Qatar on Tourism map (some) as Qatari will not need to identify Qatar as neighbor of Dubai (one). As an answer for whether Qatar host more mega sport events should, most answered yes because Qatar can, FIFA was not the first and won't be the last, but some wanted mega cultural events and not just sport events to make Qatar the capital of both (most young participants below 35). Many stressed that Qatar not only succeeded by excelled by all standards and presented FIFA and the world with a new level of high

standard of hosting the World Cup. As some participants explained, FIFA never hosted World Cup in the Arabian Gulf area, but now that it did, FIFA and every mega-event organizer saw the capabilities and high caliber in Qatar for organizing and hosting any global event. One added (with approval from his colleagues) that the world needs Qatar to proceed to new levels of excelling in organizing events with new innovative alternatives and solutions. Being part of Arabian Peninsula, Qatar has a central geographical location that made it easier and faster for most nations to travel by air. Also being in the middle of a football-loving nation made it possible for thousands in neighboring countries to drive to attend their favorite matches and drive back home same day. FIFA 2022 witnessed new types of fans in terms of colors, ethnicities, and cultures. African, central Asian, far Asian, Eastern European, Latin Americans and middle easterners were prominent in the fans' seats. This also gave Qatari people to get to know new destinations for their travels, by seeing, knowing and communicating with fans from countries that felt much closer to their values and aspirations. Latin America could be the new Qatari destination, after decades of having Europe and UK as the main destinations for months of traveling annually. Vice-versa, for those who visited Qatar and felt the ease of getting there and the welcoming nature of the people and all what Qatar can offer, Qatar could be their new destination for vacation with family or friends. Also, the word of mouth could be the biggest destination marketing Qatar could receive. Further, participants mentioned that although some European entities launched a vicious smearing war against Qatar aiming to halt the hosting of the FIAF event, many fans who came to Qatar published many videos and posts telling the truth about Qatar and answering the false claims. When visitors saw by their own eyes that women of Qatar work everywhere starting the airport, and drive cars, and go to work and participate in the events as audience and as organizers and volunteers, they knew that they have been misled to think that Qatar is violating women rights and all sort of non-sense some prejudice European entities was spreading around. Most participants stressed the fact that Qatar succeeded in organizing and hosting a family-safe World Cup that never have seen before anywhere in the world.

Answering the question of whether they or someone they know participated in making the success, most answered someone they know and referred to volunteers, staff, and organizers. But also one participant mentioned a lady in her family who will make traditional figure bites food, and go every day to Souq Waqif (modern shopping square that was built in traditional style and rented to businesses of traditional crafts and food) with her daughters dressed in Qatari traditional style, to offer tourists to taste it and explain to them how she made it and ask their opinion about how to develop the taste drawing from their cuisine, aiming to create a conversation and introduce them to Qatari lifestyle. Another answer was a participant who volunteered in an activity organized by the Qatari Embassy in Australia to introduce Australians to Qatari culture and answer their questions and concerns, when she was a student there. Another answer was a Qatari family who will walk every evening in fans gathering area, all dressed up in traditional dresses and allow international tourists to take pictures with them to show Qatari identity.

Regarding personal benefits they got from hosting the tournament, some answered nothing, some mentioned how beautiful and exciting atmosphere became, few answered being proud of our country and our identity, but from their body language when talking about benefits Qatar received, almost all of them showed pride of being Qatari. One of the answers that was said by many is that they were so happy at those three weeks, and they feel happiness level in Qatar elevated, and so after everything was over people felt post-event depression. One said she was very ill at that time, but still she went to see and enjoy herself and that what made her recover faster. One said that having guests at that time came to watch the games gave her a chance to discover and enjoy the beautiful touristic attractions sites like the National Library and Pearl Island. Another benefit mentioned is the amazing enhancement of roads and highways and how driving has become much easier and more comfortable for young people with less experience in driving, areas are connected by speedways and the design and comfort is amazing. The metro was mentioned as a fast easy way

to go between many sites without the need for a car or a driver, especially for university students. The new recreational parks were mentioned by many.

Participants expressed that they had concerns before the beginning of the tournament, but all were gone from the opening ceremony and then pride, and thrill replaced them. Participants expressed their resentment of the European smearing campaigns against Qatar that showed either ignorance of what Qatar is about, or jealousy from what they knew that Qatar has what it takes to achieve it, and therefore they wanted to prevent it if they could. Participants presented many examples for when European reporters faked situations to write a bad false story about Qatar, including calling hotels and asking them random questions to create a false story to make European feel that if they travelled to Qatar their human rights will be violated, which is not the case of course. One example given by many was the news reporter who was filming in a private location and filming people without their permission. When he was told by the policeman that he cannot film there, he videotaped it and translated it as if he was told he cannot film anywhere in Qatar, which was a big lie, yet this framed video was broadcasted everywhere to smear Qatar.

Participants believe that the world needs Qatar to proceed to new levels of excelling in organizing events that brings people together in highly organized manner with kindness, respect, and joy. Furthermore, they believe that Qatar have set a high standard for others to follow, and that fans and hosting nations should start demanding it.

Participants expressed the joy, excitement and happiness during the three weeks of hosting the FIFA World Cup which confirms some of the results from Al-Emadi et al. (2022) who surveyed Qatar's local community perception about holding the event, 8 years before it was held. His sample however included Citizens and foreign Residents and concluded with finding excitement amongst them in relation to the M-SE being staged in Qatar.

The legacy of pride was expressed by almost every single participant in every group. They expressed their admiration for the high level of organization and management of the event by their country. Sense of pride was also expressed regarding their fellow Citizens and how they presented true image of Qatar via going out, showing who they are, and being there for tourists to see them and to even take pictures with them and get to know them. Sense of pride was also expressed via admiration of beauty all around and the provision of entertainment places and programs world-class and up to Qatari taste and standards. Sense of pride was also expressed regarding Qatari identity and traditions and Islamic values and Arabic unity.

One outstanding note is regarding the youth as well as elderly enthusiasm to go out and meet the guests and provide them with taste of Qatari hospitality and make them see Qatari traditions and Qatar's people in their traditional clothes and held-high identity.

5.3.1 Important topics related to Citizens' perception mentioned in FGD

1. Smearing and Propaganda

Some European countries officially and unofficially launched campaigns against Qatar hosting the 22nd World Cup. Regardless of their intentions, vicious or ignorance, Qataris and Residents of Qatar felt the unjust attacks, and form a perception of western governments as being racist, manipulative, deceptive, vicious, envious, full of hate and bad intentions towards Qatar and its people. Examples mentioned by the participants in the FGD are shown in Table 13.

Table 13. Citizens’ perception of smearing campaigns by some official and unofficial media against Qatar

Smearing claims	Reality in Qatar	Reality in other countries
Qatar torturing foreign workers and violating their human rights.	Qataris are not racist. Qatari are Good Muslims and God-fearing people who have mercy on the poor and less fortunate and even pay them more and provide food for them for free as it is part of their usual practice of giving (Sadaqat (charity), Zakat (2.5% of asset), Dafa’t Bila (protection), Duaa(praying).	Some countries are racist against Muslim labors and even tourists. Muslims attacked and killed in some countries all the time. Some of those countries are racist against other nations, other colors, other religions. Some nations are violent, and many mosques got attacked and event destroyed in those countries.
Qatar violates women rights and oppressed women.	Qatari women have access to free education and health from birth to grave. Qatari women work, make good money, travel, and live good life. Some are ministers, ambassadors, CEOs, doctors, engineers and pioneers. Qatari women rights are fully protected by law, if they are not happy in a marriage for instance, law support their safe and dignified transition, and the state provide for them till they are married again.	Some of those countries’ racist governments force on women and girls what to dress. Some Muslim women were physically and verbally assaulted in public places because of wearing headscarf. This shows lack of tolerance, and respect of women rights and human rights in general.
Qatari Arabic & Islamic culture are about hate and rejecting others.	Qataris are of the most welcoming generous nations, they cherish their own religion and culture, but do not interfere with others’ religions	Some cultures are about supremacy and prejudice. They need to learn respect and tolerance from Islamic Arabic culture.
Qatari are backward and ignorant, and they are Arab who ride camels, and live in tents in the desert and away from civilization.	Qatari are extremely civilized and sophisticated. They live in beautiful modern houses and cities and Qatar has best services and easy life in all rates.	Some nations are ignorant about other nations and assume they are better than others and are not shy about spreading lies and rumors and dehumanizing others.
Qatar is incapable of organizing a global mega-event like World Cup.	Qatar organized best World Cup and set a difficult standard for others to follow.	Previous mega events and ones after Qatar’s FIFA event, that are organized by the other countries had many issues related to safety, decency, violence, vandalism, racism, crimes and negative atmosphere. But no one said they should not host an event. Even problems were normalized. E.g. France Olympics and its contaminated river for athletes to swim in.
Western fans will not travel to Qatar in fear for violation of their human rights or contributing to violating human rights, or it won’t be safe for them	Those who attend published videos telling their fellow fans that they have been lied to, and that the ones who did not come have lost a lot.	If an Arab country did this about France or Germany or others, it will not be accepted.
Some media reporters were broadcasting from Qatar and spreading lies like “You are not allowed to film in Qatar”.	Those were violating human rights law in Qatar by filming people without their permission and by trespassing to private properties. The police told them just that.	If an Arab or Muslim reporter tried to do the same in other countries, he will probably be arrested and charged for trespassing, violating people’s rights and spreading false information and God knows what.

Source: Author’s own construction based on FGD conducted

5.3.2 International fans image

The image of some football fans (pre-event) is quite negative in most view shared by participants. This includes viewing those fans as disrespectful and behaving in an uncivilized and violent manner. During the event, Citizens have opportunities to see and sometime talk with fans from different countries. The image was impacted by those interactions, as indicated by many participants in the FGD. Examples of local community’s perception pre-event and post-event about the football fans visitors coming from some countries are shown in Table 14. below.

Table 14. Citizens' initial perception and after-math perception of foreign fans participating in FIFA 2022

Description of Western Fans before the event	Why?	Did it change post-event?
Violent.	From following their tournaments over TV.	In Qatar, no violence was committed.
Hate and rage.	Watched in TV and internet their actions and words at previous tournament.	Some fans showed kindness and smiles and cooperation with others – they look happy and having good time.
Dirty – will trash the stadium and Qatari beautiful places.	Have seen what they do in their countries during matches.	Japanese showed amazing positive image when they cleaned the stadium – and anyway Qatar had a good system installed that no trash was seen.
Racists and disrespectful - mixing freedom for offensive acts and violating others' rights.	Read and watched how they acted in other tournaments and what they said even about their own team members coming from other origins.	Some of them at least showed respect to the host country, its traditions and people in general.
Some have agenda against Qatar.	Read on the internet and saw videos made by westerns, full of lies and prejudice about Qatar.	Some of them at least broadcasted the truth about Qatar the way it is and even told others that they have all been lied at (at home) to prevent them from traveling to Qatar.
Drunk and loud.	Read on the net and saw on TV in previous FIFA and other games that took place in other countries.	Most behaved well. Drinking is prohibited in stadiums and public.
Prejudice and hate towards Muslims and Arab.	Some media has long history of showing that, especially just before the hosting of the tournament in Qatar.	Some participants broadcasted true image of Qatar and its people and even expressed love and appreciation of the hospitality.
Disrespect to women and their human rights.	News show disrespect and attacks on Muslim girls in public places and calling them bad names and attempting to remove their headscarves. Also, laws issued by some countries that force certain clothes and outfits on women and girls against their will.	The opening ceremony celebrated local Qatari clothes. Some foreign women showed interest to know Qatari traditional dresses. Even some tries head scarves to show respect. In metro, some fans showed respect to Qatari ladies using the metro.

Source: Author's own construction based on FGD

5.3.3 Main perception

From the analysis and discussion above, perception of Qatari Citizens of impacts on DS from hosting a M-SE (22nd FFC in our case) appears to be both negative and positive, before the event started. Socio-cultural impacts seem to be the most valued ones among Citizens. Most negative impacts revolve around disrupting the beautiful life Qatari have with large number of inflow of foreigners with potential of inflecting negative impacts to the country and its people, especially children. Table 13 Below lists main items mentioned by participants. Positive perception summed from FGD revolves around what Qatar did, will do and capable of doing. Examples are listed in Table 15. Below. These findings are used in developing the empirical study and deciding on main constructs and elements to be tested in the 5-point Likert questionnaire.

Table 15. listing main categories for Qatari Citizens negative and positive perception pre-event
Perception (-) before the event - Categories

- Pushing FIFA Rules against local culture.
- Imposing foreign Traditions.
- Large Inflow number.
- Leap for Haters inside.
- Leap for Events abusers.
- Citizen's lifestyle disruption (congestion, traffic, overcrowding).
- Inflation in prices and living cost
- Pushing LGTB agenda.
- Event fails due to media smearing against Qatar.
- Compromising peace, freedom, and identity in Qatar.
- Disrespecting Citizen's beliefs, traditions and values.
- Visitors will be prioritized over Citizens.

Perception (+) before event – Categories

- Qatar will protect its people
- Many beautiful places created for Citizens and guests
- People will see how beautiful and advanced Qatar is
- People will know the truth about Qatar
- Qatar will become centre of the World attention
- The country will have entertainment events

Source: Author's edition

5.4 Results from qualitative SSI

Although the SSI is conducted after the empirical study, its purpose is to inform the discussion of the results of the empirical study and find potential implementations of those results. Therefore, I decided to present it before the empirical study section. Experts in the study area were consulted in semi-structured interviews (SSI) settings both to help in interpretations of the results and understand potential implications of the study. Main fields covered were academic research, especially in fields of perception and psychic income, legacy, identity, culture, NGO, youth and sport. A dedicated SSI was assigned for each field, to make best use of experts' time in in-depth discussions in their fields. Table 16. main results obtained from different experts (the detailed of participation in the SSI can be found in Table A3. in Appendix 8.7).

Table 16. Main questions and summary results obtained from the SSI

Main Questions	Main explanations
Why did negative environmental impacts receive less weight in Citizens' and Residents' perception?	Protective of their country's achievements & awareness of sustainability advanced technologies used by Qatar in care for the environment & most pollution and climate change impacts come from the west and high industrial countries.
What is the legacy intended from the hosting? What legacy was achieved?	To show the true image of Qatar & Change the long-lived stereotyping and prejudice against Islam and Arab & to show the real treasure of Qatar which is not its economic wealth, but its Islamic and Arabic values, civilized ethics and generosity and openness
Why was substantial weight placed on negative impacts on identity, values and cultural aspects, but not the environment?	Environment often linked to cleanliness and not leaving waste, that Qatar will take care of, regardless of the behavior of the guests, Qatar's ban on drinking in public places prevented chaos, and vandalism. The negative impact on society and local culture is completely different story: great concern for their highly valued identity, heritage, country, and society, in light of history of possible negative influences from the West, because People continued to discriminate against Arabs and Muslims in some European countries showing disrespect towards Muslim women and their freedom and right to decide what to wear. A concern that FIFA would impose matters on Qatar that were against Qatari religion, culture, and the moral values of Qatari society.
Community attachment did not receive high weight in participants' perception – why?	Citizens have a sense of national unity without the need for activity. While the Resident appreciated this impressive global event that they were part of and were able to represent Qatar in as proud people of Qatar and work together to show the visitors who they are as Arab, Muslims, and people of Qatar.
Why is correlation between trust in government and support for hosting strong at the FGD, but not confirmed by the Empirical study?	Mediating factors like personal satisfaction, self-pride and confidence, community pride, identity pride, and the overwhelming success and achievements by Qatar probably are the strongest incentive for supporting hosting more events.
Why do negative impacts (especially socio-cultural and environmental) have more impact on support than positive impacts?	Qataris (and Residents) have great attachments to their unique culture enshrined in Islam faith and Arabic identity. The West has a long history (still existing) of stereotyping Arabs and Muslims in their media and actions in their countries. With the outrageous biased and false smearing of Qatar , in an attempt to stop the hosting of FIFA 2022 or pressurize fans and institutions not to participate in Qatar, in a hope to make the event fail, alarmed Qatari local community to have concerns about some visitors from certain countries far and close. This results in locals insecure feeling towards visitors, especially coming in large numbers, making them even more protective towards the culture and the local society, especially children.

Source: Author's own construction

5.5 Results from the Survey Data

This section discusses the empirical study's validity and reliability, descriptive statistics of items and dimensions, comparison between Citizens and Residents results, and results of testing the

study hypotheses. The results of each construct are also discussed together with the correlations between them according to the hypotheses discussed in Chapter 3. Direct and indirect effects in the model for Residents are presented and discussed first for Citizens then for residents. This is followed by a comparison between the two. Effect of Sociodemographic Characteristics on the Values of Examined Dimensions follows and ending with the summary of results subsections including hypotheses tests results. Interpretation of the empirical study results is presented in conjunction with results from other methods, including SSI, FGD and literature review.

5.5.1 Validity and Reliability of Measurement (Outer) Model

This section discusses the validity and reliability of constructs used in the study and provides descriptive statistics for the constructs and items in each construct. Content validity of constructs and descriptive statistics for items and constructs is shown in Table A5 for Citizens model & for Residents in Table A6 (in the Appendices 8.9 & 8.10 respectively). During the initial analysis, it was found that the theoretical model of the study could not be fully analysed. A high correlation ($r=0.860$) between trust in the organizing committee and trust in the government was identified as problematic, indicating potential multicollinearity or a lack of discriminant validity. As a result, trust in the organizing committee was excluded from the Citizens' model.

Several levels of analysis were needed to create a summary of the data collected in the empirical study. The first level was done on item level, looking for any abnormality. This analysis was important as it helps clean up the data for the next stages.

For Citizens participants, as shown in Table 17, the Composite Reliability (CR) values for all constructs are high, indicating strong internal consistency. The Average Variance Extracted (AVE) values exceeding 0.50 demonstrate good convergent validity.

For the constructs ECO- (Citizens' perception of negative economic impacts) and PVDS (personal valuation of destination sustainability) Cronbach's alpha values are low (0.558 and 0.560, respectively). However, the constructs are considered reliable based on Composite Reliability (CR) and demonstrate convergent validity based on Average Variance Extracted (AVE), making them acceptable for further analysis. The low Cronbach's alpha values are primarily due to the small number of items in these constructs (e.g., PVDS contains only two items).

For the construct "Trust in Government," the Cronbach's alpha is close to the threshold value of 0.7. In this case, the CR and AVE values also support the reliability and validity of the construct, making it suitable for further analysis.

Table 17. Internal Consistency Reliability and Convergent Validity of Constructs in the Citizens Model

Construct	Cronbach's alpha	CR	AVE
CUL+	0.729	0.846	0.647
CUL-	0.807	0.873	0.632
ECO+	0.711	0.836	0.632
ECO-	0.558	0.765	0.523
ENV+	0.706	0.830	0.620
ENV-	0.840	0.893	0.676
PVDS	0.560	0.820	0.695
PSYCHIC INCOME	0.855	0.912	0.775
SUPPORT	0.787	0.862	0.610
TRUST IN GOVERNMENT	0.679	0.862	0.757

Source: Author's calculations

For Residents participants, as shown in Table 18. (below), the Composite Reliability (CR) values for all constructs are high, indicating strong internal consistency. The Average Variance Extracted (AVE) values exceeding 0.50 demonstrate good convergent validity.

For the construct PVDS (personal valuation of destination sustainability), Cronbach's alpha value is low (0.560). However, the construct is considered reliable based on Composite Reliability (CR) and demonstrates convergent validity based on Average Variance Extracted (AVE), making it acceptable for further analysis. The low Cronbach's alpha values are primarily due to the small number of items in the construct (only two items).

For the construct ECO- (Residents' perception of negative economic impacts), and TRSTORG (trust in organization committee), the Cronbach's alpha values are close to the threshold value of 0.7 (0,695 and 0,696 respectively). The CR and AVE values for both constructs also support the reliability and validity of the construct, making both constructs suitable for further analysis.

Overall, in the Residents model, the values in Table 18 indicate strong reliability and validity for all constructs used in the model.

Table 18. Internal Consistency Reliability and Convergent Validity of Constructs in the Residents Model

Construct	Cronbach's alpha	CR	AVE
CUL+	0.792	0.866	0.685
CUL-	0.803	0.864	0.559
ECO+	0.776	0.856	0.668
ECO-	0.695	0.825	0.613
ENV+	0.817	0.879	0.645
ENV-	0.847	0.897	0.686
PVDS	0.603	0.776	0.543
PSYCHIC INCOME	0,803	0,871	0,631
SUPPORT	0,721	0,827	0,546
TRSTORG	0,696	0,865	0,763
TRUST IN GOVERNMENT	0,766	0,894	0,809

Source: Author's calculations

Figure 14. below illustrates Mean values of the constructs for both Citizens and Residents participants in the study. The values show differences between Citizens and Residents, especially in relevance to perception of negative impacts on DS, and Support for hosting the M-SE. The Citizens' model does not include the TRSTORG (Trust in Organizing Committee) dimension. Citizens show higher perception of negative environmental, economic and socio-cultural impacts on DS. Residents, however, show more Support, PVSD and Psychic Income.

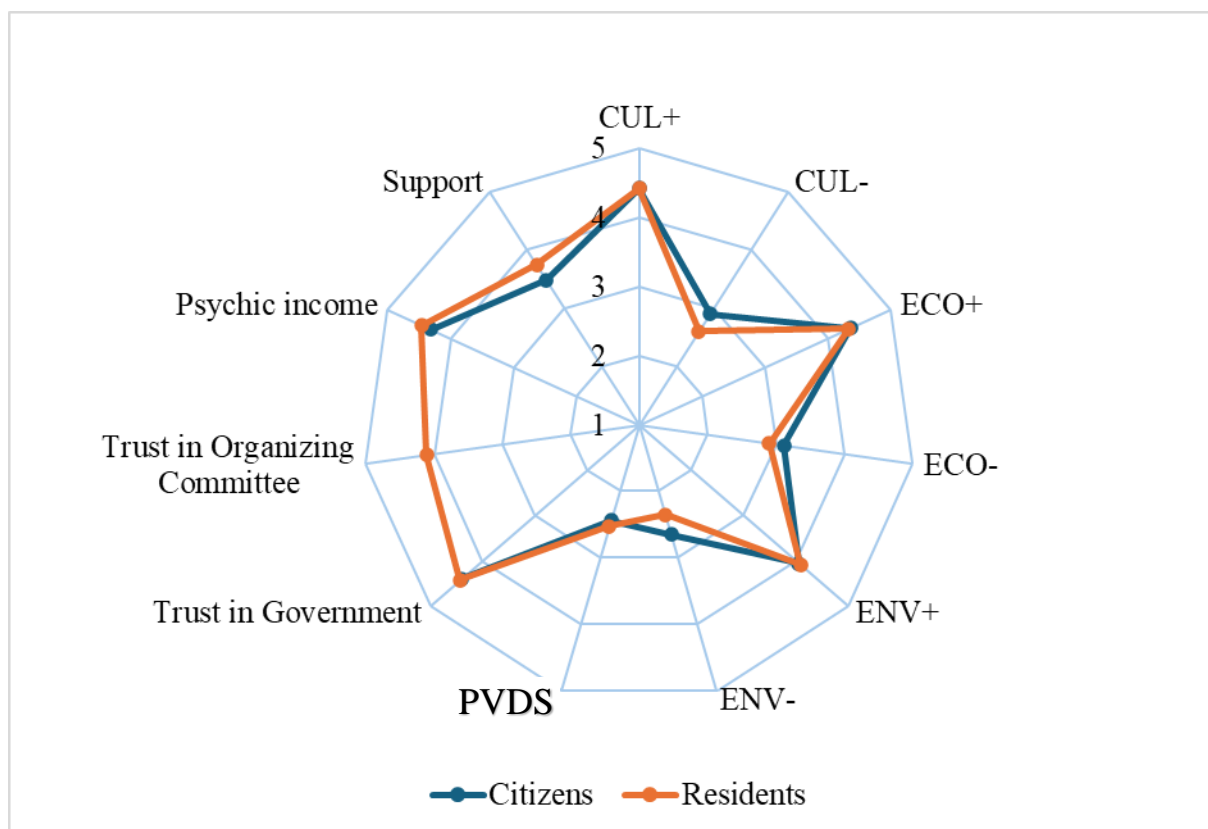


Figure 14. Mean values of the constructs for Citizens and Residents
(1 = strongly disagree, 5 = strongly agree)

5.5.2 Descriptive Statistics of Items and Dimensions and Socio-demographic

In this section, results of the 5-point Likert scale survey are presented and grouped to show the socio-demography of the participants, followed by results from main dimensions of the study. In this section socio-demographic data of participants is presented for Citizens first, followed by the same for Residents. This is followed by results corresponding to both Citizens and Residents groups in relation to the research dimensions and items. Results from Citizens' participants in the empirical study are presented first in this section, followed by the results from the Residents (non-nationals) for each dimension.

This section will be followed by a section comparing both Citizens and Residents (section 5.5.3). The results from direct and indirect relationship analysis according to the hypotheses of the study will be discussed in another section (5.5.4).

Out of the 885 questionnaires filled, 520 were fully filled. Only 515 of that were valid after data validating, preparation and cleaning process. Of that, 367 were filled by Qatari Citizens, and 148 by Residents in Qatar. A total of 515 surveys are included in the cumulative sample for analysis, and the focus is on the 367 Qatari nationals in comparison with qualitative study results, especially the FGD. The sociodemographic characteristics of the sample show participants covered the seven municipalities, with 45% of participants (234) from Doha the capital, followed by Al Rayyan (85) the second populated municipality in Qatar. Details of sample description follow.

Study Dimensions Results

The study dimensions and items are discussed for Citizens and Residents groups separately in the following paragraphs.

Citizens

Personal valuation of Destination Sustainability (**PVDS**) was tested for all Citizens participants. 66.2% of participants never volunteered in an NGO to serve the community. Around 87.5% of participants showed awareness and concern that tourism should have social benefit for the local community, especially in the form of training and jobs. 88.3% of participants considered the protection and support to SMEs not less important than that for big national projects. 21.0% consider economic growth to be the priority even if it meant sacrificing the environment and some social aspects. Around 55.3% of participants believed that environmental legislation should focus on recycling and events rather than preventing pollution from source, and 19.1% did not object to this notion nor agreed to it. 28.7% of participants considered local identity and culture to belong to history which makes it less relevant to modern era, and therefore culture should not be used as an obstacle of development, while around 54.4% disagreed with this notion. On the other hand, around 87.8% believe that by preserving local identity and culture, suitable tourism can be welcomed with great success.

From the personal valuation perspective, Qatari seem have high valuation of destination sustainability attributes. They showed awareness and concern about socio-cultural DS as well as economic DS. Environmental DS was important but to a lesser level than the other two. Citizens place high weight on personal valuation of DS concerning the importance of benefits to local community and the importance of protecting local's values and culture. Only 28.3% consider culture and identity as old history and shouldn't be used as obstacles for development. 54.8% disagreed. The environmental aspect of DS is considered important, but the awareness scored less, as only 26.2% thought that preventing pollution is more important than holding environmental events for instance. However, only 20.2% supported economic advancement even if it is on account of environment and society. 62.7% disagreed with that notion.

Socio-cultural (and socio-economic) benefits to the local community scored high weight from the perspective of participants. 87.8% agreed that by protecting own culture and identity, suitable tourism can be attracted. 88.8% agreed that supporting local SMEs is not less important than big national projects, and 86% thought that local SMEs can benefit from hosting M-SE if the event uses their services and products. 88.1% of participants thought event hosting and tourism should benefit the local community with jobs and training opportunities for instance. 91.2% believed that Qatar's success in hosting the first FIFA in MENA region created a legacy to pass to children in Qatar.

90.8% thought that hosting will facilitate cultural exchange between people in Qatar and other nations and giving Qataris an opportunity to introduce their culture and values. 90.2% believed that hosting will improve public services and infrastructure like roads and public places and present the local community with recreational sites.

The perception of **economic impact** on destination sustainability especially in relevance to tourism was tested. Majority of participants thought that hosting the M-SE will make Qatar a tourism destination (89.1%) and will improve Qatar's image internationally (83.6%). 89.2% thought that the built tourism infrastructure and good services will attract more in country tourism or staycation.

34.1% believed that the image of Qatar internationally could be destroyed if any mistake happened while hosting the event, or in case of events failure. 39.5% thought that the financial cost of the hosting will outweigh any local economic benefits.

Participants' perception of positive and negative environmental impacts on destination sustainability were studied. For positive environmental impacts, 81.5% thought that Qatari lifestyle will change to a more sustainable one after the event, and 77.2% agreed that the event will result in spreading environmental awareness among Residents and visitors. 83.7% agreed that planning to host the event will bring green cities, green buildings, green transport technologies which will continue to exist in Qatar after the event. 77.9% thought that hosting the M-SE will promote administrative procedures in Qatar for environmental protection such as recycling and preventing pollution. In general, more than three quarters of the participants believed that hosting the event has positive environmental impacts on destination sustainability.

When it came to the negative impacts of hosting much less agreement was found. 26.4% of the respondents thought the hosting of M-SE can cause environmental pollution such as in air and water, and even noise and visual pollution. Further, similar percentages thought that the activities related to the event and its preparation could cause negative environmental impacts such as waste, such as high carbon foot-print due to travel, constructions, waste production and high energy consumption (26.4%), and 24.3% believed that constructions related to hosting have negative impacts on nature and natural resources. In general, only 24.5% believed that hosting M-SE has negative environmental sustainability impacts. Altogether it confirms that around one quarter of the participants consider the environmental impacts of hosting an M-SE on DS. This can be understood further in light of the DA (Appendix 806, Table A2), as the state envisions "agile and comprehensive legal system that protects all elements of the environment, responding quickly to challenges as they arise" (QNV2030, 2008), together with awareness and strong institutions and tools as its means for environmental protection.

The perception of socio-cultural positive and negative impacts is interesting. Regarding negative social impacts, participants showed more perception of negative impacts than shown for environmental ones. 60.0% believed that hosting the event could result in piece inflation with another 20% indicating neutrality but not disagreeing with the notion. 34.1% indicated that if the event failed then it will reflect badly on the image of Qatar internationally, and 20.2% indicating neutrality but not disagreeing with the notion. 39.5% indicated worries about negative impacts on children from the mass attendees of the event from different places and cultures, and 37.3% believed that the hosting could result in road congestion and overcrowding, while 35.4% agreed that vandalism and theft is among negative impacts of hosting. Quality of life of the Residents and interruption of their lifestyle and quality of life is believed to be a possible impact of hosting by 29.7% of participants.

Participants' perception of negative economic impacts on destination sustainability was found to be 39.5% of the population believing that the high financial cost of hosting the FFC outweighs any possible economic gains, with 25.9% of participants not objecting to the notion. 43.0% believed that hosting may imposes on Qatar's government things compromising local culture, identity, and values. It is worth noting that this represents the Qatari Citizens' belief after the event that was successful and showed them respect to their traditions as stated by many in FGD. It is much higher than that of the Residents as will be seen in the next section. This could reflect the importance and high valuation the Citizens of Qatar place in their culture, traditions, identity and values.

Studying **psychic income** felt by participants, with confidence and pride of their country's logistic and financial capability to succeed in hosting such a gigantic international event and make its people proud (89.9%) and building a legacy for generations to come (90.5%). Similarly, high self-esteem, confidence and pride of Qatar's capability of success and achieving miracles in any M-SE it decides to host (85.0%), therefore should host more international events. This explains what was said in some of the FGD about how the world needs Qatar to host more events of that high standards that can be inspiring for others.

Excitement was felt by most participants, with 81.2% indicating excitement during FFC 2022, and being excited about hosting more events, and 85.8 % believing that the amount of excitement Citizens lived during that hosting is overwhelming and they want to live this feeling again.

Regarding infrastructure, 90.2% believed that the hosting of the FFC 2022 will result in beautiful hotels and advanced tourism services and infrastructure supporting in country tourism, while 60% of those gave this belief the highest weight (strongly agree). Furthermore, 88.3% of participants in the hosting of M-SE felt the impact of improving public services and city infrastructure like roads and public places and presenting the residents with recreational sites, with 50.0% of participants agreeing strongly with this.

Many participants in the FGD mentioned their positive feeling about them being known internationally, so that when they travel anywhere, they do not need to explain Qatar in terms of other countries. Further, people will treat them well without prejudice and unfair stereotyping. In the survey 83.6% of participants thought that hosting international M-SE will improve Qatar's image internationally, and 89.1% thought that hosting international M-SE will promote Qatar as an international tourism destination. Further, 66.0% did not think that the image could be destroyed by mistakes that could take place during the event.

71.4% thought that hosting M-SE will strengthen societal bond and national unity.

Investigating **institutional trust** held by Citizens towards their government and the organizing committee of the event regarding the hosting of a M-SE, trust in Qatar's government was very clear with 88.8% having full trust in the government's decisions that will prioritize the benefits and interest of the country and the Citizens. Similarly, 89.9% indicated full trust in their government's capability to succeed in hosting the huge event and make its Citizens proud. However, 41.1% believed that the negative impact of hosting M-SE is inevitable regardless of trust in own government; and 43.0% thought that hosting itself and the international sports federations and event's organizers imposes on the host government things against the local's culture, identity, and values. Yet, 59.6% of participants believed that the government consulted people at different stages, while 25.3% remained neutral and only 15.0% thought the government did not. 87.8% had full confidence that Qatar will study the situation and decide what is best for the sake of our country, Citizens and will protect local tradition and values and natural resources.

The trust in the organizing committee was good, but not as high as their trust in their government. 82.6% believed that the organizing committee has long experience and skills to be able to take wise decisions at different challenges, and 76.3% believed that the committee will prioritize the Qatari society's interest in any decision, while 57.0% believes that priority will be for the committee's own success and financial and media gains. 24.7% believed that the organizing committee of M-SE event is foreigner to the country and does not understand locals' traditions and values.

Support to hosting M-SE and future aspiration of participants was also studied. Regarding whether or not more M-SE events should take place in the future, 85.0% of Citizens participants believed that Qatar should host more M-E in the future. 31.9% of Citizens' participants preferred that future M-E should focus on culture, science, economy and not just sport.

73.6% of Citizens participants believed that prior hosting any future M-E, comprehensive study should take place with public consultation and community participation. In addition to 59.6% of Citizens participants indicating that the government consulted people at different stages of FFC 2022. This should be read in conjunction with participants' belief that hosting M-SE has negative impacts (41.4%), regardless of their full trust in their government (87.8%), and with the belief that the hosting itself and the International Federations will impose things against locals' culture and identity (43.0%), and the belief that local community should benefit from tourism in terms of training and job opportunities and more (87.51%), and that SMEs in Qatar will benefit from hosting if their services and products were used instead of foreign firms (85.3%).

17.4% thought that hosting FIFA 2022 should have never happened or any other M-SE in the future.

85.0% believed that Qatar should host more M-SE because Qatar is capable of succeeding and excelling and achieve miracles

Second Residents

Personal valuation of Destination Sustainability (**PVDS**) was tested for all Residents participants. 62.0% of participants never volunteered in an NGO to serve the community. 89.0% of participants showed awareness and concern that tourism should have social benefit for the local community, especially in the form of training and jobs. 90.6% of participants considered the protection and support to SMEs not less important than that for big national projects. 16.2% consider economic growth to be the priority even if it meant sacrificing the environment and some social aspects. 48.7% of Residents participants believed that environmental legislation should focus on recycling and events rather than preventing pollution from source, and 21.6% did not object this notion nor agreed to it. 27.2% of participants considered local identity and culture to belong to history which makes it less relevant to modern era, and therefore culture should not be used as an obstacle of development, while around 57.5% disagreed with this notion. On the other hand, around 85.8% believe that by preserving local identity and culture, suitable tourism can be welcomed with great success.

From the personal valuation perspective, Qatari seem have high valuation of destination sustainability attributes. They showed awareness and concern about socio-cultural DS as well as economic DS. Environmental DS was important but to a lesser level than the other two. Citizens place high weight on personal valuation of DS concerning the importance of benefits to local community and the importance of protecting local's values and culture. Only 16.2% consider culture and identity as old history and shouldn't be used as an obstacle for development. 57.5% disagreed. The environmental aspect of DS is considered important, but the awareness scored less, as only 27.7% thought that preventing pollution is more important than holding environmental events for instance. However, only 16.1% supported economic advancement even if it is on account of environment and society. 71.6% disagreed with that notion.

Socio-cultural (and socio-economic) benefits to the local community scored high weight from the prospective of participants. 85.8% agreed that by protecting Qatari culture and identity, suitable tourism can be attracted. 90.5% agreed that supporting local SMEs is not less important than big national projects, and 91.2% thought that local SMEs can benefit from the hosting of M-SE if the event uses their services and products. 89.1% of participants thought event hosting and tourism should benefit the local community with jobs and training opportunities for instance. 92.5 % believed that Qatar's success in hosting the first FIFA in MENA region created a legacy to pass to children in Qatar.

91.9% thought that hosting will facilitate cultural exchange between people in Qatar and other nations and giving Qataris an opportunity to introduce their culture and values. 88.5% believed that hosting will improve public services and infrastructure like roads and public places and present the local community with recreational sites.

The perception of **economic impact** on destination sustainability especially in relevance to tourism was tested. Majority of participants thought that hosting the M-SE will make Qatar a tourism destination (91.2%) and will improve Qatar's image internationally (92.6%). 88.5% thought that the built tourism infrastructure and good services will attract more in country tourism or staycation.

27.0% believed that the image of Qatar internationally could be destroyed if any mistake happened while hosting the event, or in case of events failure. 25.0% thought that the financial cost of the hosting will outweigh any local economic benefits.

The participants' perception of positive and negative environmental impacts on destination sustainability was studied. For positive environmental impacts, 86.5% thought that Qatari lifestyle will change to a more sustainable one after the event, and 81.1% agreed that the event will result in spreading environmental awareness among Residents and visitors. 84.4% agreed that planning to host the event will bring green cities, green buildings, green transport technologies which will continue to exist in Qatar after the event. 78.4% thought that hosting the M-SE will promote administrative procedures in Qatar for environmental protection such as recycling and preventing pollution. In general, more than three quarters of the participants believed that hosting the event has positive environmental impacts on destination sustainability.

When it came to the negative impacts of hosting, much less agreement was found. 15.5% of the respondents thought the hosting of M-SE could cause environmental pollution such as air and water, and even noise and visual pollution. Further, similar percentages thought that the activities related to the event and its preparation could cause negative environmental impacts such as waste, such as high carbon foot-print due to travel, constructions, waste production and high energy consumption (15.5%), and 12.8% believed that constructions related to hosting could have negative impacts on nature and natural resources. In general, only 16.9% believed that hosting M-SE has negative environmental sustainability impacts.

The perception of socio-cultural positive and negative impacts is interesting. Regarding negative social impacts, participants showed more perception of negative impacts than shown for environmental ones. 52.7% believed that hosting the event could result in piece inflation with another 20% indicating neutrality but not disagreeing with the notion. 27.0% indicated that if the event did not succeed then it will reflect badly on the image of Qatar internationally, and 17.6% indicating neutrality but not disagreeing with the notion. 28.4% indicated worries about negative impacts on children from the mass attendees of the event from different places and cultures, and 28.3% believed that the hosting could result in road congestion and overcrowding, while 23.6% agreed that vandalism and theft are among negative impacts of hosting. Quality of life of the Residents and interruption of their lifestyle and quality of life is believed to be a possible impact of hosting by 15.5% of participants.

The participants' perception of negative economic impacts on destination sustainability were found to be 25.0% of the population believing that the high financial cost of hosting the FFC outweighs any possible economic gains, with 34.5% of participants not objecting to the notion. 27.7% believed that hosting may imposes on Qatar's government things compromising local culture, identity, and values.

Studying **psychic income** felt by participants, with confidence and pride of their country's logistic and financial capability of succeeding in hosting such a gigantic international event and making its people proud (91.2%) and building a legacy for generations to come (92.5%). Similarly, high self-esteem, confidence and pride of Qatar's capability of success and achieving miracles in any M-SE it decides to host (90.5%), therefore should host more international events. This explains what was said in some of the FGD about how the world needs Qatar to host more events of that high standards that can be inspiring for others.

Excitement was felt by most participants, with 88.5% indicating excitement during FFC 2022, and being excited about hosting more events, and 90.6% believing that the amount of excitement Citizens lived during that hosting is overwhelming and they want to live this feeling again.

Regarding city infrastructure, 88.5% believed that hosting the FFC 2022 will result in beautiful hotels and advanced tourism services and infrastructure supporting country tourism, while 60% of those gave this belief the highest weight (strongly agree). Furthermore, 89.2% of participants in the hosting of M-SE has the impact of improving public services and city infrastructure like roads and public places and present the Residents with recreational sites, with 53.4% of participants agreeing strongly with this.

Many participants in the FGD mentioned their positive feeling about them being known internationally, so that when they travel anywhere, they do not need to explain Qatar in terms of other countries. Further, people will treat them well without prejudice and unfair stereotyping. In the survey 92.6% of participants thought that hosting international M-SE will improve Qatar's image internationally, and 91.2% thought that hosting international M-SE will promote Qatar as an international tourism destination. Further, 73.0% did not think that image can be destroyed by mistakes that could take place during the event.

69.6% thought that hosting M-SE will strengthen societal bond and national unity.

Investigating **institutional trust** held by Citizens towards their government and the organizing committee of the event regarding the hosting of a M-SE, trust in Qatar's government was very clear with 87.9% having full trust in the government's decisions that will prioritize the benefits and interest of the country and the Citizens. Similarly, 91.2% indicated full trust in their government's capability to succeed in hosting the huge event and make its Citizens proud. However, 22.0% believed that the negative impacts of hosting M-SE is inevitable regardless of trust in own government; and 27.7% thought that hosting itself and the international sports federations and event's organizers impose on the host government things against the local's culture, identity, and values. Yet, 62.2% of participants believed that the government consulted people at different stages, while 31.1% remained neutral and only 6.7% thought the government did not. 87.9% had full confidence that Qatar will study the situation and decide what is best for the sake of our country, Citizens and will protect local tradition and values and natural resources.

The trust in the organizing committee was good, but not as high as their trust in their government. 83.8% believed that the organizing committee has long experience and skills to be able to take wise decisions at different challenges, and 82.4% believed that the committee will prioritize the Qatari society's interest in any decision, while 56.8% believes that priority will be for the committee's own success and financial and media gains. 17.6% believed that the organizing committee of M-SE event is foreigner to the country and does not understand locals' traditions and values.

Support to hosting M-SE and future aspiration of participants was also studied. Regarding whether or not more M-SE events should take place in the future, 90.5% Residents participants believed that Qatar should host more M-E in the future. 25.7% Residents participants preferred that future M-E should focus on culture, science, economy and not just sport.

77.7% of Residents participants believed that prior hosting any future M-E, comprehensive study should take place with public consultation and community participation. In addition to 62.2% of Resident participants indicating that the government consulted people at different stages of FFC 2022. This should be read in conjunction with participants' belief that hosting M-SE has negative impacts (23.0%), regardless of their full trust in their government (87.9%), and with the belief that the hosting itself and the International Federations will impose things against locals' culture and identity (27.7%), and the belief that local community should benefit from tourism in terms of training and job opportunities and more (89.15), and that SMEs in Qatar will benefit from hosting if their services and products were used instead of foreign firms (91.2%).

11.5% thought hosting FIFA 2022 should never have happened nor any other M-SE in the future. 90.5% should host more M-SE because Qatar is capable of succeeding and excelling and achieve miracles

5.5.3 Comparison of Citizens and Residents

Gender ratio of participants is close for both Citizens and Residents with about 53% biased towards females. While 95% of Citizens' indications of household income were average or above, 82% of Residents indicated the same (Tables 8. & 10.). Education acquired is close with Citizens (80.1%) and Residents (81.1%) with tertiary of higher education. Most participants from both groups live in Doha, the Capital.

From previous sections, Citizens and Residents seem to have some similarities or closeness in their views regarding different dimensions of the study. In general Residents seem to be slightly more supportive of hosting M-SE, more excited about it, more believing in the legacy of hosting FIFA 2022, and perceiving less negative impact of hosting on DS (See Table 19. & Table 20. below for examples).

Table 19. examples comparing Citizens and Residents in terms of support for M-SE

Item	% Citizens Agreeing	% Residents Agreeing
Given its capacity for success, excellence, and miraculous feats, Qatar ought to host more M-SE events.	85.0%	90.5%
In general, I believe that during FIFA 2022, we experienced excitement that was beyond compare, and we wish to experience it once more.	85.8%	90.6%
I was excited about hosting FIFA 2022, and I am still excited about hosting more events.	81.2%	88.5%
I believe we have a legacy to leave for our kids because of Qatar's successful hosting of the first FIFA in the MENA region.	90.5%	92.5%

Source: Author's own construct from the empirical study results

However, the main noticeable differences are in three areas:

- (i) Citizens are noticeably more proactive of their culture, traditions, identity and culture.
- (ii) Citizens are more concerned that the hosting of M-SE can impose on Qatar terms that are not consistent with the Qatari culture, traditions, identity and values.
- (iii) Citizens are more concerned about possibility of negative impacts of hosting on children's values and identity

This all can be interpreted by the fact that Qatari Citizens are known for their conservative nature and love and great respect for their traditions and identity. Qatari children wear Qatari traditional 'Thob' (white outfit for men) together with 'Gutra and Iqal' (head cover for men) from early age, at school, community celebrations, and family events. This was evident at the opening and closing ceremonies of the FIFA 2022, the outfit of Amir of Qatar and his sons and all Qatari in the organizing team. The 'Bisht' (men gown) that the Amir of Qatar gifted Messi with the Cup in honor of his achievement reflected the valuation Qatari place in their traditions and identity.

Table 20. Examples of negative perception comparing Citizens and Residents in terms of support for M-SE

Item	% Citizens Agreeing	% Residents Agreeing
I believe that hosting a global M-SE may impose on our government things compromising our culture, identity, and values.	43.0%	27.7%
Weeks of hosting a gigantic global M-SE, in my opinion, will have negative effects on our everyday lives and quality of life.	29.7%	15.5%
My trust in my government is unaffected by my belief that hosting M-SE results in negative effects.	41.4%	23.0%
I am concerned about the negative effects, from the large influx of tourists coming from different cultures and behavioral norms, on our kids.	39.5%	27.8%

Source: Author's own construct from the empirical study results

The highest weight put by both Citizens on one item was “Qatar’s success in hosting the first FIFA in MENA region created a legacy to pass to children in Qatar”, as it scored 92.5 % by Residents and 90.5% by Citizens. Also, the belief that hosting will facilitate cultural exchange between people in Qatar and other nations and giving Qataris an opportunity to introduce their culture and values scored 91.9% among Residents and 90.8% among Citizens.

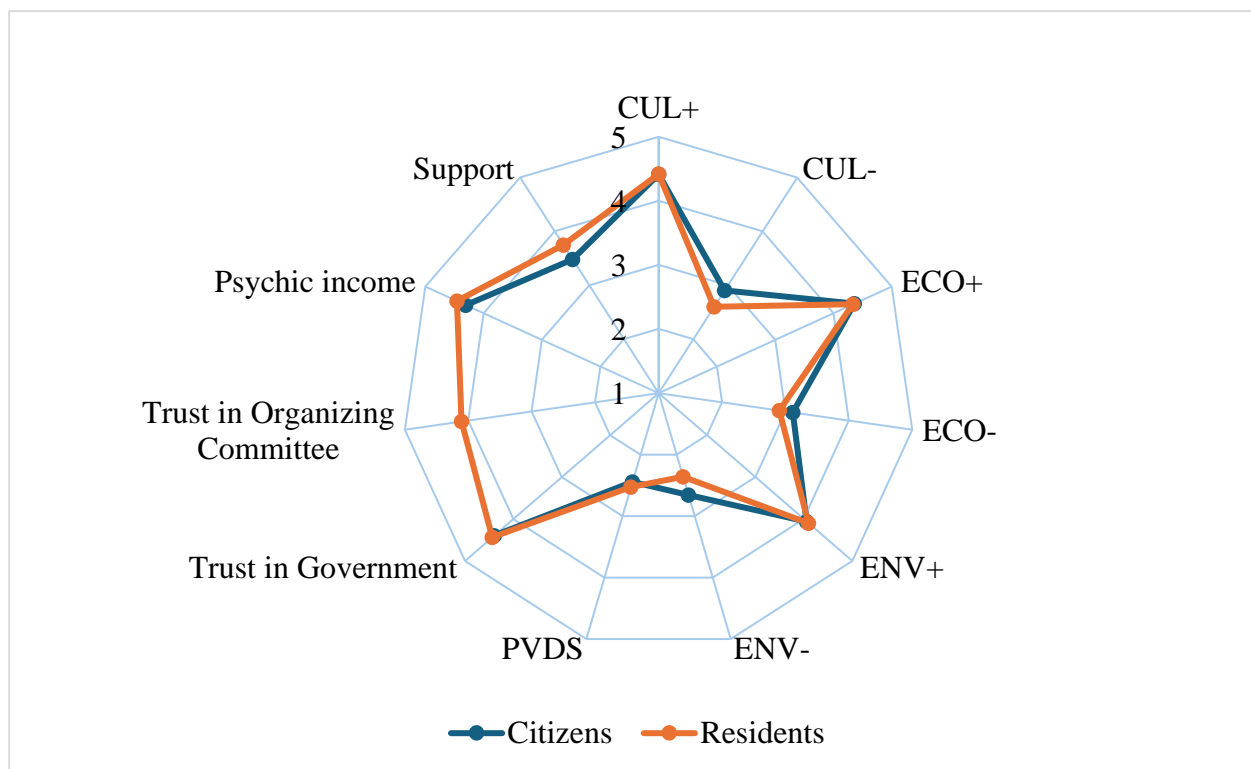
Testing the study hypotheses

To statistically test the relationships hypothesized in the theoretical model, Structural Equation Modeling (SEM) was employed using the Partial Least Squares (PLS) path analysis method with SmartPLS software. The hypotheses were tested with the Mann-Whitney test, Kruskal-Wallis test, Cronbach's test, and Dunn-Bonferroni post hoc test.

The first hypothesis pertains to the differences between Citizens and Residents, resulting in a total of 12 hypotheses specifically related to Citizens or Residents separately (One of these (H13) pertains to the differences among sociodemographic groups).

Differences in Qatari Citizens' and Residents' Perceptions of the Cultural, Economic, and Environmental Impacts of Hosting M-SE.

Hypothesis 1. Differences exist between Qatari Citizens and Residents in their perceptions of the positive and negative socio-cultural, economic, and environmental impacts of hosting M-SE. These differences extend to their personal valuation of destination sustainability, levels of trust in the government and organizing committee, psychic income felt due to hosting the M-SE, and overall support for hosting such events. (Figure 15.)



Note: The Citizens model does not include the Trust in Organizing Committee dimension

Figure 15. Mean values of the constructs for Citizens and Residents

Based on the results of the Mann-Whitney test (Table 21.), significant differences have been justified between Qatari Citizens and Residents in five of the ten examined dimensions. Residents evaluate cultural positive impacts higher ($Z = -3.216$, $p = 0.001$) compared to the Citizens, and the Citizens consider the negative socio-cultural impacts higher ($Z = -2.907$, $p = 0.004$) than Residents (Figure X). Qatari Citizens perceive the negative economic ($Z = -2.699$, $p = 0.007$) and environmental ($Z = -3.390$, $p < 0.001$) impacts of hosting M-SE more strongly than Residents. This contributes to Residents showing greater support for hosting such events compared to Citizens ($Z = -3.018$, $p = 0.003$).

Table 21. Results of the Mann-Whitney test comparing Qatari Citizens and Residents

	CUL+	CUL-	ECO+	ECO-	ENV+	ENV-	PDVS	Trust in Government	Psychic Income	Support
Mann-Whitney U	22292.0	22716.0	26739.0	23033.0	26084.0	21985.5	25080.5	25948.5	24791.5	22547.5
Wilcoxon W	89820.0	33742.0	37765.0	34059.0	37110.0	33011.5	92608.5	93476.5	92319.5	90075.5
Z	-3.216	-2.907	-0.279	-2.699	-0.705	-3.390	-1.361	-0.829	-1.591	-3.018
p-value	0.001	0.004	0.780	0.007	0.481	0.001	0.173	0.407	0.112	0.003

Source: Author's calculations

The results of the Mann-Whitney test revealed a significant **difference in psychic income** between Qatari Citizens and Residents only within Generation X ($Z = -3.445$, $p < 0.001$). Specifically, Residents reported a higher level of psychic income compared to Citizens. (Table 22. & Figure P16.)

These results do not agree with the conclusion of Ishac & Swart (2022) that studies youths 21 years old and below and found that psychic income is felt more among Citizens than Residents. From one of my SSI, the interpretation of results from the literature is more towards it is expected that Citizens will feel prouder and feel the benefit of improving the country's infrastructure for instance and the image of Qatar globally. This corresponds in my study to GenZ. Both found by Mann-Whitney test not to show significant differences between Citizens and Residents. The test revealed a significant difference in psychic income between Qatari Citizens and Residents, with the latter group reporting higher level of psychic income, but only within Generation X (44 - 53 years old), which is out of the scope of Ishac & Swart (2022). Furthermore, from discussions with other experts majoring in socio-cultural and psychological fields in two of the SSI conducted, the interpretation of feeling more psychic income among young Residents who are not Qatar nationals could be attributed to the sense of pride and belonging this global event brought to them, which probably was not felt towards their nationality of origin, or would have never be felt if they were not in Qatar. All of the Residents surveyed in the empirical study are Arab, coming from countries with challenging situations such as Palestine, Syria, Sudan and Yemen. And most of them consider Qatar as the only home they have due to difficulties in returning or due to the fact that they don't know the other homeland. Even in Ishac (2024) and Ishac et al. (2022), there was an emphasis on the influence of socio-cultural background on Residents on their perceptions. Further, the way the M-SE was conducted starting from the opening till closing involved, encouraged and supported the participation of Arab Residents as part of the host preparation, programs and execution. The poetry recited at the closing ceremony in classical Arabic (that unites all Arab) by the famous and much-loved Palestinian poet Al-Barghouthi is one example. This can also be interpreted by studies showing that psychic income components were felt differently by the same sample towards various major events happening in the same year or in the same place over a span of time (Wallstam & Kronenberg, 2022; Ishac, 2024). Further, some of the green technology used, used in the Climate-friendly event for instance, were the idea or the execution of Arab pioneers such as the nicknamed Dr. Cool, the mastermind behind the novel outdoor cooling technology, who is Sudan-born Dr. Abdul-Ghani (Arabwhoswho, 2024; InsideFIFA, 2019). Further, the Arab unity and celebration of the Arabic identity and Islamic values included Residents as much as it included nationals. The only difference is that, although the event might have confirmed all of that for Qatari Citizens, they knew that all the way, being nationals. However, the event gave the Residents a new feeling that they did not quite feel before hosting such a gigantic event and getting involved as part of the host. Therefore, it makes sense to find similar results in reference to feeling psychic income and does not necessitate having more psychic income just for being a Citizen, in the case of FIFA 2022. This interpretation is worthy of a follow up study to understand it fully, but for the purpose of this dissertation it gives a logical conclusion.

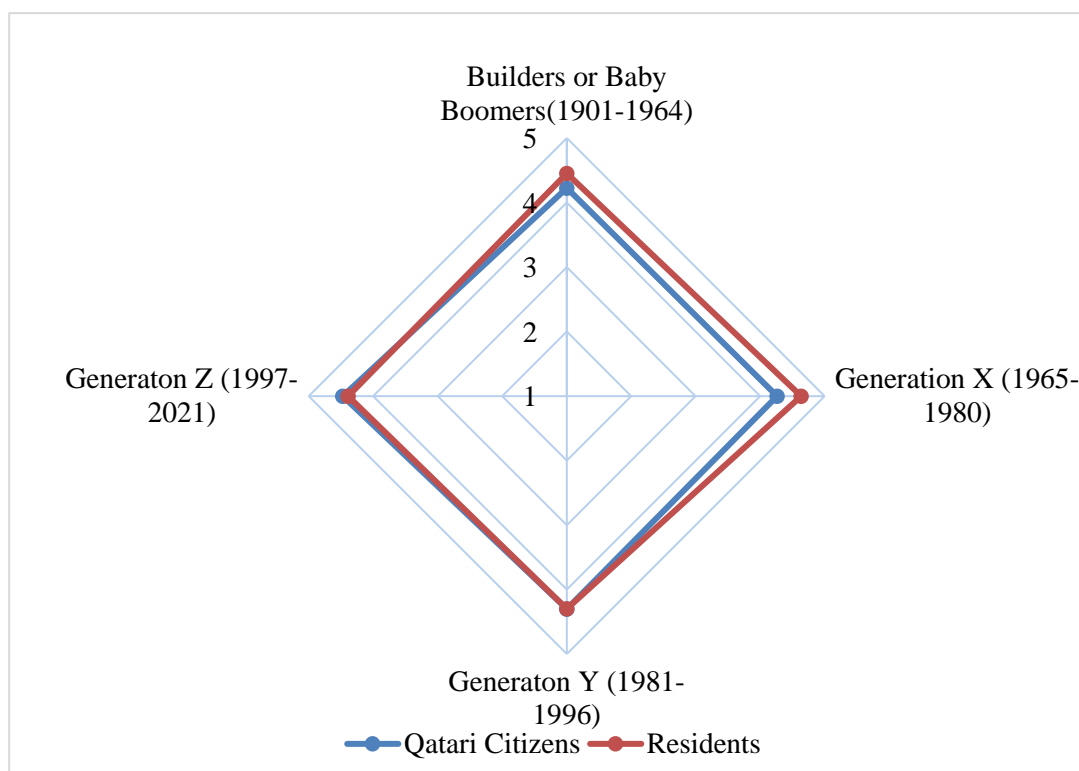


Figure 16. Mean values of the Psychic Income construct for Citizens and Residents Across Generations (1 = strongly disagree, 5 = strongly disagree). Source: Author's edit from Mann-Whitney Test

Table 22. Results of the Mann-Whitney test comparing Psychic Income Construct between Qatari Citizens and Residents

Generations	Psychic Income	
1 Baby Boomers & Builders (1901-1964)	Mann-Whitney U	187.000
	Wilcoxon W	890.000
	Z	-0.832
	Asymp. Sig. (2-tailed)	0.405
	Mann-Whitney U	2242.000
2 Generation X (1965-1980)	Wilcoxon W	8237.000
	Z	-3.445
	Asymp. Sig. (2-tailed)	0.001
	Mann-Whitney U	4586.500
	Wilcoxon W	6297.500
3 Generation Y (1981-1996)	Z	-0.483
	Asymp. Sig. (2-tailed)	0.629
	Mann-Whitney U	448.000
	Wilcoxon W	619.000
	Z	-0.743
4 Generation Z (1997-2021)	Asymp. Sig. (2-tailed)	0.458

a. Grouping Variable: Citizen status

Source: Author's calculations

The results of the Mann-Whitney test suggest that, among Citizens, there is no significant difference in the average values of the examined dimensions between individuals who volunteered in an NGO or social initiative and those who did not. (Figure 17.).

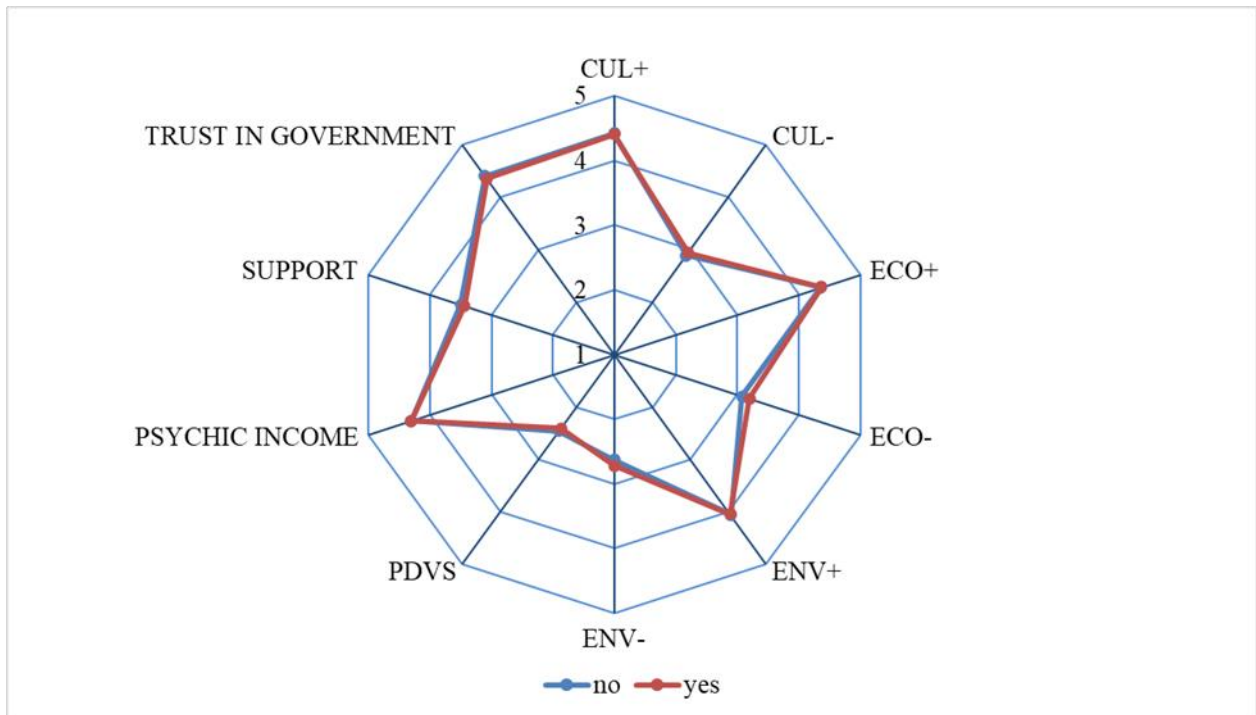


Figure 17. Comparison of construct mean values in relation to volunteering in NGOs or social initiatives to serve the community

The results of the Mann-Whitney test suggest that, among Residents, there is no significant difference in the average values of the examined dimensions between individuals who volunteered in an NGO or social initiative and those who did not.

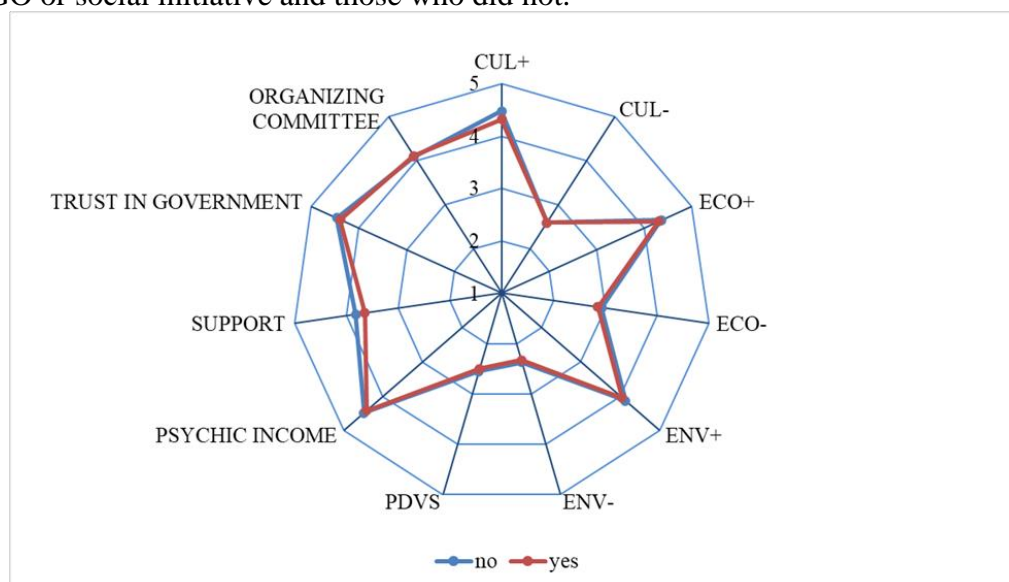


Figure 18. Comparison of construct mean values in relation to volunteering in NGOs or social initiatives to serve the community

5.5.4 Direct and indirect effects in the structural model for Citizens

In this subsection, results from hypothesis testing are presented. This includes comparison of Citizens and Residents based on the mean values of the examined dimensions, results of the structural model (direct and indirect effects) for Citizens and Residents separately. This is followed by comparison of sociodemographic groups based on the mean values of the examined dimensions among Citizens and Residents, in the next section.

The Perception of M-SE Hosting's Impacts on DS Hypotheses (Citizens)

Testing impacts of perception of positive and negative environmental, socio-cultural and economic impacts of hosting on destination sustainability hypotheses (H2 – H7), followed by testing impacts of PVDS (H8, H9), then psychic income (H10), institutional trust (H11, H12), and finally impact of sociodemographic factors (H13), the results are shown below for Citizens first then Residents. (Table 23 and Table 24 respectively)

Table 23. Path coefficients and significance tests for the Citizens' structural model

Hypothesis	Relation tested	Path coefficients	Standard deviation	T statistics	P values	Supported/not supported
H2	Env+ → Support	-0.054	0.055	0.974	0.330	Not supported
H3	Env- → Support	-0.104	0.062	1.687	0.092	Not supported
H4	Eco+ → Support	0.015	0.062	0.244	0.807	Not supported
H5	Eco- → Support	-0.134	0.056	2.384	0.017	Supported
H6	Cul+ → Support	0.167	0.073	2.302	0.021	Supported
H7	Cul- → Support	-0.309	0.064	4.804	<0.001	Supported
H8	PDVS → Support	-0.267	0.042	6.299	<0.001	Supported
H9a	PDVS → ENV- → Support	-0.027	0.017	1.555	0.120	Not supported
H9b	PDVS → ENV+ → Support	0.004	0.007	0.614	0.539	
H9c	PDVS → ECO- → Support	-0.021	0.012	1.683	0.092	
H9d	PDVS → ECO+ → Support	-0.002	0.010	0.213	0.831	
H9e	PDVS → CUL- → Support	-0.052	0.022	2.382	0.017	
H9f	PDVS → CUL+ → Support	-0.019	0.014	1.394	0.163	
H10	Psychic Income → Support	0.204	0.063	3.220	0.001	Supported
H11	Trust In Government → Support	-0.075	0.061	1.237	0.216	Not supported
H12	Trust In the Organizing Committee → Support	The Organizing Committee was excluded from the Citizens' model due to its high correlation with Trust in Government, rendering the hypothesis untestable.				

Source: Author's calculations

The level of Citizens' (Residents') perception of the negative environmental impacts of hosting M-SE on destination sustainability directly reduces their support for hosting such events.

The findings indicate that 5 out of the 11 hypotheses related to the structural model demonstrate statistical significance.

Hypothesis 2 – A higher perception of positive environmental impacts from hosting M-SE among Citizens increases their support for hosting such events.

Hypothesis 2 was not supported, as the results did not indicate a significant influence of the perception of positive environmental impacts from hosting mega-sport events on the support for organizing such events ($\beta = -0.054$, $p = 0.330$).

Hypothesis 3 – A higher perception of negative environmental impacts from hosting M-SE among Citizens decreases their support for hosting such events.

Hypothesis 3 was not supported, as the results did not indicate a significant influence of the perception of negative environmental impacts from hosting mega-sport events on the support for organizing such events ($\beta = -0.104$, $p = 0.092$).

Hypothesis 4 – A higher level of citizens' perception of the positive economic impacts of hosting M-SE on destination sustainability positively influences their support for hosting such events.

Hypothesis 4 was not supported, as the results did not indicate a significant influence of the perception of positive economic impacts from hosting mega-sport events on the support for organizing such events ($\beta = -0.015$, $p = 0.807$).

Hypothesis 5 – A higher level of Citizens' perception of the negative economic impacts of hosting M-SE on destination sustainability reduces their support for hosting such events.

The structured model for Citizens revealed that the level of Citizens' perception of the negative economic impacts of hosting M-SE on destination sustainability has a direct negative effect on their support for hosting such events ($\beta = -0.134$, $P = 0.017$).

And therefore Hypothesis 5 is supported by the data

Hypothesis 6 – A higher level of Citizens perception of the positive socio-cultural impacts of hosting M-SE on destination sustainability increases their support for hosting such events.

The structured model for Citizens revealed that Citizens' perception of the positive socio-cultural impacts of hosting M-SE on destination sustainability has a direct positive influence on their level of support for hosting such events ($\beta = 0.167$, $P = 0.021$)

And therefore Hypothesis 6 is supported by the data

Hypothesis 7 – A higher level of Citizens' perception of the negative socio-cultural impacts of hosting M-SE on destination sustainability reduces their support for hosting such events.

The structured model for Citizens revealed that Citizens' perception of the negative socio-cultural impacts of hosting M-SE on destination sustainability directly reduces their support for hosting these events ($\beta = -0.309$, $P < 0.001$)

And therefore Hypothesis 7 is supported by the data

Hypothesis 8 – A higher level of Citizens' personal valuation of destination sustainability positively influences their support for hosting M-SE.

The structured model for Citizens revealed that Citizens' personal valuation of destination sustainability has a direct positive impact on their support for hosting M-SE ($\beta = -0.267$, $P < 0.001$)

And therefore Hypothesis 8 is supported by the data

Hypothesis 10 – A higher level of Citizens' sense of psychic income positively influences their support for hosting M-SE.

The structured model for Citizens revealed that Citizens' sense of psychic income directly and positively influences their support for hosting M-SE ($\beta = 0.204$, $P = 0.001$)

And therefore Hypothesis 10 is supported by the data

Indirect (Mediating) Impacts on Support via PVDS (Citizens)

Hypothesis 9 – Citizens' personal valuation of destination sustainability indirectly affects their support for hosting mega-sport events (M-SE) through their perceptions of the events' environmental (9a, 9b), economic (9c, 9d), and socio-cultural (9e, 9f) impacts, both positive and negative.

The structural model for Citizens revealed that the personal valuation of destination sustainability indirectly influences support for hosting M-SE, but only in the context of negative socio-cultural impacts ($\beta = -0.052$, $p = 0.017$). The negative beta coefficient ($\beta = -0.052$) suggests that as Citizens perceive destination sustainability more positively, their concerns about negative socio-cultural impacts lead to slightly reduced support for hosting M-SE. In other words, Citizens who value sustainable practices at a destination may be more sensitive to the potential negative socio-cultural consequences of hosting large events. Hypothesis 9 was not supported.

Hypothesis 11 – A higher level of trust in government among Citizens has a positive effect on their support for hosting M-SE.

Hypothesis 11 was not supported, as the results did not indicate a significant influence of the level of trust in government among Citizens has a direct positive impact on their support for hosting M-SE ($\beta = -0.075$, $p = 0.216$).

Hypothesis 12 – A higher level of trust in the organizing committee among Citizens has a positive effect on their support for hosting M-SE.

The “Trust in Organizing Committee” was excluded from the Citizens' model due to its high correlation with Trust in Government, rendering the hypothesis untestable.

5.5.5 Direct and indirect effects in the structural model for Residents

Testing impacts of perception of positive and negative environmental, socio-cultural and economic impacts of hosting on destination sustainability hypotheses (H2 – H7), followed by testing impacts of PVDS (H8, H9), then psychic income (H10), institutional trust (H11, H12), and finally impact of sociodemographic factors (H13), the results are shown below for Residents.

The findings indicate that 4 out of the 11 hypotheses related to the structural model demonstrate statistical significance. None of the indirect effects of PVDS were supported. (Table 24.)

Table 24. Path coefficients and significance tests for the Residents’ structural model

Hypothesis	Relation tested	Path coefficients	SD Standard deviation	T statistics	P values	Supported/not supported
H2	Env+ → Support	0.011	0.096	0.117	0.907	Not supported
H3	Env- → Support	-0.086	0.089	0.960	0.337	Not supported
H4	Eco+ → Support	-0.026	0.095	0.269	0.788	Not supported
H5	Eco- → Support	-0.298	0.087	3.419	0.001	Supported
H6	Cul+ → Support	0.045	0.079	0.575	0.575	Not supported
H7	Cul- → Support	-0.203	0.097	2.097	0.036	Supported
H8	PDVS → Support	-0.304	0.080	3.821	<0.001	Supported
H9a	PDVS → ENV+ → Support	0.002	0.024	0.101	0.920	Not supported
H9b	PDVS → ENV- → SUPPORT	-0.032	0.038	0.840	0.401	
H9c	PDVS → ECO+ → Support	-0.004	0.020	0.195	0.845	
H9d	PDVS → ECO- → Support	-0.064	0.036	1.771	0.077	
H9e	PDVS → CUL+ → SUPPORT	-0.002	0.013	0.154	0.878	
H9f	PDVS → CUL- → Support	-0.067	0.041	1.652	0.099	
H10	Psychic Income → Support	0.314	0.126	2.491	0.013	Supported
H11	Trust In Government → Support	-0.036	0.097	0.372	0.710	Not supported
H12	Trust Organizing Committee → Support	-0.163	0.095	1.728	0.084	Not supported

Source: Author’s calculations

Hypothesis 2 – A higher perception of positive environmental impacts from hosting M-SE among Residents increases their support for hosting such events.

Hypothesis 2 was not supported, as the results did not indicate a significant influence of the Residents' perception of positive environmental impacts from hosting mega-sport events on the support for organizing such events ($\beta = 0.011$, $p = 0.907$).

Hypothesis 3 – A higher perception of negative environmental impacts from hosting M-SE among Residents decreases their support for hosting such events.

Hypothesis 3 was not supported, as the results did not indicate a significant influence of the Residents' perception of negative environmental impacts from hosting mega-sport events on the support for organizing such events ($\beta = -0.86$, $p = 0.337$).

Hypothesis 4 – A higher level of Residents' perception of the positive economic impacts of hosting M-SE on destination sustainability positively influences their support for hosting such events.

Hypothesis 4 was not supported, as the results did not indicate a significant influence of the Residents' perception of positive economic impacts from hosting mega-sport events on the support for organizing such events ($\beta = -0.026$, $p = 0.788$).

Hypothesis 5 – A higher level of Residents' perception of the negative economic impacts of hosting M-SE on destination sustainability reduces their support for hosting such events.

The structured model for Residents revealed that the level of Residents' perception of the negative economic impacts of hosting M-SE on destination sustainability has a direct negative effect on their support for hosting such events ($\beta = -0.298$, $P = 0.001$),

And therefore Hypothesis 5 is supported by the data

Hypothesis 6 – A higher level of Residents' perception of the positive socio-cultural impacts of hosting M-SE on destination sustainability increases their support for hosting such events.

The structured model for Residents revealed that Residents' perception of the positive socio-cultural impacts of hosting M-SE on destination sustainability has a direct positive influence on their level of support for hosting such events ($\beta = 0.045$, $P = 0.575$)

Hypothesis 7 – A higher level of Residents' perception of the negative socio-cultural impacts of hosting M-SE on destination sustainability reduces their support for hosting such events.

The structured model for Residents revealed that Residents' perception of the negative socio-cultural impacts of hosting M-SE on destination sustainability directly reduces their support for hosting these events ($\beta = -0.203$, $P = 0.036$)

And therefore Hypothesis 7 is supported by the data

Hypothesis 8 – A higher level of Residents' personal valuation of destination sustainability positively influences their support for hosting M-SE.

The structured model for Residents revealed that Residents' personal valuation of destination sustainability has a direct positive impact on their support for hosting M-SE ($\beta = -0.304$, $P < 0.001$)

And therefore Hypothesis 8 is supported by the data

Hypothesis 10 – A higher level of Residents' sense of psychic income positively influences their support for hosting M-SE.

The structured model for Residents revealed that Residents' sense of psychic income directly and positively influences their support for hosting M-SE ($\beta = 0.314$, $P = 0.0013$)

And therefore Hypothesis 7 is supported by the data

Indirect (Mediating) Impacts on Support via PVDS

Hypothesis 9 – Residents' personal valuation of destination sustainability indirectly affects their support for hosting mega-sport events (M-SE) through their perceptions of the events' environmental (9a, 9b), economic (9c, 9d), and socio-cultural (9e, 9f) impacts, both positive and negative.

The structural model for Residents revealed that the personal valuation of destination sustainability indirectly influences support for hosting M-SE, but only in the context of negative socio-cultural impacts ($\beta = -0.052$, $p = 0.017$). The negative beta coefficient ($\beta = -0.052$) suggests that as Residents perceive destination sustainability more positively, their concerns about negative socio-cultural impacts lead to slightly reduced support for hosting M-SE. In other words, Residents who value sustainable practices at a destination may be more sensitive to the potential negative socio-cultural consequences of hosting large events.

Hypothesis 11 – A higher level of trust in government among Residents has a positive effect on their support for hosting M-SE.

Hypothesis 11 was not supported, as the results did not indicate a significant influence of the level of trust in government among Residents has a direct positive impact on their support for hosting M-SE (beta=-0.036, p=0.710).

Hypothesis 12 – A higher level of trust in the organizing committee among Residents has a positive effect on their support for hosting M-SE.

Hypothesis 12 was not supported, as the results did not indicate a significant influence of the level of trust in government among Residents has a direct positive impact on their support for hosting M-SE (beta=-0.163, p=0.084).

5.5.6 Effect of Sociodemographic Characteristics on the Values of Examined Dimensions (for Citizens and Residents)

Hypothesis 13 – Significant differences exist among groups of Citizens (Residents) categorized by gender, generation, educational level, and ages of their children, in their perceptions of the negative and positive environmental, economic, and socio-cultural impacts of hosting M-SE, their psychic income, their personal valuation of destination sustainability (PVDS), and their support for these events.

First Citizens

Gender differences

The results of the Mann-Whitney test (Figure 19) show that, among Citizens, females had a significantly stronger perception of the negative socio-cultural ($Z=-4.058$, $p<0.001$) and environmental ($Z=-4.306$, $p<0.001$) impacts of the M-S events.

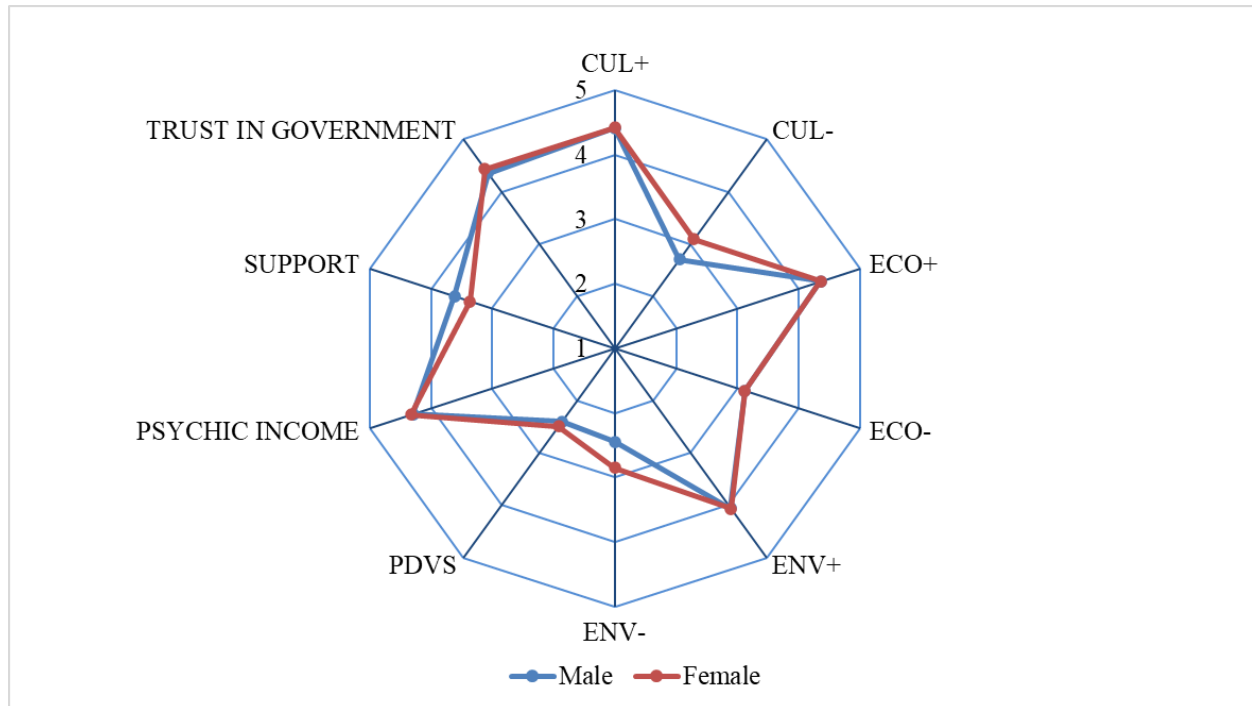


Figure 19. Construct comparison for Citizens participants in the empirical study based on gender using Mann-Whitney test
Source: Author's own construction

Having children

The Kruskal-Wallis test reveals significant differences among groups categorized by the age of children for perceived negative environmental impacts ($H=8.307$, $p=0.040$) and personal valuation of destination sustainability ($H=8.673$, $p=0.034$) among Citizens. According to the Dunn-Bonferroni post hoc test results, Citizens with children under 10 years old perceive negative environmental impacts more strongly compared to those with children aged 19-24 years. This could reflect the impacts of environmental awareness of children (Gen Alpha) on their parents. Additionally, results showed that personal valuation of destination sustainability (PVDS) is higher among Citizens without children compared to those with children aged 10-18 years (Figure 20. below). This could be attributed to generational differences among participants, as the first group is more likely to be of a younger generation.

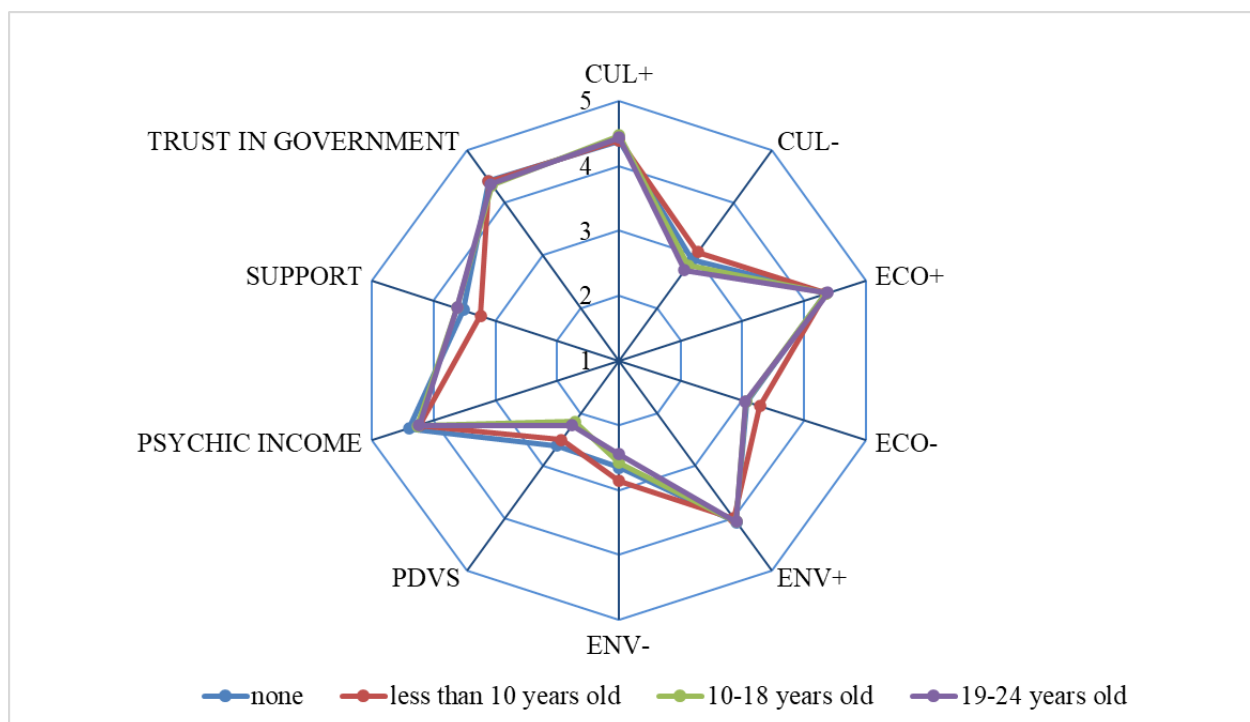


Figure 20. Comparing Citizens' scores of constructs in relation to having children under their care

Source: Author's calculations from Kruskal-Wallis test

Generations/ Age Differences

The hypotheses related to generations of the study were all tested using the Independent-Samples Kruskal-Wallis Test and results are shown in Table A8. (in the Appendix 8.12). Among Citizens, perception of negative socio-culture impacts, perception of negative environmental impacts and personal valuation of DS showed variation across different generations.

The Kruskal-Wallis test indicates significant generational differences among Citizens (Figure 21.)

The findings suggest distinct generational perspectives on the socio-cultural and environmental impacts of M-S events, highlighting varying levels of positive and negative perceptions across age groups. Specifically:

1. Positive Socio-cultural Impacts: Generation X perceives the positive socio-cultural impacts of M-S events more favorably than Generation Z. This suggests that older generations may see these events as beneficial in promoting cultural or social cohesion.

2. Negative Socio-cultural Impacts: Generation Z, compared to Generations X and Y, perceives stronger negative socio-cultural impacts from these events. This may indicate a more critical view among younger generations regarding the social disruptions or cultural changes associated with M-S events.

3. Negative Environmental Impacts: Generation Z reports the highest perception of negative environmental impacts, more so than any other generation. This aligns with broader research indicating that younger generations are often more environmentally conscious and sensitive to ecological issues.

Conclusion: These findings underscore a generational divide in how M-SE are perceived, with younger generations, particularly Generation Z, more attuned to the negative socio-cultural and environmental impacts. In contrast, Generation X perceives greater socio-cultural benefits. These insights could inform policymakers and event organizers, who might consider tailoring

communication and mitigation strategies to address the concerns of each generation, particularly in minimizing perceived environmental harm and enhancing positive socio-cultural outcomes.

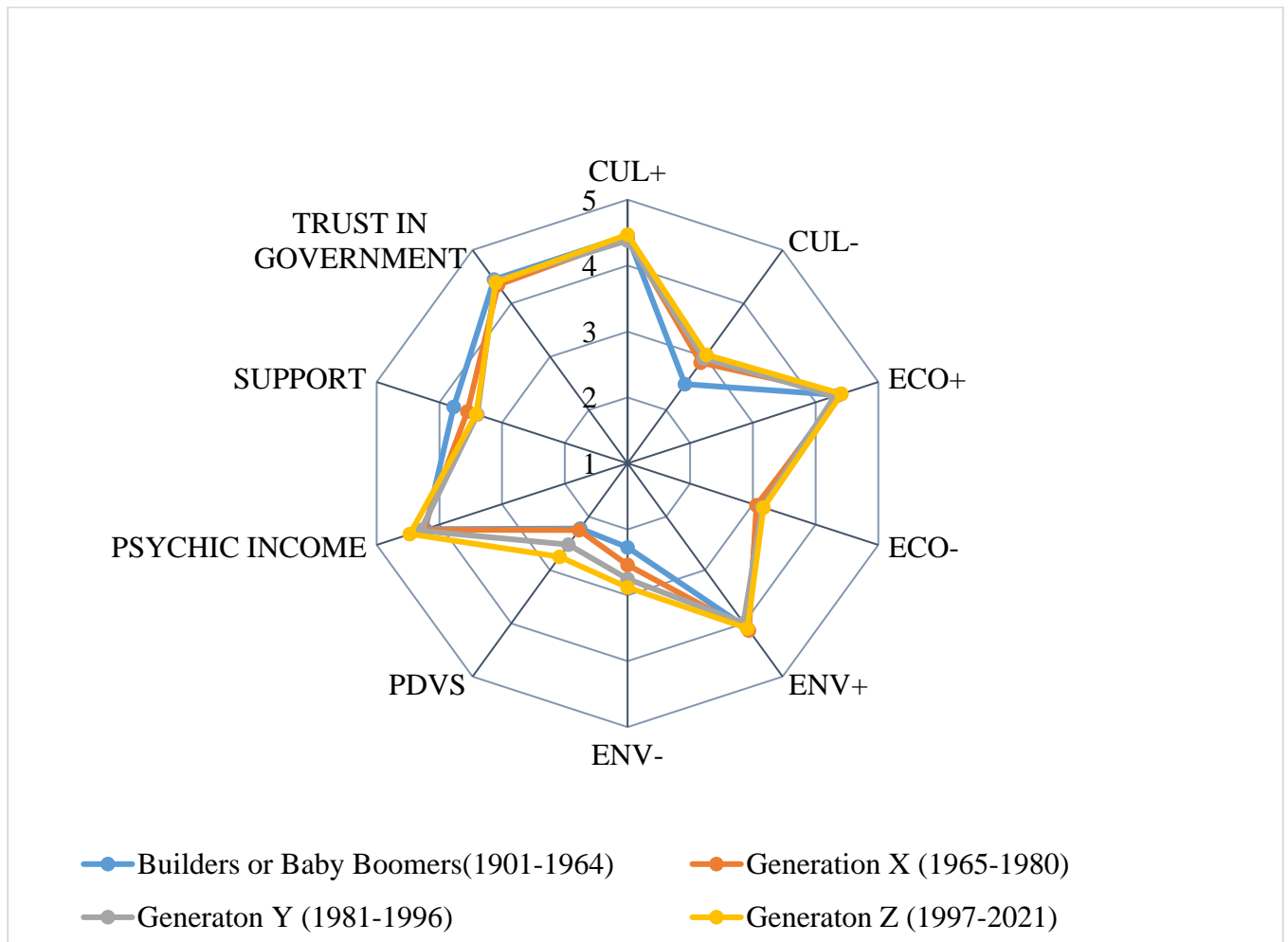


Figure 21. Generational differences among Citizens in their perceptions of the six layers of sustainability impacts and other constructs (1 = strongly disagree, 5 = strongly agree)

Second Residents

Sociodemographic characteristics seem to have influence on perception, valuation and support.

Gender differences

The Mann-Whitney test results indicate that, for Residents (Figure 22.), there is no significant difference in the mean values of the examined dimensions between males and females.

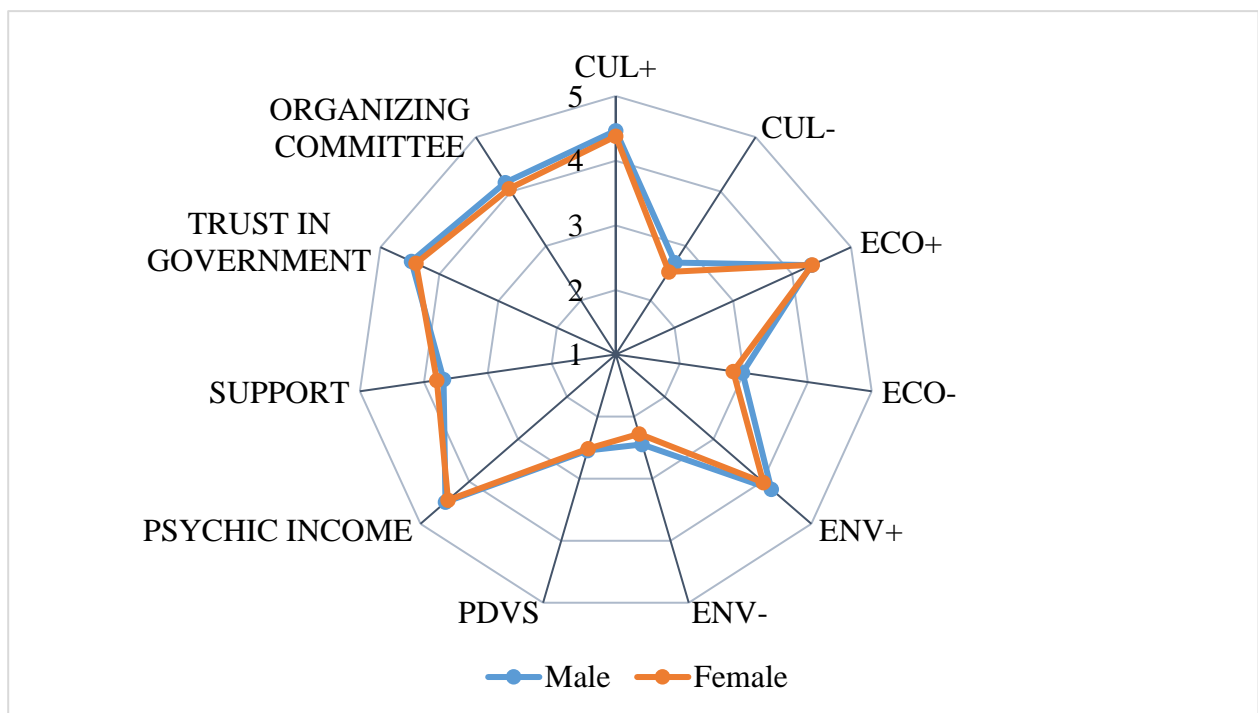


Figure 22. Construct comparison for Residents participants in the empirical study based on gender using Mann-Whitney test (1 = strongly disagree, 5 = strongly agree)
Source: Author's own construction

Having children

The Kruskal-Wallis test results indicate that, among Residents, there are no significant differences in the average values of the examined dimensions across groups categorized by the age of children. (Figure 23.)

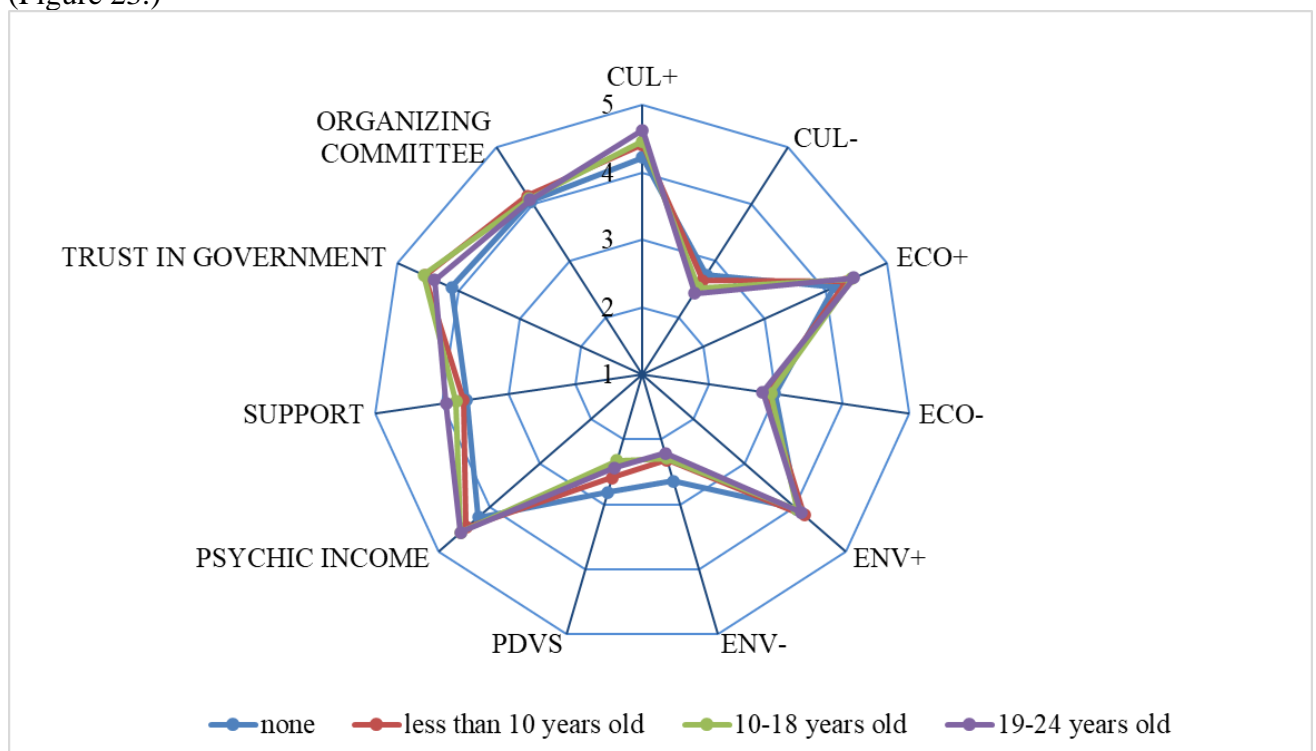


Figure 23. Comparing Residents' scores of constructs in relation to having children under their care
(1 = strongly disagree, 5 = strongly agree)

Generations/ Age Differences

The hypotheses related to generations of the study were all tested using the Independent-Samples Kruskal-Wallis Test and results are shown in Table 8. (in the Appendix 8.12). Among Residents, perception of socio-cultural positive impacts as well as perception of negative socio-cultural impacts, and negative environmental impacts showed variation across different generations.

The Kruskal-Wallis test indicates significant generational differences among Residents (Figure 24.) in their perceptions of positive (H=8.304, p=0.040) and negative (H=13.701, p=0.003) socio-cultural impacts, as well as negative environmental impacts (H=15.944, p=0.001) of M-S events. Generation X perceives positive socio-cultural impacts as significantly higher compared to Generation Z. Generation Z, in contrast, has a stronger perception of negative socio-cultural impacts compared to Generations X and Y. Furthermore, Generation Z perceives negative environmental impacts of hosting M-SE as significantly higher than all other generations.

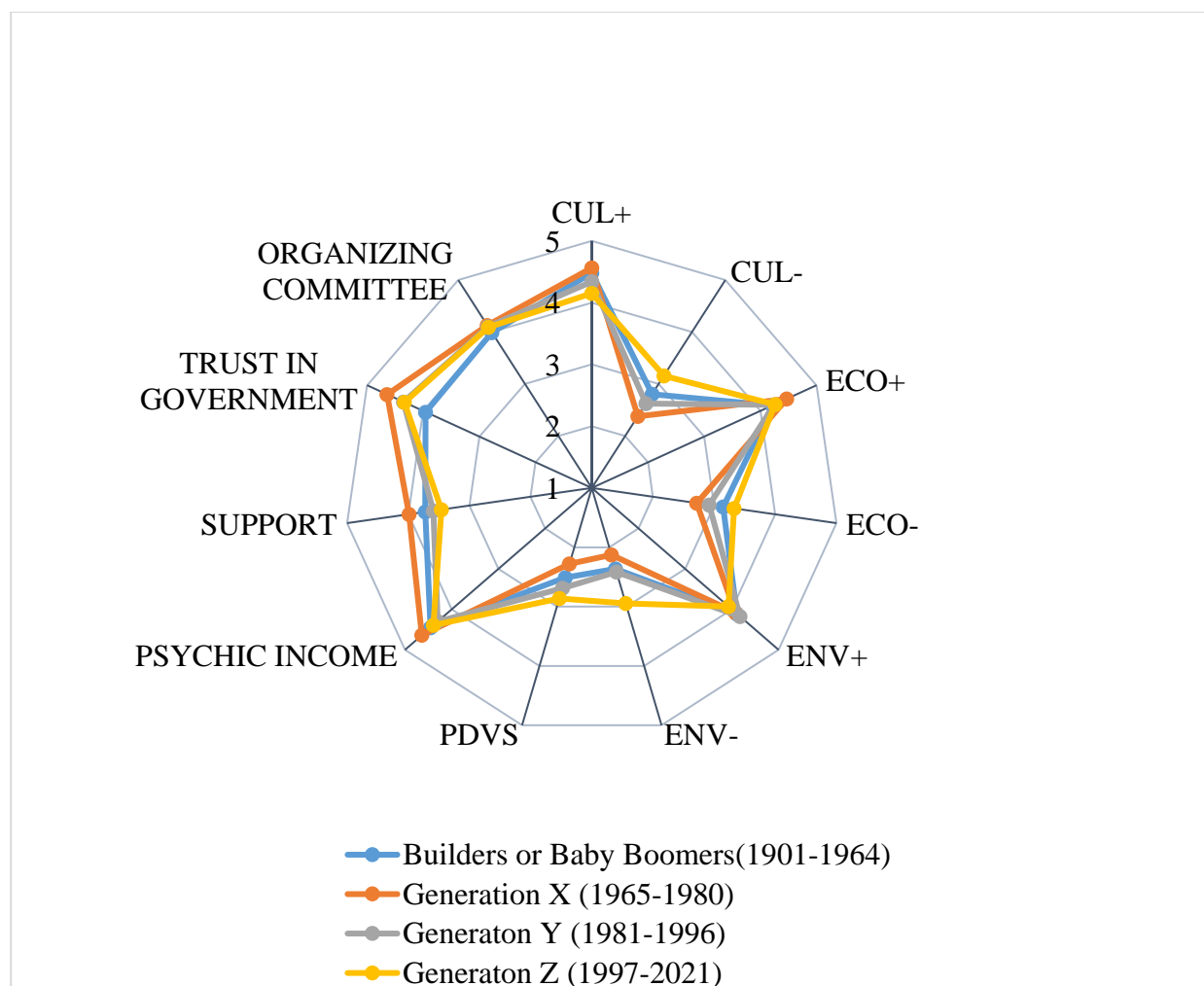


Figure 24. Generational differences among Residents in their perceptions of the six layers of sustainability impacts and other constructs

Source: Author's edit

Therefore, the perception of negative socio-cultural and environmental impacts seems to be different across generations for both Citizens and Residents.

Hypothesis 13 is supported by data for both Citizens and Residents.

5.5.7 Summary of Results' Subsections and Hypotheses Tests

In summary, besides H1 and H13, 5 out of 11 hypotheses were supported for Citizens and 4 for Residents. For Citizens H5, H6, H7, H8 and H10 were supported, while only one part of H9 was supported. For Residents, H5, H7, H8, H10 only were supported.

The findings suggest distinct generational perspectives on the socio-cultural and environmental impacts of M-S events, highlighting varying levels of positive and negative perceptions across age groups. Specifically:

1. **Positive Socio-cultural Impacts:** Generation X perceives the positive socio-cultural impacts of M-S events more favorably than Generation Z. This suggests that older generations may see these events as beneficial in promoting cultural or social cohesion.
2. **Negative Socio-cultural Impacts:** Generation Z, compared to Generations X and Y, perceives stronger negative socio-cultural impacts from these events. This may indicate a more critical view among younger generations regarding the social disruptions or cultural changes associated with M-S events.
3. **Negative Environmental Impacts:** Generation Z reports the highest perception of negative environmental impacts, more so than any other generation. This aligns with broader research indicating that younger generations are often more environmentally conscious and sensitive to ecological issues.

Conclusion: These findings underscore a generational divide in how M-SE are perceived, with younger generations, particularly Generation Z, more attuned to the negative socio-cultural and environmental impacts. In contrast, Generation X perceives greater socio-cultural benefits. These insights could inform policymakers and event organizers, who might consider tailoring communication and mitigation strategies to address the concerns of each generation, particularly in minimizing perceived environmental harm and enhancing positive socio-cultural outcomes.

Sociodemographic characteristics seem to have an influence on perception, valuation and support. A few previous studies of local community perception in Qatar mentioned some Sociodemographic differences. Al-Emadi et al. (2024) studying both Citizens and Residents suggested a strong and positive association between respondents' demographic characteristics and their interest, in terms of participants' gender, nationality and educational level. Ishac et al. (2022) showed differences in perception of psychic income based on nationality.

Reading their perceptions, in general, the highest weight by Citizen's participants placed on the personal valuation is intercultural exchange and presenting own culture to others. More than 90% of Citizens (and Residents) agreed that hosting M-SE in Qatar provides opportunity for cultural

exchange and presenting Qatari culture to visitors. From previous publications, it was noted that cultural exchange has the potential to bring more highlight to own culture and its values (Magno & Dossena, 2020; Hassan, 2020).

Local community's support to hosting does not always match their perception of impacts. In a study investigating perceptions of Hamburg Residents in relevance to hosting the 2024 Olympics before the bid was cancelled (Scheu & Preuss, 2018), results show a high level of support together with a strong perception of negative legacies outweighing the positive ones. In general, no personal benefit was perceived by participants, who also had a highly negative perception of the costs of the hosting. This makes their strong support for hosting sound odd. However, and according to the statistical analysis of their study that was conducted before the Olympic bid, the support was attributed to the perception of positive legacies.

Results show split in opinion among participants when answering a question indicating negative impacts of the hosting, except regarding socio-cultural impacts (i.e. as shown in Figure 25. below, instead of 60% or more agreeing or disagreeing on an answer, results show 25% or more indecisive choosing "3" and the rest are divided almost evenly between agreeing and disagreeing). But also, it can be a reflection of the protective attitude of Qataris against attempt to depreciate their success of hosting the event. The latter can be explained in light of the difficult political relationships with neighbouring countries since June 2016, and the media attacks against Qatar hosting the event since 2010, that were both expressed explicitly by all FGD participants in all groups, and most of the SSI. This is clear in the answer for questions related to possibility of pollution as a result of hosting, clear majority did not agree with that notion. This was different when the question was about aspects that impact people's life directly such as possibility of impacts on price inflation and traffic. Only small minority disagree to these two notions. Negative Socio-cultural aspects received more attention from Citizens especially. This can be interpreted by the significance of culture for Qatari Citizens (and Residents to a less extent).

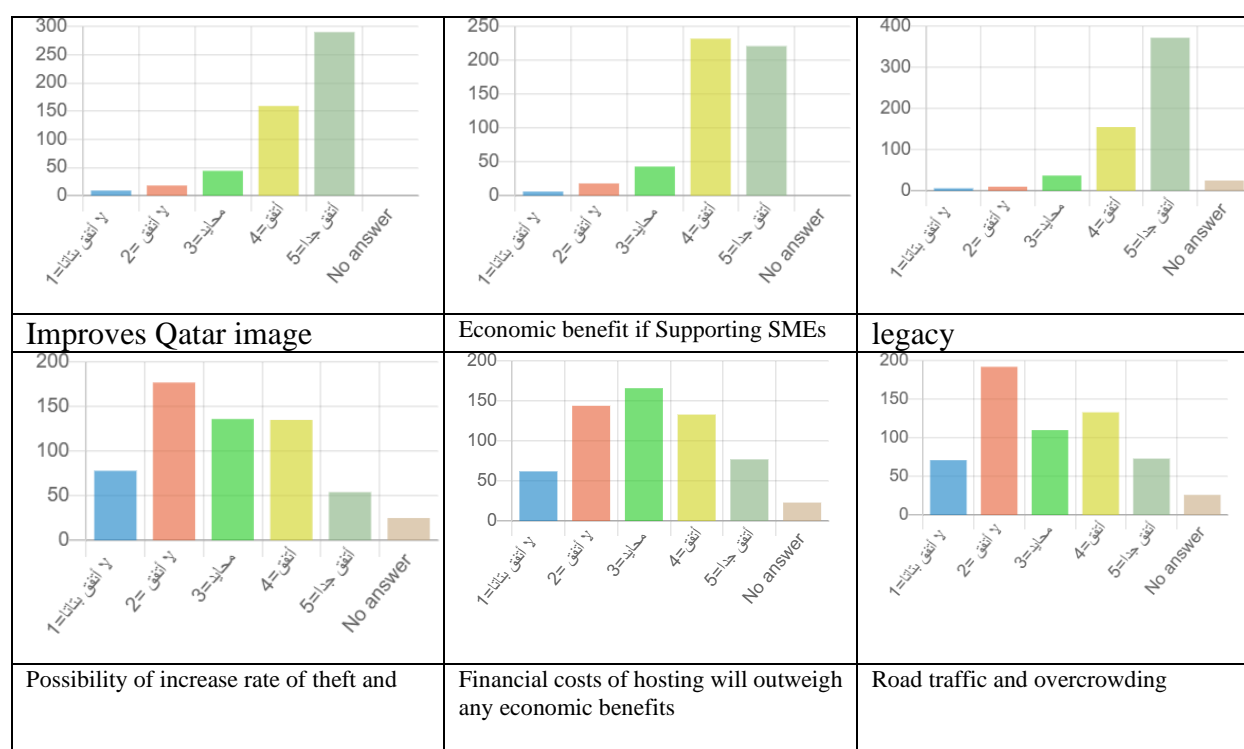


Figure 25. comparison of patterns of participants responses to possible positive and negative impacts

Cultural exchange with others has the potential to bring more highlight to own culture and its value. This effect is not well studied in literature. However, I emphasize that the FGD and SSI conducted in my study supports the “strong theoretical value” (Magno & Dossena, 2020) due to the suggestion that positive cultural exchanges are able to increase the valuation of own culture and identity in the perception of Citizens in host countries (and Residents to an extent depending on some circumstances). Citizen’s participants of FGD conducted post-event (especially in two groups) expressed repeatedly their thrills when tourist (fans and players) showed interest in learning about Qatari culture including when they try Qatari dresses or ask about aspects in the culture. However, more emphasis was placed in the importance of showing respect to local people in Qatar and their culture and values, or on the potential negative socio-cultural of impacts. This concern was also shared by some literature prior the hosting of the event. Griffin (2019) suggested that Qatar needs to put in test the marketed image of Qatari society’s openness, tolerance, to accomplish a memorable legacy for Qatar and FIFA, with applying necessary reforms but without compromising the essence of Qatar’s identity, a requirement that forms a great challenge.

From all results, Qatar official vision and strategy value sustainability and welcomes tourism development and global events hosting, but also values its local culture, values and identity. Qatar envisioned an open society, well-trained to cope with challenges and invest in the future. Public participation is encouraged with a strong focus on education and promoting health and healthy successful lifestyles for Citizens and Residents. FGD results show Citizens’ (and Residents’) concerns about hosting M-SE in relevance to potential negative socio-cultural impacts, especially related to the mass tourism and possibly over-tourism. FIFA 2022 being the first M-SE hosted by Qatar with that gigantic size, Qataris (and Residents) were not sure of what to expect before the event started, especially despite the huge propaganda from the west, and even other neighbours, before the event, hinting Qatar’s inability to succeed and expected negative consequences. As the event started, and after that, FGD results showed shift in concerns and focus on potential benefits, with a great sense of national pride and gratitude, and more confidence and pride in their own culture. Concerns were conducted more in the form of recommendations for the future events that they are excited about hosting. The empirical study results shows big support for hosting future M-SE and a trend to host cultural, scientific and other types of M-E as Qatar have proven high calibre in organizing and excelling in M-SE. Psychic income was felt and expressed by Citizens in the FGD, especially in relevance to Citizens’ facilities, services and infrastructure that enhanced the daily life of Citizens (and Residents), but also built in a state-of-art style and rigorously, to continue to serve for decades if not centuries to come. National and community pride, together with event and community excitement were expressed explicitly as well as pride of Qatar’s image and being known to others and respected when they travel anywhere. The results from the empirical study confirm most of that, but did not provide a strong link between psychic income and support to hosting future events. The results show very strong support for hosting future M-SE and M-E and also very strong sense of pride; however, the strong effective link could not be drawn. Qataris’ (and Residents’) trust in their government is shown in the empirical study to be very strong, confirming the same from the FGD and SSI. However, a strong positive link was not seen using different tests in the empirical study.

6 CONCLUSIONS, RECOMMENDATIONS, LIMITATIONS AND FUTURE DIRECTIONS

This chapter presents the conclusion of the study together with recommendations for future research, and for improving destination sustainability. Limitations are also discussed.

6.1 Conclusions and Summary

Tourism is a very important sector of the global and local economy, with a promising opportunity both for developing nations, and those aiming to attract tourism and diversify their economy. However, mass tourism comes with threats to environmental and social sustainability. Nations compete to host M-SE for its potential benefits to their economy, country image and potential tourism. The MENA Region, and especially the Arabian Gulf oil-rich region finally entered to win this competition and Qatar managed to successfully host the Football World Cup in 2022, with other GCC countries expressing interest in hosting more M-SE. While this holds the potential for not just destination branding but also building civic and tourism infrastructure for sustainability and benefits to the local community and the environment, with an opportunity for a shift from linear to circular economy, understanding impacts on local communities gains more importance.

Despite its small size, Qatar succeeded in hosting the most prominent international football tournament accommodating mass tourism of international groups with comfort, and a memorable cultural experience. Moreover, it seems to have achieved many benefits towards social and environmental sustainability, social responsibility, and intercultural dialogue. All can be good topics for prospective research direction. The infrastructure built for the tournament was modern and had the opportunity to benefit from the best sustainable solutions and technologies. This is another topic for prospective research. The design made the best use of circular economy principles to minimize waste and maximize the utilization of material and energy, but it also kept local traditions and identity. Qatar being a small, rich oil and natural gas-producing state helped in achieving that. It also helped in human development and elevation of suffering in other places of the world by donating most of the temporary facilities such as mobile homes, buses, stadium seats and items to nations in need. Whether it is a multicultural destination or a sustainable technology hub, a destination image is painted with a taste of unique identity, rich heritage, and great welcoming generosity. The destination image that Qatar succeeded in acquiring, however, must be further built upon to maximize the destination marketing momentum gained while hosting the event, to market the potential of the region, before the focus shifts to other destinations. This in turn can support the positive legacy and the long-term destination sustainability and the maximization of the advantages to be gained thence. To this end, I suggest using the “tourists trap” suggested by Priatmoko et al. (Priatmoko et al., 2021) for the revival and development of new tourist destinations by linking popular to unpopular destinations and establishing the latter as tourist centers with advanced facilities and infrastructure through structured tourism trips to the former, which could be the stadiums, the famous Bisht shop, or the room that famous players like Messi stayed at during the 2022 World Cup. Regional collaboration amongst GCC states for hosting future M-SE building on Qatar’s experience is an obvious recommendation. Further, a global collaboration including developed and developing nations for initiating mega-events sustainable tourism reforms is another recommendation Qatar can take the lead in. We recommend that some initiatives applied in Qatar 2022 FFC be studied for prospective global reform of sustainable tourism and destination sustainability such as the inclusion of circularity or circular economy principles in the FIFA constructions and projects from the early planning and design stages and mitigating social impacts of overcrowding by soft control over tourists’ activities. Utilizing Citizens and even tourists megaphoning is recommended for domino effect impacts, like what happened after the Japanese fans took the initiative to clean the stadium. Rewarding sustainable individual, group, and nation’s initiatives that support destination sustainability should be added to the official prizes in any mega-sport tournament. For mega-event tourism to be more

sustainable, sustainable management that proves successful in hospitality services management such as green supply chain management (GSCM) and active participation of different national stakeholders can be researched for application in M-SE. Investigating the role of technological innovations in their full potential should be encouraged and supported to promote destination sustainability whether environmental, economic, socio-cultural, and beyond. Ensuring minimal externalities and maximum benefit to local communities at the host destination should always be a priority in any initiative related to hosting mega-events or tourism in general. Social and especially socio-cultural sustainability in addition to destination sustainability environmental could be further explored in this regard.

It is the opinion of the author of this dissertation that what I have seen in the Qatar Football World Cup and other gigantic tournaments may have much greater potential to benefit humanity and the environment than what has already been harvested if past experiences especially Qatar FIFA 2022 were analyzed by multidisciplinary approaches focusing on people at the host destination and visitors to that destination. This detailed research provides a first effort to shed light on the impacts of hosting a M-SE on tourism and destination sustainability, together with other aspects of the hosting country of the 2022 FFC, by deep and detailed reading local community prospective from within, and a thorough literature review, and document analysis of most important Qatari documents. It is recommended to follow it with a more in-depth measure of perception both from the demand and supply side; that is, the local community, the tourists, and the tourism authority, and firms inbound and outbound. For a better understanding of visitors' experience and perception of Qatar as a destination image compared to its target strategic country branding, it is worth studying that from football fans who participated in the event in Qatar, and those who did not make it to Qatar and followed the games over satellite TV or the internet. It is also recommended to study the local community's perception of hosting the event, from different DS dimensions in a more focused manner, one dimension at a time, as well as psychic income in a more catered approach to the local community and the different generational categories that can reflect the modern classification in current Qatari community.

Together, this can form a clearer understanding of the impact of hosting the M-SE in terms of destination image and intention to visit/revisit, and possible impact on the near future tourism sustainability in Qatar. This can still be done for FIFA 2022, but also for planned future activities and hosting more M-SE.

Destination sustainability marketing and the role of the local community and soft marketing powers could be a topic for a follow-up study on Qatar's unique experience with hosting a global mega-sport event. Considering the true size and impact of the M-SE from all dimensions some scholars (Müllerb, 2015; Wolfe et al., 2022) consider them as giga-events forming a new class of their own. The future research could choose the title "Impacts of giga-sport events (G-SE) on destination sustainability".

The support of local community at host destination for hosting a M-SE is essential for the success of hosting (Sharma et al., 2008), as absence of support and cohesion can have catastrophic impacts on the destination's political and social stability (Gursoy et al., 2016). Therefore, the support of Citizens and Residents for Qatar's decision to host the 22nd FFC played a vital role in the attained results. Both Qatar National Vision (QNV2030, 2008) and Qatar National Development Strategy (QNDS3, 2024) emphasize the importance of respecting local culture and identity, and supporting an educated well-trained population (Appendix 8.6 Table A2). Therefore, this study was conducted to examine the perception of local community in Qatar of hosting M-SE, while studying factors impacting their perception. Another important objective of this study is to explore destination sustainability globally and reflect that on the Arabian Gulf Region, to form a baseline for further specific studies on Qatar and other GCC countries as they are heading to host more M-SE in the near future. KSA has already been awarded hosting the 2034 FFC, and the door is opened for its request to host the Summer OG in Winter like Qatar did with the FFC, to avoid the

very hot weather of the GCC countries in Summer (Daily Mail, 2024). Qatar also expressed interest in hosting the OG (Reuters, 2022). This adds to the importance of my research.

The study uses various theories to study the perception and its impact on support for hosting, as well as mediating variables. The mediating variables are trust, personal valuation, psychic income and overall attitude. While trust and overall attributes have been studied before for their mediating effect, the other two are not. Theories used are SET, TRA, and Identity Theory. Psychic income is studied for its possible mediating effect for the first time, as far as I know. Personal valuation is customised defined for this study to represent the traits of participants in relevance to destination sustainability, and PV is also investigated for its possible mediating effect. Hence, with validating the use of trust for perception studies in relation to support for hosting M-SE, this study added two new variables namely personal valuation of destination sustainability, and psychic incomes mediating effects between perception of impacts of hosting on DS and support for hosting. This is in addition to the overall attitude that was added previously by Gursoy et al., (2016). Although this study did not come with strong support for either, it presented an invitation for focused carefully designed studies to further investigate each separately. It also uses and validated the triple bottom line impact framework to study perception adopted from Prayag et al. (2013), with six categories: positive socio-cultural, negative socio-cultural, positive environmental, negative environmental, positive economic and negative economic, instead of the three categories previously used.

Further, the study presented some interesting results worthy of further investigations such as generational differences. Results also showed significant between males and females among Citizens in the perception of negative environmental and socio-cultural impacts on DS. Qatari nationals' ladies seem to be more aware and concerned regarding potential negative impacts on DS from hosting M-SE, than Qatari nationals' men. This calls for a more profound study focusing on confirming and investigating these results further, to form a clearer understanding of the perception's aspect and possible motives behind it.

The data was collected using an online questionnaire, that was designed and interpreted using different qualitative methods on the studied population, namely FGD and SSI. The model was tested and validated. The findings showed enthusiasm among Citizens and Residents for hosting potential M-E, the importance of consultation with them and adding values and benefits to the local community as a result of hosting. It was also shown that the population (especially Citizens) value their local culture, identity and values and would like this to be respected and valued by tourists and policies that regulate hosting mega events. Differences exist between Citizens and Residents, and between different groups such as generations and gender.

The results suggest that to reduce the direct or indirect negative impacts on destination sustainability due to hosting, it is vital to design targeted awareness programs catered for different generations and groups, to promote both DS objectives and policies, and Citizen-science and knowledge-based personal valuation of DS amongst Citizens and Residents. Prior to that, public consultations and public hearings in different forms should be well designed and conducted to ensure full understanding of local community worries and aspirations.

Looking at long-term effects on the development of local communities and sustainable tourism in connection with the FIFA World Cup in Qatar is an interesting topic yet to be investigated scientifically in a follow-up study (probably in 2027 and 2032). However, from close follow-up of changes in Qatar's community, new SMEs seem to be initiated or/and progressing in tourism services and products, together with noticeable growth in tourists' arrival especially from the region. Environmentally, more initiatives such as "Green Mosque" seem to have more highlight in the Holy month of Ramadhan in 2025, connecting environmental protection to culture. From academic perspective, colleges in Qatar and research centers show more interest in sport in connection to sustainability. I also expect more events will be hosted by Qatar in the next years, either solely or jointly with neighboring countries, KSA for instance.

6.2 Limitations

Limitations of the study are several. The empirical study, for instance, was conducted with limited time and resources for the purpose of the study. The study would have obtained a representative sample by applying a comprehensive scientific sampling procedures like the one used by Al-Emadi et al. (2021; 2022; 2023; 2024) that use a sampling frame developed by the Social and Economic Survey Research Institute (SESRI) at Qatar University and interviewed via phone calls more than 2000 participants, by employed trained field researchers. However, the sample was diversified in terms of municipalities, age groups, gender, sector, and interest as much as possible. Also, I hope in the future to be able to conduct similar research with the researcher and use the scientifically verified methods to validate the approach used in this study, re-examine the variables especially the mediating effect, and extend the study further. The survey was distributed more than a year after hosting Qatar 2022 FIFA World Cup and does not necessarily capture the perception they had before hosting the event. It would have provided a clearer picture if we were able to distribute the same questionnaire before, during and after the event. Non-Arab Residents were not studied, as they were not the focus of this study. However, reading their perception is recommended for future studies, with appropriate current classifications, such as “students”, “born in Qatar” and “long-term-Residents”. Their nationalities and cultural background could also be useful. The number of Resident participants could have been more than the current one, especially that Citizens are a smaller percentage compared to Residents. However, the study had Citizens only as its focus, and it was only due to the number of Residents filling the questionnaire that I decided to extend the study to include Residents. For future studies, I recommend increasing the number of Residents and Citizens, and targeting universities and workplaces early to obtain their necessary permits and support to distribute the questionnaire among their students/staff. The conclusion drawn is for Qatar, although other GCC countries have similar culture and values, there might be differences among the six GCC states, as each has its own unique characteristics due to many factors including economic and political factors. Around 50% of surveys returned were not filled in completely, because the survey was made anonymous and online, it was not possible to reach out to the participants and attempt to have them complete the questions. The sample used in the study may not accurately reflect the entire population of the country being examined, as it was not easy to reach all Citizens in Qatar, and certainly not in all GCC countries. So, it will be interesting for future similar studies can be conducted in each of the GCC countries and draw a comparison. Also, because the study covers the three dimensions of sustainability, some of the important elements were not incorporated in detail in the survey to avoid ending up with a very lengthy questionnaire that can risk incompleteness by many participants. I recommend that separate studies cover each of the three dimensions, especially socio-cultural. The Likert scales have the disadvantage of missing details that could be otherwise elaborated by open-ended questions or semi-structured interviews or FGD. For instance, it is not clear why the majority would not think that M-SE have environmental impacts on destination sustainability of host countries, and only around a third of participants believed that high expenses of the hosting will outweigh any possible financial profits attained. However, the SSI that followed the quantitative survey shed some light on possible interpretations, which adds to the strength of the study. Psychic income components were meant to be analyzed in detail, to explore if they all have the same impact, or is there a difference between event excitement, pride in infrastructure and image, community attachment and community excitement. However, it seems that a dedicated questionnaire should be carefully designed to explore the differences and reconfirm and validate the questions to measure just the intended component at a time, with a different set of mind and direction of the survey, to get the participants in ease to consider the non-monetary income and benefits.

Regarding the literature review, as stated in my published article (Al-Muhannadi et al., 2024), the study also has several limitations that should be considered. Due to restrictions on database access and search parameters, the scope of the study, which focuses on a review of the literature covering forty-seven years, may not include all pertinent publications. Despite being thorough, the

bibliometric analysis may have overlooked some relevant studies that were not related to the keywords "sport tourism" & "mega-sport.". Some findings may not be applicable to the current context of the 22nd FFC because the socioeconomic and environmental settings of previous research may vary greatly from those of current scenarios. Given that a large portion of the current research on M-SE focuses on Western contexts, the literature review may be biased geographically. The findings' generalizability may be limited by the literature's incomplete representation of Qatar's distinct sociocultural and political context as an Arab Islamic nation in MENA Region. Measuring the impacts of M-SE on destination sustainability is inherently complex (Al-Muhannadi et al., 2024). While social and environmental effects are more difficult to quantify and frequently call for long-term research to fully grasp, economic effects are comparatively easy to quantify. The difficulty of quantitatively evaluating socioeconomic legacy components over a long period of time is acknowledged in the paper. Figures from FIFA were used and referenced in this paper, although I am aware of the recommendation of Matheson (2006:21) and other researchers regarding the importance of vigilantly evaluating any economic benefit estimates presented by organizations that have motivations and interest to show exaggerated positive impact figures. It is worthwhile for future research to cross-reference the numbers with official and scholarly economic reports as they become available. Regarding to what extent can the research findings be generalized to other non-GCC countries, and what factors might influence differing perceptions? I believe there is good room for generalization, especially in relevance to environmental aspects, also social and less in economic. Factors impacting that could be the economy of the host country, SME existence, specialization, efficiency and support from the government. As this can play an important role in positive economic impacts on the local community, and in reducing overhead and expenses at the government or organizational level. Also, the depth and importance of culture, traditions and values for the local community. Awareness in general and strong PVDS can make the results and the study in general of more relevance to a host country regardless of its geographical location. Relationships between the government and the people can be an important factor, especially in relevance to institutional trust and support for the hosting.

6.3 Recommendations and future directions

One of most important recommendations to Qatari authority, and other Arabian Gulf Countries, is to ensure that local community is both respected, recognized and appreciated by new commers, and receives benefits from the hosting including economic benefit such as promoting their SMEs businesses, which is in line with QNV and QNDS (Table A2 in Appendix 8.6). Both require thorough and constructive public consultation including reading their perception and adding local businesses economics as an important objective of hosting and setting a strategy to both understand what is available and support them to develop for maximum potential of benefiting from the event. This should go in the direction of destination environmental and socio-cultural sustainability as well. Being a rich country, and thriving for building a global image, should not result in ignoring benefits to the local community, that can be accomplished in parallel to achieving the big goals, with the potential of enriching the target global image and maximizing the host benefits. The recommendation is valid for all nations globally.

A more thorough assessment of perception from the supply and demand sides—that is, the local population, the visitors, and the tourism authority—is advised. A clearer perspective and confirmation of the findings of this paper could be formed with the use of questionnaires, additional focus group discussions, and interviews with pertinent groups and individuals.

A follow-up study on Qatar's unique experience hosting such an M-SE on a global scale could focus on DS marketing, the role of the local community, and soft marketing powers. The author believes that if best practices are thoroughly comprehended and implemented in future events, particularly as we approach giga-events, the potential benefits of what has been witnessed in the

Qatar Football World Cup and other massive tournaments may be much greater. (Al-Muhannadi et al., 2024).

From the FGD and open-ended questions, I recommend that a program should be dedicated to understanding and dealing with the gap between official vision for hosting M-SE and the public, especially Citizens from GenX and above. It is recommended that more in-depth studies address this gap. It gives the studies more credibility and acceptance by the public if they are initiated by the government and with an encouragement statement to participate with full honest views and perceptions.

The support of local community at host destination for hosting a M-SE is essential for the success of hosting (Sharma et al., 2008), as absence of support and cohesion can have catastrophic impacts on the destination's political and social stability (Gursoy et al., 2016). Therefore, the support of Citizens and Residents for Qatar's decision to host the 22nd FFC played a vital role in the attained results. Cross-cultural experiences play a significant role in community development, fostering better appreciation of own culture, social cohesion, intercultural exchange, and economic growth.

Therefore, three main recommendations are presented:

1. For the government: linking the vision and results from FGD pre- and post-event and results from the Likert scale and building on experience built for both, government need to initiate a dialogue mechanism with Citizens to inform them about the vision and its implications on them and get their feedback on how to do things better to ensure maximum benefit for local community and minimal negative impacts from hosting future M-SE. This can also benefit desired tourism with enhancing tourists' satisfaction and trust by promoting local community participation and supporting their locally made products (Jebbouri et al., 2022).
2. A scientific debate in form of workshops or an international conference of seminars and workshops to discuss all valuable scientific papers about Qatar's FIFA World Cup and conclude with both learnt lessons and recommendations for forthcoming hosting of M-SE in Qatar and in the region, and production of a scientific book about the lessons learnt from the first Arab Mega-sport event. This could be a Qatari initiative that allows Qatar to take a leading role in harvesting best goods from hosting M-SE, especially in terms of sustainability, human development, human rights and social responsibility, civilizations dialogue, and world peace.
3. For researchers: in-depth research with qualitative and quantitative mix, to understand negative impacts and perceptions in general, and link it to best practices to minimize impacts and maximize benefits for locals and all. Capacity building and awareness building for destination sustainability before, during and after hosting events is a very important topic for scientific research, that can reflect on turning hosting M-SE into actual conservation and destination sustainability and not just sustainability marketing. (See summary in Figure 26. Below). Further, building on Shahbaz et al. (2021) recommendation of research collaboration amongst developed and developing nations for initiating sustainable tourism reform, and on the finding of my study, such a reform has the potential to maximize the benefit of hosting an M-SE learning from a small nation in Asia holding deeply-rooted traditions and values, that helped in succeeding and building a unique, yet sharable, experience, being the latest host of FFC could use the momentum of world attention to lead the way for international cooperation in this direction.

As suggested early in my dissertation, for attaining sustainability practicing in addition to sustainability marketing, "an inclusive resilience-based framework with a strong political will and stakeholders' full awareness and participation in decision-making from the early stages" is needed (Al-Muhannadi, 2020).



Figure 26. : Summary of main recommendations to different entities

Source: Author's own construction

Findings and recommendations of this study can be used to develop destination sustainability policies, not only in relevance to hosting M-SE, but also for tourism and in general. It should prioritize the DS and sustainability communication and marketing.

From the FGD and open-ended questions (see Appendix 8.11), I recommend that a program should be dedicated to understanding and dealing with the gap between official vision for hosting M-SE and the public, especially Citizens from GenX, GenZ and above. It is recommended that more in-depth studies address this gap. It gives the studies more credibility and acceptance by the public if they are initiated by the government and with an encouragement statement to participate with full honest views and perceptions.

According to As Qatar aims for annual economic growth of around 4%, by 2030, with US\$B100 FDI attraction from foreign direct investment, to establish the Gulf State as a favorite business environment with digital advancement (QNDS3, 2024:15), the willingness to pay for sustainability could be investigated in prospective studies. Tourists' perception should also be investigated to complete the demand-side perspective. It will be interesting to compare the perception of fans from different countries and relate it as well to their socio-demographic data and personal valuation of DS. Table 25 illustrates my recommendations and strategies for instilling Destination Sustainability values and practices in Citizens during events to enhance circularity according to ReSOLVE Framework of circular economy. This can further serve marketing Qatar from destination sustainability prospective. Tourists tend to trust their travel experience including purchase and consumption, and opt out of overt discourse of DS, suggesting that DS communication is more effective if subliminal and implanted within practices and products. (Hanna et al., 2018). Researchers like (Whitson & Horne, 2006; Horne, 2007) addressed the phenomenon that M-SE do not only showcase countries or facilitate destination marketing, but also impact the host nations in ways that were not planned for, by inviting host nations and their people of take on new identity as World's Citizens. This could explain the feeling of generosity and love towards visiting fans from different nations but also could be utilized to instill and enhance sustainability responsibility towards Mother Earth and set a "responsustable" example of destination sustainability while hosting M-SE, for the rest of the world.

Table 25. A summary of my recommendations and strategies for instilling Destination Sustainability values and practices in Citizens during events to enhance circularity according to ReSOLVE Framework

Field	Ideas for strategies	ReSOLVE Component Enhanced
Transport	<ul style="list-style-type: none"> • Encourage walking • Reduce use of private cars • Encourage use of metro • Encourage use of bikes 	Exchange
Nature	<ul style="list-style-type: none"> • More activities in nature than in closed places • Invitations for participation in planting trees and cleanups • Involving Citizens in sea turtle releases and other conservation activities • Encouraging creating microenvironment for birds nesting at homes • Building on existing activities such as “flower for every spring” to spread awareness about own flora and fauna 	Regenerate Exchange
SMEs	<ul style="list-style-type: none"> • Supporting SMEs to specialize in local products and services with embracing local culture and life-cycle social responsibility of their products. 	Exchange Optimize Virtualize
Food packaging	<ul style="list-style-type: none"> • Going back to traditional packaging (identity branding and greening activities = adding circularity) • Making rather than buying always • Gifting reusable containers with food charity • 	Share Exchange
Plastic reduction	<ul style="list-style-type: none"> • Textile bags • Reusable cups, mugs, bags • Preparing a zero-waste carry-on bag with all reusable utensils such as a metal straw for volunteers and winners of contests 	Optimize Exchange
Pride in DS	<ul style="list-style-type: none"> • Contests between municipalities for best DS practices • Connecting nationalism and good Citizenship with DS • School curriculums 	Exchange
Local products	<ul style="list-style-type: none"> • Increase quality • Decrease quantity • Market its quality • Training , competition and quality assurance 	Optimize Exchange Loop
Cultural celebration	<ul style="list-style-type: none"> • Support Boots for NGOs, SMEs everywhere • A bus for Children or men traditional performance visiting Fans Zones • Children and travel books to takeaway about Qatar in different languages • Intellectual fun activities for cultural exchange with locals 	Regenerate
Legacy	<ul style="list-style-type: none"> • Create long-term contests for art and literature (e.g. scientific, fiction, paintings, drama) about Qatar • Encouraging joint art and literature • Giving vacation vouchers for green fans such as the Japanese fans who cleaned the stadium • Encouraging deep research in legacy formed and legacy anticipated 	Regenerate Exchange
Cross-generations	<ul style="list-style-type: none"> • Encouraging families to have and document cross generations debate about the hosting of the event • Including the event in school curriculum to inspire thoughts about their aspirations • Form neighbourhood wisdom committees to receive Citizen’s worries and aspirations before the event, and complaints and suggestions during the event 	Regenerate
Virtual interpretation center for DS	<ul style="list-style-type: none"> • Create a virtual center or user-friendly data bank with guidelines, illustrations, short videos and information for better practices to contribute in DS , both for locals and guest in different languages 	Virtualize

Source: Author’s own construction

Over the past three decades, tourists' involvement with destinations has changed from being primarily a passive gaze (Pera, 2014) or consumption (Miles, 2010) to more engaging ways of relationship and creating own experience or co-creating the destinations (Richards, 2011). This Co-creation involves sharing knowledge and skills between tourists and locals and emerging as a form of creative tourism (Richards & Wilson, 2006). Jebbouri et al. (2022) showed the link between local community participation and tourists' satisfaction. This can be the new emerging topic in destination sustainability and hosting Mega and Gega sport events and other gigantic global events.

7 NEW SCIENTIFIC RESULTS

1. This study introduces a novel framework for understanding the perceptions of Qatari Citizens and Residents regarding the hosting of M-SE and empirically validates the proposed model. This tool was tested using a triple bottom line framework adapted from Prayag et al. (2013), covering six categories—positive and negative aspects of the economic, socio-cultural, and environmental dimensions.
2. The study results confirm significant differences between Qatari Citizens and Residents in their perceptions of hosting M-SE. Residents tend to view the positive socio-cultural impacts of hosting M-SE more favorably than Citizens, while Citizens perceive the negative socio-cultural, economic, and environmental impacts more strongly. As a result, Residents show greater overall support for hosting these events compared to Citizens. The empirical study identified a significant difference in psychic income between Qatari Citizens and Residents exclusively within Generation X. In this group, Residents reported a higher level of psychic income than Citizens.
3. The study found that positive socio-cultural and environmental impacts had a minimal effect on shaping support for Mega-Sport Events (M-SE). In contrast, negative socio-cultural and economic impacts emerged as significant deterrents, strongly influencing reduced support for hosting such events.
4. Psychic income, which includes emotional benefits such as pride and excitement from hosting Mega-Sport Events (M-SE), was identified as a moderate direct factor influencing overall support for hosting these events among both Qatari Citizens and Residents.
5. Personal Valuation of Destination Sustainability (PVDS) was found to significantly influence the perception of negative socio-cultural and economic impacts for both Citizens and Residents. Individuals with high sustainability awareness tended to be more critical of the potential harms of M-SE on DS.
6. Empirical research revealed that while trust in the government and organizing committees was high among both Citizens and Residents, it did not significantly influence support for hosting Mega-Sport Events (M-SE).
7. The findings of the empirical research indicate that Generation Z perceived greater negative socio-cultural and environmental impacts of hosting M-SE compared to Generations X and Y, while Generation X showed a stronger recognition of positive socio-cultural impacts than Generation Z.
8. Significant differences were identified among Citizens based on the age of their dependent children regarding perceived negative environmental impacts and personal valuation of destination sustainability. Citizens with children under 10 years old perceived more pronounced negative environmental impacts, while those without children exhibited a higher valuation of destination sustainability compared to Citizens with children aged 10-18. Among Residents, no significant differences were observed across these dimensions.
9. Qualitative FGD and SSI surveys revealed that Qatari citizens' initial concerns about potential negative socio-cultural impacts of the mega-sport event (M-SE) transformed into a strong sense of national and cultural pride during and after the event, fueled by positive on-the-ground experiences and international appreciation.

8 APPENDICES

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8.2 The Questionnaire in English (for our reference only)

Questionnaire

Destination Sustainability in Qatar with hosting Mega-Sport Events

Dear members of Qatari society: This survey aims to understand and develop tourism destination sustainability in Qatar with understanding of your perceptions and impressions of hosting Mega-Sport events in Qatar. Kindly read the statements carefully and with joy and choose the option closest to your perception accurately, knowing that there are no right or wrong answers. The survey aims to read your perception and understanding as a member of the Qatari society. The survey does not ask your name, nor aims for it, and further it cannot find any information about participants more than what they write, as it set as anonymous. Thank you for investing 10-20 minutes of your time in participating and sharing your accurate opinions. Kindly do not hesitate to pass the link to others in your circle to increase participation for better results. Thank You.

Thank you for participating in this scientific survey. Best regards. For any question megasportqtsurvey@gmail.com

Personal Valuation of Destination Sustainability

To what extent do you agree with the following statements?

1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree					
					1	2	3	4	5
Supporting SMEs is, in my opinion, just as important as supporting large-scale national initiatives.									
Economic growth should come first, in my opinion, even if it means sacrificing the environment and certain social aspects.									
I believe that local community should benefit from tourism in terms of training and job opportunities and more									
I believe that environmental legislations should focus on waste segregation and environmental events, and not on preventing pollution from source									
Community identity and culture, in my opinion, belong in the past and shouldn't stand in the way of progress because they are historical rather than contemporary.									
I think we can receive tourism that is appropriate for us if we preserve our culture and identity.									

Environmental Impacts perception of hosting on Destination sustainability

To what extent do you agree with the following statements?

	1	2	3	4	5
	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe that having the M-SE in Qatar will encourage administrative practices that safeguard the environment, like recycling and pollution control.					
In my opinion, hosting M-SE has negative impacts on environmental sustainability of the host country					
I think planning to host the event will bring green cities, green buildings, green transport technologies which will continue to exist in Qatar after the event					
I believe that the hosting of M-SE has its high carbon footprint due to travel, constructions, excessive waste generation and high energy consumption					
I believe that air, water, soil, visual, and audio pollution will all rise as a result of hosting.					
I think the hosting and its high international standards will promote environmental awareness amongst people in Qatar and visitors					
I believe that hosting will lead to a more sustainable lifestyle in Qatar, including the use of green transportation.					
Nature and natural resources are negatively impacted, in my opinion, by construction related to hosting.					

Economic Impacts perception of hosting on Destination sustainability

To what extent do you agree with the following statements?

	1	2	3	4	5
	Strongly isagree	Disagree	Neutral	Agree	Strongly Agree
In my opinion, Qatar's International image will likely improve as a result of hosting M-SE.					
In my opinion, hosting an M-SE will result in price inflation in our local market					
I think that SMEs in Qatar will benefit from hosting if their services and products were used instead of foreign firms					
I believe that the hosting will lead to stunning hotels, cutting-edge tourism services, and infrastructure that will support travel within the country and for staycations.					
In my opinion, if the hosting went poorly or if errors occurred, Qatar's image and reputation could be ruined globally.					
I think hosting global M-SE will promote Qatar as a tourism destination for international travelers.					
I believe that any local economic benefits will be outweighed by the hosting's huge financial costs.					

Socio-cultural Impacts perception of hosting on Destination sustainability

To what extent do you agree with the following statements?

	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
I think hosting will strengthen societal bond and national unity					
Hosting a global M-SE, in my opinion, will result in crimes like theft and vandalism.					
I am concerned about the negative effects, from the large influx of tourists coming from different cultures and behavioral norms, on our kids.					
I believe we have a legacy to leave for our kids because of Qatar's successful hosting of the first FIFA in the MENA region.					
I think hosting a M-SE will result in road congestion and overcrowding and other associated issues					
I think hosting will facilitate cultural exchange between us and other nations and give us an opportunity to introduce our culture and values					
In my opinion, hosting will enhance public services, facilities and infrastructure, such as roads and public spaces, and provide recreational areas.					
Weeks of hosting a gigantic global M-SE, in my opinion, will have negative effects on our everyday lives and quality of life.					
I believe that hosting a global M-SE may impose on our government things compromising our culture, identity, and values					

Institutional Trust perception of hosting on Destination sustainability

To what extent do you agree with the following statements?

	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
With all due diligence, Qatar will undoubtedly assess all circumstances throughout the hosting of the M-SE, and determine what is best for its people, the nation, and the preservation of its natural resources, culture, identity, and values.					
My trust in my government is unaffected by my belief that hosting M-SE results in negative effects.					
In my opinion, our government is allowing Citizens to participate at the planning and implementation stages of any hosting of M-SE					
In my opinion, Qatar has the financial and logistics capacity to successfully host a global M-SE and bring honor and pride to our nation.					
I think that for any M-SE that Qatar hosts, the event's organizing committee is foreign to the nation and does not comprehend our culture, traditions, and values.					

The organizing committee of any M-SE that Qatar hosts, in my opinion, possesses a great deal of experience and expertise to enable informed decisions.					
Organizing committees for global M-SE often have their focus on the event's success and their own financial and media return benefits.					
I have no doubt that the organizing committee of any M-SE that Qatar hosts will take into account the interests of the Qatari community in all aspects of the hosting					

Attitude and Support for hosting Mega-Sport events

To what extent do you agree with the following statements?

	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
	1	2	3	4	5
I was excited about hosting FIFA 2022, and I am still excited about hosting more events					
I believe that there will be more negative impacts on Qatar than positive ones from hosting an M-SE.					
I believe that hosting M-SE will have long term positive impacts on the host destination					
Hosting FIFA 2022 was good for Qatar, but I am not sure if Qatar should be hosting more events					
In my opinion, hosting FIFA 2022 should never have occurred, and there should never be another M-SE.					
Given its capacity for success, excellence, and miraculous feats, Qatar ought to host more M-SE events.					
I support hosting M-SE in Qatar, but only after comprehensive study with Citizens participating in effective way					
I support hosting M-E but cultural, scientific or economic, but not sport events					
In general, I believe that during FIFA 2022, we experienced excitement that was beyond compare, and we wish to experience it once more.					

Tourism destination preferences for Citizens

What kind of destinations did you like most in the last five years?

Entertainment	Nature	Culture	Religious	Sports	Other
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What makes the destination attractive for you?

Is it inside Qatar?

Yes	
No	

Socio-demographic Profile for Citizens

Are you?

<input type="checkbox"/>	Qatari Citizen
<input type="checkbox"/>	Resident

Gender

<input type="checkbox"/>	Male
<input type="checkbox"/>	Female

Are you?

<input type="checkbox"/>	Married
<input type="checkbox"/>	Currently not married

Year of Birth

<input type="checkbox"/>	1997-2018
<input type="checkbox"/>	1981-1996
<input type="checkbox"/>	1965-1980
<input type="checkbox"/>	1946-1964
<input type="checkbox"/>	1928-1945
<input type="checkbox"/>	1901-1927

Educational Level Attained

<input type="checkbox"/>	Alimentary or intermediate
<input type="checkbox"/>	High school
<input type="checkbox"/>	Diploma
<input type="checkbox"/>	University
<input type="checkbox"/>	Post-grad

Job

<input type="checkbox"/>	Student
<input type="checkbox"/>	Housewife
<input type="checkbox"/>	Retired
<input type="checkbox"/>	Technician
<input type="checkbox"/>	Specialist
<input type="checkbox"/>	Manager and above
<input type="checkbox"/>	Un-employed
<input type="checkbox"/>	Other

Kindly explain if you chose "Other"

--

Work Sector

<input type="checkbox"/>	Public sector (Government)
<input type="checkbox"/>	Private sector
<input type="checkbox"/>	Have my own business
<input type="checkbox"/>	Not working
<input type="checkbox"/>	Other

Family Economic Status

	Less than average
	Average
	More than Average

Age of children under your care

	None
	Less than 10 years old
	10-18 years old
	19-24 years old

Have you ever volunteered in an NGO or initiative to serve the environment or for societal development?

Yes
No

Where do you live?

	Doha
	Al Khor
	Al Wakrah
	Al Rayyan
	Al Shamal
	Umm Salal
	Al Daayen
	Al Sheehaniy

You may write any comment relevant to your choices/answers

Kindly leave us any comment you may have about the survey itself or its topic

Thank you for participating in this scientific survey. Best regards. For any question
megasportqtsurvey@gmail.com

8.3 The Questionnaire in Arabic (language of the participants)

استطلاع رأي

حول استدامة الوجهة السياحية في قطر مع استضافة بطولات رياضية عالمية

أعزائنا أفراد المجتمع القطري: يهدف هذا البحث العلمي لفهم وتطوير السياحة المستدامة في قطر من منطلق فهم انطباعكم ورأيكم في استضافة البطولات الرياضية العالمية. شكرا لمشاركتكم في إنجاحه. يرجى قراءة العبارات بتأن واستمتاع ثم تحديد خيارك الأقرب لقناعاتك بدقة، علما بأنه لا توجد إجابة صحيحة أو إجابة خاطئة. يهدف البحث لاستقراء رأيك ومفهومك كفرد من المجتمع القطري المحلي. البحث لا يطلب ذكر اسم المشارك، ولا يهدف لذلك، ولا يستطيع معرفة المشاركين فيه. شكرا لاستثمارك 10-20 دقيقة من وقتك للمشاركة ولإعطائنا رأيك الدقيق. لطفا، لا تتردد في تمرير الرابط لمعارفك لزيادة عدد المشاركين. شكرا

نشكركم على المشاركة في هذا البحث العلمي . أطيب التحيات لأي استفسار megasportqtsurvey@gmail.com

أهمية استدامة الوجهة

إلى أي درجة تتفق أو لا تتفق مع العبارات التالية؟

					1 لا أتفق بتاتا	2 لا أتفق	3 محايد	4 أتفق	5 أتفق جدا
1	2	3	4	5					
					التلوث بأنواعه واستنزاف الموارد الطبيعية تعد مشاكل بيئية جادة تؤثر على التنمية المستدامة				
					التنمية الاقتصادية يجب أن تحصل وبأي ثمن لتحقيق التنمية المستدامة				
					لتحقيق سياحة مستدامة، يجب أن نتنفع المجتمعات المحلية من السياحة ، مثلا في صورة فرص عمل وتدريب وتنمية اجتماعية				
					حماية تراث وهوية وقيم المجتمع المحلي تعد أولوية في تحقيق التنمية المستدامة				

انطباع المواطنين حول التأثيرات البيئية للإستضافة على استدامة الوجهة السياحية

إلى أي درجة تتفق أو لا تتفق مع العبارات التالية؟

					1 لا أتفق بتاتا	2 لا أتفق	3 محايد	4 أتفق	5 أتفق جدا
1	2	3	4	5					
					استضافة قطر لبطولات رياضية عالمية كبرى ستحفز التخطيط والاجراءات الادارية لحماية واستدامة البيئة مثل سياسات التدوير والحد من التلوث				
					التخطيط لانجاح استضافة بطولات رياضية عالمية كبرى سيجلب تكنولوجيا المدن والمبان الخضراء والمواصلات صديقة البيئة والتي سيستمر وجودها في البلد حتى بعد انتهاء الاستضافة				
					الاستضافة العالمية للبطولات الرياضية ومعاييرها الدولية العالية ستؤدي إلى نشر الوعي البيئي بين المقيمين والمواطنين والزوار				
					استضافة البطولات العالمية الكبرى سيغير نمط الحياة في قطر على المدى القريب والبعيد تجاه اتباع خيارات مستدامة صديقة للبيئة مثل استخدام مواصلات خضراء (المترو) وقضاء أوقات وممارسة أنشطة مع الطبيعة				
					اعتقد أن استضافة بطولات رياضية عالمية كبرى له آثار سلبية على البيئة واستدامتها				
					استضافة بطولات رياضية عالمية كبرى سيتسبب في التلوث للماء والهواء والتربة فضلا عن التلوث السمعي والبصري				
					المنشآت الرياضية والسياحية التي تقام لاستضافة البطولات الرياضية العالمية تؤثر سلبا على الطبيعة مثل البحر والمساحات الخضراء وتستنزف الثروات الطبيعية مثل المياه				
					لاستضافة بطولات رياضية عالمية كبرى بصمة كربونية عالية جدا بسبب السفر والانشاءات و انتاج النفايات والاستخدام العالي للطاقة				

انطباع المواطنين حول التأثيرات الاقتصادية للإستضافة على استدامة الوجهة السياحية

إلى أي درجة تتفق أو لا تتفق مع العبارات التالية؟

1 لا أتفق بناتا					2 لا أتفق	3 محايد	4 أتفق	5 أتفق جدا
1	2	3	4	5				
								استضافة بطولات رياضية عالمية كبرى سيحسن صورة قطر عالميا
								استضافة بطولات رياضية عالمية كبرى سيروج لقطر كوجهة سياحية عالمية
								استضافة بطولات رياضية عالمية كبرى يؤدي إلى إيجاد فنادق جميلة وخدمات سياحية متقدمة وبنى تحتية سياحية والتي ستدعم السياحة الداخلية للمواطنين والمقيمين في قطر والدول المجاورة
								ستستفيد الأعمال التجارية الصغيرة والمتوسطة في قطر من استضافة فعاليات رياضية عالمية كبرى إذا تم تقديم الخدمات السياحية والمنتجات المحلية من خلالها بدلا من المنتجات والشركات والأعمال التجارية الأجنبية
								في حال فشل أو وقوع أخطاء في استضافة البطولات الرياضية العالمية فسيؤدي ذلك إلى تدمير صورة قطر عالميا
								الاستثمار المالي الضخم جدا المطلوب لاستضافة بطولات رياضية عالمية ليس من المحتمل تعويضه من خلال أية أرباح اقتصادية من الممكن أن تتحقق للاقتصاد المحلي
								استضافة بطولات رياضية عالمية في قطر سيتسبب في ارتفاع كبير في أسعار السلع في السوق المحلي

انطباع المواطنين حول التأثيرات الاجتماعية والثقافية للإستضافة على استدامة الوجهة السياحية

إلى أي درجة تتفق أو لا تتفق مع العبارات التالية؟

1 لا أتفق بناتا					2 لا أتفق	3 محايد	4 أتفق	5 أتفق جدا
1	2	3	4	5				
								استضافة بطولات رياضية عالمية في قطر سيقوي الترابط المجتمعي والشعور بالوحدة الوطنية والترابط لإنجاح الاستضافة ورفع رأس قطر
								نجاح قطر في استضافة فيفا 2022 للمرة الأولى لهذه البطولة في الشرق الأوسط أعطانا إرثا من الاعتزاز الوطني نفخر به ونورثه لأبنائنا
								استضافة بطولات رياضية عالمية يحسن من الخدمات العامة والبنى التحتية مثل الشوارع والأماكن العامة ويهيئ أماكن للاستجمام والرياضة والأنشطة العائلية مما يحسن الصحة والاستمتاع بالحياة داخل قطر
								أعتقد أن استضافة بطولات رياضية عالمية كبرى يسهل التبادل الثقافي بيننا وبين الشعوب الأخرى ويمنحنا فرصة التعريف بترائنا وهويتنا وقيمنا المميزة للشعوب الأخرى
								أعتقد أن استضافة بطولات رياضية عالمية كبرى سيزيد من وقوع جرائم مثل السرقة وتخريب الممتلكات العامة
								أعتقد أن هناك مخاوف في تأثر الأطفال أو الشباب الصغار بالأعداد الكبيرة من الزوار والسواح القادمين من مختلف الثقافات والقيم التي تختلف عنا أثناء استضافة بطولات رياضية عالمية كبرى
								سيؤدي استضافة بطولات رياضية عالمية كبرى إلى زحمة كبيرة وكل المشاكل التي تأتي مع الزحمة مثل التعطيل والإزعاج لأهل البلد
								استضافة بطولات رياضية عالمية كبرى لأسابيع يؤثر سلبا على الرفاهية وجودة الحياة للمواطنين ومجريات حياتهم اليومية

انطباع المواطنين حول الثقة المؤسساتية

إلى أي درجة تتفق أو لا تتفق مع العبارات التالية؟

						1 لا أتفق بناتاً	2 لا أتفق	3 محايد	4 أتفق	5 أتفق جداً
1	2	3	4	5						
					أنا واثق أن اللجنة المنظمة لأي بطولة رياضية عالمية كبرى تستضيفها قطر ستنتظر بعين الاعتبار لمصلحة المجتمع القطري أثناء كل تفاصيل الاستضافة					
					أعتقد أن الأولوية لدى اللجنة المنظمة هي نجاح البطولة الرياضية العالمية الكبرى والمردود المالي والإعلامي للجنة منها					
					أعتقد أن اللجنة المنظمة لأي بطولة رياضية عالمية كبرى تستضيفها قطر لديها خبرة ومهارات وإمكانات كبيرة تمكنها من اتخاذ القرارات الصحيحة لإنجاح استضافة قطر وظهرها في صورة جيدة					
					اللجنة المنظمة لأي بطولة رياضية عالمية كبرى تستضيفها قطر هي لجنة أجنبية ولاتفهم المجتمع المحلي ولا تراثه أو قيمه أو عاداته					
					لدي ثقة تامة في أن دولة قطر ستدرس الوضع وتتخذ القرارات الصحيحة لمصلحة البلد والمواطنين وتحمي تراثنا وقيمنا وهويتنا وثرواتنا الوطنية					
					تبدل الحكومة جهوداً كبيرة في إشراك المواطنين في مراحل التخطيط والتنفيذ لاستضافة أي بطولات رياضية عالمية كبرى					
					لا علاقة للثقة بالنتائج السلبية الحتمية لاستضافة بطولات رياضية عالمية كبرى					
					استضافة بطولات رياضية عالمية كبرى قد يفرض على حكومة قطر القبول بأمور تتعارض مع تراثنا وثقافتنا وهويتنا وقيمنا ، وذلك بسبب شروط وقيود يفرضها قبول منح الاستضافة لقطر					
					دولة قطر قادرة مالياً ولوجستياً على مواجهة التحدي والنجاح في استضافة بطولات رياضية عالمية كبرى وجعلنا فخورين بالنجاح الباهر والانجاز					

الاختيارات السياحية للمواطنين

مانوعية الأماكن السياحية التي أحببتها أكثر ضمن وجهاتك السياحية خلال الأعوام الخمسة الأخيرة؟

ترفيهية	طبيعية	ثقافية	دينية	رياضية	أخرى
---------	--------	--------	-------	--------	------

ما الذي يجعل هذه الوجهة السياحية جذابة بالنسبة لك؟

--

هل موقعها في قطر ؟

نعم	
لا	

بروفایل اجتماعي ديموقرافي للمشاركين

هل أنت؟

مواطن قطري	
مقيم	

النوع الاجتماعي

ذكر	
أنثى	

هل أنت؟

	متزوج
	غير متزوج حاليا

سنة الميلاد

	1997-2018
	1981-1996
	1965-1980
	1946-1964
	1928-1945
	1901-1927

المستوى التعليمي

	تعليم ابتدائي أو إعدادي
	تعليم ثانوي
	دبلوما
	تعليم جامعي
	دراسات عليا

الوظيفة

	طالب
	ربة بيت
	متقاعد
	فني
	متخصص
	مدير فمافوق
	لا أعمل
	أخرى

يرجى التوضيح في حال اختيار "أخرى"

جهة العمل

	لقطاع العام (جهة حكومية)
	القطاع الخاص
	أمتلك عملي الخاص
	لا أعمل
	غير ذلك

المستوى الاقتصادي لأسرتك

	أقل من المتوسط
	متوسط
	أعلى من المتوسط

أعمار الأبناء تحت رعايتك

	لا يوجد
	أقل من 10 سنوات
	10-18 سنة
	19-24 سنة

هل عملت ضمن جمعية أو مبادرة تطوعية لأجل البيئة أو تنمية المجتمع ؟

نعم
لا

أين تسكن؟

	الدوحة
	الخور
	الوكرة
	الريان
	الشمال
	أم صلال
	الضعاين
	الشحانية

بإمكانك كتابة أي تعليق متعلق بخياراتك هنا

--

يرجى كتابة أي تعليقات أخرى لديك حول الاستطلاع أو موضوع البحث إن أحببت

--

أشكركم على المشاركة في هذا البحث العلمي . أطيبت التحيات
للاستفسار يرجى مراسلتنا على megasportenets@gmail.com

8.4 Table A0: Systematic review of literatures discussed in the dissertation

Topic	subtopic	References	Interest
Tourism and M-SE Sustainability Development		(Mihalic, 2016)	Despite several decades of academic and practical debate on tourism sustainability, its application in practice remains difficult.
		(Juma & Khademi-Vidra, 2019)	goal of sustainable tourism is minimizing negative impacts and maximizing socio-economic gains
		(Sharma et al., 2021)	Global shift to sustainable tourism - The tourism industry may transform into a new global economic order: sustainable tourism, society's well-being, climate action, and the involvement of local communities
		(Getz, 2008)	A review of event tourism in academic study. Discussion of implications for the practice of event management and tourism and implications are drawn for advancing theory in event tourism
		(Getz & Page, 2016)	extended review to study event tourism updating the previous review article published in 2008 with a deeper analysis of evolution and development, charting the growth of the literature, focusing both chronologically and thematically.
M-SE Tourism	Motivation for hosting	(Müller et al., 2023)	Growth of three of the largest sports tourist events: the Two Olympic Games and the Football World Cup, about 60-fold over the past 50 years, thirteen times faster than the world GDP
		(Grix et al., 2022)	mega-sport events are argued to have been used by hosting countries to achieve political and socio-political
		(Preuss, 2015)	opportunities for destination development rather than focusing on the event itself- the hosting can bring changes with important consequences for the host city
		(Nyikana et al., 2014)	Economic benefits and development with hosting mega-sport events
		(Matheson, 2006)	
DS with M-SE	Mega-Sport sustainability	(Liu & Wilson, 2014:12)	cities use hosting mega-sport events as tools for building the city image for their tendency to draw large audiences from both home and abroad and generate global media coverage
		(Trendafilova et al., 2014)	shift in sports organizations' mindset over time towards current environmental initiatives implementation and continuous development
		(Collins et al., 2009)	suggested using Ecological Footprint analysis and Environmental Input–Output modelling to explore the environmental impacts of mega-sport events in general
		(Graham et al., 2018)	Barriers to adopting sustainability in sport
		(Daddi et al., 2022)	
	Sport organization & sustainability	(Trendafilova et al., 2014)	
		(Sharma et al., 2021)	a global shift in all sort of organization's mindset to the direction of sustainability
		(Bujdosó & Dávid, 2013)	findings items managers perceive to be a top priority (versus lower priority) & strategic responses to contribute to sustainable development and the importance of special-interest tourism.
M-SE Hosting's Impacts	future study directions	(Dolles & Söderman, 2008)	Introduction to conceptual and methodological issues related to defining and measuring the impact of mega-sport events, with growing interest in hosting sport events in Asia, indicating potential directions for further research
	Impacts on destination	(Nyikana et al., 2014)	Long-term positive (Legacy) impacts on the destination as many visitors planned to visit again with good ratings for tourism facilities.(using the 2010 FIFA World Cup in Port Elizabeth, South Africa as a case study)

Topic	subtopic	References	Interest
Economic-impacts		(Maennig, 2017)	no majority support for hosting. unequal distribution of net benefits. minority perceive large average net benefits per capita, while the majority suffer net costs.
		(Solberg & Preuss, 2007)	Long-term economic impacts: government funding is an incentive to exaggerate the benefits. Events can be both costly and risky investments. The challenge for policy makers: to evaluate the true costs, benefits, risks, and leveraging strategies that each event offers.
		(Geyer-Klingeberg et al., 2017)	Evidence against the hypothesis: stock markets are driven by sports sentiment in the case of national teams. Due to the existence of strong asymmetry in the returns after wins and losses of individual clubs, behavioral explanations cannot be fully ruled out
		(Geyer-Klingeberg et al., 2017)	Winning a match is not associated with significant return effects for both national teams and individual clubs. In the case of lost matches: publication bias, i.e. negative returns are systematically overrepresented causing a biased picture of the true soccer match effect. regional differences, time interval under examination and the design of empirical analysis to be responsible for the wide variation in previous study outcomes.
		(Andreff, 2008)	Winning the bid to host M-SEcan be viewed as a winner’s curse, in view of all what seems to be linked costs such as delayed completion, financial deficit, cost overruns, project revisions, and debt.
		(Whitson & Horne, 2006)	Advocates for mega-projects tend to make optimistic economic estimates, whilst opponents worry about public debt and about the ‘opportunity costs’, when public money is spent on architecturally dazzling stadia and other spectacular infrastructure. Questions asked about discrepancies between predicted and actual outcomes of sports megaevents, and about why hosting is so often the project of political and business elites, and economic impacts of tourism, in the years after the event.
		(Liu & Wilson, 2014)	The objective of this article is to explore the effect of the national football team’s victory in the FIFA World Cup on the winning country’s tourism. No conclusive positive relationship was found.
M-E impacts on inbound		(Matheson, 2006)	This paper provides an overview of the economics of sports mega-events as well as a review of the existing literature in the field. The paper describes why boosters’ ex ante estimates of the economic impact of large sporting events tend to exaggerate the net economic benefits of these events and surveys the results of a large number of ex post studies of exploring the true impact of mega-events.
		(Fourie & Santana Gallego, 2011)	Significant increase in tourism numbers during the event, but also possible regular tourist displacement: changing time or location of trips.
M-SE hosting’s negative impact		(Al-Emadi et al., 2022)	Anticipated impacts: traffic, pollution, price increases& rise in the overall cost of living.
		(Liu & Wilson, 2014)	Travel inconvenience was the most negative impact recorded, followed by price inflation, security, and crime concerns, risk of disease and pollution, and environmental concerns.
Socio-cultural impacts		(Preuss, 2015)	legacies affect stakeholders differently - positively for some and negatively for others. It considers how to maximize positive legacies and suggests that these can best be controlled by governmental organizations. legacies gain and lose power over time and that often a legacy will be activated only if environmental changes offer opportunities.
		(Gratton & Preuss, 2008)	The positive, or negative, legacy of mega sport events will be considered. A definition of legacy will be given, how legacy might be measured is discussed and the key elements that make up a legacy are identified.
		Legacy of M-SE and social impact	
		(Liu, 2013)	Long-term impacts of hosting mega-sport events can have benefits:

Topic	subtopic	References	Interest
			<p>. the feel-good effect on the host countries' citizens and the international perception effect bring profits to the host countries.</p> <p>. World Cup has positive impacts on both developed and developing countries hosting the event with more bias towards developing ones as a result of the new stadium's novelty effect</p> <p>. The novelty effect of new stadiums benefits host countries that are already developed while developing host countries actually suffer a loss from stadiums</p> <p>. Future research in this area should therefore focus on the quantitative measurement of these impacts in order to figure out the full extent of the positive impacts in the host countries</p>
		(Gratton et al., 2000)	Defining legacy and how legacy might be measured and to identify key elements that make up a legacy.
	Impact on QoL	(Heere et al., 2013) (Mair et al., 2023) (Al-Emadi et al., 2023)	hosting mega-sport events directly impacts the quality of life of people living in the host communities by triggering various negative and positive short-term and even long-term impacts that are known as 'legacies'
	Destination image	(Kaplanidou et al., 2016)	higher awareness of the 2022 World Cup being hosted in Qatar improved host destination image perceptions, selective regional country perceptions, country character and relevant behaviors to either travel to Qatar for vacation, for interest to travel to attend the event, or to watch the event on TV
	Impact Assessment	(Khalifa, 2020)	. the different phases of the 2022 FIFA World Cup in Qatar significantly present opportunities for advancing human rights.
	Ambiguity of adverse social impacts	(Liu & Wilson, 2014) (Millington & Wilson, 2019)	Positive impacts of M-SE tourism (intention to travel and more tourism), has negative impact on the local community (such as travel inconvenience & price inflation, security and crime concern, risk of disease)
	Soft power	(Al Thani, 2021)	Global M-SE can be used for Development and Peace : investigating whether leveraging the rights and social legacy of migrant workers, as part of broader discourses concerning transparency, integrity and equality, accountability and commitment towards international human rights standards and international development, can restore the host's soft power abilities in the process.
	Environmental Sustainability	(Stoddart, 1990)	Early focus on golf and its environmental impacts. Attention to the environmental impact of sport goes very far back to last century examining the concept of sustainable development and its relevance to golf. But social negative impacts were not fully understood.
		(Lenskyj, 1998) (Lenskyj, 2002)	Early Link sport with environment and society, examining the notion of sustainable sport in the context of preparations for the 2000 Summer Olympic Games in Sydney examining the strategy of 'corporate environmentalism', which the organizers have deployed in their attempt to remediate the site of the Games. The study multifaceted link between sport and the environment, focus on environmental and also social impacts of sport, and the greening of sport
		(Millington & Wilson, 2019)	The present-day status quo is such that golf is commonly depicted as a positive force in the quest for sustainable development. For example, and despite sustained criticism of golf's potential impacts on plants, animals, and ecosystems in general, golf industry representatives commonly tout their leadership on environmental issues. Our analysis in this chapter critiques this present status quo – for instance, by highlighting cases whereby the economic dimension of sustainable development has seemingly overridden its environmental and social analogues.
	Sustainability in sport-facility-management	(Mallen et al., 2010a)	The results reveal the state of sport facility ES, including the reported value, financial support, best practices, challenges and delineated competencies for students seeking to enter the field. In addition, emerging trends are discussed based on a vision of ES in the sport facility industry by the year 2015.
	Knowledge gap in Environment	(Wilby et al., 2022)	knowledge gaps in understanding impacts of sport emissions on climate : mega sport events, elite sport, soccer, skiing, and golf have received most attention, whereas grassroots and women's sport, activity in Africa and South America, cricket, tennis, and volleyball are understudied.
	Environmental -impact	(Collins et al., 2009)	Environmental impacts of mega-sport events in general not just as socio-economic legacy components. More recognition of importance of environmental impacts of mega sporting events & sustainable development, while the environmental impacts of events are difficult to assess quantitatively, being complex and often occurring over extended periods
	Sport-management		Barriers to adopting environmental sustainability in sport as a stand-alone course and as a module, makes developing stand-alone coursework a long-term process.

Topic	subtopic	References	Interest
Qatar FFC	education & sustainability	(Graham et al., 2018)	
	Environmental -degradation and tourism	(Shahbaz et al., 2021)	"a comprehensive knowledge map of tourism and environmental degradation literature review based on scientific articles published between 1999 and 2020. The study provides an overview of research, influential authors, and journals."
	Local concern for the environment	(Liu & Wilson, 2014)	Pollution & environmental aspects constitute concerns for participants in the research
	Stadia-management & sustainability	(Daddi et al., 2021)	"Two dimensions of sustainability in sport management: operational (direct environmental impacts such as waste) and governance (allocation of environmental roles) practices. One challenge is fragmentation of operational practices on the infrastructures or the planning and staging of football events and a lack of maturity of governance structures."
		(Russ et al., 2022)	Hosting Qatar FFC results in promoting important infrastructural changes, social challenges in the country& shifting the image of the nation
		(Henderson, 2016)	Qatar faces opportunities & challenges in staging the M-SE (unguaranteed success in the hosting of FIFA 2022).
		(Grix et al., 2022)	"Qatar case study is an outlier to the other case studies of countries hosting mega-sport events"
		(Matheson, 2006)	The challenge for Qatar is to implement required global changes without sacrificing what Matthew Gray describes as its 'sense of "Qatari-ness"'. If it does so, the World Cup will not just be another significant moment in the history of football in the years to come. It will also have long-lasting social and cultural implications for the people of Qatar and their wish to declare a national identity to the world that is unique amidst a wider mosaic of Muslim and Arab identities.
		(Russo et al., 2022)	The positive legacy of the country's image from hosting the event is threatened by several social challenges
	Sport diplomacy & soft-power	(Al-Dosari, 2021)	Examining official state statements related to hosting the 22nd FFC, found the use of sports-diplomacy serves achieving numerous foreign policy objectives in Qatar
		(Al Thani, 2021)	By investment in new legislation, Qatar supported the human-right of migrant low-skill labors and dealt with human-right accusations to defend its global image.
		(Grix et al., 2022)	Discusses its own hypothesis about the use of sports and M-SE by Qatar to gain socio-political goals. It also possible to use it for Development-and-Peace by the promotion of human-rights, foreign labor' rights, transparency, integrity, and equality and to restore Qatar's soft-power abilities in the process
	Local's perception	(Al-Emadi et al., 2022)	Citizens and expats in Qatar support hosting the M-SE with some concerns (traffic; pollution; price increases; & possible increase in costs of living).

Source: Author's own construct based on literature review (Al-Muhannadi et al., 2024)

8.5 Table A1: Published Literature studying different impacts of hosting Qatar FFC

(i) Socio-economic impacts of hosting

Topic	Method/theory	Results	Implication	Objective	Reference
Impacts Beyond the event	Holistic synthesizing and evaluation of challenges, opportunities, and progress in event preparation	Qatar's organization teams using green-tech, urban-development-concepts, aiming for legacy based on the QNV2030, envisioning Qatar's sustainability.	This can lead to lessons learnt for more successful organization and planning of future mega-sport tournaments from a holistic perspective.	To address the intersection between M-SE & sustainability + Case-study the 22 nd FFC.	MEZA TALAVERA et al. (2019)
Impacts on DS & with focus on Qatar FFC	Bibliometric Analysis , LR , ReSOLVE Approach application	Potential of positive impacts on DS -yet to be proven in following years	Building on momentum of successful M-SE for destination marketing with enhanced DS principles	To conduct LR on impacts on DS as a result of hosting M-SE and apply it on Qatar as the host of Qatar FFC	Al-Muhannadi et al. (2024)
influence on destination images	Case study: 2016 UEFA European Football Championship (France), 2018 FFC (Russia) & 2022 FFC (Qatar)		Forming an understanding of impacts of recent football M-SE	To investigate the influence on destination image of the host of football M-SE. Th study analyzed Qatar's FFC and two other events; France's 2016 UEFA European Football Championship and Russia's FFC .	Andersson et al. (2021)
Examining football fans Consumer Behaviour towards Qatar FFC in Nsufa, Accra, Ghana	WTP theory using quantitative methods with closed-ended questions distributed on WhatsApp and Facebook among soccer fans in Nsufa, using a regression model and Microsoft excel for data analysis	residents in Nsufa : (1) are fans of the M-SE & WTP for food & drinks at increased prices through games times. Yet, the consumption of 22 nd FFC has no impact on their sales of decoder.	residents will not watch FIFA World Cup matches at the pub, restaurant and beer bar, hence, an open space or park with a mounted giant screen may be necessary and ideal for business operators to leverage for sales.	to examine a non-host city consumer behavior of football Fans in Ghana, towards Qatar FIFA	Appiah Kusi, Frank & Osei, Charity. (2023).
Predicting Fan Attendance	Machine Learning (ML) Approach : model developed using attendance data Russia 2018 FFC to forecast the Qatar FFC participants. Stochastic gradient descent (SGD) was found to be the top-performing algorithm, achieving an R2 metric of 0.633 in an Auto-Sklearn experiment that considered a total of 2523 models.	Team qualification has the highest impact on attendance. Other factors such as distance, number of expatriates in the host country, and socio-geopolitical factors have a considerable influence on visitor counts.	viable results by the model, but with recommendation to use more data inputs, which can be taken from previous events for increasing results' accuracy.	to introduce a new application for machine learning to for accurate prediction of the number of fans participating in Qatar FFC.	Al-Buenain et al. (2024)
opportunities and challenges for Qatar	empirical case study of Qatar hosting M-SE	The possibility of undesirable outcomes & event's Success not guaranteed	Opportunities and challenges to be considered for achieving ambitious plans	to discuss role and significance of mega-sport events in tourism.	Henderson (2014)
Socio-Economic Impacts Perception of non-host city.	A questionnaire (n=422) from Chon Buri Sports City residents (11 districts) Extracted seven dimensions by confirmatory factor analysis consistent with empirical data	+ve impacts : "Community Development", "Community Pride", Economic Benefits. -ve impact Traffic, Security, economic & environmental Costs. participants perception of -ve impacts is less than that of other non-host city residents.	Qatar 2022 has more +ve impacts than -ve on non-host Chon Buri Sports City residents' perceptions	Investigating distal non-host city perception to mega-sport from non-host city perception.	Chankuna (2022).
The economic impact of hosting & winning	a comparison of the GDP growth rates for 5 years (2 before & 2 after FFC 19,20,21,22) for the host and the winner Data Source:	no consistent pattern of significant positive impact on economies of host & winning countries of FFC during the period (2010-2022)..	no general pattern but Qatari economy shows a positive impact and is predicted to increase in the first half of 2023	to analyze the primary economic effects of the 22 nd FFC on Qatar as a host country and Argentina as the country that won the Cup	Omer (2023)

	World Bank database, FIFA Website, World Atlas Database, Database of the Qatar's PSA.				
Economic Impact on Qatar Beyond 2022	Discussion	Immediate economic impacts on the capital and anticipated short and long term economic impacts related to the infrastructure and the plans for tourism development	The event utilized for tourism attraction and destination branding and development of different economic sectors	To discuss anticipated economic impacts of hosting on Qatar's economy	TechnologyHQ (2022)
Assessing Impacts of 22 nd FFC on Tourism	a quantitative research collecting data using online surveys with correlation analysis using SPSS	significant relationships between tourism development activities and 22 nd FFC in Qatar with significant effect on tourism development.	appropriate planning to maximize the benefits with appropriate tourism infrastructure, brand image. stakeholders need to ensure availability of tourism activities.	to examine the anticipated impacts of the mega-sport 22 nd FFC on tourism development and activities, and investigate if tourism development is dependent on income from the event and number of visitors	AL-Dosari (2020)
Measuring Impact and Performance	Data collected from a joint study by Euromonitor and Google designed to help marketers better understand in-person visitors to the World Cup. Surveying 1,500 leisure travelers from 13 countries, including the UK, the US, Brazil and China.	38% of fans want to visit neighboring countries with good flexibility such as UAE.	beside performances, fans want to shape their overall World Cup experience in and outside host country bringing benefit to both.	to understand perception of expected 1.2 million fans for Qatar FFC, and measure impact and performance of Qatar FIFA on visitors' experience on host country and its region	Alan Rownan and Rabia Yasmeeen (2022)
Socio-cultural impacts	Literature analysis	The hosting is a challenge for colonial western stereotyping of Arab and Islamis World.	Qatar's hosting a FIFA M-SE is therefore a late but important decision of FIFA to fill an important gap for sports global inclusion.	To study the cultural ramifications of FIFA's first Arab FFC and impacts on national identity and social legacy	Griffin (2019).
Mass social change and identity hybridization	DA & Interviewing participants Groups : Citizens in Qatar, from within Qatar's cultural, education, policy, and sports sectors.	some everyday Qatari cultural practices "survived modernization attempts, albeit, in hybrid forms"	hosting the M-SE came with challenges but Qatar Citizens "actively maintain celebratory heritage customs"	examines how 22 nd FFC has transformed national and cultural identity in Qatar, and residents' responses to such change	Brannaget al. (2023)
Post-event Urban regeneration strategies for Doha.	literature review of urban post-event growth strategies taking London as a case study previous mega-event host city, and projecting it to the capital of Qatar	interviews reveal that post-event urban regeneration strategies are still under discussion, and only general guidelines are established	proposing implementing relevant post-event urban regeneration strategies	to understand the current post-FIFA planning and repurposing strategies in Qatar, and evaluate their compatibility with needed urban planning for Qatar	Elgahani & Furlan (2018)
Impacts on Human Rights: A Case of Qatar FFC	Case study research design with Questionnaires targeting population(520) sample(400) of persons working in different activities related to the FFC in Qatar. quantitative data obtained analysis in SPSS V.25: descriptive statistics with t-tests (significance). Multiple linear regression to test relationships.	There are human rights guiding principles in all phases of the 22 nd FFC but also impacts on 1) adverse human rights and 2) opportunities for advancing human rights. Challenges: Kafala Scheme, unregulated recruitment agents, religion & tradition	Adopt policies to influence sustainability & human rights of foreign labors and locals during and after hosting	to assess the impacts of Mega-Sport Events on human rights, focusing on the Qatar	Khalifa (2020)

(ii) Health aspects of Qatar FCC

Topic	Method/theory	Results	Implication	Objective	Reference
Is M-SE spreaders of infectious	examined Tokyo 2020 Olympics and Paralympics	hosting M-SE during COVID-19 pandemic is safe if strictly	recommend better procedures for forthcoming mega-sport	To study mega-sport events' possible risk for the spread of pandemics similar to the coronavirus, to	Chowdhury et al. (2023)

diseases similar to COVID-19		maintained the precautions with non-pharmaceutical and pharmaceutical measures” for controlling infections.	events learning from the success in Tokyo 2020 M-SE	improve preparedness for future international events	
Qatar's healthcare system readiness for incidents during the FFC	A simulation-based exercise enabling “organizers and participants to identify potential gaps in systems and processes, but also in their own ability to manage such situation”	Finding feedback about important requirements to ensure that all required participants can engage in the activity smoothly and that lessons learnt from everyone included in the exercise	key lessons addressed to the ” planners of system-wide tabletop SimExs are to start by running multiple small-scale activities to get learners from various concerned facilities familiar with the tabletop exercise process”	to present how a large-scale tabletop Simulation-based to test Qatar's healthcare system's readiness to respond to a potential serious incident during the Qatar FFC, and illustrate lessons learned for scholars and educators.	Alinier et al. (2023)
Trauma and orthopedic surgery response at	A retrospective analysis was conducted on programs and plans at the department during the event. Followed by descriptive analysis. Data review done for all year 2022 cases by two independent researchers.	The Orthopedic response is integrated with the overall medical response for the event, with good coordination and efficient flow of patients and availability of the right resources at the right time	the importance of crisis management and training program adaptations for optimal patient care and resident training advancement and provides valuable insights for the organization of future mega-sporting events.	to analyze the impact of the 22 nd FFC on the Orthopedic Surgery department at Hamad Medical Corporation and its reaction to the challenges for hosting M-SE.	Salman et al (2023)
Health incident (Lower Limb) during the event	thorough history review, examination, and laboratory studies to exclude possible bleeding disorders, a diagnosis of simple purpura was made	the 36-year-old man presenting with bruising to the dorsum of the legs scored 0 on both the Bleeding Assessment Score and Wells’ Criteria for DVT	Following a thorough assessment, he was diagnosed with simple purpura.	To report a case of symmetrical posterior lower limb bruising in a Qatari male football fan 12 following his attendance a game at Qatar FFC.	Awan & Bhatti (2023)
Health and Safety Strategies and Legacy for Qatar FFC	Review	Qatar FFC need to change unhealthy behaviors and promote healthy lifestyles, using vital components.	proposed strategies with components for systematic and scientific plans and execution of forthcoming FFC	to understand impacts of the pandemic and NCDs, to inform preparation for the 22 nd FFC the FIFA World cup Qatar 2022 and suggesting strategies	Adelowo (2022).

(iii) Green technology

Topic	Method/theory	Results	Implication	Objective	Reference
Green technology: Adopting EV in Qatar	A well-to-wheel life cycle assessment and comparison with ones using natural gas. A survey to evaluate economic & practical feasibility of EV in Qatar.	EVs were found to pass conventional gasoline vehicles which produce triple the amount of GHG emissions. But not enough financial subsidies to make the shift	Government practical incentives & substantial subsidies needed to switch to e-mobility. carbon-neutral solutions. Or much time & resources are needed to achieve decarbonizing road mobility on roads with “10% electric vehicles by 2030”	“life-cycle-based comparative study between the electric and conventional gasoline vehicles” testing impacts and environmental performance in relation to the environment, and reflecting on the 22 nd FFC	<u>Al-Buenain et al.</u> (2021)
CE & social sustainability & legacy: The case of innovative shipping container stadium	“The Ecoinvent v.3.7.1 is used to quantify the midpoint environmental & endpoint human health impacts”. Comparison made between two operation scenarios- 1. one-year temporary operation & 2. 50-years of permanent operation followed by simulation-based sensitivity analysis	Circular design could reduce 60% of negative health implications with decreasing material footprint	enhancing awareness of the sustainability benefits of CE & learning from economic application adopted by M-SE and FFC sustainable planning and its implications on forming legacies.	to discuss social sustainability and legacy aspects of a CE application for FFC, by analyzing the full life-cycle phases of the ” RAA stadium including the raw material production, construction, operations, and end-of-life”. Also, it discusses how enhancing circularity of modules and design impact forming legacies	Kucukvar et al. (2021)
tree nursery project in Qatar & carbon neutral commitment	carbon emission analysis	With the use of treated grey water & fertilizer, the tree nursery project showed carbon reduction potential of about 22%.	22 nd FFC can meet the carbon-neutral challenge, UN 2030 Agenda for SD	To investigate whether Qatar FFC can fulfil the carbon-neutral commitments and the UN2030 Agenda for SD, by analyzing the tree nursery initiative	Spanos et al. (2021)

(iv) Soft diplomacy/power

Topic	Method/theory	Results	Implication	Objective	Reference
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Soft power & soft disempowerment.	Case study using “soft power– soft disempowerment nexus”	awarding Qatar, the hosting of the 22nd FFC and its perceived ambitions stimulated foreign criticism causing negative impacts on Qatar and its people, including tourism, but also positive impacts including nation’s resilience facing hardships & strengthening its soft power.	Presenting “soft power–soft disempowerment nexus” as a method to examine soft power strategies anywhere and in any field	to address criticisms of Qatar, by author’s analytical model of the “soft power– soft disempowerment nexus”.	Brannagan & Giulianotti (2018)
Resilience-oriented recovery of flooded road networks: a novel framework	Applying the resilience index and metrics, to evaluate 3 recovery strategies : (1)Flood-susceptibility-based(SBR), (2)Centrality-based(CBR), (3)Critical-links-first(CLBR) recovery strategies	* CLBR : best strategy to improve resilience * SBR : worst	presenting a simple, flexible and robust method to evaluate “recovery strategies’ impact on road networks resilience and performance” for M-SE, with outcome to advise policy makers of Qatar FIFA 2022.	to evaluate “three post-flood interventions” -Flood-susceptibility-based(SBR); -Centrality-based(CBR); and -Critical-links-first recovery strategies(CLBR), at Qatar FFC, to build a framework on established resilience index and metrics to perform a resilience-oriented recovery strategies evaluation for M-SE.	Serdar & Al-Ghamdi (2023)
Resiliency Assessment of Road Networks during Mega Sport Events: The Case of Qatar FFC	Development of a framework to assess the resilience focusing on “multilevel assessments during several disturbance scenarios”	Road networks showed (1) high level of resilience to intentional attacks and accident scenarios. (2) issues during natural-hazard-scenario (Flood) including low resilience and extreme fragmentation	improving storm management plans.	To assess Qatar’s road networks for their resilience during the hosting the 22 nd FCC mega-sport events.	Serdar, & Al-Ghamdi, (2021)
Diamond of the Desert: The Case of Qatar’s 2022 FIFA World Cup.	Discussion	negative image implications, instigated by Western media coverage could cause international brand investors withdrawal of their contribution and sponsorship	Possible impact on the success of the event and the huge tourism opportunity	Discusses possible obstacles to Qatar’s investment in promoting tourism using the hosting of the event	Russo et al. (2022).
Role of the Netherlands Businesses in Addressing Human Rights Issues in Qatar	Case study Dutch state & businesses in Qatar FFC, and other participants exploring lessons learned and opportunities missed in Qatar	Although businesses becoming increasingly aware of their expected obligations towards defending human-rights, but they have shown little action to address human rights risks, especially in public	in the absence of appropriate response from the M-SE organizers or host, responsibility lies on countries & national sports entities to assist businesses in navigating ruling criteria surrounding the M-SE, and to impose implications for failing to fulfill them.	To discuss the involvement of private businesses with M-SEs like FFC, and how that can be used. It has demonstrated that.	Heerdt & Roorda (2023)
Sportwashing ethical concerns	Discussion	sportwashing has two levels of negative impacts: (1) it turns participants in the M-SE to complicit in the sportswasher’s wrongdoing & (2) sportwashing corrupts the important heritage linked to sports traditions and organizations.	claim that the 22 nd FFC in Qatar is sportwashing and propose resistance strategies for athletes and different stakeholders that can lead to failing the event.	To discuss human rights concerns related to Qatar related to the hosting of the 22 nd FFC and claim that it is ‘sportwashing’ suggesting ways to fail the event	Fruh et al. (2022)
Sport and International Relations: Qatari Soft Power and Foreign Policy Making	Analysis and discussion of formal state discourses regarding the 22 nd FFC,	Despite known impacts of Sport on politics and international diplomacy, the impact of soft power of staging an M-SE is unclear literature	it is required to move outside current analysis to the “post-structuralist – interpretive approach and discourse theory”,	to explore the official state narratives regarding Qatar’s choice to host the 22 nd FFC, and examine how this application of sports diplomacy is aiding in the	Al-Dosari (2021).

		discussions of the role of sport in Qatari soft power adheres to the Realist School of international relations theory, and digging towards internal motivations of Qatar	To get clearer understanding of the use of sports diplomacy in different cultural contexts	accomplishment of various foreign policy objectives of Qatar and propose a new approach	
Soft Power: Migrant Workers, and International Image	Discussion	The negative publicity received by actions by Qatar for mitigating adverse impacts and bad image such as: collaborating with global entities for the promotion of rights of foreign labors + showing commitment to global conventions on "Sport for Development and Peace"	Qatar succeeded in restoring its soft power by employing ways for showcasing "accountability and commitment towards international human rights standards" & global development	to examine the impact of hosting the 22 nd FFC from human right perspective focusing on the leverage of legacy related to foreign labors	Al Thani (2021)
soft power in Qatar's Global Sports Strategy	Discussion	Claim that severe critique of Qatar social regulations & legislations resulted in let go of FIFA President	22 nd FFC example of soft power and how sport and politics intertwine	to show that Qatar uses sport to achieve small-state objectives & showcase Qatar worldwide, exercising soft power internationally.	Grix et al. (2019).
Importance of Sports in QNV2030	Unstructured interviews (2012): Qatar 22 nd FFC Committee; Qatar Olympic Committee; Aspire Academy of Sporting Excellence; the International Centre for Sports Security; & international sports broadcaster(ESPN)	Sports' importance inside Qatar exceeds expectations and assumptions of published literature	Qatar's M-SE to accomplish social & political goals: (1)health & well-being (2)celebrating orientalism & dealing with misguided stereotyping (3)infrastructural development (4)attracting global tourism	take to the lead in studying the growing importance and motivations for sports in Qatar (and hosting the S-ME) from a sociological standpoint, by communication with key organizations and personnel inside Qatar's sporting domain	Brannagan (2013)
Soft power & health & wellbeing	Introductory analysis	3 topics for Qatar's image promotion: (1)health & well-being (2)progress & modernization (3)peace & security	Sports found important in the 3 topics for Qatar's soft power strategy	To fill the gap in literature on Qatar and sports	Brannagan & Giulianotti (2014).

Source: Author's edition

8.6 Table A2: Document analysis of official documents: Qatar National Vision 2030 (QNV2030) & Third Qatar National Development Strategy 2024–2030 (QNDS3)

Sustainability attribute	Quote	Vision / strategy	note
3 Pillars + Human Development	<ul style="list-style-type: none"> <i>Human Development</i>: Development of all its people to enable them to sustain a prosperous society. <i>Social Development</i>: Development of a just and caring society based on high moral standards, and capable of playing a significant role in the global partnership for development. <i>Economic Development</i>: Development of a competitive and diversified economy capable of meeting the needs of, and 	QNV2030	QNV rests on four pillars PAGE 11

Sustainability attribute	Quote	Vision / strategy	note
	securing a high standard of living for, all its people for the present and for the future.		
	<ul style="list-style-type: none"> • <i>Environmental Development</i>: Management of the environment such that there is harmony between economic growth, social development and environmental protection. 		
	<ul style="list-style-type: none"> • Economic growth, social development and environmental management 	QNV2030	Defining Characteristics of Qatari Future (Page 3)
	<ul style="list-style-type: none"> • choose the development path that carefully balances the interests of the current generation with the interests of future generations 	QNV2030	The Needs of this Generation and the Needs of Future Generations
3 Pillars of sustainability	<ul style="list-style-type: none"> • The Qatar National Vision 2030 builds a bridge between the present and the future. It envisages a vibrant and prosperous country in which there is economic and social justice for all, and in which nature and man are in harmony 	QNV2030	Head of State Message
HUMAN DEVELOPMENT (family, culture, health, safety)	<ul style="list-style-type: none"> • An Educated Population • A Healthy Population: Physically and Mentally • A Capable and Motivated Workforce 	QNV2030	Human Development (page 15-18)
	<p>5. Quality of Life :</p> <ul style="list-style-type: none"> • Provide quality of life for all through excellence in healthcare and public safety, with a vibrant cultural life, becoming a best-in-class environment for families. 	QNDS3	QNDS3 Strategic National Outcomes (14)
SOCIAL Pillar + Respect Local Culture, Arabic & Islamic identity	Family is the basis of the society. A Qatari family is founded on religion, ethics, and patriotism. The law shall regulate adequate means to protect the family, support its structure, strengthen its ties, and protect maternity, childhood, and old age.”	Permanent Constitution	Guiding principles of Qatar’s national vision (page 10)
	<ul style="list-style-type: none"> • protects public and personal freedoms; • promotes moral and religious values and traditions; and, • guarantees security, stability and equal opportunities. 	Permanent Constitution	Principles
	Social Care and Protection A Sound Social Structure International Cooperation	QNV2030	social development outcomes Page 21
	Preserve Qatar’s national heritage and enhance Arab and Islamic values and identity	QNV2030	A Sound Social Structure (22)
	An increased regional role economically, politically and culturally, particularly within the framework of the Gulf Cooperation Council, the Arab League and the Organization of Islamic Conference. Intensification of cultural exchange with the Arab peoples in particular and with other nations in general.	QNV2030	International Cooperation (23)
	Qatar will seek to build a safe, secure, and stable society based on effective institutions. The country will promote tolerance, benevolence,	QNV2030	The second pillar – social

Sustainability attribute	Quote	Vision / strategy	note
	constructive dialogue, and openness toward other cultures in the context of its Arab and Islamic identity		development Page 19
	Qatar will also enhance its important and constructive regional role, especially within the framework of the Gulf Cooperation Council, the Arab League and the Organization of Islamic Conference.	QNV2030	The second pillar – social development Page 20
	<ul style="list-style-type: none"> 4. Cohesive Society : Preserve Qatar's values and strong family bonds, fostering active citizenship, an integrated community, and harmonious society to thrive in a globalized world 	QNDS3	QNDS3 Strategic National Outcomes (14)
	promotes moral and religious values and traditions	QNV2030	Guiding principles of QNV (page 10)
	<ul style="list-style-type: none"> protects public and personal freedoms; promotes moral and religious values and traditions; and, guarantees security, stability and equal opportunities. 	Permanent Constitution	Principles
	Strong Islamic and family values will provide our moral and ethical compass	QNV2030	Head of state (2008))
	seeks to connect and balance the old and the new.	QNV2030	Modernization and Preservation of Traditions (Page 4)
Inter-cultural and civilization dialogue	Sponsorship and support of dialogue among civilizations, promoting coexistence between different religions and cultures. Contribution towards international peace and security through political initiatives and developmental and humanitarian assistance.	QNV2030	International Cooperation (23)
	Intensification of cultural exchange with the Arab peoples in particular and with other nations in general.	QNV2030	International Cooperation (23)
Openness to others and soft power	As a responsible member of the international community, Qatar will contribute to attaining international security and peace and will fulfill its international commitments	QNV2030	The second pillar – social development Page 20
ECONOMIC pillar			
Sustainable economic growth	Wherever there is an environmental cost to be paid for economic progress, it must be compensated with investments in technologies that help improve the environment		Economic Growth, Social Development and Environmental Management
Diversification and competitiveness	<ul style="list-style-type: none"> Sound Economic Management Responsible Exploitation of Oil and Gas Suitable Economic Diversification 	QNV2030	Economic development
	<ul style="list-style-type: none"> 1. Sustainable Economic Growth : Adopt a sustainable growth model to transform into a competitive, productive, diversified, and innovative economy. 	QNDS3	QNDS3 Strategic National Outcomes (14)

Sustainability attribute	Quote	Vision / strategy	note
	<p>sustainable improvements in livelihoods and in the quality of life: It must target growth rates that are compatible</p> <ul style="list-style-type: none"> with its capacity for real economic expansion. 	QNV2030	Managed Growth and Uncontrolled Expansion (Page 6)
Support PPP & SMEs	<ul style="list-style-type: none"> Governance will be restructured for improved coordination and management of PPP projects, and PPP schemes will be revised to facilitate SME participation□ 	QNDS3	Business Environment (Page 18)
Economic stability & growth	<ul style="list-style-type: none"> Reasonable and sustained rates of economic growth that secure a high standard of living for this generation and for future generations. Financial and economic stability characterized by low inflation rates, sound financial policy and a secure and efficient financial system. A stimulating business climate capable of attracting foreign funds and technologies and of encouraging national investments. Open and flexible economic structures capable of competing in a changing world. Coordination with Gulf Cooperation Council states and with Arab and regional economic organizations to establish trade, investment and financial ties. 	QNV2030	Economic development outcomes: Sound Economic Management
	<ul style="list-style-type: none"> Optimum exploitation of hydrocarbon resources, establishing a balance between reserves and production, and between economic diversification and the degree of depletion. A vigorous oil and gas sector that generates advanced technological innovations and contributes to the development of human resources and economic capacities throughout Qatar. A fully developed gas industry that provides a major source of clean energy for Qatar and for the world. The long term maintenance of strategic reserves of oil and gas to meet the needs of national security and sustainable development 	QNV2030	Economic development outcomes: Responsible Exploitation of Oil and Gas
	<p>A diversified economy that gradually reduces its dependence on hydrocarbon industries, enhances the role of the private sector and maintains its competitiveness through:</p> <ul style="list-style-type: none"> Expansion of industries and services with competitive advantages derived from hydrocarbon industries Design and development of economic activities in which Qatar can specialize, including the technical and human requirements of these activities 	QNV2030	Economic development outcomes: Suitable Economic Diversification

Sustainability attribute	Quote	Vision / strategy	note
	<ul style="list-style-type: none"> • A knowledge-based economy characterized by innovation; • entrepreneurship; excellence in education; a world-class • infrastructural backbone; the efficient delivery of public • services; and transparent and accountable government 		
ENVIRONMENTAL Pillar	6. Environmental Sustainability: Conserve natural resources, protect ecosystems, reduce greenhouse gas emissions, and build resilience against future environmental threats	QNDS3	Strategic National Outcomes (14)
	Development will be carried out with responsibility and respect, balancing the needs of economic growth and social development with the conditions for environmental protection.	QNV2030	The Fourth Pillar – Environmental Development
	“The State shall preserve the environment and its natural balance in order to achieve comprehensive and sustainable development for all generations.”	Permanent Constitution	
	“We need to care for our natural environment for it was entrusted to us by God to use with responsibility and respect for the benefit of humankind. If we nurture our environment, it will nurture us.”	QNV2030	Mozah bint Nasser Al-Misnid
	An agile and comprehensive legal system that protects all elements of the environment, responding quickly to challenges as they arise	QNV2030	Environmental Development outcomes (Page 32-34)
	Effective and sophisticated environmental institutions that build and strengthen public awareness about environmental protection, and encourage the use of environmentally sound technologies. These institutions will also conduct awareness raising campaigns, employ environmental planning tools, and carry out environmental research	QNV2030	Environmental Development Outcomes (Page 32-34)
	An environmentally aware population that values the preservation of the natural heritage of Qatar and its neighboring states	QNV2030	Environmental Development outcomes (Page 32-34)
	An agile and comprehensive legal system that protects all elements of the environment, responding quickly to challenges as they arise	QNV2030	Environmental Development outcomes (Page 32-34)
	A comprehensive urban development plan for Qatar that adopts a sustainable policy with regard to urban expansion and population distribution. Encouragement of regional cooperation to put in place preventive measures to mitigate the negative environmental effects of pollution arising from development activities. A proactive and significant regional role in assessing the impact of climate change and mitigating its negative impacts, especially on	QNV2030	Environmental Development outcomes (Page 32-34)

Sustainability attribute	Quote	Vision / strategy	note
	countries of the Gulf. Support for international efforts to mitigate the effects of climate change		
Stakeholders' participation	QNV2030 belongs to the government, the private sector, civil society and to all Qatari Citizens	QNV2030	Head of state (2008)

Source: Author's construction based on the DA of Qatar National Vision 2030 (QNV2030) & Third Qatar National Development Strategy 2024–2030 (QNDS3)

8.7 Table A3 Details of Participation in SSI

Questions	Specialists from SSI	Dates
Why negative environmental impacts received less weight in Citizens' and residents' perception?	Academic research in Mega-sport Sociology and Psychology Environment	September 2024 December 2024 November 2023
What is the legacy intended from the hosting? What legacy was achieved?	Culture & Legacy	December 2024
Why was substantial weight placed on negative impacts on identity, values and cultural aspects?	Education and Ethics Academic research in Mega-sport Sociology and Psychology Culture	July 2024 September 2024 December 2024 December 2024
Community attachment did not receive high weight in Citizens participants' perception – why?	Academic research in Psychic Income Sociology & Psychology Culture & Legacy	December 2024 December 2024 December 2024
Why is correlation between trust in government and support for hosting strong at the FGD, but not confirmed by the Empirical study?	Academic research in Mega-sport Sociology and Psychology	August 2024 December 2024
Why do negative impacts (especially socio-cultural and environmental) have more impact on support than positive impacts?	Sociology and Psychology Culture & Legacy	December 2024 December 2024
In previous studies: Psychic income higher in Citizens than residents – we found it the other way around	Academic Research in Psychic income	December 2024
Psychic income is addressed in some literature as part of socio-cultural positive impact although it is intangible income.	Academic Research in Psychic income Academic Researcher in Psychic income	November 2024 December 2024

8.8 Table A4 Table of Constructs and respective attributes indicators

constructs	DS Attributes	Elements /items	sources
Personal Valuation of DS	Env. DS awareness of pollution & Resources depletion	Pollution and natural resource depletion are serious environmental issues	Aydin & Alvarez (2020) ; Borisov et al. (2024)
	economic DS : economic linkage and leakage	supporting SMEs is not less important than big national projects	
	Capacity & DS concern of severity of impacts	Economic development needs to happen quickly and at any cost	
	Concern for Soc. DS local community benefit	for hosting tourism to be succesful, local community should benefit from it in terms of employment, training and social development	
	Env. DS awareness of root casue of environemntal degradation	environmental legislations should focus on waste segregation and environmental events and not on preventing pollution from source	
	Consciousness in Respect for local culture and values	Protecting local community's culture, identity and values must be prioritised to choose suitable tourism	
	Socio-cultural DS concern and awareness	Culture is not important now a days and should not be obstacle to development	
	WT make trade-offs for SD and pro-sustainability behavior	I volunteered in NGOs to serve my community	
+ ve Environmental DS Perception	Adopting Sustainable technology	I think planning to host the event will bring green cities, green buildings, green transport technologies which will continue to exist in Qatar after the event	Prayag et al (2013)
	Sustainable legislations and practices	I think that hosting the M-SE will promote administrative procedures in Qatar for environemntal protection such as recycling and preventing pollution	
	Sustaiaable lifestyle	I think hosting will change life-style in Qatar into more sustainable including using green transport	
	Sustainability Awareness	I think the hosting and its high international standards will promote environmental awareness amongst people in Qatar and visitors	
-ve Environmental DS Perception	Nature degradation	I think constructions related to hosting has negative impacts on nature and natural resources	Prayag et al. (2013) Gursoy et al. (2016)
	Pollution	I think hosting will increase pollution in air, water, soil, visual and audio pollution	
	Climate change, waste & energy	I think the hosting has its high carbon foot-print due to travel , constructions,	

		waste production and high energy consumption	
	Negative impacts	I believe that hosting M-SE has negative environmental sustainability impacts	
+ve Economic DS Perception	SMEs	I think that SMEs in Qatar will benefit from hosting if their services and products were used instead of foreign firms	Prayag et al. (2013); Aydin & Alvarez (2020)
	Tourism	I think the hosting will result in beautiful hotels and advanced tourism services and infrastructure supporting in country tourism	
	Tourism	I think hosting international M-SE will promote Qatar as an international tourism destination	
	Image	I think Qatar's image internationally might be destroyed if the hosting failed or mistakes happened during the hosting	
-ve Economic DS Perception	Price inflation	I think hosting will cause inflation in prices in our local market	Prayag et al. (2013)
	High cost	I think that the financial cost of the hosting will outweigh any local economic benefits	
+ve Socio-cultural DS Perception	Public services and infrastructure	I think hosting will improve public services and infrastructure like roads and public places and present Citizens with recreational sites	Prayag et al. (2013); Kim & Walker (2012); Ishac & Swart (2020); Gursoy et al. (2016); Aydin & Alvarez (2020)
	Cultural exchange	I think hosting will facilitate cultural exchange between us and other nations and give us an opportunity to introduce our culture and values	
	Legacy	I think that Qatar's success in hosting the first FIFA in MENA region gave us a legacy to pass to our children	
	Community attachment and bonds	I think hosting will strengthen societal bond and national unity	
	Country Image	I think hosting international M-SE will improve Qatar's picture internationally	
-ve Socio-cultural DS Perception	Traffic & Overcrowding	I think hosting will result in road congestion and overcrowding and issues that come with that	
	Crimes & Vandalism	I think hosting will cause crimes like theft and vandalism	

	QoL	I think hosting for weeks will have negative impacts on our quality of life and daily lifestyle	
	Negative impacts on children	I have worries about negative impacts on children from the mass tourists coming from different cultures and norms of behavior	
	Compromising culture and values	I think hosting may imposes on our government things compromising our culture, identity, and values	
Institutional trust	Trust in government	<p>I think hosting may imposes on our government things compromising our culture, identity, and values (-)</p> <p>I am sure that Qatar will study the situation and decide what it is best for the sake of our country, Citizens and protecting our tradition and values and natural resources (+)</p> <p>I believe that the government let people participate at planning stages and implementation of any hosting of M-SE (+)</p> <p>I believe that Qatar is capable from logistic, financial aspects to host an international M-SE and make us proud (+)</p>	<p>Gursoy et al.(2016);</p> <p>Prayag et al (2013);</p> <p>Máté & Kajos (2023)</p>
	Trust in organizing committee	<p>I believe that the organizing committee of and M-SE event is foreigner to the country and does not understand our traditions and values (-)</p> <p>I believe that the organizing committee has big experience and skills to allow wise right decisions</p> <p>I think priority for organizing committee is its benefit from financial and media return (-)</p> <p>Organizing committee will prioritize Qatari committee interest</p>	
Overall attitude		<p>negative impacts will override any sort of benefits (-)</p> <p>positive long term impacts on hosting destination (+)</p> <p>I think hosting FIFA 2022 should have never happened nor any other M-SE in the future (-)</p>	

		<p>Qatar should host more M-SE because it is capable of succeeding and excelling and achieve miracles (+)</p> <p>I believe the hosting had bad negative impacts (-)</p>	
Psychic income	Community Pride (CP)	<p>Qatar should host more M-SE because it is capable of succeeding and excelling and achieve miracles</p> <p>I think that Qatar's success in hosting the first FIFA in MENA region gave us a legacy to pass to our children</p> <p>I think hosting international M-SE will improve Qatar's picture internationally</p> <p>I think hosting international M-SE will promote Qatar as an international tourism destination</p> <p>I believe that Qatar is capable from logistic, financial aspects to host an international M-SE and make us proud</p>	<p>Kim & Walker (2012); Ishac & Swar (2020); Prayag et al. (2013); Gursoy et al. (2016)</p>
	Community infrastructure (CI)	<p>Improved our public facilities</p> <p>Improved the quality of community public services</p>	
	Community Excitement (CE)	<p>Brought excitement to the community</p> <p>I believe that the amount of excitement we lived during FIFA 2022 is outstanding and we want to live it again</p> <p>I was excited about hosting FIFA 2022 , and still excited about hosting more events</p>	
	Community attachment (CA)	<p>Freindship, communication, belonging</p> <p>I think hosting will strengthen societal bond and national unity</p>	
	Event Excitement (EE)	<p>Excitment about the game/ visitors</p> <p>(I think no question was asked about this)</p>	

Support (+)	Current	<p>In general, I believe that the amount of excitement we lived during FIFA 2022 is outstanding and we want to live it again</p> <p>I was excited about hosting FIFA 2022 , and still excited about hosting more events</p>	<p>Prayag et al. (2013)</p> <p>Gursoy et al. (2016)</p>
	Future	<p>I support hosting M-SE in Qatar, but only after comprehensive study with Citizens participating in effective way</p> <p>In general, I believe that the amount of excitement we lived during FIFA 2022 is outstanding and we want to live it again</p> <p>I was excited about hosting FIFA 2022 , and still excited about hosting more events</p> <p>hosting FIFA 2022 was good, but I am not sure about hosting more events (-)</p>	
Oppose (-)	Current	I think hosting FIFA 2022 should have never happened nor any other M-SE in the future	
	Future	I support hosting M-E but cultural, scientific or economic and not sport events	

Source: Author's own construction

8.9 Table A5 Content validity of constructs and descriptive statistics for items and constructs in the Citizens model

Code	Construct/Items	Mean (SD)	Loadings
ENV+		4.06 (0.70)	
ENV3	I think planning to host the event will bring green cities, green buildings, green transport technologies which will continue to exist in Qatar after the event	4.15 (0.84)	0.835
ENV6	I think the hosting and its high international standards will promote environmental awareness amongst people in Qatar and visitors	3.96 (0.88)	0.759
ENV7	I believe that hosting will lead to a more sustainable lifestyle in Qatar, including the use of green transportation.	4.05 (0.93)	0.765

ENV-		2.66 (0.94)	
ENV2	In my opinion, hosting M-SE has negative impacts on environmental sustainability of the host country	2.61 (1.19)	0.830
ENV4	I believe that the hosting of M-SE has its high carbon footprint due to travel, constructions, excessive waste generation and high energy consumption	2.78 (1.09)	0.850
ENV5	I believe that air, water, soil, visual, and audio pollution will result from hosting.	2.62 (1.15)	0.834
ENV8	Nature and natural resources are negatively impacted, in my opinion, by construction related to hosting.	2.62 (1.14)	0.774
ECO+		4.36 (0.66)	
ECO3	I think that SMEs in Qatar will benefit from hosting if their services and products were used instead of foreign firms	4.23 (0.89)	0.676
ECO4	I believe that the hosting will lead to stunning hotels, cutting-edge tourism services, and infrastructure that will support travel within the country and for staycations.	4.39 (0.80)	0.879
ECO6	I think hosting global M-SE will promote Qatar as a tourism destination for international travelers.	4.41 (0.80)	0.817
ECO-		3.12 (0.89)	
ECO2	In my opinion, hosting an M-SE will result in price inflation in our local market	3.59 (1.16)	0.614
ECO5	In my opinion, if the hosting went poorly or if errors occurred, Qatar's image and reputation could be ruined globally.	2.85 (1.24)	0.761
ECO7	I believe that any local economic benefits will be outweighed by the hosting's huge financial costs.	3.08 (1.21)	0.783
CUL+		4.41 (0.63)	
CUL4	I believe we have a legacy to leave for our kids because of Qatar's successful hosting of the first FIFA in the MENA region.	4.52 (0.80)	0.780
CUL6	I think hosting will facilitate cultural exchange between us and other nations and give us an opportunity to introduce our culture and values	4.41 (0.74)	0.842
CUL7	In my opinion, hosting will enhance public services, facilities and infrastructure, such as roads and public spaces, and provide recreational areas.	4.33 (0.84)	0.789
CUL-		2.91 (0.97)	
CUL2	Hosting a global M-SE, in my opinion, will result in crimes like theft and vandalism.	2.94 (1.18)	0.816

CUL3	I am concerned about the negative effects, from the large influx of tourists coming from different cultures and behavioral norms, on our kids.	3.04 (1.21)	0.772
CUL5	I think hosting a M-SE will result in road congestion and overcrowding and other associated issues	2.93 (1.28)	0.805
CUL8	Weeks of hosting a gigantic global M-SE, in my opinion, will have negative effects on our everyday lives and quality of life.	2.72 (1.23)	0.785
PVDS		2.45 (1.10)	
PVDS2	Economic growth should come first, in my opinion, even if it means sacrificing the environment and certain social aspects.	2.35 (1.26)	0.828
PVDS5	Community identity and culture, in my opinion, belong in the past and shouldn't stand in the way of progress because they are historical rather than contemporary.	2.54 (1.37)	0.839
Trust in Government		4.40 (0.70)	
TRSTG 1	With all due diligence, Qatar will undoubtedly assess all circumstances throughout the hosting of the M-SE, and determine what is best for its people, the nation, and the preservation of its natural resources, culture, identity, and values.	4.36 (0.87)	0.866
TRSTG 4	In my opinion, Qatar has the financial and logistics capacity to successfully host a global M-SE and bring honor and pride to our nation.	4.43 (0.75)	0.874
Psychic income		4.31 (0.81)	
ATT1	I was excited about hosting FIFA 2022, and I am still excited about hosting more events	4.18 (0.99)	0.876
SUPP2	Given its capacity for success, excellence, and miraculous feats, Qatar ought to host more M-SE events.	4.34 (0.90)	0.889
SUPP5	In general, I believe that during FIFA 2022, we experienced excitement that was beyond compare, and we wish to experience it once more.	4.40 (0.89)	0.876
Support		3.48 (0.98)	
ATT2*	I believe that there will be more negative impacts on Qatar than positive ones from hosting an M-SE.	3.47 (1.20)	0.781
ATT4*	Hosting FIFA 2022 was good for Qatar, but I am not sure if Qatar should be hosting more events	3.33 (1.23)	0.770
SUPP1*	In my opinion, hosting FIFA 2022 should never have occurred, and there should never be another M-SE.	3.92 (1.26)	0.798
SUPP4*	I support hosting M-E but cultural, scientific or economic, but not sport events	3.19 (1.32)	0.776

8.10 Table A6: Content validity of constructs and descriptive statistics for items and constructs in the Residents model

Code	Construct/Items	Mean (SD)	Loadings
ENV+		4.10 (0.69)	
ENV1	I believe that having the M-SE in Qatar will encourage administrative practices that safeguard the environment, like recycling and pollution control.	3.97 (0.93)	0.816
ENV3	I think planning to host the event will bring green cities, green buildings, green transport technologies which will continue to exist in Qatar after the event	4.17 (0.85)	0.776
ENV6	I think the hosting and its high international standards will promote environmental awareness amongst people in Qatar and visitors	4.10 (0.81)	0.851
ENV7	I believe that hosting will lead to a more sustainable lifestyle in Qatar, including the use of green transportation.	4.16 (0.87)	0.766
ENV-		2.36 (0.83)	
ENV2	In my opinion, hosting M-SE has negative impacts on environmental sustainability of the host country	2.33 (1.04)	0.775
ENV4	I believe that the hosting of M-SE has its high carbon footprint due to travel, constructions, excessive waste generation and high energy consumption	2.48 (0.95)	0.865
ENV5	I believe that air, water, soil, visual, and audio pollution will result from hosting.	2.29 (1.02)	0.877
ENV8	Nature and natural resources are negatively impacted, in my opinion, by construction related to hosting.	2.32 (1.00)	0.791
ECO+		4.34 (0.67)	
ECO3	I think that SMEs in Qatar will benefit from hosting if their services and products were used instead of foreign firms	4.24 (0.70)	0.680
ECO4	I believe that the hosting will lead to stunning hotels, cutting-edge tourism services, and infrastructure that will support travel within the country and for staycations.	4.30 (0.86)	0.915
ECO6	I think hosting global M-SE will promote Qatar as a tourism destination for international travelers.	4.43 (0.78)	0.839
ECO-		2.90 (0.93)	
ECO2	In my opinion, hosting an M-SE will result in price inflation in our local market	3.44 (1.22)	0.686

ECO5	In my opinion, if the hosting went poorly or if errors occurred, Qatar's image and reputation could be ruined globally.	2.63 (1.20)	0.826
ECO7	I believe that any local economic benefits will be outweighed by the hosting's huge financial costs.	2.81 (1.12)	0.829
CUL+		4.42 (0.70)	
CUL4	I believe we have a legacy to leave for our kids because of Qatar's successful hosting of the first FIFA in the MENA region.	4.55 (0.75)	0.843
CUL6	I think hosting will facilitate cultural exchange between us and other nations and give us an opportunity to introduce our culture and values	4.35 (0.83)	0.717
CUL7	In my opinion, hosting will enhance public services, facilities and infrastructure, such as roads and public spaces, and provide recreational areas.	4.35 (0.89)	0.912
CUL-		2.60 (0.86)	
CUL2	Hosting a global M-SE, in my opinion, will result in crimes like theft and vandalism.	2.50 (1.16)	0.789
CUL3	I am concerned about the negative effects, from the large influx of tourists coming from different cultures and behavioral norms, on our kids.	2.80 (1.11)	0.722
CUL5	I think hosting a M-SE will result in road congestion and overcrowding and other associated issues	2.71 (1.16)	0.770
CUL8	Weeks of hosting a gigantic global M-SE, in my opinion, will have negative effects on our everyday lives and quality of life.	2.43 (1.08)	0.726
CUL9	I believe that hosting a global M-SE may impose on our government things compromising our culture, identity, and values	2.58 (1.22)	0.730
PVDS		2.53 (0.94)	
PVDS2	Economic growth should come first, in my opinion, even if it means sacrificing the environment and certain social aspects.	2.20 (1.23)	0.889
PVDS4	I believe that environmental legislations should focus on waste segregation and environmental events, and not on preventing pollution from source	3.32 (1.17)	0.588
PVDS5	Community identity and culture, in my opinion, belong in the past and shouldn't stand in the way of progress because they are historical rather than contemporary.	2.50 (1.26)	0.701
Trust in Government		4.44 (0.74)	
TRSTG1	With all due diligence, Qatar will undoubtedly assess all circumstances throughout the hosting of the M-SE, and determine what is best for its people, the nation,	4.42 (0.84)	0.919

	and the preservation of its natural resources, culture, identity, and values.		
TRSTG4	In my opinion, Qatar has the financial and logistics capacity to successfully host a global M-SE and bring honor and pride to our nation.	4.45 (0.79)	0.880
Trust in Organizing Committee			
TRSTOR G2	The organizing committee of any M-SE that Qatar hosts, in my opinion, possesses a great deal of experience and expertise to enable informed decisions.	4.11 (0.82)	0.916
TRSTOR G4	I have no doubt that the organizing committee of any M-SE that Qatar hosts will take into account the interests of the Qatari community in all aspects of the hosting.	4.09 (0.91)	0.828
Psychic income		4.46 (0.65)	
ATT1	I was excited about hosting FIFA 2022, and I am still excited about hosting more events	4.42 (0.85)	0.887
ECO1	In my opinion, Qatar's International image will likely improve as a result of hosting M-SE.	4.47 (0.79)	0.691
SUPP2	Given its capacity for success, excellence, and miraculous feats, Qatar ought to host more M-SE events.	4.49 (0.75)	0.799
SUPP5	In general, I believe that during FIFA 2022, we experienced excitement that was beyond compare, and we wish to experience it once more.	4.47 (0.84)	0.787
Support		3.75 (0.85)	
ATT2*	I believe that there will be more negative impacts on Qatar than positive ones from hosting an M-SE.	3.67 (1.06)	0.780
ATT4*	Hosting FIFA 2022 was good for Qatar, but I am not sure if Qatar should be hosting more events	3.51 (1.08)	0.683
SUPP1*	In my opinion, hosting FIFA 2022 should never have occurred, and there should never be another M-SE.	4.20 (1.16)	0.817
SUPP4*	I support hosting M-E but cultural, scientific or economic, but not sport events	3.43 (1.28)	0.663

*Reversed item

8.11 Qualitative results from the Survey for all participants

Although the 5-point Likert scale survey was designed for quantitative data gathering, an optional space was left for additional comments. Many participants left it empty. However, among those who decided to write something, comments about tourism development were found. One interesting comment explains possibilities for nature-based tourism using the sea and the desert. Many comments mentioned nature-based tourism one way or another.

Many comments encouraged the survey stating that research is needed and thanking the researcher, and several praised the questionnaire. One interesting comment stated that the questions are cute and lighthearted. Other comments found the questionnaire as educational providing participants with good information or showing Qatar's achievements. A comment considered the questionnaire as long and having similar questions. One interesting comment stated that no other country could have organized an event like Qatar did in FIFA 2022. Other comments found the questions to be beautiful, interesting, fluent, sufficient and inclusive for all impacts of hosting the event. One interesting comment elaborated in reasons for liking the survey, indicating that it gave a chance for Citizens and residents to express their perceived impacts of the hosting of FIFA 2022. The excitement about getting a chance to express their views was repeated in many filled questionnaires. One mentioned that attending the event made them able to fill in the questionnaire? Surprisingly, few comments demanded that the survey reaches everyone, results analyzed and published, because it is very important. And one comment in particular went into details of the necessity to leave a space for comments with each question so that the participants can explain their thoughts clearly and maybe answer differently than the multiple choices provided. This challenges the assumption that many people were not interested to participate. Many comments wished the best for the researcher.

Other comments showed pride in Qatar's achievements and capabilities; one interesting comment praised Qatar for its high aspiration. Some comments had suggested for future mega-events. Timing was mentioned with preference to winter for its nice weather, and other types of M-SE were also suggested such as religious and cultural events. Many comments expressed love and best wishes for Qatar. several expressed their willingness to volunteer in any future events Qatar will host.

After reading around 100 comments, I am intrigued in my next survey to allow more space for qualitative input.

8.12 Acknowledgements

Gratitude to God Almighty for the patience, strength and blessings in so many ways throughout the process of acquiring my PhD. Family support and professional development and supervision are among the best blessings. May my parents feel happiness and pride at this moment of achievement. Special thanks to my brother Eng. Khalid Al-Muhannadi, and his family, for his priceless continuous genuine support and encouragement, especially at difficult time, and to Ahmed Khalid Al-Mohannadi for the technical assistance. Thanks to brother Hamad, for family support at a stressful time.

From MATE, I would like to thank Prof. Maria Feketa for her continuous care and support to me and all other international colleagues since my day one at SZIE. My colleague Ahmed Daragmeh from Palestine, for being a true brother and colleague at pandemic time and I pray that his family and people are protected now as Palestinians are being ethnically cleansed, and our dear colleague Shams, may his soul rest in peace, who left so soon after leaving a legacy of kindness and goodness at time of selfishness and unnecessary cruelty, reminding me how short life is, and how important it is not to take anything for granted in life, and that people we meet are opportunities for us to evolve in our humanity with every interaction. Melinda, Zsuzsa, Noora, Pedor, and the amazing staff at the technical support of MATE and for Ms. Edit from Admin and Ms. Eva from mtmt. I also thank the special tutors we learnt from through the courses in the first three years, who cared to teach, share experience and inspire. I am so proud that I scored 5 in all and each course I took at the university, including the online ones at the time of the pandemic. I would like to remember Prof. Dr. Fogarassy who was the reason for joining SZIE to learn and research in CE with him, may his soul rest in peace.

I would also like to acknowledge and thank my supervisors: Dr. Anita Boros for every support she provided, , especially her gentle communication and involving me in the MATE contest online in

2024, and for setting the Home Defense meeting, and the respective reviewers (opponents) Prof. Dr. Géczi Gábor István and Prof. Dr. Müller Anetta and Prof. Dr. Zoltán Bujdosó, the head of doctoral school in MATE for contributing thorough suggestions and comments in the final stages.

I would also like to make a special and separate mention of the genuine and highly professional support I have received from my supervisor, Dr Sergey Vinogradov, and I thank God for guiding me to him during the pandemic blockade time. With a knowledgeable, responsible, respecting, and supporting supervisor of high scientific caliber and due diligence, the experience of PhD can be exciting, challenging and empowering in a constructive way and even enjoyable. His sense of responsibility with utmost respect, care and generosity introduced me to beautiful part of scientific research and Hungarian culture that is not always felt.

From the state of Qatar, I would also like to thank Dr. Ahmed Al-Emadi for his time and share of experience in conducting research in Qatar. Thanks are extended to all the key people who contributed to testing and distributing the questionnaire and who participated in the FGD, SSI and the survey. Special thanks to Dr. Khalid Al-Mulla, Dr. Ahmed Hamad, Cornel Mohammad Al-Jaida, Ms. Amal Al-Nuaimi, Ms. Sara Al-Mohannadi, Ms. Mariam Al-Doseri, the family of Cousin Yousif Bumatar, may he rest in peace, Dr. Adel Almarzooqi, Mr. Ibrahim Hamad Al-Mohannadi and Mr. Ibrahim Rashid Al-Doseri, Dr. Fatima Alhejri and Ms. Areej Al-Angari – from Qatar, Bahrain, KSA, Oman and Egypt.

Surprisingly, as I summarize today, some of the enormous effort put into my dissertation and the challenging stages of my Ph.D. journey, I have been able to maintain an interest in further work. I feel that I would like to continue working on publications, both with current results and exploring other closely related areas, building on this vast experience and the deep knowledge accumulated and the multi-disciplinary cooperation with my colleagues and professors. In this context, while reiterating the contribution of Dr. Vinogradov, I would also like to mention my deep appreciation to my colleague and co-author Dr. Igor Borisov. As it turned out, good communication and well-coordinated joint research stimulate the desire to publish more joint articles, and I look forward to our joint publications with some excitement.

In general, it has been important for me to realize that while the space of science implies rationality and structure, which has been growing stronger in me in recent years, it is through contact with the professional and noble people mentioned above, where possible, that I feel the value of what I am doing and the inspiration to continue.