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THÁRCYLA GONÇALVES MOURÃO

PSYCHIC INCOME OF MEGA-EVENTS: A study about the Summer
Olympics

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Olympics

Thesis submitted to the academic staff of the Full-Time MBA program of the COPPEAD Graduate School of Business, from the Federal University of Rio de Janeiro, as part of the requirements to obtain the title of Master in Science in Business Administration.

Advisor: Victor Manoel Cunha de Almeida

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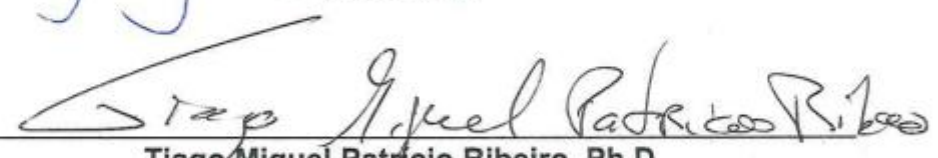
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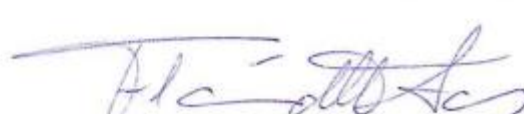
Victor Manoel Cunha de Almeida, D.Sc - Advisor
COPPEAD



Otavio Henrique dos Santos Figueiredo, D.Sc
COPPEAD



Tiago Miguel Patrício Ribeiro, Ph.D
UNISUAM



Flavia D'Albergaria Freitas, D.Sc
Celso Lisboa

*To my grandfather, my
biggest cheerleader*

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RESUMO

Mourão, Thárcyla Gonçalves. *Psychic Income of Mega-Events: A Study about the Summer Olympics*. Rio de Janeiro, 2019. Dissertação (Mestrado em Administração) – Instituto de Pós-Graduação e Pesquisa em Administração, COPPEAD, Universidade Federal do Rio de Janeiro, 2019.

A partir da literatura sobre megaeventos esportivos, pode-se observar que nem sempre o *bottom line* para sediar o megaevento é positivo. Contudo, eles ainda são muito populares. Por essa razão, é relevante investigar e analisar que outros motivos fazem com que sediar um megaevento valha a pena, se é que existem, e os benefícios intangíveis que se espera extrair deles. O principal referencial teórico desse estudo é o paradigma do Resultado Psicológico, desenvolvido por Crompton (2004) e operacionalizado por Kim e Walker (2012), para tentar justificar o investimento de recursos públicos em arenas esportivas a partir dos benefícios intangíveis que os indivíduos da comunidade local recebem deles. Os objetivos da pesquisa foram destrinchados em sete hipóteses substantivas que refletiram cada dimensão do resultado psicológico. A pesquisa foi conduzida com pessoas naturais da cidade do Rio de Janeiro. Duas amostras foram coletadas para o presente estudo: uma cinco meses antes, com 333 respondentes, e outra um mês depois das Olimpíadas, com 1025 respondentes. De modo geral, foram 1358 observações. Algumas adaptações à escala foram necessárias para garantir sua aplicabilidade no contexto brasileiro. Por essa razão, alguns itens foram reformulados para tentar capturar o que o construto esperava transmitir e adapta-los para o contexto brasileiro e o megaevento em questão. Nesse caso, os Jogos Olímpicos Rio 2016. A análise de dados foi conduzida usando uma única base de dados, composta de ambas amostras. Para realizar essa tarefa, foi realizado um teste de Diferença de Médias (Teste T), uma Análise Fatorial Exploratória (AFE) e uma Análise Fatorial Confirmatória (AFC), verificando confiabilidade, validade convergente e validade discriminante. Para testar as hipóteses, Modelagem de Equações Estruturais foi utilizada com a técnica Maximum Likelihood (ML). Como resultado, as sete hipóteses de pesquisa foram suportadas. Os resultados sugerem que há uma relação positiva entre sediar um megaevento e as dimensões do resultado psicológico. Além disso, os resultados sugerem que a escala é adequada para medir tanto as expectativas antes do evento quanto a percepção das pessoas após o mesmo.

Palavras-chave: resultado psíquico, impactos sociais, megaeventos, Jogos Olímpicos, Rio 2016.

ABSTRACT

Mourão, Thárcyla Gonçalves. *Psychic Income of Mega-Events: A Study about the Summer Olympics*. Rio de Janeiro, 2019. Master Dissertation in Business Administration – COPPEAD Graduate School of Business, The Federal University of Rio de Janeiro, Rio de Janeiro, 2017.

From the literature on mega-events, one might observe that the financial *bottom line* for hosting a mega-event is not always positive. However, they are still very popular. Then, it is relevant to investigate and analyze the other reasons that make hosting a mega-event worthwhile, if there are any, and the intangible objectives it is hoped to achieve from them. The main theoretical background of the research is the Psychic Income paradigm, developed by Crompton (2004) and operationalized by Kim and Walker (2012), to try and justify public financing of sports arenas from the perspective of the intangible benefits people from the community receive from them. The research objectives were broken down into seven substantive hypotheses that reflected each psychic income dimension. A survey was conducted with people native from Rio de Janeiro. Two samples were collected for the present study: one five months before, with 333 respondents, and one another one month after the Olympics, with 1025 respondents. Overall, there were 1358 observations. Some adaptations to the survey were necessary to ensure the scale's application in a Brazilian context. For this purpose, some items were reformulated to try and capture what the construct aimed at expressing and adapt it to the Brazilian context and the mega-event in question. In this case, the 2016 Rio Summer Olympics. Data analysis was conducted using a single database, made of both samples. To accomplish this task, it was used a Difference of Means Test (Two sample T-Test), an Exploratory Factor Analysis (EFA) and a Confirmatory Factor Analysis (CFA), verifying reliability, convergent validity and discriminant validity. In order to test the hypotheses, Structural Equation Modeling (SEM) was used with the Maximum Likelihood (ML) technique. As a result, the seven research hypotheses were supported. The results suggest there is a positive relationship between hosting a mega-event and the psychic income reflexes. In addition, the results suggest that the scale is adequate to measure both the expectations prior to the event and the perception of people afterwards.

Keywords: psychic income, social impacts, mega-events, Olympic Games, Rio 2016.

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LIST OF ABBREVIATIONS AND ACRONYMS

CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
GOF	Goodness-of-Fit
IOC	International Olympic Committee
IPC	International Paralympic Committee
ROI	Return on Investments
SEM	Structural Equation Modeling

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1 INTRODUCTION

The following section will present the origin and importance of the study, its academic relevance, managerial relevance and its overall structure.

1.1 ORIGIN AND IMPORTANCE OF THE STUDY

In October 2007, Brazil was officially named the host of the 2014 FIFA World Cup (CNN, 2007; Reuters, 2007). Two years later, Rio de Janeiro was confirmed as the host city for the 2016 Summer Olympic Games (Olympic Movement, 2009). Moreover, every year, there is a mega-event in Brazil: Carnival, which receives high investments (USA Today, 2018; The Atlantic, 2019). There are also music festivals, such as Rock in Rio (G1, 2017; G1, 2018) and Lollapalooza (G1, 2018), which are getting more popular with each edition.

In order to support the execution of a mega-event, high investments are in order. For instance, for the Olympic Games, the host city will need both private and public investments to build new arenas for the competitions, improve its transportation network, communications, hotel network, strengthen security and crime prevention, with costs in the order of billions of dollars (Riley, 2012), that not always return in the form of revenues.

In the 2010 Vancouver Winter Olympics, even though Canada had a record of 14 gold medals, the event ended with billions of dollars in deficits, in part due to the government taking over the construction of the Olympic Village after the company responsible was unable to do so because of a credit crisis (CNBC, 2012). The Canadians were not very happy with the project, since funds of public services such as education, health and arts financing that were diverted to infrastructure-building for the event (CNBC, 2012).

Similarly, in the 2004 Athens Summer Olympic Games, the estimated budget of US\$4.6 billion reached around US\$14 billion, a situation that most likely contributed to the financial crisis that struck the country (CNBC, 2012). In Sydney, Australia, 2000, the Organizing Committee tripled the forecasted budget of US\$3.8 billion; to make matters worse, studies show that their edition of the Olympic Games did not attract that many tourist nor boosted the locals' interest in sports (CNBC, 2012). The 1998 Olympic Games of Nagano, Japan, cost around \$10 billion, which resulted in a recession for the city; moreover, the Games did not deliver impressive returns for the local hospitality industry (CNBC, 2012).

Nonetheless, in September 2013, when Tokyo was announced to host the 2020 Summer Olympic Games, the news were received with happiness by the Japanese. According to The Economist (2013), the main reason why cities want to host the Games so badly is that they are popular with taxpayers – and they will probably cover most of the costs involved in hosting the mega-event. The decision to host the Olympic Games usually involve different agendas from one edition to the next: the Beijing Olympic Games, for instance, intended to show the world the Chinese ability to host a mega-event this size and its purchasing power; the London Olympic Games, in turn, intended to resuscitate deteriorated areas of the city; with the 2020 Tokyo Summer Olympics, Japan intends to boost their economy (The Economist, 2013). In the case of Rio de Janeiro, the main reason that led Rio de Janeiro to bid to host the Games was to bring sustainable economic, urban and social development to the city (Rio de Janeiro City Hall, n.a.; Knowledge@Wharton, 2010).

In the case of the 2016 Rio Summer Olympics, people protested against the public spending on the event (The Economist, 2013). However, in an interview to Carta Capital (2013), the city's mayor at the time, Eduardo Paes, argued that investments would not be confined to the richer sections of the city, but would also involve other areas, resuscitating deteriorated areas and investing in public transportation.

Looking back, according to the IOC, the use of arenas has remained largely on paper (Reuters, 2018). The Velodrome caught fire twice, Arenas I, II and III are used only sporadically, the handball arena was supposed to turn into four schools, but there are no funds for the project. The Olympic Village turned into condominiums but sales are not doing great. However, investments in infrastructure and transportation paid out, such as the subway extension from Ipanema to Barra da Tijuca and downtown Rio's port area, which has been completely refurbished, recognized as a place people can go to hang out (Miami Herald, 2017).

This problem does not seem to be restricted to the Olympic Games. Lollapalooza, for instance, is a music festival that in 2019 had its most recent edition in São Paulo, Brazil (Lollapalooza, 2019). The event organizers, GEO Eventos, in an interview to a popular Brazilian magazine, *Veja* (2013), admitted that they suffered losses in their first Brazilian edition, back in 2011. The high costs are mainly related to the million-dollar expenses to bring international artists to the country, a recurring situation in Brazil (*Revista Veja*, 2013).

Therefore, one might observe that the financial *bottom line* for hosting a mega-event is not always positive. However, they are still very popular. Then, it is relevant to investigate and analyze the other reasons that make hosting a mega-event worthwhile, if there are any, and the intangible objectives it is hoped to achieve from them.

1.2 ACADEMIC RELEVANCE

Mega-events are usually the subject of scientific studies that aim to investigate their many impacts on a host country or city (Gibson, Qi, & Zhang, 2008; O'Reilly, Lyberger, McCarthy, Séguin, & Nadeau, 2008; Parent & Séguin, 2008; Porter & Fletcher, 2008; Tien, Lo, & Lin, 2011; Xing & Chalip, 2009; Kim & Walker, 2012). Among these studies, some discuss psychic income, defined by Crompton (2004, p. 49) as “the emotional and psychological benefit residents perceive they receive, even though they do not physically attend sports events, and are not involved in organizing them.”

The idea behind the rationale, that had its roots in economic theory, was to find an alternative to economic reasons that would make hosting megaevents worthwhile. The psychic income paradigm, then, looks inward, to the community's residents, trying to find and measure the intangible benefits they receive from an event this size (Crompton, 2004). Crompton (2004) thus proposed seven dimensions to psychic income applied to sports marketing. Based on this conceptual framework, Kim and Walker (2012) conceptualized a scale to try and measure psychic income.

Their results were different than the conceptual model originally thought by Crompton (2004). A possible explanation for this divergence lies in the choices they made during the statistical analysis. On their study, for instance, they used principal components for extraction. This technique, however, is more recommended under the assumption of unidimensionality of the scale. On this study, different choices were made. Therefore, it is relevant to study if replicating the study in another context, making different technical choices during data analysis, the results will be closer to conceptual model found in the literature for Psychic Income.

Hence, the present study aimed at adapting and testing the scale used in the study undertaken by Kim e Walker (2012). The authors investigated the perception of the impact caused by the Super Bowl XLIII on locals of Tampa, FL, USA. In turn, this study investigated

the perception of the impact caused by the Rio 2016 Summer Olympic Games on residents native of Rio de Janeiro, RJ, Brazil.

An adaptation of the scale was needed since the original is in English and also because Kim and Walker (2012) concluded that the results of their study could not be generalized to other contexts, since the perception of the intangible benefits could vary from one mega-event to the next.

In sum, the present study uses the psychic income paradigm as its theoretical background, to research the social impact from the Rio 2016 Olympics, using as method Exploratory Factor Analysis (AFE), Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM). In turn, its objective is to adapt the scale used by Kim and Walker (2012).

1.3 MANAGERIAL RELEVANCE

The subject is relevant because understanding the intangible benefits of mega-events might aid government officials in their decision to host an event this size, especially if the promise of economic returns are not exactly guaranteed when the subject is mega-events. Also, from a political standpoint, the subject is relevant to shed light on how *cariocas* (residents native of Rio de Janeiro) perceived the event and if they felt the government should have invested on other areas instead.

1.4 STRUCTURE OF THE STUDY

This study was organized as follows: in the first chapter, Introduction, the objective of the study, its context and relevance were detailed; in the second chapter, Theoretical Background, it was discussed the definition of a mega-event, a brief history of the Olympic Games, the impacts of mega-events (social, political and economic) and the psychic income paradigm; in the third, Research Hypotheses, the seven hypotheses are detailed, coupled with the conceptual model; in the fourth, Method, the research question was presented, as well as its objectives, scope, nature of the study, population and sample, the construction of the instrument of data collection, and the method of data analysis; later, it will be added the chapters of the Discussion and Conclusion, including research limitations and suggestions for future research. In the appendix, the instruments of data collection are presented.

2 THEORETICAL BACKGROUND

The following section will first address the definition of mega-event, discussing its importance. Then, it will be presented a literature review on the Olympic Games, the mega-event analyzed in the present study, highlighting its main stakeholders. Afterwards, the impacts of mega-events will be covered. Finally, the *Psychic Income* paradigm will be presented.

2.1 DEFINITION OF MEGA-EVENT

In order to understand what is a mega-event, it is paramount to first discuss the definition of an event. It is marked by human involvement, there is a pre-determined chronological dimension to it, with a high degree of planning, all the while generating media attention, which makes it very important to tourism. Therefore, an event is usually treated in a special way, given its rare or unique nature (Reiter, 2010).

A mega-event, in turn, is an event of extraordinary proportions. Just as an event, it can be of various kinds – cultural, economic, political (Reiter, 2010). The study of mega-events might be a complex matter. This is because they involve multiple areas with low correlation with one another, which makes harder to produce content on them. Another factor is its unique or rare nature, which requires a specific analysis to each mega-event, which might render them a part of history that little can be learned from (Roche, 2000).

In order to classify an event as a mega-event, one needs to take into consideration its size, duration and frequency (Reiter, 2010). Moreover, mega-events have a great cultural impact, international significance and they are usually organized by national governments and non-governmental organizations (NGOs) (Roche, 2000).

There is a certain difficulty in defining a mega-event in terms of size, given it is a relative concept. Thus, it is often said that a mega-event exists on a continuum of size, significance and reach. On practical terms, the benchmarks to measure the size of a sport mega-event are, for instance, number of athletes, live spectators and television viewers. In addition, these aspects generate other measures worth mentioning, such as the number of television hours that were dedicated to the event, the number of tourists there were present, among others. Nowadays, even the interaction of people on social media must be taken into consideration. Since this analysis is rather complex and very subjective, some authors would rather focus on the economic returns related to a mega-event (Maenning & Zimbalist, 2012).

In relation to the duration, an occasion such as a mega-event might have varying degrees of duration: some days, weeks or even go on for an indefinite amount of time. The most common case are the Olympic Games, but there are other famous mega-events, such as the FIFA World Cup, UEFA, Rock in Rio, among others (Reiter, 2010).

Mega-events might also be marked by its frequency, whether they are recurring or non-recurring, or whether they happen regularly or irregularly (Reiter, 2010). The Olympic Games, for instance, happen every four years. Rock in Rio was born without a regularly scheduled frequency, happening on 1985, 1991 and 2001. However, ever since 2011, it takes place every two years. The 2019 edition is scheduled for the end of September and beginning of October at Rio de Janeiro (Rock in Rio, 2019).

2.1.1 The Importance of Mega-events

The study of mega-events is relevant to understand how events of this nature contributed to globalization, given the opportunity to the diffusion of cultural values on modern society, both on a national and international level. The mega-events of highest visibility are the Olympic Games and the World Expos. However, specific sport competitions, such as the FIFA World Cup especially, are also very important in this context, given that its growth is parallel to the Olympics itself (Roche, 2000).

On an international level, cultural and artistic events, such as film festivals (Cannes, Venice, Sundance, etc.), music (Rock in Rio, Lollapalooza, Coachella, etc.), derive from the main mega-events. In the case of sports, there is the Rugby World Cup, Tour de France Cycling, Wimbledon Tennis, UEFA Champions League, among others. On a national level, many events carry cultural symbolism and are part of the social fabric of many countries, such as the Super Bowl in the United States (Roche, 2000).

2.2 THE OLYMPIC GAMES

The first edition of the Modern Olympic Games was hosted at Athens, Greece, in 1896. Taking into consideration both summer and winter editions, the mega-event has occurred more than 50 times. In the beginning, the Olympics were usually hosted in North America and Europe. However, there has been an effort to better distribute the event among the continents. Especially in the last 50 years, this endeavor has contributed to popularize the event.

The transition of the Olympic Games from event to mega-event did not happen overnight. The literature suggests that, in the beginning, the International Olympic Committee (IOC), non-governmental organization responsible for the Olympic Games, did not have access to the amount of funds they have nowadays. Therefore, the event used mostly the infrastructure already in place in a given city or it happened simultaneously with another event (Frawley & Adair, 2013).

To illustrate the growth of the Olympic Games over the course of a century, it is enough to compare the magnitude of the first edition, in 1896, and the last edition of the Summer Olympic Games, in 2016. In Athens, 1896, just 311 athletes from 11 nations participated in the event (Segrave & Chu, 1996). More than a 100 years later, in Rio de Janeiro, Brazil, more than 10.000 athletes from 207 countries competed in the Olympics (Olympic Movement, 2016).

The difference between the allocated budget for the mega-event in the last 30 years suggests that its growth curve was highest during this period than ever before (Frawley & Adair, 2013). For the 1988 Seoul Olympic Games, for instance, almost US\$1.3 billion were invested (Segrave & Chu, 1996). In London, 2012, almost US\$15 billion were invested to host the mega-event (Flyvbjerg & Stewart, 2012). Rio 2016 is not far behind, with the media reporting an investment of around US\$13 billion for infrastructure alone (Folha de S. Paulo, 2016; Reuters, 2017).

Another factor that might be attributed to the recent growth of the Olympics is its commitment to host the mega-event in conjunction with the Paralympic Games, ever since the 1988 edition, in Seoul. The partnership between the IOC and the IPC (International Paralympic Committee) has increased the complexity of the project, since the infrastructure must accommodate the needs of both events. This is true for the sport venues and also for other facilities, such as the Olympic Village, the Media Village, etc. (Frawley & Adair, 2013).

The media participation also has also boosted the growth of the mega-event. The first Olympic Games to be commercially televised live happened in 1960. In order to acquire the transmission rights for the United States alone, CBS paid US\$394.000. Forty years later, another North American network, NBC, paid IOC US\$1.27 billion to broadcast the 2000 Summer Olympic Games and 2002 Winter Olympic Games. This numbers are even more staggering since they represent the broadcast rights for the transmission of the mega-event of a single country (Segrave & Chu, 1996). In 2011, NBC agreed to a US\$4.4 billion contract to

broadcast the Games through 2020, after a bidding war with Disney's ESPN/ABC and News Corp.'s Fox Sports. In 2014, for US\$7.75 billion, NBCUniversal agreed to a contract extension to broadcast the Games through 2032, covering six Olympics, from 2022 to 2032. The deal includes all media platforms including TV, internet and mobile (USA Today, 2014).

The mobile nature of the Olympic Games requires a bigger responsibility with the project, since the event has never been hosted twice in the same city consecutively. This scenario entails challenges that will vary geographically, as well as the need to assemble local teams good enough to guarantee the success of a new edition of the mega-event (Frawley & Adair, 2013).

Since it is the biggest sport event in the world, the Olympic Games are extremely popular, and countries that wish to host the mega-event launch formal bids for the right to do so, and the IOC chooses the eventual winner. In order to understand the reasons why so many cities bid to host the Olympics, one needs to understand the global context in which they are part of (Frawley & Adair, 2013).

Ever since the 1980s, capitalism is expanding in developing countries, especially in Asia. Moreover, the world has seen the growth of technologies that help information to be mass-circulated. Through globalization, many companies have used sports marketing to expand their business to growing markets (Frawley & Adair, 2013).

This juncture puts into perspective the decision of countries to launch a formal bid for an event of this magnitude. Hosting the Olympic Games means obtaining national and international recognition. It means making the whole world talk about the host country during two weeks. The desired results of all this attention usually are economic, political or social (Horne & Manzenreiter, 2006).

The selection process to host the Olympic Games begin ten years prior, when the IOC invites all NOCs (National Olympic Committees) to declare their interest in bidding to host the mega-event, which they call the Invitation Phase. During this period, the IOC organizes workshops with potential candidates, giving them a opportunity to learn more about the best practices to put together a bid for the event that will best serve the city's long-term objectives. The IOC puts great emphasis on legacy and sustainability from the very beginning of the selection process, as they believe it will be a catalyst for the development of the city (Olympic Movement, 2019).

The following year, the Candidature Process begins with cities presenting their formal bids. During the two subsequent years, the IOC receives and evaluates the bids. After the evaluation, a city is chosen to host an edition of the Olympic Games in a Host City Election by the IOC Session. The candidature process has three stages in which cities will present three official submissions covering different elements of the cities' proposals: (1) Vision, Games Concept and Strategy; (2) Governance, Legal and Venue Funding; (3) Games Delivery, Experience and Venue Legacy. When a city is elected, it will have seven years to prepare for the event (Olympic Movement, 2019).

Each bid is tailored to help the city achieve its long-term development objectives. In the case of Rio de Janeiro's bid, for instance, according to a report published by Rio de Janeiro's city hall, the main reason that led Rio de Janeiro to bid to host the Games was to bring sustainable economic, urban and social development to the city:

The city's decision to bid to host the 2016 Games was made based on a long-term vision: to grasp the opportunity that a successful bid would offer to transform Rio into a better city in which to live, work and visit. The 2016 Games could boost growing and sustained urban and social developments in the city. A unique opportunity was spotted to implement some important infrastructure projects, promised decades ago but never executed, bringing about comprehensive urban renewal. Challenges such as improving urban mobility, revitalizing neglected areas such as the port region, controlling floods and expanding the sanitation infrastructure are examples of public policies that could benefit from Rio being elected. The Games could help to reduce geographic and social divisions and help better integrate the city and all its different regions.

Based on this vision, Rio developed its bid plan, establishing close relations between the sports competitions and the legacy for the city's infrastructure. As a result, Rio de Janeiro entered the race, giving the International Olympic Committee (IOC) a bid with a clear proposal aimed at the Olympic legacy, which would also extend beyond borders, given that a South American city had never before hosted the event. The bid's motive was the main message contained in the proposal: to make the 2016 Olympic and Paralympic Games, if held here, represent a turning point for Rio, entering world sporting history as the Olympic Games of Transformation (Rio de Janeiro City Hall, n.a.).

In an unusual move by the IOC, in 2017, two cities were chosen at once: Paris for the 2024 Summer Olympic Games and LA for the 2028 edition. In the words of the IOC President, Thomas Bach:

"This historic double allocation is a 'win-win-win' situation for the city of Paris, the city of Los Angeles and the IOC. (...) It is hard to imagine something better. Ensuring the stability of the Olympic Games for the athletes of the world for the next 11 years is something extraordinary" (Olympic Movement, 2017).

As of 2019, it was decided that the next editions will be: 2020 Tokyo Summer Olympic Games; 2022 Beijing Winter Olympic Games; 2024 Paris Summer Olympic Games; Milan-

Cortina 2026 Winter Olympic Games; 2028 LA Summer Olympic Games (Olympic Movement, 2019).

2.2.1 Olympic Games' Stakeholders

The International Olympic Committee (IOC) hold the rights to the Olympic Games. Similarly, the International Paralympic Committee (IPC) hold the rights of every aspect of the Paralympic Games. When a new city is chosen to host the mega-event, the IOC “leases” the rights on the Games. As soon as the event ends, the rights are reverted back to the IOC. It is important to highlight that the IOC holds decision rights on every aspect related to the Olympic Games, while the National Committees are the actors operational and legally responsible for the Games (Parent, 2013).

The bidding committee becomes the Organizing Committee when their city is elected to host an edition of the event. During the seven years of preparation, the Organizing Committee will deal with the IOC; national and international sports federations; non-governmental organizations (NGOs), such as the World Anti-Doping Agency (WADA), the Court of Arbitration for Sport (CAS), among others (Parent, 2013).

During the final phase of preparation, other stakeholders will be involved in the event, since the Olympic Committees will be dealing with: both the IOC and other Olympic Committees in order to prepare reports and transfer knowledge; sports federations; management of any legal issues that arise in this phase, etc. Up until one year before the event, the Organizing Committee ceases to exist. The described processes mark the amount of stakeholders involved in the organization of the Olympic Games during its various phases (Parent, 2013).

Among the most important stakeholders to ensure the success the event are the employees and volunteers of the Organizing Olympic Committee, local government, the city's community, sponsors, media, sports federations and international sports delegations. Amid this context, every stakeholder mentioned so far expect different returns on their investments, that might be tangible, intangible, or both (Parent, 2013).

For instance, (1) the employees and volunteers might hope to develop their skills and to have networking opportunities; (2) governments might be focused on the economic return on investment generated by the event, on the opportunity to increase the visibility of the city/country and foster national pride; (3) members of the local community usually hope that

the event bring some sort of positive legacy to the city, in the form of new infrastructure, but also feel the desire to extract some fun from the event; (4) sponsors are more worried with visibility, in hopes that it translates into sales increases (companies such as Coca-Cola Company and McDonald's are frequent sponsors of the Olympic Games, what suggests they are satisfied with the ROI of their participation); (5) the media might aim to sell their products, be them physical or digital. Thus, in the months leading up to the event, they will discuss the Olympic Committee at length, even if the news paints it on a negative light. Therefore, their visibility also increases; last but not least, (7) athletes, motivated by their desire to win, feel that the quality of sports facilities and other services available to them (such as the Olympic Village) are essential to ensure their teams' performance (Parent, 2013).

2.3 IMPACTS OF MEGA-EVENTS

Mega-events are usually assessed in terms of their economic, political or social impacts.

2.3.1 Economic Impacts

There are many studies that aim to measure or debate on the economic impacts related to mega-events (Li & McCabe, 2013; Tien, Lo, & Lin, 2011; Porter & Fletcher, 2008; Frawley & Adair, 2013; Maenning & Zimbalist, 2012), although there is also a discussion on whether this economic return generated by them is real (Crompton, 2004; Kim & Walker, 2012).

In order to discuss the economic impacts, one should, first, distinguish them from financial impacts. The former involve wider aspects of the economy of the host country, such as reducing the unemployment rate, GDP growth, attracting foreign investments, etc. The latter are more related to the impacts of the organization of the event itself, such as budgetary concerns, for instance (Tien, Lo, & Lin, 2011, p. 13).

The desired objectives of hosting a mega-event usually have an economic angle, in hopes that the occasion is able to contribute to the development of the local economy (Frawley & Adair, 2013). This happens because hosting a sport event represents an unique opportunity to promote the lifestyle of the local population and its products, boost tourism, create new jobs (even if they are mostly temporary), improve trade possibilities, make the city more attractive to new businesses (Lee & Taylor, 2005), among others. A successful mega-event might even lead to the sustainable economic development of the host city (Tien, Lo, & Lin, 2011).

It is difficult to measure the economic impact because it is usually longitudinal. In the case of the number of visitors during mega-events, for instance, the literature suggests that even in the cases that this number fall short of the expected during the event, the tourism inflow will increase in following years. This is possible due to the positive image reconstruction of the city, that will bring more tourists to the city throughout the following years (Lee & Taylor, 2005).

In recent years, the economic rationale behind governments' decision to host a mega-event is also related to a destination marketing strategy. Literature suggests that national and regional marketing efforts are able to create an image of the place that will later be important for the city to be recognized as a coveted tourism location (Funk, Toohey, & Bruun, 2007).

In 2012, when London hosted the Olympic Games, it received less tourists than the same period the year prior (CNNGo Staff, 2012). The following year, however, the city set visitation records that were not seen since 1961. The London mayor at the time attributed this increase to an "outstanding mix of culture, art, music and sport to be found" there (BBC Staff, 2014). Beijing, China, on the other hand, showed decline in the tourism sector after the Olympic Games in 2008. This fall might be, however, also related to the financial crisis of that time period (Dyer, 2009).

The Olympic Games also have great potential for the creation of new jobs, both involved directly with the organization of the event and the services industry in general (Malfas, Theodoraki, & Houlihan, 2004). For London 2012, more than 100,000 new jobs were created (Prynn, 2012). The estimates for the creation of new jobs for the previous edition of the Games in Beijing, China, were around 1.8 million new work posts (Reuters, 2005). Even though the Olympics create jobs, it should also be noted that they are mostly temporary and low-paid (Malfas, Theodoraki, & Houlihan, 2004).

In an study undertaken to measure the economic impact of the Summer and Winter Olympic Games of 15 cities that hosted 22 editions of the Games, it was suggested that the economic impact over time is not significant if one observes the following indicators: GPD, unemployment rate and investment rates (Tien, Lo, & Lin, 2011). Therefore, even though it is intuitive to assume that hosting the Olympic Games will present a positive economic impact, this does not seem to be the best way to achieve economic objectives that generate long-term benefits to the host city (Crompton, 2004; Kim & Walker, 2012).

2.3.2 Political Impacts

It is hard to dissociate mega-events from the political context of its time period. The Olympic Games, throughout its history, have also been used as a political tool. The examples of the 1936 and 1952 suggest that the Olympic Games do not exist on a “apolitical bubble” (Nickerson, 1995, p. 73).

In 1936, the Summer Olympic Games, in Berlin, were used to legitimize the Nazi regime of Adolf Hitler (Segrave & Chu, 1996). When IOC decided, in 1931, that the Games would be in Berlin, this movement represented the German reintegration to the rest of the international community after World War I. However, two years later, Hitler became Germany’s chancellor and, soon after, turned the country into a dictatorship. His regime was marked by the purification of the German race, mainly through anti-Semitism (United States Holocaust Memorial Museum, 2003).

At that time, Jewish athletes were persecuted, which led the United States and other democratic western countries to question the morality to host the Olympics in Germany. However, German officials were successful conveying to the IOC an image that the athletes were being treated fairly, and the event was allowed to proceed (United States Holocaust Memorial Museum, 2003).

The Berlin Olympic Games were the perfect opportunity to heavily broadcast Nazi propaganda, with impressive public spectacles, outstanding sport performance and a warm welcome to visitors. Its two weeks hid, however, an oppressive dictatorship marked by racist nationalism and German imperialism (United States Holocaust Memorial Museum, 2003).

In 1952, Olympic Games in Helsinki, the Soviet Union participated for the first time after 40 years boycotting the event for its bourgeois nature. In the following years, during the Cold War between the United States and Soviet Union, the Games would be used for ideological propaganda and prestige (Nickerson, 1995).

This political context led to stressful moments during the 1980 Olympic Games in Moscow, Russia. The 1970s were marked by oil crises and violence in the Middle East, and dissatisfaction of North Americans with the direction their government was taking. Some people even suggested that, at this point, the Soviets were winning the Cold War. Therefore,

the 1980 edition of the Games marked an increase in the hostility between the two countries, that used the event as a metaphor of the circumstances they were living in (Nickerson, 1995).

This situation was apparent during a hockey game between the United States and the Soviet Union in the semifinals. Reports of the match illustrate that, for both countries, the match represented, ultimately, a battle between capitalism and socialism, encouraged by the nationalist Olympic environment, giving new meaning to the North American win over the Soviets (Nickerson, 1995).

2.3.3 Social Impacts

Sports mega-events have the potential to strengthen local customs and values, as well as encouraging the local population to practice more exercises. Through a mega-event such as the Olympics, it will be possible to increase national pride, showing the world the best facet of the host country. These benefits are prone to enhance the quality of life of those most affected by the mega-event, the locals (Malfas, Theodoraki, & Houlihan, 2004).

Some social impacts of mega-events that might be noticed during the event and are often mentioned are related to changes to the local lifestyle, such as traffic jams, environmental pollution, noise pollution and visual pollution (Lin, 2013; Kim, Kang, & Kim, 2014; Liu, 2015).

In order to deal with the traffic jam issue, making the experience of hosting a mega-event the size of the Olympic Games smoother both for visitors and locals, it is necessary to invest in transportation infrastructure. In regards to pollution, governments usually invest in improvements in the air and environment quality as part of their branding strategy for the city (Lin, 2013). Preparing a branding strategy for a country or city has been a recurring resource of government officials, especially when it is related to mega-events (Knott, Fyall, & Jones, 2015). The aforementioned investments are part of the mega-event's legacy to the city, bringing long-term benefits (Lin, 2013).

The experiences of volunteers were also analyzed in the literature (Ribeiro & Correia, 2020). Organizational, infrastructural and environmental issues that happen during the Games influence volunteers perception, which might lead to volunteer drop-outs and influence the experiences of other stakeholders (Ribeiro & Correia, 2020).

One criticism on the Olympic Games, given its size, is that the mega-event might enhance the gaps between many sectors of society, which might turn life more difficult for the

poorer. The city that will host the event tends to go through real estate speculation, in which rent and property prices increase (Malfas, Theodoraki, & Houlihan, 2004). Often, dwellers are relocated to other areas, in negotiations in which they have little bargaining power. However, these urban investments have an important role in renovating deteriorated areas of the city and local housing standards (Lin, 2013).

The Summer Olympic Games of Atlanta, 2008, illustrate the social negative impacts stemming from a sport mega-event this size. In the years leading up to the Games, around US\$350 million in public spending were diverted from building affordable housing to investments in infrastructure for the mega-event (Malfas, Theodoraki, & Houlihan, 2004).

Inside the literature on social impacts of mega-events, the Psychic Income paradigm aims at further discussing the intangible benefits people from the community hosting the mega-event might accrue from it.

2.4 PSYCHIC INCOME

This section will briefly discuss the origins of the concept and its usage in the present study. While this study present study uses psychic income applied to the field of sports marketing, instances of the term can be found in economic theory.

2.4.1 Psychic Income in Economic Theory

Fetter (1915) discussed the idea of income, making a distinction between “real” and “monetary” income. According to him, the former is related to material items individuals receive to fulfill their desires, such as bread and butter, while the latter is a sum of money a person receives to purchase the goods they desire. Fetter (1915, p. 26) calls it “a means to an end”.

In addition, he argues that many choices people make are not driven only by real or monetary income, for they exist in the sphere of feeling. Fetter (1915) uses as an example services one does for oneself, such as the satisfaction an artist can reap from engaging in a creative activity. This pleasure is not simply measured on monetary terms, and he called it *psychic income*. Thus, Fetter (1915, p. 27) defines psychic income as “desirable results produced in the realm of feeling by valuable objects or by valuable changes in the environment which accrue to or affect an economic subject within a given period”.

Terborgh (1928) argues that psychic income is not a simple concept to grasp. It entails that people's "stream of enjoyments" (p. 75) are measurable and comparable between individuals. However, gathering a sample that would allow the researcher to compare experiences amongst subjects and identify the sources of psychic income is a daunting proposition. For him, one would have a hard time reaching a percentage of how much of a subject's psychic income is due to countless mundane aspects of life, such as the weather, work, religion, marriage or graduate school.

Thus, he investigates if there might be a way to indirectly measure one's psychic income through Alfred Marshall's total utility concept. According to Marshall (1890), prices are influenced by how much customers are willing to pay for a product, and this willingness-to-pay is, in turn, related to the utility they are going to derive from it. Therefore, Terborgh (1928) argues that the total utility could be measured withdrawing an element from the equation and observing the difference it makes to the whole.

However, while this line of thinking seems reasonable, it would be tricky to observe the contribution of an intangible element if, in its absence, it would make none. Terborgh (1928) compares this situation to measuring the weight of a single egg in a basket and outside of a basket: one could clearly ascertain how much it weighs; conversely, it would not work with psychic income, for the components are "complementary and interdependent" (p. 77). Therefore, removing an element here would not help in measuring its individual contribution, for its presence is boosted by the presence of the others. Thus, according to Terborgh (1928), successfully identifying and measuring the components of psychic income would be too hard of a task to accomplish.

Decades later, however, this very concept would be applied in the field of sports marketing to try to figure out non-economic reasons as to why governments should subsidize any given sports property.

2.4.2 Psychic Income in Sports Marketing

John Crompton (2004) used psychic income to discuss the factors that justified public investment in major league sports facilities. His psychic income paradigm was the basis for the subsequent scale conceptualization undertaken by Kim and Walker (2012), in the context of sports mega-events.

Since sports franchises are private ventures, there is a debate on whether investing public funds on sports venues is a good idea, be it in terms of direct return on investments (ROI) or in more general, intangible benefits derived from the presence of the team on a given city. In addition, Crompton (2004) identified a series of studies that strongly suggest there is no relation between public funding in sports venues and financial returns generated. Therefore, he argues one should look for other factors that justify public funding that are not financial-related.

In this context, the author presents four alternate benefits: “increased community visibility; enhanced community image; stimulation of other development; and psychic income” (p. 43). The first three are focused on reaching outsiders, such as tourists and foreign investments in the community. The last one, psychic income, is focused on reaching the city’s residents.

Increased community visibility is related to a higher attention from the media, especially if it is a major league franchise, given the national appeal of this type of coverage. An argument used by those that argue in favor of public funding for sports facilities has its basis on the relationship between the franchise and the city. According to them, the franchise is able to attract companies and tourists for the city, increasing its economic base. However, while this sounds like a sound argument, there is no empirical evidence that increased media coverage can, on its own, achieve the aforementioned desired effects (Crompton, 2004).

Regarding enhanced community image, what is understood by “image” for Crompton (2004, p. 44) consists of “a mental reconstruction of a place in a person’s mind”. This traditional definition has been expanded to encompass image also as perceived reputation or character. In this context, cities use place marketing to convey a positive image of the place, in order to attract new businesses, tourists and even residents. For instance, on the years following World War II, the image of a city was defined by the number of skyscrapers it possessed (Crompton, 2004).

Nowadays, the city’s image, at least in the United States, is very much related to the sports franchise as a symbol for the city. This argument was used on a public referendum requesting \$125 million for a new sports facility in Dallas, Texas. Thus, according to Crompton (2004), there is strong argument to suggest having a major league franchise is a prerequisite for a city to make the leap from being considered a “small city” to a “big city”.

Another aspect of this image is related to citizen’s perception of public administration. Since a sports team is a symbol of great proportions, the success of the team translates into the city’s social and economic health, even if there is no empirical evidence to support this line of

thinking. On the other hand, if the team decides to relocate to another city, this immediately translates to the public as incompetence from the public administration and entrepreneurs (Crompton, 2004).

The third benefit analyzed is that being a sports team host city might be a source of development in other areas, non-related to sport, as if it served as the “glue” that attracted investments or even the starting point for a new development project for the city. This is based on the tenet that businesses will thrive if they are closer to one another. After all, there must be reasons to attract people to the city center even when the sports season is over (Crompton, 2004).

It is worth noting that the initiative to stimulate new investments must be planned in such a way that boost local businesses. Therefore, to convince citizens that it is necessary to spend public money in sports facilities, advocates often use an holistic view as an argument. In this scenario, the sports facility will drive the development efforts of the city. On the other hand, others might argue that, oftentimes, stadiums are built in remote areas, where people might enjoy easy access with their cars, given the vast space for parking (Crompton, 2004).

The benefits discussed so far had an outside-in perspective, focusing on reaching external audiences, with an innate economic perspective for receiving a sports team and its facility, given the effort to attract more media attention, more tourists, private investments, among others. Therefore, the *psychic income* presents itself as an important antithesis to what has been discussed up until this point (Crompton, 2004).

The Psychic Income has internal dimensions, since it is focused on the city’s residents. Therefore, it might be defined as: “(...) the emotional and psychological benefit residents perceive they receive, even though they do not physically attend sports events, and are not involved in organizing them” (Crompton, 2004, p. 49).

All in all, identification with a team is not directly related to watching the games at the stadium or not. An individual might consider themselves a fan and take pleasure in the team’s victories (conversely, to feel sad when they lose), without ever having set foot in a game. A sports team means “an investment in the emotional infrastructure of a community”. Therefore, the team represents a tangible focus for social bonding, uniting people regardless of their political affiliations, gender, race, status in the community, income, etc. (Crompton, 2004, p. 49).

Sport is also capable of making people forget of their daily tasks, enabling them to escape their reality, serving as a cultural asset, and being a symbol of collective identification.

There is even a biological explanation for the individual's identification with their team in the literature. Winning or losing, the chemical composition of the brain is altered, starting from the serotonin levels. The social environment is proven to influence the serotonin levels of an individual. When they win, the levels increase and people get happier; when they lose, these levels decline, making people sad or violent, because they feel as if they had also lost (Crompton, 2004).

Since there is no scientific way to measure psychic income, public officials need to answer the following question to justify public subsidy of a private sport facility: How much subsidy sports facilities deserve in order to justify the positive experiences they will have upon residents of the host city? (Crompton, 2004, p. 51).

In this context, Crompton (2004) argues that a psychic income paradigm is necessary to justify public investment in sports facilities on acceptable grounds. Therefore, the author propose the following dimensions to represent psychic income: (1) community pride resulting from increased visibility; (2) civic pride from being a sport event host city; (3) pride in efforts to resuscitate deteriorated areas; (4) enhanced collective self-esteem; (5) tangible focus for social bonding; (6) excitement from the event and visitors; and (7) emotional involvement with a sport event.

The psychic income paradigm might be used as the basis to identify the psychological impacts of mega-events on residents of the host city or country (Kim & Walker, 2012), in accordance with the present study.

3 RESEARCH HYPOTHESES AND CONCEPTUAL MODEL

In this chapter, the research hypotheses and the conceptual model will be presented.

3.1 RESEARCH HYPOTHESES

3.1.1 Community pride resulting from increased visibility

The community pride resulting from increased visibility represents the challenge to imbue citizens with a national spirit that will help them be successful hosting a mega-event (Crompton, 2004; Kim & Walker, 2012). Thus, the city will to show to the world they are able to do it and their residents will feel proud of the fact that their city are now under global spotlights (Xu, 2006).

When a sport event is broadcasted, besides the game itself, the city's landscapes are also transmitted. During a mega-event, international viewers have an opportunity to get to know a little bit more about the place, making residents proud of showing their city to the world (Kim & Walker, 2012).

A sport mega-event is an unique opportunity to advertise new products and services offered in the country (or city). Moreover, through the event, it is possible to broadcast, to the entire world, an entirely new image of the country. Being able to attract both national and international media attention is one of the main reasons why governments decide to host an event of this magnitude (Horne & Manzenreiter, 2004).

In the case of the 1996 Summer Olympic Games in Atlanta, a longitudinal study showed that the city's residents considered, during 1992, 1993 and 1994, that the international recognition was the biggest intangible benefit of the Games. Overall, during the six times the survey was administered in this three-year period, they considered that the intangible benefits were of more importance than the economic ones (Mahalik & Simonetta, 1999).

Evidence collected in the literature suggest there is a positive relationship between higher international (and national) visibility and the pride citizens feel to see their city receive bigger media attention (Kim & Walker, 2012).

Thus, the first research hypothesis is proposed:

H₁: There is a positive relationship between hosting a mega-event and an increased community pride resulting from increased visibility.

3.1.2 Civic pride from being a sport event host city

The civic pride can be described as positive mindset on behalf of the citizens that will host a mega-event (Kim & Walker, 2012). The literature suggests that every community is in a position to enjoy the intangible benefits of a sport mega-event, for the opportunity to celebrate their unique features and stimulate civic pride in their residents (Gelan, 2003).

Even though hosting an event of the size of the Olympic Games might bring negative impacts such as higher urban traffic and noise pollution, the residents of a host city might feel proud of the fact that their city is able to host the biggest multisport event in the world. Since it is an intangible benefit, this pride is often overlooked in studies about the social impacts of mega-events (Mules, 1998).

In studies that investigate the social impacts of hosting a sports team, the results also suggest that there is an increased civic pride derived from this fact (Siegfried & Zimbalist, 2000; Johnson & Whitehead, 2000).

Therefore, hosting a mega-event might be related to the increased civic pride among city residents, stemming from a positive mental reconstruction in relation to the event, the positive recognition from outsiders, and the possibility of using the event as a platform to showcase what their city is able to accomplish (Kim & Walker, 2012).

Therefore, the second research hypothesis is proposed:

H₂: There is a positive relationship between hosting a mega-event and an increased civic pride from being an event host city.

3.1.3 Pride in efforts to resuscitate deteriorated areas

The discussion on mega-events might involve, among other topics, the event as a political or ideological instrument, its relationships with sponsors, tourism, the economy, etc. However, these events might also be analyzed in the context of urban processes (Hiller, 2002) and the renovation of deteriorated areas (Gratton, Shibli, & Coleman, 2006) related to the event.

In order to win a bid to host a mega-event like the Olympic Games, the preparation of the host city will inevitably involve some form of urban restructuring or infrastructure-building (Roche, 1992). Mega-events usually represent the transformation of urban space through the building of stadiums, sport arenas, parks or commercial and residential areas (Hiller, 2002).

The case of Barcelona is among the most discussed in literature as a success story where the 1992 Summer Olympic Games were used as opportunity to promote the city's urban development (Marshall, 1996; Monclús, 2003; Qu & Spaans, 2009).

Since the beginning of the 1980s, important projects to prepare the city for the Games were launched. These projects were aimed at resuscitating deteriorated areas and increasing the city's public spaces. In addition, other important initiatives were undertaken with the objective of boosting the local economy, such as: new highways, improvements in communication and basic sanitation, and new residential areas (Marshall, 1996).

Another city whose bid to host the Olympics involved plans of urban renovation was London. Their winning bid to host the 2012 Summer Olympic Games marked the city as the first in history to host the Games three times (1908, 1948 and 2012). The reasons why it was considered and chosen to host the Games again were based on its commitment with sustainability and renovation with the east side of the city, one of the poorest in the country. The projects devised to accomplish these objectives included new residential areas, parks (green areas), investments in public transportation and education, a new shopping center, among others (Cunningham, 2014).

Cape Town's bid to host the 2004 Summer Olympic Games also included a plan focused on the city's urban reconstruction (Hiller, 2002). Similarly, Manchester, in its failed bid, intended to use the 2000 Summer Olympic Games as an opportunity to recover their economy through urban reconstruction that would be largely financed by public funds (Cochrane, Peck, & Tickell, 1996).

In the case of Cape Town, their bid involved a plan for the restructuring of the city in a country marked by Apartheid, during a delicate political period (Hiller, 2002). Manchester's bid, in turn, involved the city's political and economic restructuring using a place marketing strategy in which Manchester would join a global elite of cities that are known worldwide in the 21st century (Cochrane, Peck, & Tickell, 1996).

Before submitting a city for an Olympic bid, the officials in charge must clearly convey to citizens the changes they envision for the city in the case of a successful bid (Hiller, 2002). Therefore, the sense of community and local pride might increase as the population realizes the government intends to use the mega-event as an instrument to leave a positive legacy for the host city, such as resuscitating deteriorated areas (Kim & Walker, 2012).

Therefore, the third research hypothesis is proposed:

H₃: There is a positive relationship between hosting a mega-event and an increased pride in resuscitating deteriorated areas.

3.1.4 Enhanced collective self-esteem

According to Social Identity Theory, self-concept has two dimensions, an individual and a collective one. The latter refers to the social identity of an individual, how they perceive themselves within a group, the emotional attachment derived from their participation in it (Luhtanen & Crocker, 1992) and an evaluative component, related to a positive or negative attribution from this association – the collective self-esteem (Ellemers, Kortekaas, & Ouwerkerk, 1999).

Individuals usually strive to maintain high collective self-esteem, in an effort to look superior than those that belong to another group. This is done through comparisons between their group and others (Phua, 2010). In addition, according to the level of engagement among members, the psychological separation between the individual's and the group's self-concept might become blurry, resulting in people that strongly identify with their groups (Phua, 2010).

The collective self-esteem might be defined from two standpoints: (i) the way the community perceive itself; or (ii) the way outsiders perceive the community (Eckstein & Delaney, 2002).

Hosting a mega-event might represent an unique opportunity for individuals to get excited about the event, feel proud of their city and country, for they are feeling a “community spirit” (Waite, 2003, p. 209). Also, an event of this nature generates increased tourism that will also be positive for collective self-esteem, in the form of increased standards of living and new recreational opportunities (Haley, Snaith, & Miller, 2005).

Consequently, the fourth research hypothesis is proposed:

H₄: There is a positive relationship between hosting a mega-event and an increased collective self-esteem.

3.1.5 Tangible focus for social bonding

The tangible focus for social bonding stems from the phenomenon in which sports spectators use their common interest to keep in touch with people that share their fan

identification. For instance, watching a game amongst family members is an excellent opportunity to strengthen these social bonds (Wann, 1995).

On a national level, sports are capable of making individuals forget their rivalries on behalf of nationalism. In this case, sports might be used as a “homogenization” tool to prevent citizens to mobilize against authorities (Frey & Eitzen, 1991, p. 511). In the Roman Empire, this policy became known as “bread and circuses”, in which the emperor guaranteed food and entertainment to people in exchange for their political passiveness (Murphy & Bauman, 2007).

During a mega-event, both residents and visitors experience an energy that transcends the sport and that can be shared by everyone. This energy is cultivated by minor events that are held during the mega-event; promotion of informal opportunities for socialization; production of auxiliary events and opportunities to socialize in the sport event itself, to cite a few (Chalip, 2006).

During the 2014 FIFA World Cup, held in Brazil, for instance, huge screens were placed in host cities, providing Brazilians and foreigners a tangible focus for social bonding (FIFA Fan Fest, 2014).

Thus, the fifth research hypothesis was formulated:

H₅: There is a positive relationship between hosting a mega-event and an increased focus for social bonding.

3.1.6 Excitement from the event and visitors

Sports events are related to the pleasure both athletes and spectators will feel attending or competing in the event. The athletes will have an opportunity to overcome challenges inherent to their participation in the event, while the spectators will have an opportunity to socialize with other like-minded individuals, that are also excited about the event (Green, 2001; Gibson, 1998).

The offer of side activities from the main event guarantees the promotion of an atmosphere of fun and excitement with hopes to attract more spectators or participants, depending on the focus of the mega-event. Participating in or watching a sports event is a choice on how to spend one’s leisure time and the pleasure one derive from doing so (Green, 2001). This atmosphere that is present in a sport event, especially mega-events, is one of the reasons why they are still organized and why they are so popular (Chalip, 2006).

Sports provide people with an opportunity to have a catharsis, expressing feelings of happiness or frustration alike. As society evolved, a sports arena work as a controlled environment for spectators to express themselves. Therefore, watching games personally guarantees a sort of excitement and enthusiasm that cannot be compared to watching the same game any other way (Gibson, 1998).

Regarding the relation between locals from where the event will be hosted and tourists, the perception of locals will be positive as long as their expectations for the event are positive. These expectations might include, for instance, an improvement of their overall economic and social statuses. If they perceive the payoff related to the event, monetary or not, will be high, they will be able to support hosting the event and its costs, welcoming tourists, while also tolerating its downsides (e.g., noise pollution, traffic jams and litter) (Waite, 2003).

Thus, the sixth research hypothesis was formulated:

H₆: There is a positive relationship between hosting a mega-event and an increased excitement from the event and visitors.

3.1.7 Emotional involvement with a sport event

Emotional involvement might be defined as a “an unobservable state of motivation, arousal or interest toward a recreational activity or associated product” (Havitz & Dimanche, 1999, p. 123). The analysis of this phenomenon, that is lasting and continuous by definition, helps to understand the behavior and the decision-making processes of consumers (Bloch, Sherrell, & Ridgway, 1986). In addition, consumers might exhibit different levels of commitment, depending, for instance, of their identification with the brand itself (McGehee, Yoon, & Cárdenas, 2003).

It is important to take into consideration the perception of residents in planning and hosting an event to ensure its success. Moreover, it is paramount that citizens see the event on a positive light (Ap, 1992), or its progress might be jeopardized (Gursoy & Kendall, 2006).

When the public opinion is ignored, the event is rarely perceived as an unique opportunity to deliver a positive legacy to the host city or country. Citizens' concerns must be addressed on a timely manner, such as the possibility of an increase in taxes; if the event is being treated as something that only the elite will enjoy; or if the local population will be relocated to make room for infrastructure specific to the event, to cite a few. Still, criticism

related to real estate price increases, traffic jams, noise pollution and other possibilities that might affect the local lifestyle must also be taken into consideration (Hiller, 1990, p. 119).

Literature suggests that citizens' emotional involvement with the sport event is an important factor for the success or failure of an event (Kim & Walker, 2012), given the strength residents' personal involvement will have in their perceptions towards the event (Hiller, 1990).

Therefore, the seventh and final research hypothesis was proposed:

H₇: There is a positive relationship between hosting a mega-event and an increased emotional involvement with the sport event.

3.2 CONCEPTUAL MODEL

Based on the psychic income paradigm proposed by Crompton (2004), Kim e Walker (2012) propose the conceptual model illustrated in Figure 1.

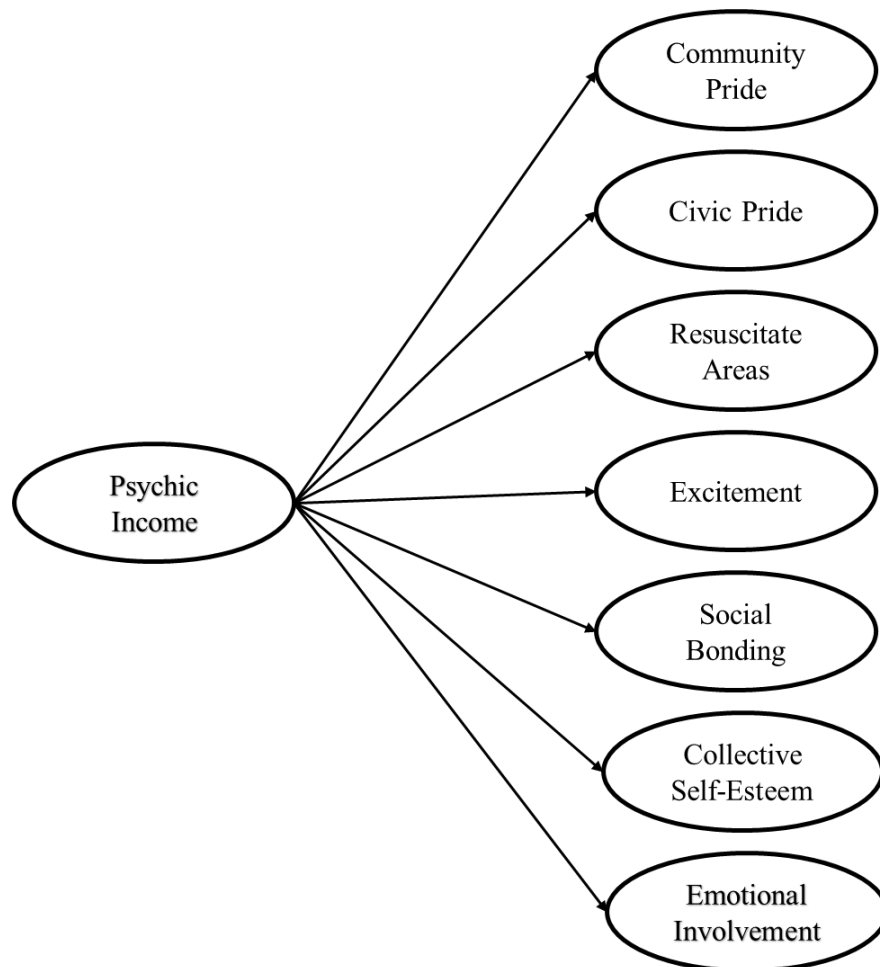


Figure 1. Conceptual model proposed by Kim e Walker (2012), based on Crompton's (2004) Psychic Income Paradigm.

4 METHOD

The following chapter will present the method and a detailed explanation of the procedures used to operationalize this study. First, the scope of the study is delimited through the research question, its corresponding objectives, questions specific to the study and scope. Then, the nature of the study is presented, taking into consideration the chosen research technique and unit of analysis. Subsequently, the population and sample are presented. Since two samples were collected, one before the event and another after the event, both phases of the study will be discussed. Afterwards, there will be a section on the operationalization of the variables and the procedures used for data collection. Finally, the techniques used for data analysis in both phases are described.

4.1 RESEARCH QUESTION

The present study aims to contribute with the literature that deals with the social impacts of a mega-event. More specifically, it is an effort towards better understanding the psychic income of mega-events for residents of the community in which the event will take place. In order to accomplish this task, the scale proposed by Kim and Walker (2012) will be adapted for the context of the 2016 Summer Olympics, which was held in Rio de Janeiro.

Literature has many studies focusing on the impacts of mega-events, be them economic (Li & McCabe, 2013; Tien, Lo, & Lin, 2011; Porter & Fletcher, 2008; Frawley & Adair, 2013; Maenning & Zimbalist, 2012), political (Nickerson, 1995; Segrave & Chu, 1996) or social (Lin, 2013; Kim, Kang, & Kim, 2014; Liu, 2015; Malfas, Theodoraki, & Houlihan, 2004).

The present study aims to contribute to the literature on social impacts of mega-events, focusing specifically on the intangible benefits people from the community hosting the megaevent perceive they receive from it.

4.2 RESEARCH OBJECTIVES

The present study aims primarily to investigate if the psychic income dimensions, namely (a) community pride, (b) civic pride, (c) pride in efforts to resuscitate deteriorated areas, (d) collective self-esteem, (e) social bonding, (f) excitement and (g) emotional involvement are good proxies to measure the intangible benefits residents native of Rio de Janeiro perceived

they received from the 2016 Summer Olympics, i.e., the psychic income accrued from the mega-event. Additionally, as a secondary objective, investigate if there is significant difference between respondents' expectations prior to the event and their perceptions following it.

The objectives were translated in the form of two questions, that will be presented below.

4.2.1 Specific questions from the study

Question 1: Does hosting a mega-event influence the psychic income dimensions?

Question 2: Is there a significant difference between expectations prior to the event and perceptions following it?

4.2.2 Scope

In this section, the scope is delimited. In order to define the boundaries of the study, the following restrictions were considered.

It was decided to study the intangible benefits residents native of Rio de Janeiro perceived they received from the 2016 Summer Olympics. The Summer Olympics is the biggest multi-sport event in the world, with unparalleled visibility and reach. In order to capture the psychic income from residents native of the city, tourists, both national and international, were not approached to answer the survey. Also, although the survey included questions on whether people participated in the event on any capacity, it was not used as a filter. According to the literature, even those that were not physically present at the event accrue psychic income from it.

Also, the perceptions of residents were captured both in the months leading up to the event and right after it ended, to analyze if there was a significant change in their perceptions.

4.3 NATURE

This study was conceived as a non-experimental type of research. According to Kerlinger (1986, p. 348), a “nonexperimental research is systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestations have already occurred or because they are inherently not manipulable. Inferences about

relations among variables are made, without direct intervention, from concomitant variation of independent and dependent variables”.

Since the researcher is unable to manipulate independent variables, one of the risks of non-experimental researches is the risk of wrong interpretations. When guided by hypotheses, however, this risk is mitigated (see Chapter 3) (Kerlinger, 1986).

4.3.1 Research Technique

The chosen research technique was survey, since it is simple to administer, code, analyze and interpret (Malhotra, Nunan, & Birks, 2017). The data collection revolves around a structured questionnaire, with a 7-point Likert scale in most items, and an open question at the end.

4.3.2 Unit of Analysis

This study investigated the perceptions people native and residents of Rio de Janeiro had about the 2016 Summer Olympics. Their perceptions were captured a few months before and immediately after the event. Therefore, the unit of analysis was the individual both born in the city and that was still living in it during the time in which each sample of the study was collected.

4.4 POPULATION AND SAMPLE

The population might defined as "the aggregate of all the elements that share some common set of characteristics and that comprise the universe for the purpose of the marketing research problem" (Malhotra, Nunan, & Birks, 2017, p. 412). Therefore, the population targeted for this study were all the individuals native and residents of Rio de Janeiro, RJ, Brazil. A sample, in turn, is defined as a “subgroup of the elements of the population selected for participation in the study” (Malhotra, Nunan, & Birks, 2017, p. 413). In the first phase of the study, our sample was non-probabilistic, out of convenience (Malhotra, Nunan, & Birks, 2017), limited to undergraduate students, as to facilitate the researcher during data collection. In the second phase of the study, the sample was also non-probabilistic, given that the targets were people native of Rio de Janeiro still living in the city. This time around, however, the team responsible for data collection approached people in the streets in different points of the city.

4.4.1 Sample 1: Before the Olympics

The sample was collected between March 14 and March 26, 2016. 333 valid instruments were collected. The number of questionnaires surpassed the recommended number of five times the number of variables (Hair, et al., 2010), given that the model has 43 variables. The sample was non-probabilistic, chosen out of convenience (Malhotra, Nunan, & Birks, 2017), having undergraduate students as respondents. Thus, targeted universities were also convenient, as they were the ones the researcher had the opportunity to apply the survey. Most of the students that participated in the survey were from the following institutions: UFRJ, Universidade Cândido Mendes, UNISUAM and Faculdade Mercúrio (see Table 1).

Since a portion of the instruments were self-applied, the questionnaires from respondents that were not *cariocas* currently living in the city were discarded.

Table 1 – *Frequency of Universities*

University	Frequency	Percentage
FAMERC	141	42%
UFRJ	76	23%
Unisuam	68	20%
Cândido Mendes	33	10%
Others	15	5%
Total	333	100%

In relation to what they were studying, most respondents' were studying Physical Education (see Table 2).

Table 2 – *Frequency of Undergraduate Courses*

Course	Frequency	Percentage
Physical Education	138	41%
Business Adminsitration	63	19%
DGEI	57	17%
Computer Science	21	6%
Accounting	10	3%
Economics	5	2%
Others	39	12%
Total	333	100%

The respondents' age ranged from 17 to 57, with a mean of 25 years old. Most of them (60%) were between 20 and 29 years old. From the 333 respondents, 168 (50,5%) were men and 165 were women (49,5%).

4.4.2 Sample 2: After the Olympics

The sample was collected between September 19 and October 21, 2016. 1037 questionnaires were collected, 1025 of them were valid. The remaining 12 were discarded due to being incomplete or presenting systematic errors in filling out. For the second phase, the researcher also went for a non-probabilistic sample (Malhotra, Nunan, & Birks, 2017) given the targeted prospects for answering the survey were *cariocas* living in the city at that time.

The researcher, along with a small team of 6 people, approached people in the streets of Rio de Janeiro, at the neighborhoods of Centro (Downtown Rio de Janeiro), Tijuca (North Zone) and Botafogo (South Zone). Those places were chosen in an attempt to cover a wider spectrum of possibilities in terms of age, education level, participation in the event and neighborhood of residence.

According to data from Sebrae (2016), there are more than six million people living in the city of Rio de Janeiro. The city is roughly divided between three areas: Central and Zona Sul, Zona Norte and Zona Oeste. The distribution of the population through the areas can be found in Table 3. It should be noted, however, that knowing how many people live in each area is helpful up until a certain point, because one cannot know for certain if these people are all native of the city of Rio de Janeiro, or *cariocas*.

Table 3 – Population of Rio de Janeiro by Area

Area of the City	Frequency	Percentage
Central e Zona Sul	1.303.785	21%
Zona Norte	2.645.526	42%
Zona Oeste	2.371.135	38%
Total	6.320.446	100%

While devising the strategy for data collection, there was an effort to come up with an even distribution between areas of the city. However, there was no data collection on Zona Oeste, due to the distance from the residence of most interviewers, which might help explain why it has the lowest percentage overall (23%). The distribution of the sample by area of the city can be found in Table 4.

Table 4 – *Sample by Area*

Area of the City	Frequency	Percentage
Central e Zona Sul	286	28%
Zona Norte	508	50%
Zona Oeste	231	23%
Total	1025	100%

The sample is fairly distributed gender-wise. 520 (50,7%) of respondents were male, while 505 (49,3%) were female. The minimum age of respondents was 16, while the maximum was 90. The sample is concentrated between 18 and 30 years old (see *Figure 2*).

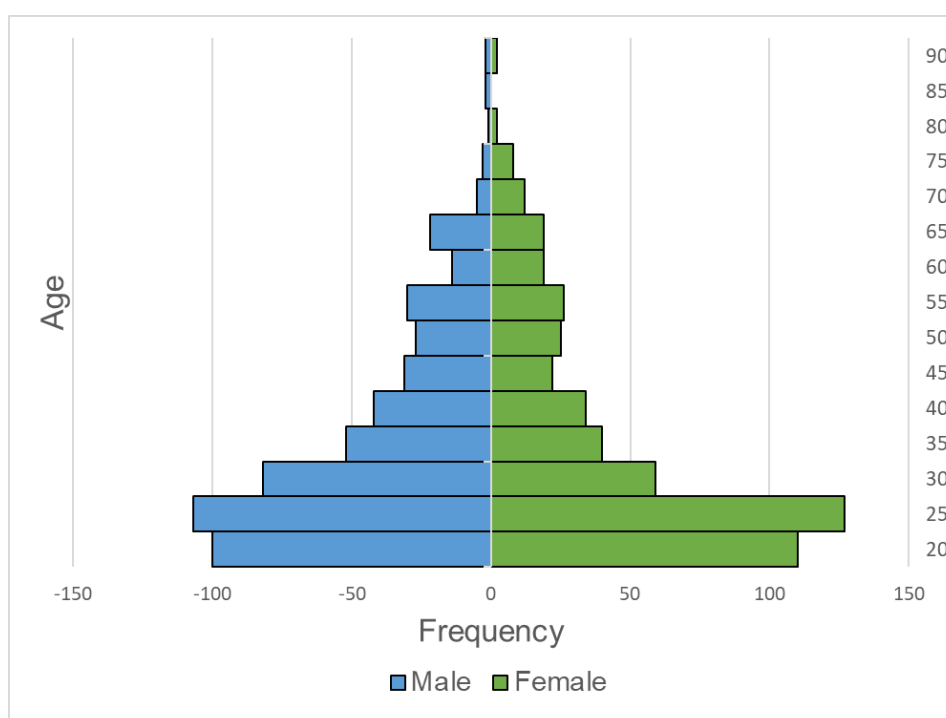


Figure 2. Frequency Distribution by Gender

Regarding level of education, half of respondents 510 (50%) had a high school degree, while 344 (34%) had an undergraduate degree or higher (see Table 5).

Table 5 – *Level of Education*

Level of Education	Frequency	Percentage
Elementary School	37	4%
Middle School	134	13%
High School	510	50%
Undergraduate or higher	344	34%
Total	1025	100%

When asked about their participation in the event, 456 (44%) of respondents participated in some capacity. Most of those people, 333, were spectators in the Olympics, while the

remaining 123 either had paid jobs in the event or volunteered in it (see Table 6). The respondents were also inquired on whether they followed the event on another media, and 888 (87%) of them did.

Table 6 – *Type of Participation in the Rio 2016 Olympic Games*

Type of Participation	Frequency	Percentage
Spectator	333	73%
Employment	103	23%
Volunteer	20	4%
Total	456	100%

4.5 INSTRUMENT OF DATA COLLECTION

The survey involved ten blocks of information. The first block included two filter questions (if the respondent was native of Rio de Janeiro and if they currently reside in the city). Since the survey had as objective analyzing the perception *cariocas* (natives from the city) had on the 2016 Rio Summer Olympics, these filters were pivotal to guarantee that respondents satisfied the sample requirements. The remaining questions on this block were of demographic nature.

On the seven following blocks, the questions related to the psychic income dimensions were presented: enhanced collective self-esteem, tangible focus for social bonding, excitement from the event and visitors, emotional involvement with a sport event, community pride resulting from increased visibility, civic pride from being a sport event host city and pride in efforts to resuscitate deteriorated areas.

The ninth block included questions on respondents overall perception regarding the event. Every question from block two through nine were adapted from Kim and Walker's (2012) study on the social impacts associated with Super Bowl XLIII on the residents of Tampa Bay, FL, USA. The authors initiated the study with a 43-item scale and 7 dimensions that reflected the Psychic Income paradigm, as per Crompton (2004). However, after purifying the scale, they ended up with 22 items and 5 dimensions.

Kim and Walker (2012) concluded that the results of their study could not be generalized to other contexts, since the perception of the intangible benefits could vary from mega-event to mega-event, the present study opted to use the full scale, on both phases, based on the Psychic Income paradigm, with the dimensions: enhanced collective self-esteem (represented by the

code CSE); tangible focus for social bonding (SBO); excitement from the event and visitors (EXT); emotional involvement with a sport event (INV); community pride resulting from increased visibility (IVB); civic pride from being a sport event host city (SEH); and pride in efforts to resuscitate deteriorated areas (DTR).

It was used a 7-point Likert scale to measure items (ranging from (1) “strong disagree” to (7) “strongly agree”). Table 7 shows the description of each item, its number in the survey and the corresponding variable in data analysis.

Since the researcher was unable to find studies using the scale in Brazil, it was necessary to translate the questionnaire from English to Brazilian Portuguese. In order to guarantee its integrity, it was used the back translation technique. First, the survey was translated from the foreign language, English, to the native language, Brazilian Portuguese. Then, it was translated back to English. Finally, the convergence between the original formulation of items and the translated back version was verified, as to correct or adjust possible mistakes (Malhotra, Nunan, & Birks, 2017), aiming at semantic proximity between items, not a mere literal translation of the original content (View Appendix A).

In the tenth and final block, there was a single open question: “*Por que você concorda (ou discorda) com a decisão do Rio de Janeiro sediar as Olimpíadas?*” (“Why do you agree (or disagree) with the decision of Rio de Janeiro hosting the Olympics?”) This question was included to help interpret the remaining questions since, through it, the respondent had the chance to express their opinions more freely.

The data collection was conducted in the first sample both with the interviewer conducting the interview and with the respondent answering the questions on their own. To aid data collection, there were two versions of the survey at this point: one had instructions to guide the interviewer to conduct the interview (View Appendix B). In the second one, the survey was adapted to be answered without the aid of the interviewer. This version was used when the survey was applied to multiple students in the same classroom (View Appendix C). It is worth noting that, at this point, questions were formulated in future tense, since the event had not yet happened. On the second phase, however, just interviewer-conducted surveys took place. Therefore, there was only one version of the survey, with items phrased in past tense, since the event had just ended when data collection began (View Appendix D).

Table 7 – Correspondence between variables and items in the survey

Item	Item Description	Q*
CSE1	Eu me sinto honrado em ter as Olimpíadas na minha cidade.	9
CSE2	Como carioca, eu fiquei satisfeito em ter as Olimpíadas em minha cidade.	10
CSE3	As Olimpíadas farão com que os cariocas apreciem mais seu estilo de vida.	11
CSE4	As Olimpíadas aumentarão o orgulho dos cariocas.	12
CSE5	As Olimpíadas aumentarão o meu respeito pela minha cidade.	13
CSE6	As Olimpíadas contribuirão com o meu bem estar pessoal.	14
SBO1	As Olimpíadas aumentarão a disposição para cooperação entre as pessoas da minha cidade.	15
SBO2	As Olimpíadas aumentarão minhas relações sociais na minha cidade.	16
SBO3	As Olimpíadas aumentarão as oportunidades de passar mais tempo com a família.	17
SBO4	As Olimpíadas aumentarão as minhas possibilidades de criar vínculos sociais.	18
SBO5	As Olimpíadas aumentarão as oportunidades de socialização.	19
SBO6	As Olimpíadas fortalecerão minhas amizades na minha cidade.	20
EXT1	Eu terei prazer em interagir com os visitantes durante as Olimpíadas.	21
EXT2	Eu ficarei empolgado pela presença dos visitantes durante as Olimpíadas.	22
EXT3	As Olimpíadas trarão empolgação para os cariocas.	23
EXT4	As Olimpíadas oferecerão entretenimento para os cariocas.	24
EXT5	As Olimpíadas oferecerão novas atividades para os cariocas.	25
EXT6	A vida noturna carioca será mais animada por conta das Olimpíadas.	26
INV1	A escolha do Rio de Janeiro para sediar as Olimpíadas foi muito importante para mim.	27
INV2	A escolha do Rio de Janeiro para sediar as Olimpíadas foi uma grande notícia para mim.	28
INV3	Eu passei a acompanhar mais os esportes olímpicos desde que eu soube que a minha cidade ia sediar as Olimpíadas.	29
INV4	Eu terei prazer em assistir as Olimpíadas na minha cidade.	30
INV5	As Olimpíadas aumentarão meu envolvimento com os esportes olímpicos.	31
INV6	As Olimpíadas aumentarão meu interesse nos esportes olímpicos.	32
IVB1	Porque a minha cidade será exposta para pessoas de fora do RJ em virtude das Olimpíadas.	33
IVB2	Porque pessoas de fora do RJ saberão mais sobre minha cidade depois das Olimpíadas.	34
IVB3	Porque as Olimpíadas aumentarão a visibilidade da minha cidade na mídia.	35
IVB4	Porque as Olimpíadas proporcionarão a minha cidade uma identidade internacional.	36
IVB5	Porque as Olimpíadas contribuirão para a minha cidade ficar nacionalmente conhecida.	37
IVB6	Porque a TV exibirá mais sobre a minha cidade enquanto transmite os jogos.	38
SEH1	Porque a minha cidade poderá sediar outros grandes eventos esportivos no futuro.	39
SEH2	Porque a minha cidade poderá mostrar que tem a habilidade de sediar grandes eventos esportivos, tais como as Olimpíadas.	40
SEH3	Porque a minha cidade obterá uma imagem positiva como sede das Olimpíadas.	41
SEH4	Porque a minha cidade obterá reconhecimento positivo como uma cidade sede de um grande evento esportivo.	42
SEH5	Porque não há muitas cidades no Mundo que possam sediar os Jogos Olímpicos.	43
SEH6	Porque as Olimpíadas realçarão a imagem da minha cidade como uma cidade importante.	44

Item	Item Description	Q*
SEH7	Porque as Olimpíadas gerarão oportunidades para mostrar o que a minha cidade é capaz de fazer.	45
DTR1	Porque as Olimpíadas melhorarão as instalações públicas da minha cidade (ex. ruas, sinalizações de trânsito, centros de convenções).	46
DTR2	Porque as Olimpíadas ajudarão a melhorar a aparência da minha cidade.	47
DTR3	Porque as Olimpíadas ajudarão na revitalização urbana da minha cidade.	48
DTR4	Porque as Olimpíadas melhorarão a qualidade dos serviços públicos da minha cidade.	49
DTR5	Porque as Olimpíadas melhorarão a qualidade dos serviços de segurança (polícia e corpo de bombeiros) da minha cidade.	50
DTR6	Porque as Olimpíadas promoverão oportunidades de renovação da minha cidade.	51
OVR1	Sediar as Olimpíadas no Rio de Janeiro foi uma boa decisão.	52
OVR2	Sediar as Olimpíadas no Rio de Janeiro valerá a pena, apesar das eventuais consequências negativas.	53
OVR3	As Olimpíadas trarão impactos futuros positivos para o Rio de Janeiro.	54
OVR4	Eu apoio a decisão de sediar as Olimpíadas no Rio de Janeiro.	55
OVR5	Eu concordo em pagar impostos mais altos para sediar as Olimpíadas no Rio de Janeiro.	56
OVR6	De forma geral, eu sou favorável à decisão de sediar as Olimpíadas no Rio de Janeiro.	57

*Number in the survey

4.6 QUESTIONNAIRE PRE-TEST

The questionnaire was pre-tested by 22 respondents, students of the Full-Time MBA of the COPPEAD-UFRJ and undergraduate students. The objective was to listen to their criticism and suggestions and make adjustments that would aid the data collection afterwards.

As a result of the pre-test, the order of the intermediate blocks of questions was changed, since it was observed that initiating the survey with questions about the pride of respondents (as it was previously arranged), might generate an unwanted bias in the respondent.

Moreover, item 43 was rewritten. Originally formulated as “*Estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque não há muitas cidades que possam sediar os Jogos Olímpicos*” (“I am proud of Rio de Janeiro because there are not many cities that can host the Olympic Games”), pre-test respondents were unsure whether it referred only to cities in Brazil or worldwide. In order to avoid the ambiguity, the expression “*no mundo*” (“in the world”) was included.

4.7 DATA ANALYSIS

Data analysis was undertaken using a single database, made of both the sample before and after the event. A dichotomous moderating variable was included to distinguish the responses from each sample.

For the first phase, 333 valid questionnaires were collected before the event, with college students. For the second phase, 1025 valid questionnaires were collected around the city of Rio de Janeiro. The surveys were manually inputted on Excel and the ones that contained errors or were incomplete were excluded from the overall sample. The database containing both samples thus had 1358 responses. In order to perform the multivariate and univariate analyses, SPSS was used (version 21). For scale validity and hypotheses testing, AMOS (version 21) was used.

This subsection is structured as follows: first, difference of means; second, an Exploratory Factor Analysis (EFA); third, Overall items analysis; fourth, a Confirmatory Factor Analysis (CFA); last but not least, Structural Equation Modeling (SEM).

4.7.1 Difference of Means

Since there were two samples, one before and one after the event, difference of means test (two sample t-test) was used to verify whether there was significant difference of the means in each sample. It was expected that there would be a significant change in means from one sample to another, specifically that the sample after the event would be much higher than the sample before the event.

4.7.2 Exploratory Factor Analysis (EFA)

In order to identify the dimensions that are part of the psychic income, the extraction method used was principal axis factoring, since its objective is to identify the dimensions or constructs represented in the original variables (Hair, et al., 2010).

As for the criteria for the numbers of factors to extract, the number was fixed in seven, in consonance with the Psychic Income Paradigm (Crompton, 2004). The next step involved choosing a rotational method for interpretation of the factors. By rotating the factor matrix, the variance from earlier factors are redistributed to latter ones, achieving a factor pattern that is simpler to be analyzed. While the orthogonal factor rotation is simpler, oblique rotation *Direct*

Oblimin was performed, since it allows for correlated factors rather than maintaining independence among factors (Hair, et al., 2010).

In order to guarantee the adequacy of the EFA, it was used the Kaiser-Meyer-Olkin (KMO) and the Measure of Sample Adequacy (MSA). Since factors with less than 0,50 MSA are considered unacceptable, they were selected one by one to be eliminated. The criteria for removal were: those that had factor loading less than 0,5 and significant cross-loadings, i.e., variables that demonstrated significant loading in more than one factor, making interpreting the scale harder. By eliminating those factors with high cross loading, each variable would be related to one factor only (Hair, et al., 2010).

Scale reliability was measured through internal consistency, i.e., the idea that items should measure the same construct, presenting high intercorrelation. Internal consistency can be verified through Cronbach's alpha, one of the most used estimates for reliability. The minimum acceptable for Cronbach's alpha is usually 0,70 (Hair, et al., 2010).

It was also necessary to verify each item's commonality to assess whether it reaches acceptable levels of explanation. This can be measured through the explained variance of each variable (Hair, et al., 2010).

Another indicator of factor analysis adequacy is the measure of sample adequacy (MSA). It also variates from 0 to 1. Items above 0,5 indicate appropriateness of applying exploratory factor analysis (Hair, et al., 2010).

The validity test assess the precision which the scale measure the studied concept, in this case, psychic income. The validity test used in this phase was convergent validity, verified through the factor loadings of items and through the correlation among them (Hair, et al., 2010).

4.7.3 Overall Perception

After performing EFA with the dimensions of Psychic Income, the items of overall perceptions were analyzed, also checking for reliability, measure of sample adequacy and validity.

4.7.4 Confirmatory Factor Analysis (CFA)

After the EFA, a Confirmatory Factor Analysis was performed. Using CFA, the analysis is guided by theory and the researcher is able to “confirm” whether the data is aligned with the theoretical specification (Hair, et al., 2010). It was chosen the Maximum Likelihood technique.

The measurement model of this study was specified and evaluated in terms of the goodness-of-fit (GOF) analyzing indices such as Chi-Square (χ^2), Normed Chi-Square (χ^2/gl), Goodness-of-Fit Index (GFI), Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA).

A small χ^2 usually indicates that there is goodness-of-fit between theory and reality. However, large sample sizes will make it harder to achieve GOF, as will adding more constructs to the model. Thus, it is often necessary to use other GOF indices, as is the case in this study. The normed chi-square is a ratio of χ^2 to the degrees of freedom for the model. A χ^2/gl lower than 3 is usually considered to be indicative of a good-fitting model (Hair, et al., 2010).

The Goodness of Fit-Index (GFI) is indicative of the quality of the model. It is less sensitive to sample size. It ranges from 0 to 1. Values higher than 0,9 are considered good. Comparative Fit Index (CFI) is an incremental fit index, also ranged from 0 to 1. It is desirable due to its relatively insensitivity to model complexity. Like GFI, values higher than 0,9 are usually considered good (Hair, et al., 2010).

RMSEA is the root mean square error of approximation, an attempt to correct for the χ^2 tendency to reject models with a large sample or large number of observed variables. A good reference value for RMSEA is $< 0,07$ considering this sample size and number of variables (Hair, et al., 2010).

Reliability was measured through Construct Reliability (CR). It is computed from the squared sum of factor loadings for each construct and the sum of the error variance terms for a construct. A good reference for CR is $> 0,7$ (Hair, et al., 2010).

Convergent validity was measured through the Average Variance Explained (AVE). AVE is calculated from the total of all squared standardized factor loadings divided by the number of items. An AVE higher than 0,5 suggest adequate convergence.

Discriminant validity was assessed through the correlation between constructs. It is suggested that in order to have discriminant validity, the correlation between constructs should be below 0,85. Also, the square of the correlations among constructs should be below the average variance explained (AVE) of each construct in order to support discriminant validity (Hair, et al., 2010).

4.7.5 Substantive Hypotheses Testing

In order to test the substantive hypotheses, Structural Equation Modeling (SEM) was applied. SEM is able to estimate multiple regression equation simultaneously through the specification of a structural model to be used by AMOS, in the case of this study (Hair, et al., 2010). SEM is adequate in this case to investigate the relationship between the seven constructs of the Psychic Income paradigm. The GOF measures used in the Confirmatory Factor Analysis were also verified in the structural model.

To test the hypotheses H1 through H7, the conceptual model hypothesized paths were examined. The analysis involved the standardized regression weights, the CR and p-value. The criterion to support the hypotheses was based on a p-value lower than 0,05 (Hair, et al., 2010).

5 RESULTS

In this chapter the results of the research are presented. This subsection is structured as follows: first, difference of means, to highlight the differences between samples; second, an Exploratory Factor Analysis (EFA); third, Overall items analysis; fourth, a Confirmatory Factor Analysis (CFA); last but not least, Structural Equation Modeling (SEM) to test the proposed hypotheses.

5.1 DIFFERENCE OF MEANS

Since there were two samples, one before and one after the event, difference of means test (two sample t-test) was used to verify whether there was significant difference of the means in each sample. The null hypothesis that the means of the items are statistically the same was rejected ($p\text{-value} < 0,001$). This result suggest that there are significant differences between the items' responses considering both samples (see Table 8).

Table 8 – *Difference of Means among Survey Items*

Difference of means among samples: before the Olympic Games and after the Olympic Games							
Item	Before		After		T-Test		Difference of Means
	Mean	SD	Mean	SD	T	p-value	
CSE1	3,47	2,13	4,80	2,09	-9,982	***	1,32
CSE2	3,56	2,15	4,81	2,10	-9,417	***	1,26
CSE3	2,96	1,78	4,79	2,06	-14,545	***	1,83
CSE4	3,11	1,96	4,99	2,00	-15,052	***	1,89
SBO2	3,10	1,90	5,56	1,79	-21,449	***	2,46
SBO4	3,40	2,02	4,78	2,10	-10,558	***	1,38
SBO5	3,88	2,08	5,19	1,94	-10,463	***	1,31
EXT3	4,03	2,04	5,65	1,70	-14,360	***	1,62
EXT4	4,27	2,05	5,76	1,69	-13,249	***	1,49
EXT5	3,96	2,09	5,56	1,75	-13,807	***	1,60
INV3	2,18	1,72	4,13	2,29	-14,319	***	1,96
INV5	2,82	2,03	4,21	2,27	-9,929	***	1,39
INV6	2,97	2,09	4,38	2,28	-10,010	***	1,41
IVB3	3,51	2,04	5,26	2,00	-13,771	***	1,75
IVB4	3,36	2,08	5,25	2,03	-14,638	***	1,88
IVB5	3,19	2,05	5,30	2,01	-16,610	***	2,12
IVB6	3,23	2,04	5,01	2,14	-13,360	***	1,78
SEH2	2,78	2,00	4,87	2,21	-15,360	***	2,09
SEH3	2,74	1,94	4,97	2,14	-16,913	***	2,23
SEH4	2,81	1,95	4,98	2,09	-16,660	***	2,16
SEH7	3,12	2,01	5,06	2,13	-14,618	***	1,94
DTR1	3,04	1,95	4,05	2,18	-7,487	***	1,00
DTR2	3,23	1,92	4,67	2,10	-11,130	***	1,45
DTR3	3,14	1,89	4,54	2,07	-10,990	***	1,40
DTR4	2,66	1,84	3,49	2,16	-6,305	***	0,83
OVR1	2,72	2,02	4,41	2,29	-12,004	***	1,41
OVR2	3,10	2,07	4,80	2,16	-12,632	***	1,44
OVR3	3,24	2,02	4,83	2,10	-12,071	***	1,33
OVR4	2,70	2,07	4,18	2,37	-10,250	***	1,20
OVR6	2,54	2,03	4,09	2,38	-10,664	***	1,26

Notes: *** $p < 0,01$; ** $p < 0,05$.

The results suggest that people from Rio de Janeiro did not have good expectations for the event prior to it. Analyzing the overall items, the observed means were less or equal to 3,24 with standard deviation between 2,02 and 2,07 (see Table 8). This means that every item was rated below 4, the scale's middle point, that was represented by "neither agree nor disagree".

Items 1, 4 and 6 evaluated whether respondents agreed that hosting the Olympics was "the right choice", "I supported the decision to host" and "overall, I favored". The three items

presented similar results, with around 44,9%, 45,4% and 50,6% of respondents, respectively, disagreeing completely. Items 2 and 3, that referred to whether “hosting outweighs the negative consequences” and “it will bring ongoing positive impacts to the city” were better rated among respondents, with 26,3% and 28%, respectively, presenting some degree of agreement. However, the most polarized item of the whole survey was overall item 5, that inquired whether respondents agreed paying more taxes in order to host the Olympic Games in Rio de Janeiro. Around 80% of them disagreed completely with the affirmation and 92,5% presented some degree of disagreement with the idea (see *Figure 3*).

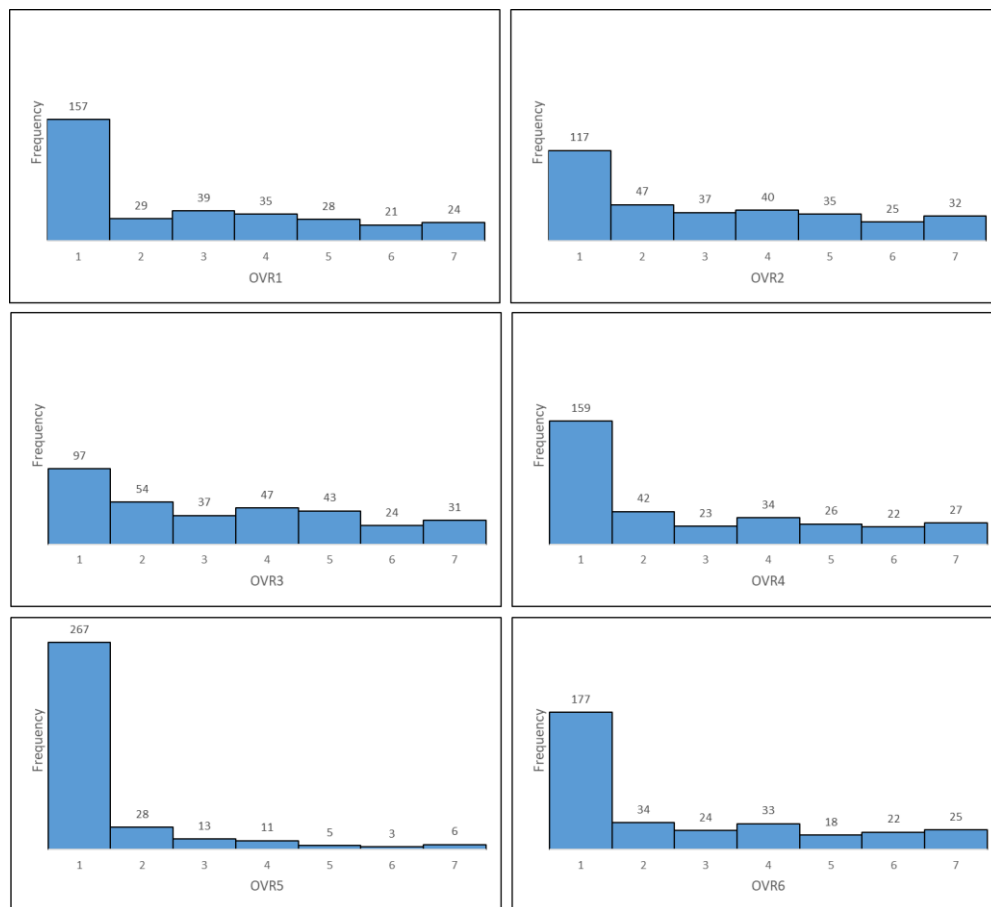


Figure 3. Histograms of Overall Perceptions Before the Event

The apparent rejection to the decision of hosting the Olympics in Rio de Janeiro seems to explain the low results observed in the Psychic Income dimensions before the event. The only dimension that presented means above the middle point of “neither agree nor disagree” was the dimension related to enthusiasm. This resulted was influenced by the item “As Olimpíadas oferecerão entretenimento para os cariocas” (EXT4), that had the highest mean of the survey, 4,27 (see Table 8). On the other hand, the dimension with lowest means was the one related to respondents’ emotional involvement with the event. According to them, they did not

follow more Olympic sports since they knew the city would host the Olympics, and its mean was 2,18 (see *Figure 4*).

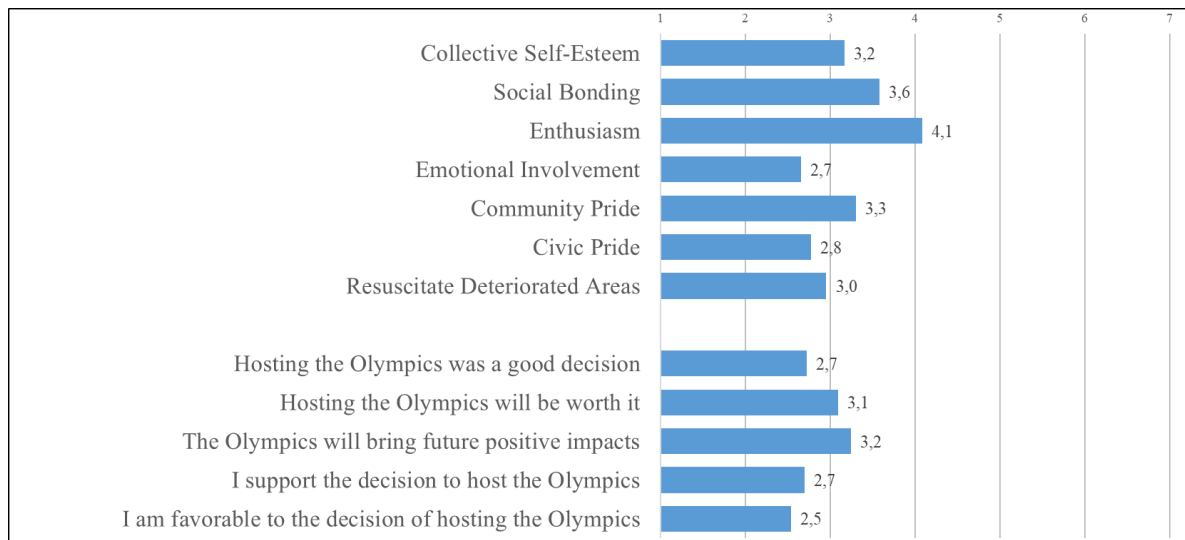


Figure 4. Means of Psychic Income Dimensions and Overall Items Before the Event

After the event, responses were considerably different. Analyzing overall variables, the observed means were all more than 4,1, with standard deviation between 2,1 and 2,38 – that is, except for item OVR5, which continued to be the most polarized item of the survey. This means that, with the exception of OVR5, the remaining overall items was rated above the scale’s middle point, that represented “neither agree nor disagree”. OVR5 inquired respondents on whether they would agree in paying more taxes to host the event. The means of OVR5, below 2 (“disagree”) in both samples, suggest that the respondents, even the ones that were favorable towards the event, would not agree to pay more taxes to be able to host the Olympics.

Items 1, 4 and 6 evaluated whether respondents agreed that hosting the Olympics was “the right choice”, “I supported the decision to host” and “overall, I favored”. This time around, people seemed more positive towards the event, with 28,9%, 27,4% and 25,5%, respectively, agreeing completely with the statements, higher from the less than 10% those same items got in the sample before the Games. Items 2 and 3 continued to be the highest rated overall items, referring to whether “hosting outweighs the negative consequences” and “it will bring ongoing positive impacts to the city”. Here, 62,4% and 62,7% of respondents, respectively, answered with some degree of agreement with the statements (see *Figure 5*).

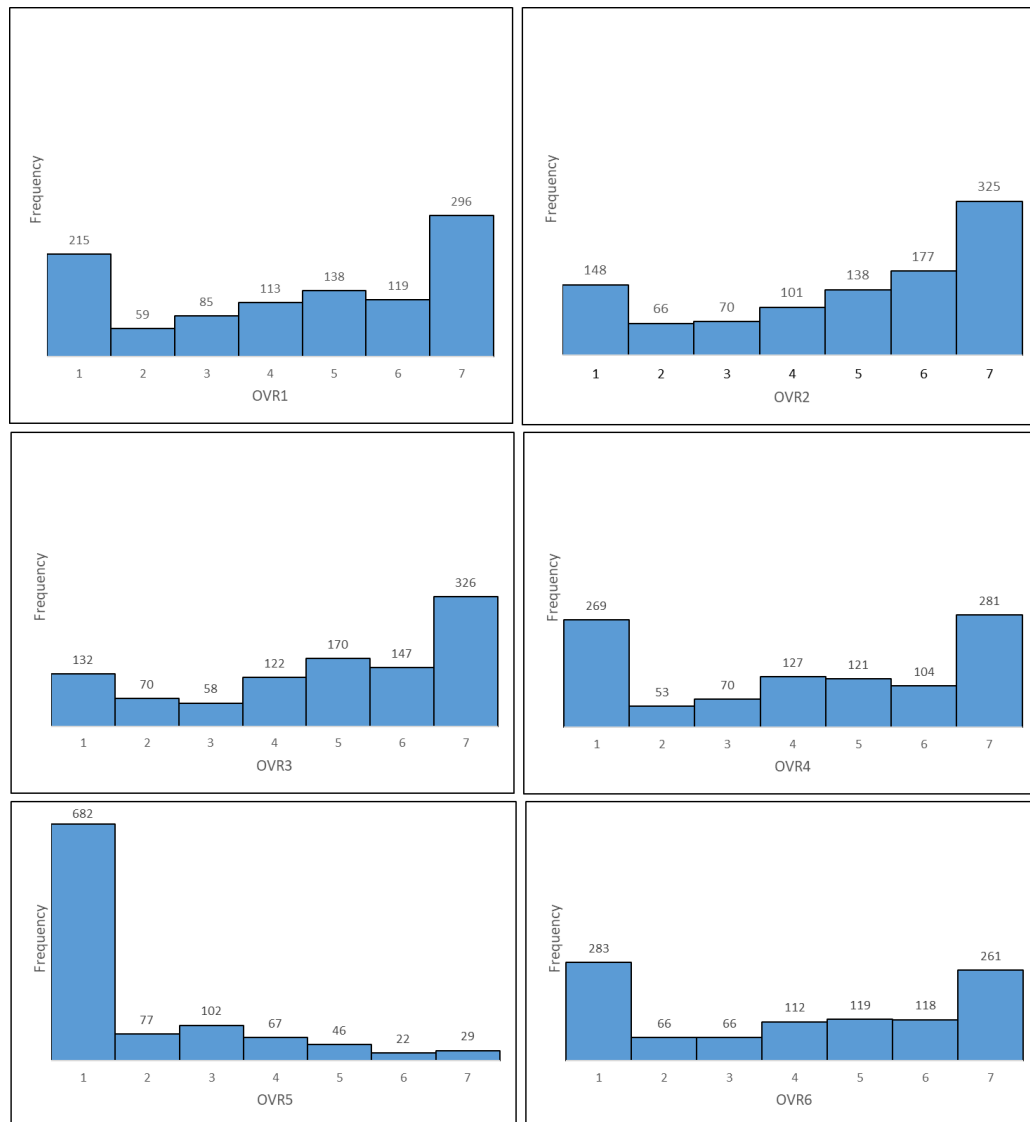


Figure 5. Histograms of Overall Perceptions After the Event

Comparing with the sample before the event, in which results suggested people were rejecting the decision to host the Olympic Games, in the sample after the event, results were considerably higher. This might be explained by the choice to run the survey again less than a month after the event ended.

Before the Olympics, just the Excitement dimension rated above 4 (“neither agree nor disagree”). After the Games, Excitement, Social Bonding, Community Pride and Civic Pride rated 5,2, 5,6, 5,1 and 5,0, respectively (somewhere around “I slightly agree”) (see Figure 6). The lowest rated dimension was related to the city’s capacity to resuscitate deteriorated areas, with an average of 4,1 (up from the 3,0 average from before the Olympics).

The single highest rated item was also EXT4 (“As Olimpíadas ofereceram entretenimento para os cariocas”), with an average answer of 5,76. As for the single lowest rated item, it was DTR4 (“Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas melhoraram a qualidade dos serviços públicos da minha cidade”), with an average answer of 3,49 (“slightly disagree”) (see Table 8).

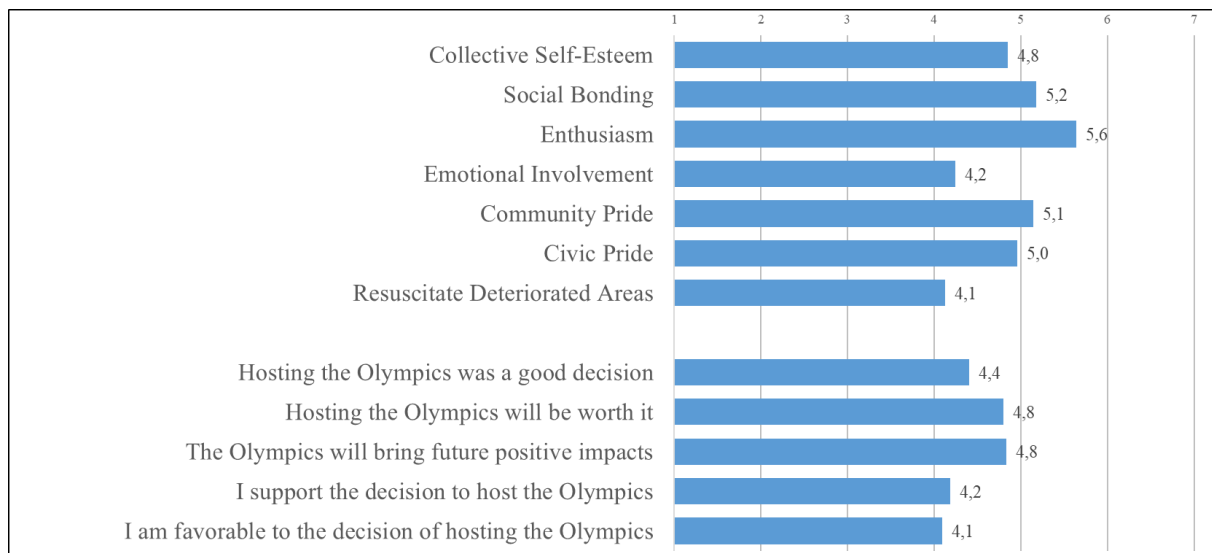


Figure 6. Means of Psychic Income Dimensions and Overall Items After the Event

5.2 EXPLORATORY FACTOR ANALYSIS (EFA)

EFA was done using the technique principal axis factoring, fixing the number of factors in seven and using the oblique rotation *Direct Oblimin*.

Initially, AFE was performed with the 43 factors resulting in a KMO of 0,981 and Bartlett’s Test for Sphericity was significant ($P < 0,001$), suggesting the sample was appropriate for factor analysis. The structure presented six factors, with 75,7% of variance explained (see Table 9). The number of factors was below expected, given that the Psychic Income Paradigm points to seven dimensions (Crompton, 2004; Kim & Walker, 2012).

At this point, the dimensions “community pride resulting from increased visibility” (IVB) and “civic pride from being a sport event host city” (SEH) were combined in a single factor. It was also observed the following factors: enhanced collective self-esteem (CSE), tangible focus for social bonding (SBO), excitement from the event and visitors (EXT), emotional involvement with a sport event (INV) and pride in efforts to resuscitate deteriorated areas (DTR) (see Table 9). Even on the first round of analysis, the results approached what was suggested in the literature.

Table 9 – Results from the Exploratory Factor Analysis with every variable

	Factor						
	1	2	3	4	5	6	7
CSE1	,079	-,047	,058	,052	-,717	-,028	-,083
CSE2	,110	-,079	,043	,034	-,729	,011	-,071
CSE3	,067	-,011	,028	,215	-,528	-,112	,120
CSE4	,109	-,044	-,034	,224	-,501	-,125	,121
CSE5	,206	-,121	,105	-,083	-,431	-,147	,147
CSE6	,014	-,119	,231	-,052	-,434	-,196	,126
SBO1	,106	-,098	,039	,161	-,200	-,315	,147
SBO2	,137	,009	-,007	,273	-,127	-,424	-,048
SBO3	-,043	-,078	,180	,090	-,068	-,350	,116
SBO4	,062	-,053	,060	-,009	-,019	-,784	-,019
SBO5	,083	-,053	-,029	,145	,003	-,710	-,046
SBO6	,107	-,078	,329	-,089	-,062	-,371	,102
EXT1	,105	-,024	,013	,225	-,098	-,359	-,280
EXT2	,044	-,088	,212	,119	-,309	-,216	-,237
EXT3	,054	-,073	,036	,563	-,162	-,084	-,099
EXT4	,113	-,055	,022	,719	-,020	-,039	-,031
EXT5	,056	-,039	,119	,724	,020	-,018	,091
EXT6	,030	-,123	,080	,450	-,014	-,138	-,026
INV1	,147	-,137	,374	-,025	-,334	-,001	,022
INV2	,166	-,110	,368	,034	-,285	,025	-,003
INV3	,060	-,082	,707	,000	-,063	,007	-,015
INV4	,109	-,007	,406	,169	-,266	-,009	-,076
INV5	,003	,012	,858	,062	,021	-,035	-,004
INV6	,069	-,005	,803	,080	,051	-,037	,014
IVB1	,647	-,049	,115	-,028	-,165	-,006	-,067
IVB2	,724	-,039	,078	-,030	-,078	-,046	-,109
IVB3	,868	-,015	-,024	-,003	,037	-,061	-,131
IVB4	,870	,026	-,023	,004	,019	-,104	-,107
IVB5	,860	,012	,043	-,021	,059	-,063	-,100
IVB6	,829	-,032	,062	-,001	,064	,007	-,064
SEH1	,653	-,079	,090	,027	-,128	,030	,032
SEH2	,742	-,056	-,002	,037	-,125	,035	,106
SEH3	,839	-,012	-,037	,064	-,083	,033	,130
SEH4	,795	-,019	-,018	,077	-,074	-,004	,109
SEH5	,540	-,081	,143	,063	,013	,021	,127
SEH6	,835	-,026	,003	,050	,002	,011	,087
SEH7	,826	-,035	-,012	,055	-,001	,000	,094
DTR1	-,005	-,833	,028	,037	-,029	,045	-,015
DTR2	,057	-,817	-,035	,071	-,047	,041	-,142
DTR3	-,023	-,870	-,013	,113	-,022	,052	-,123
DTR4	-,026	-,825	,040	-,072	,004	-,060	,121
DTR5	,035	-,808	-,013	-,050	,083	-,052	,086
DTR6	,092	-,736	,012	,006	-,043	-,071	,018

The process of scale purification was then initiated, observing the pre-defined criteria (eliminating factors with factor loading less than 0,5 and those that had significant cross-loadings). In the beginning, only the factor “tangible focus for social bonding” presented less than three items with factor loading higher than 0,5. It was expected that after careful elimination of some items, the other items could group in this factor.

The first item eliminated was SBO6 (“As Olimpíadas fortalecerão minhas amizades na minha cidade” / “As Olimpíadas fortaleceram minhas amizades na minha cidade”). The choice for this item was due to low factor loading on its original dimension (0,371) and significant cross-loadings with other three factors. After that, the following items were eliminated, in order: EXT2; INV4; IVB1; EXT1; INV1; SEH1; SEH5; CSE6; CSE5; IVB2; INV2; SBO1; EXT6; DTR6; SEH6; DTR5 and SBO3. Thus, on the nineteenth round, every elimination option was exhausted, presenting a 25-item factorial structure grouped in 7 factors, with KMO of 0,967 and explained variance of 83,24% (see Table 10).

It is worth noting that SBO, Tangible Focus for Social Bonding was left with three items to preserve the minimum of three suggested in the literature to properly conduct Structural Equation Modeling (SEM) analysis (Hair, et al., 2010), although only two presented loading factor above 0,5 even after the scale purification process (see Table 10).

Table 10 – *Exploratory Factor Analysis Final Results*

Item	Principal Axis Factoring (Direct Oblimin Rotation)							MSA	Commonality
	CSE $\alpha = 0,915$	SOB $\alpha = 0,878$	EXT $\alpha = 0,884$	INV $\alpha = 0,906$	IVB $\alpha = 0,941$	SEH $\alpha = 0,951$	DTR $\alpha = 0,918$		
CSE1	-,858	,010	-,023	,020	,022	-,020	-,008	,946	,806
CSE2	-,916	-,043	-,057	,010	,063	-,003	-,033	,947	,859
CSE3	-,577	,082	,159	,076	-,048	-,058	-,004	,972	,656
CSE4	-,546	,122	,150	,021	-,026	-,089	-,027	,972	,669
SBO2	-,110	,434	,252	,010	,043	-,090	,024	,984	,630
SBO4	-,003	,895	-,076	,066	,005	-,008	-,028	,947	,833
SBO5	-,009	,790	,066	-,027	,052	-,005	-,027	,947	,764
EXT3	-,177	,082	,547	,004	,075	-,009	-,056	,981	,679
EXT4	-,016	,019	,764	,011	,094	-,026	-,052	,960	,809
EXT5	,007	,022	,682	,122	-,010	-,088	-,040	,968	,692
INV3	-,080	-,019	-,004	,668	,087	-,004	-,070	,978	,661
INV5	-,019	,020	,013	,923	,005	,035	,023	,939	,847
INV6	,033	,027	,038	,848	,000	-,057	-,006	,949	,814
IVB3	-,012	,037	,051	-,022	,705	-,133	-,034	,982	,795
IVB4	-,041	,089	,035	-,011	,729	-,101	,005	,976	,835
IVB5	-,024	,037	,001	,066	,877	,057	-,012	,972	,844
IVB6	-,022	-,047	,020	,085	,702	-,089	-,053	,983	,753
SEH2	-,071	,000	-,008	,023	,023	-,788	-,046	,981	,820
SEH3	-,021	-,017	,029	,002	,035	-,882	-,008	,966	,886
SEH4	-,015	,056	,024	,018	,011	-,848	-,006	,972	,874
SEH7	,001	,037	,036	,033	,171	-,613	-,060	,987	,762
DTR1	,009	-,011	,003	,028	-,059	-,099	-,838	,966	,769
DTR2	-,046	,014	,048	-,047	,125	,065	-,824	,953	,801
DTR3	-,007	,009	,083	-,024	,039	,058	-,894	,949	,839
DTR4	-,016	,051	-,086	,102	-,044	-,096	-,670	,973	,592

Scale reliability was measured through internal consistency. Internal consistency can be verified through Cronbach’s alpha, one of the most used estimates for reliability. In this sample,

the lowest alpha verified among dimensions was 0,878 (SBO) and, the highest, 0,951 (SEH) (see Table 10).

It was also necessary to verify each item's commonality to assess whether it reaches acceptable levels of explanation. This can be measured through the explained variance of each variable (Hair, et al., 2010). All the 25 items had presented commonality above the limit of 0,5 (see Table 10). Another indicator of factor analysis adequacy is the measure of sample adequacy (MSA). The lowest MSA identified was 0,939 (INV5), which is considered very good.

The validity test used in this phase was convergent validity, verified through the factor loadings of items and through the correlation among them (Hair, et al., 2010). Factor loadings ranged between 0,434 (SBO2) and 0,923 (INV5) (see Table 10). The lowest correlation coefficient among two items was 0,642 and, the highest, 0,890 (see Table 11).

The result with seven dimensions was different than the one reported on the original study from Kim and Walker (2012). A possible explanation for this divergence was the technical choice for extraction made by them. On their study, they used principal components. This technique, however, is more recommended under the assumption of unidimensionality of the scale. On this study, it was opted for the principal axis factoring technique, which assumes the multidimensionality of the construct. The result using this technique was closer to the conceptual model proposed by Crompton (2004), which also pointed to seven factors.

Table 11 – *Correlation Matrix of the Psychic Income Dimensions*

			Correlation among variables																								
			Psychic Income																								
			Collective Self-Esteem				Social Bonding			Excitement			Emotional Inv.			Pride: Increased Visibility				Pride: Host City				Resuscitate Deteriorated Areas			
			α = 0,915				α = 0,878			α = 0,884			α = 0,906			a = 0,941				α = 0,951				a = 0,918			
Item	Mean	SD	CSE1	CSE2	CSE3	CSE4	SBO2	SBO4	SBO5	EXT3	EXT4	EXT5	INV3	INV5	INV6	IVB3	IVB4	IVB5	IVB6	SEH2	SEH3	SEH4	SEH7	DTR1	DTR2	DTR3	DTR4
CSE1	4,47	2,18	1,000	,870	,670	,687	,556	,538	,531	,592	,577	,523	,552	,552	,559	,600	,620	,588	,571	,658	,651	,660	,627	,493	,523	,503	,448
CSE2	4,50	2,18	,870	1,000	,700	,687	,550	,522	,519	,589	,562	,529	,557	,564	,558	,617	,632	,608	,609	,677	,672	,676	,632	,509	,539	,527	,475
CSE3	4,34	2,14	,670	,700	1,000	,756	,592	,539	,533	,596	,567	,567	,528	,542	,533	,559	,583	,561	,546	,603	,622	,621	,582	,450	,502	,490	,419
CSE4	4,53	2,15	,687	,687	,756	1,000	,592	,556	,569	,616	,585	,573	,522	,511	,541	,565	,624	,591	,558	,614	,644	,648	,605	,471	,516	,505	,461
SBO2	4,96	2,10	,556	,550	,592	,592	1,000	,667	,658	,624	,630	,583	,471	,494	,499	,570	,593	,573	,514	,561	,582	,604	,581	,419	,484	,471	,361
SBO4	4,44	2,16	,538	,522	,539	,556	,667	1,000	,792	,551	,549	,523	,501	,544	,547	,544	,581	,542	,495	,533	,550	,570	,539	,440	,468	,460	,424
SBO5	4,87	2,06	,531	,519	,533	,569	,658	,792	1,000	,579	,595	,565	,454	,483	,509	,550	,583	,551	,514	,541	,528	,579	,549	,418	,467	,466	,417
EXT3	5,26	1,92	,592	,589	,596	,616	,624	,551	,579	1,000	,734	,668	,466	,466	,486	,599	,604	,580	,554	,580	,601	,608	,569	,462	,520	,502	,404
EXT4	5,39	1,90	,577	,562	,567	,585	,630	,549	,595	,734	1,000	,755	,455	,448	,490	,616	,626	,588	,572	,581	,604	,612	,599	,465	,516	,522	,391
EXT5	5,17	1,96	,523	,529	,567	,573	,583	,523	,565	,668	,755	1,000	,461	,490	,493	,553	,583	,546	,534	,559	,577	,586	,566	,450	,473	,489	,394
INV3	3,65	2,32	,552	,557	,528	,522	,471	,501	,454	,466	,455	,461	1,000	,732	,728	,537	,550	,574	,562	,588	,574	,588	,550	,474	,491	,487	,479
INV5	3,87	2,29	,552	,564	,542	,511	,494	,544	,483	,466	,448	,490	,732	1,000	,830	,519	,545	,554	,540	,554	,568	,578	,552	,459	,451	,451	,451
INV6	4,03	2,31	,559	,558	,533	,541	,499	,547	,509	,486	,490	,493	,728	,830	1,000	,546	,569	,574	,562	,591	,594	,611	,596	,480	,483	,485	,470
IVB3	4,83	2,15	,600	,617	,559	,565	,570	,544	,550	,599	,616	,553	,537	,519	,546	1,000	,817	,803	,774	,726	,753	,748	,734	,540	,598	,573	,486
IVB4	4,78	2,19	,620	,632	,583	,624	,593	,581	,583	,604	,626	,583	,550	,545	,569	,817	1,000	,841	,778	,729	,767	,762	,751	,540	,589	,572	,494
IVB5	4,78	2,22	,588	,608	,561	,591	,573	,542	,551	,580	,588	,546	,574	,554	,574	,803	,841	1,000	,795	,701	,732	,729	,720	,521	,591	,563	,482
IVB6	4,57	2,25	,571	,609	,546	,558	,514	,495	,514	,554	,572	,534	,562	,540	,562	,774	,778	,795	1,000	,709	,728	,720	,707	,534	,586	,556	,496
SEH2	4,36	2,34	,658	,677	,603	,614	,561	,533	,541	,580	,581	,559	,588	,554	,591	,726	,729	,701	,709	1,000	,847	,838	,799	,597	,607	,602	,547
SEH3	4,42	2,30	,651	,672	,622	,644	,582	,550	,528	,601	,604	,577	,574	,568	,594	,753	,767	,732	,728	,847	1,000	,890	,803	,597	,624	,608	,540
SEH4	4,45	2,26	,660	,676	,621	,648	,604	,570	,579	,608	,612	,586	,588	,578	,611	,748	,762	,729	,720	,838	,890	1,000	,804	,593	,620	,610	,544
SEH7	4,58	2,26	,627	,632	,582	,605	,581	,539	,549	,569	,599	,566	,550	,552	,596	,734	,751	,720	,707	,799	,803	,804	1,000	,588	,608	,589	,538
DTR1	3,80	2,17	,493	,509	,450	,471	,419	,440	,418	,462	,465	,450	,474	,459	,480	,540	,540	,521	,534	,597	,597	,593	,588	1,000	,771	,777	,703
DTR2	4,32	2,15	,523	,539	,502	,516	,484	,468	,467	,520	,516	,473	,491	,451	,483	,598	,589	,591	,586	,607	,624	,620	,608	,771	1,000	,847	,642
DTR3	4,20	2,11	,503	,527	,490	,505	,471	,460	,466	,502	,522	,489	,487	,451	,485	,573	,572	,563	,556	,602	,608	,610	,589	,777	,847	1,000	,680
DTR4	3,29	2,12	,448	,475	,419	,461	,361	,424	,417	,404	,391	,394	,479	,451	,470	,486	,494	,482	,496	,547	,540	,544	,538	,703	,642	,680	1,000
Corrected Item-Total Correlation			,764	,777	,735	,754	,709	,696	,694	,727	,731	,698	,695	,695	,721	,808	,831	,808	,786	,833	,851	,859	,824	,686	,728	,718	,631
Alpha if the item is eliminated			,971	,970	,971	,971	,971	,971	,971	,971	,971	,971	,971	,971	,971	,971	,970	,970	,970	,970	,970	,970	,970	,971	,971	,971	,972

5.3 OVERALL PERCEPTION

After performing EFA with the dimensions of Psychic Income, the items of overall perceptions were analyzed. The item “Eu acho justo pagar mais impostos em virtude da realização das Olimpíadas no Rio de Janeiro” (OVR5) presented factor loading below the 0,5 acceptable and, therefore, was eliminated. This happened because even when the other overall items received high grades, this one received grades consistently low, suggesting that even the individuals that agree with the decision of Rio de Janeiro hosting the Olympics disagree with paying more taxes to do so.

In terms of reliability, the unidimensional scale of overall perceptions had a good performance, with Cronbach’s Alpha of 0,947, suggesting there is high intercorrelation among items. Commonality ranged between 0,694 (OVR3) and 0,837 (OVR1), indicating that the items presented acceptable levels of explanation. Regarding measure of sample adequacy (MSA), the lowest observed was 0,853 (OVR4) and, the highest, 0,910 (OVR3), which is considered very good. Validity was observed through factor loadings and coefficients of correlation. Factor loadings ranged between 0,833 (OVR3) and 0,915 (OVR1) (see Table 12). The lowest coefficient of correlation among two items was 0,722 and, the highest, 0,869 (see Table 13).

Table 12 – *EFA Results for Overall Items*

Item	Factor		
	$\alpha = 0,947$	M.S.A.	Common.
OVR1	,915	,898	,837
OVR2	,888	,873	,789
OVR3	,833	,910	,694
OVR4	,903	,853	,816
OVR6	,884	,867	,781

Table 13 – Correlation Matrix of Overall Perceptions Items

Item	Mean	SD	Correlation among variables				
			Overall				
			$\alpha = 0,947$				
OVR1	3,99	2,34	1,000				
OVR2	4,38	2,26	,830	1,000			
OVR3	4,44	2,19	,757	,804	1,000		
OVR4	3,82	2,38	,824	,762	,722	1,000	
OVR6	3,71	2,40	,799	,749	,708	,869	1,000
Corrected Item-Total Correlation			,883	,859	,808	,873	,856
Alpha if the item is eliminated			,930	,934	,943	,932	,935

5.4 CONFIRMATORY FACTOR ANALYSIS (CFA)

After the EFA, a Confirmatory Factor Analysis was performed. It was chosen the Maximum Likelihood technique. The measurement model was specified as illustrated by Figure 7.

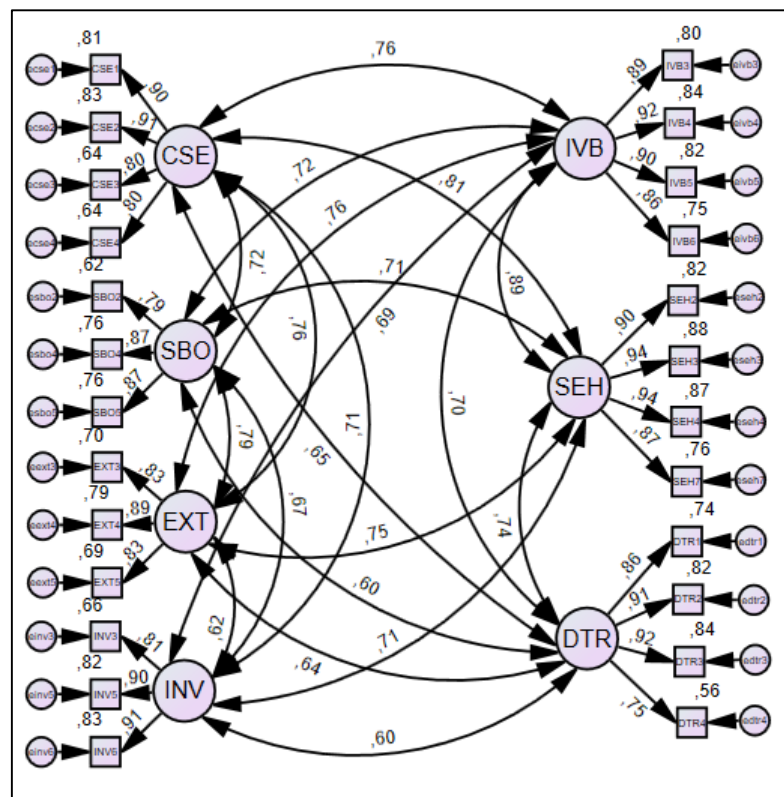


Figure 7. Measurement Model

The measurement model of this study was specified and evaluated in terms of the goodness-of-fit (GOF) analyzing indices such as Chi-Square (χ^2), Normed Chi-Square (χ^2/gl),

Goodness-of-Fit Index (GFI), Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA).

Two indices presented values outside of what was expected: χ^2/df was 5,411, although it was expected to be below 3 and PCLOSE was 0,0, although it was expected to be above 0,5. On the other hand chi-square's p-value, GFI, CFI and RMSEA presented values inside expected (see Table 14).

Table 14 – *Goodness-of-Fit Indices for the Measurement Model*

Fit Indicators	χ^2	p-value	χ^2/df	GFI	CFI	RMSEA	PCLOSE
Measurement Model	1374,349	0,000	5,411 ^a	0,920	0,967	0,057	0,000 ^a
Suggested limits	< possible	< 0,05	< 3,0	> 0,9	> 0,9	< 0,07	> 0,5

Note: ^aParameter outside expected limits

Reliability was measured through Construct Reliability (CR). A good reference for CR is $> 0,7$. The lowest CR observed was 0,886 (EXT) (see Table 15). Convergent validity was measured through the Average Variance Explained (AVE). An AVE higher than 0,5 suggest adequate convergence. Every Psychic Income Dimension presented AVE above the suggested threshold of 0,5. The lowest AVE observed was 0,716 (SBO) (see Table 15).

Discriminant validity was assessed through the correlation between constructs (see numbers above the diagonal in the lower part of Table 15). It is suggested that in order to have discriminant validity, the correlation between constructs should be below 0,85. The dimensions Community Pride Resulting from Increased Visibility (IVB) and Civic Pride from Being a Sport Event Host City (SEH) presented correlation above acceptable, 0,891. It is worth noting that back in the EFA, it could be observed high correlation among these dimensions, higher than any other pair of constructs (see Table 15). In addition, in Kim and Walker's (2012) study, these dimensions had such high correlation that they grouped in a single factor in their EFA. Finally, the square of the correlations among constructs should be below the average variance explained (AVE) of each construct in order to support discriminant validity (see Table 15) (Hair, et al., 2010).

Table 15 – *Confirmatory Factor Analysis Results*

Confirmatory Factor Analysis Maximum Likelihood Estimates							
Variable	Psychic Income						
	Collective Self-Esteem	Social Bonding	Excitement	Emotional Involvement	Community Pride	Civic Pride	Resuscitate Deteriorated Areas
	CR = 0,916	CR = 0,883	CR = 0,886	CR = 0,949	CR = 0,942	CR = 0,952	CR = 0,919
CSE1	,902						
CSE2	,912						
CSE3	,798						
CSE4	,803						
SBO2		,788					
SBO4		,873					
SBO5		,874					
EXT3			,834				
EXT4			,887				
EXT5			,828				
INV3				,814			
INV5				,903			
INV6				,911			
IVB3					,893		
IVB4					,918		
IVB5					,905		
IVB6					,865		
SEH2						,903	
SEH3						,938	
SEH4						,935	
SEH7						,872	
DTR1							,859
DTR2							,907
DTR3							,917
DTR4							,750
CSE	,732	,723	,761	,706	,761	,806	,653
SBO	,523	,716	,785	,669	,721	,710	,599
EXT	,579	,616	,850	,624	,762	,752	,641
INV	,498	,448	,389	,876	,692	,712	,599
IVB	,579	,520	,581	,479	,895	,891	,704
SEH	,650	,504	,566	,507	,794	,912	,737
DTR	,426	,359	,411	,359	,496	,543	,858

Note: Bold numbers diagonally denote the Average Variance extracted; Numbers below the diagonal denote the square of the correlations between constructs; Numbers above the diagonal denote the correlations between constructs

5.5 SUBSTANTIVE HYPOTHESES TESTING

In order to test the substantive hypotheses, Structural Equation Modeling (SEM) was applied. The structural model was specified as illustrated by *Figure 8*.

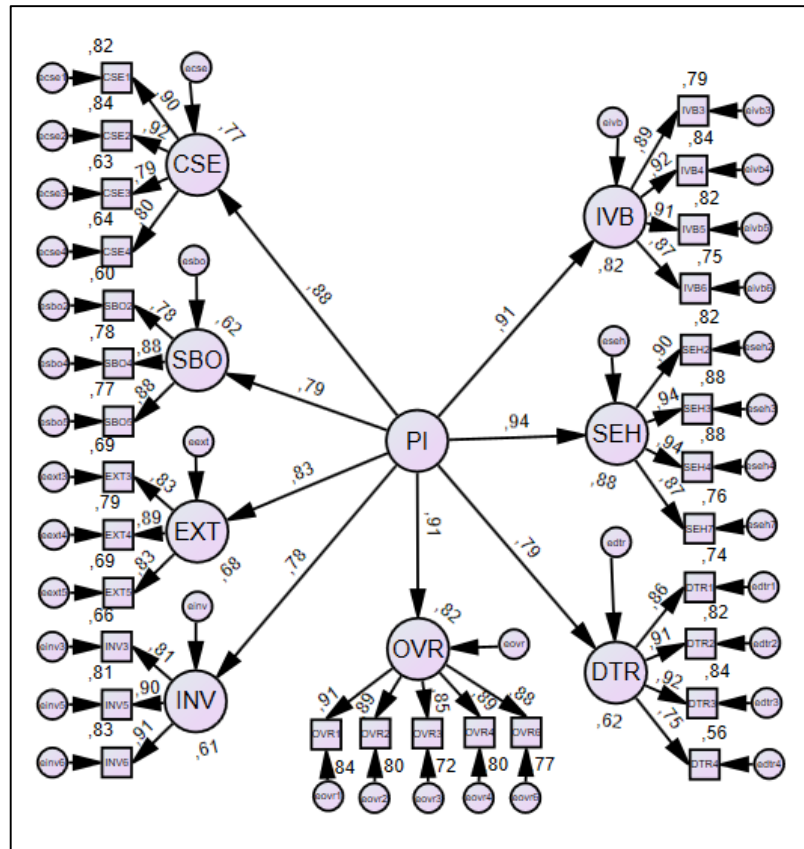


Figure 8. Structural Model

Regarding the GOF indices, χ^2/df , GFI and PCLOSE presented values outside expected limits. On the other hand chi-square's p-value, CFI and RAMSEA presented values inside expected (see Table 16).

Table 16 – Goodness-of-Fit Indices for the Structural Model

Fit Indicators	χ^2	p-value	χ^2/df	GFI	CFI	RMSEA	PCLOSE
Structural Model	2606,101	0,000	6,564 ^a	0,875 ^a	0,949	0,064	0,000 ^a
Suggested limits	< possible	< 0,05	< 3,0	> 0,9	> 0,9	< 0,07	> 0,5

Note: ^a Parameter outside expected limits

To test the hypotheses H1 through H7, the conceptual model hypothesized paths were examined. The analysis involved the standardized regression weights, the CR and p-value. The criterion to support the hypotheses was based on a p-value lower than 0,05 (Hair, et al., 2010). The results can be observed in Table 17.

The lowest explained variance of the endogenous latent variables observed was Emotional Involvement with the Sport Event, with 60,5% of the construct explained in the model. The highest was Civic Pride from Being a Sport Event Host City, with 88% (see Table 17).

The overall scale was included as a latent variable. Its explained variance was 82%. Thus, its five items are able to give a general glimpse of the psychic income accrued by the community hosting the mega-event, presenting itself as an alternative to testing every dimension, albeit the researcher would potentially lose some insights to be gleaned from the other dimensions using just overall's five items.

The paths analyzed between each Psychic Income dimension and Psychic Income were significant ($p < 0,01$). Therefore, hypotheses H1 through H7 were supported (see Table 17).

Table 17 – *Testing of the Hypotheses H1 through H7*

Hypothesis	Path	Hypothetical Relationship	Standardized Coefficient	CR	p-value	Outcome
H1	Community Pride Resulting from Increased Visibility ← Hosting Megaevent	(+)	0,907	0,792	***	Supported
H2	Civic Pride from Being a Sport Event Host City ← Hosting Megaevent	(+)	0,938	0,866	***	Supported
H3	Increased Pride in Resuscitating Deteriorated Areas ← Hosting Megaevent	(+)	0,785	0,497	***	Supported
H4	Increased Collective Self-Esteem ← Hosting Megaevent	(+)	0,878	0,722	***	Supported
H5	Focus for Social Bonding ← Hosting Megaevent	(+)	0,788	0,504	***	Supported
H6	Excitement From Event and Visitors ← Hosting Megaevent	(+)	0,826	0,594	***	Supported
H7	Emotional Involvement with the Sport Event ← Hosting Megaevent	(+)	0,778	0,481	***	Supported
	Community Pride Resulting from Increased Visibility		0,823 ^a			
	Civic Pride from Being a Sport Event Host City		0,880 ^a			
	Increased Pride in Resuscitating Deteriorated Areas		0,616 ^a			
	Increased Collective Self-Esteem		0,771 ^a			
	Focus for Social Bonding		0,621 ^a			
	Excitement From Event and Visitors		0,682 ^a			
	Emotional Involvement with the Sport Event		0,605 ^a			

Notes: *** $p < 0,01$; ** $p < 0,05$; ^a (R^2) - explained variance of the latent variable.

6 FINAL CONSIDERATIONS

This chapter is subdivided in four sections. The first presents the executive summary. Then, the answers to the research objectives are answered, with a focus on the theoretical implications to the results presented. The third section relates to the managerial implications of the study. After that, the fourth and final section presents the limitations of the present study and suggestions for future studies.

6.1 EXECUTIVE SUMMARY

In order to support the execution of a mega-event, high investments are in order (Riley, 2012), that not always return in the form of revenues. Examples of Olympic Games editions that ended with deficits are the 2010 Vancouver Olympics, 2004 Athens Olympics, 2000 Sydney Olympics (CNBC, 2012), among others. Still, many cities are ecstatic to host the Games, as is the case of Japan and the 2020 Tokyo Olympics (The Economist, 2013; Newsweek, 2016; Olympic Movement, 2020). City officials from Rio de Janeiro, for instance, hoped to resuscitate deteriorated areas from the city and invest in public transportation by hosting the mega-event (Carta Capital, 2013).

One might observe that the financial *bottom line* for hosting a mega-event is not always positive. However, they are still very popular. Then, it is relevant to investigate and analyze the other reasons that make hosting a mega-event worthwhile, if there are any, and the intangible objectives it is hoped to achieve from them.

The main theoretical background of the research is the Psychic Income paradigm, developed by Crompton (2004) and operationalized by Kim and Walker (2012), to try and understand public financing of sports arenas investigating the intangible benefits people from the community receive from them. The research objectives were broken down into seven substantive hypotheses that reflected each psychic income dimension.

A survey was conducted with people native from Rio de Janeiro living in the city at the time of data collection. Two samples were collected for the present study: one five months before, with 333 respondents, and one another one month after the Olympics, with 1025 respondents. Overall, there were 1058 observations.

Some adaptations to the survey were necessary to ensure the scale's application in a Brazilian context, since Kim and Walker's (2012) original study presented language barriers (the questionnaire was originally devised in English), the context (their target was residents of Tampa Bay, Florida, USA) and the mega-event itself (Super Bowl XLIII). For this purpose, some items were reformulated to try and capture what the construct aimed at expressing and adapt it to the Brazilian context and the mega-event in question. In this case, the 2016 Rio Summer Olympics.

Data analysis was conducted using a single database, made of both samples. To accomplish this task, it was used a Difference of Means Test (Two sample T-Test), an Exploratory Factor Analysis (EFA) and a Confirmatory Factor Analysis (CFA), verifying reliability, convergent validity and discriminant validity. In order to test the hypotheses, Structural Equation Modeling (SEM) was used with the Maximum Likelihood (ML) technique. As a result, the seven research hypotheses were supported. The results suggest there is a positive relationship between hosting a mega-event and the psychic income reflexes. In addition, the results suggest that the scale is adequate to measure both the expectations prior to the event and the perception of people afterwards.

6.2 THEORETICAL IMPLICATIONS

In this section, the scientific contributions of the study will be presented in the form of answers to the research objectives questions.

6.2.1 Question 1: Does hosting a mega-event influence the psychic income dimensions?

Analyzing the results obtained, the first question is answered positively, supporting the direct effect between hosting a mega-event and the psychic income dimensions, namely, (a) community pride, (b) civic pride, (c) pride in efforts to resuscitate deteriorated areas, (d) collective self-esteem, (e) social bonding and (f) excitement. The lowest explained variance among constructs was 60,5%.

The results diverge from Kim and Walker's (2012) study, who created the scale, in the following ways: in their study, community pride and civic pride grouped in a single factor; collective self-esteem and social bonding grouped in a single factor; excitement appears in two factors, one grouped with involvement, and another three-item dimension made up of only excitement items. Regarding community pride and civic pride, there could be observed a high

correlation among dimensions in this study. However, when setting parameters in SPSS to extract seven factors, all Psychic Income dimensions are displayed grouped in a single factor.

The reason for the different results might be due to technical choices during the analysis. Their study used principal components for the extraction. This technique, however, is more recommended under the assumption of unidimensionality of the scale. On this study, it was opted for the principal axis factoring technique, which assumes the multidimensionality of the construct. The result using this technique in line with the conceptual model proposed by Crompton (2004), which also pointed to seven factors.

The results suggests, therefore, that this study better reflected the Psychic Income paradigm presented by Crompton (2004) than the study undertaken by Kim and Walker (2012).

6.2.2 Question 2: Is there a significant difference between expectations prior to the event and perceptions following it?

Analyzing the results obtained in the difference of means test, it is clear there is a significant difference between expectations prior to the event and perceptions following it. Comparing the means, the results suggest that people from Rio de Janeiro did not have good expectations for the event prior to it. From the 25 items of the purified scale, just 2 rated above the scale's middle point, that was represented by "neither agree nor disagree". When analyzing the overall items, the average answer of the five items is also below the scale's middle point.

The apparent rejection to the decision of hosting the Olympics in Rio de Janeiro seems to explain the low results observed in the Psychic Income dimensions before the event. After the event, however, responses were considerably different. Every item from the purified scale rated above 4, expressing some degree of agreement with the items. The same tendency was observed in the overall items.

The significant uptick in responses might be related to the choice of running the research less than a month after the mega-event ended. By then, people might still have been imbued of the excitement from hosting an event that size. Thus, it is possible that whatever was responsible for the apparent rejection towards the event before the Games was softened by the end of the event. Future research might focus on replicating the study once more, given that it has been four years since the Olympics has ended, to try and see if perceptions changed in the meantime.

Also, the fact that the sample before the event pointed to a negative psychic income and the sample after the event pointed to a positive psychic income suggests that the scale is adequate to measure both expectations prior to the event and perceptions following it.

6.3 MANAGERIAL IMPLICATIONS

Before the event, the results pointed to a negative psychic income accrued by Rio de Janeiro's native residents. This conclusion is in consonance with the results from popular enquires made by local media. According to a perception survey released by *Rio Como Vamos* in 2016, the number of *cariocas* that believed the Games would bring benefits to the city dropped from 39% in 2013 to 27% in 2015. According to the coordinator of the group, responsible for demanding good public governance from Rio de Janeiro's public officials, this result might be explained by the financial crisis, the increase in unemployment in the city and by the overall dissatisfaction derived by a plethora of corruption charges (Villela, 2016).

Thus, before the event, not even the expectation to generate social bonds and entertainment to people was able to garner a positive psychic income from residents native to the city. This findings help explain why *cariocas* disagreed that hosting the Olympic Games in Rio de Janeiro was a good decision, and fewer still agreed in paying more taxes to do so.

During the event, the chatter about the Olympics in the media changed for the better. According to a survey undertaken by *Ibope*, 57% of Brazilians believed that the country's image would be more positive afterwards. For 42% of respondents, the Olympics was good or great, while 30% said it was regular, and 24% said it was bad or terrible. It is interesting to note that although these results seem optimistic toward the event, 62% of respondents said the Games would bring more damage than benefits to the country in the long term. Therefore, whatever was responsible for the rejection of the event was still present, although people seemed positively surprised by the event as a whole (Veja, 2016).

According to *Ibope's* CEO at the time, Marcia Cavallari, there was an ambiguity in responses because people could not clearly see the benefits the country could have in the long term. Also, for her, the recession also explained the seeming contraction, because even among the people who are sympathetic towards the event, there are those who believe the country should have had other priorities (Veja, 2016).

A month after the Olympic Games, TripAdvisor conducted a survey with users around the world. 76% of Brazilian respondents believed the event would bring some sort of positive legacy to the country (Uol, 2016), in consonance with the results of this study. One of the overall items wondered whether people thought the Olympics would bring future positive impacts to the city, and 63% of respondents answered with some degree of agreement with the statement.

Additionally, according to Brazilian respondents of the survey from TripAdvisor, 56% believed that the Games helped improve public transportation (Uol, 2016). The dimension related to the improvement of deteriorated areas of the city presented similar results, with an average of 4,19, slightly above the scale's middle point, between "neither agree nor disagree" and "slightly agree".

Therefore, the results suggest the Rio 2016 Olympics were able to positively change regardless of the negative expectations people had before the event. Also, these results might be used to inform future decisions on whether hosting an event this size is a good idea.

6.4 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCHES

The present study presents limitations due to the scale, sample and data collection, and context. Regarding the scale, it was operationalized in English, presenting contextual and language barriers. The back translation process presents limitations, since it is impossible to develop a perfect translation. Also, it was originally thought of in a context after the event, needing another adaptation to capture respondents' expectation prior to the Olympics.

The sample before the event was collected with undergraduate students as respondents, presenting sample limitations, which required a more random sample that could more accurately represent Rio de Janeiro's population. The sample after the event aimed at a more random sample, however, there should have been more people from one of the city's zone, Zona Oeste, to more accurately represent its population.

In the sample after the event, since data collection was aided by the interviewer, i.e., performed orally by a group of people, even if they were trained to perform the task, it implies the possibility of bias from the interviewer and presents another limitation to the present study (Malhotra, Nunan, & Birks, 2017).

The scale was originally created in the context of Super Bowl XLIII and adapted to the context of the 2016 Rio Summer Olympics. In the sample before the event, there was an

apparent rejection towards the event and since the Games do not exist on a “apolitical bubble” (Nickerson, 1995, p. 73), the results can only be generalized to the population studied. Therefore, a suggestion is that the study be replicated in other mega-events around the world to see how the scale will perform in other contexts and deepen the knowledge on psychic income.

Since the present study used a single database containing observations from before and after the Olympics, the purified scale is an attempt at measuring both expectations prior to the event and perceptions after it. Thus, future studies might replicate the study in other mega-events both before and after the event.

Also, although there is a sample after the event, it was collected a mere month after the Olympics had ended. Thus, future studies might run the survey once more with people native from the city of Rio de Janeiro who were and still is residing in the city since the Games. Considering that four years have passed, it would be interesting to try and understand whether the perception after the event is significantly different nowadays.

REFERENCES

- Ap, J. (1992). Residents' Perceptions on Tourism Impacts. *Annals of Tourism Research*, 19, 665-690.
- BBC Staff. (2014). *Record-breaking number of tourists in London in 2013*. Retrieved July 28, 2015, from BBC News: <http://www.bbc.com/news/uk-england-london-27323755>
- Berenson, M. L., Levine, D. M., & Krehbiel, T. C. (2012). *Basic Business Statistics* (12th ed.). New Jersey: Pearson.
- Bloch, P., Sherrell, D., & Ridgway, N. (1986). Consumer Search: An Extended Framework. *Journal of Consumer Research*, 13, 119-126.
- Carta Capital. (2013). *Entrevista Exclusiva — Eduardo Paes defende obras da Copa e das Olimpíadas no Rio*. Retrieved March 09, 2014, from Carta Capital: <http://www.cartacapital.com.br/revista/752/voltamos-ao-centro-afirma-eduardo-paes-4078.html>
- Chalip, L. (2006). Towards Social Leverage of Sport Events. *Journal of Sport & Tourism*, 11(2), 109-127.
- CNBC. (2012). *Olympic Cities: Booms and Busts*. Retrieved March 13, 2014, from CNBC: <http://www.cnbc.com/2012/01/19/Olympic-Cities:-Booms-and-Busts.html>
- CNN. (2007). *Brazil to host 2014 World Cup*. Retrieved August 24, 2019, from CNN: <http://edition.cnn.com/2007/SPORT/football/10/30/brazil.cup/>
- CNNGo Staff. (2012). *Britain counts cost of Summer Olympics*. Retrieved July 28, 2015, from CNN: <http://travel.cnn.com/explorations/escape/london-olympic-tourist-figures-disappoints-589656>
- Cochrane, A., Peck, J., & Tickell, A. (1996). Manchester Plays Games: Exploring the Local Politics of Globalisation. *Urban Studies*, 33(8), 1319-1336.
- Crompton, J. (2004). Beyond Economic Impact: An Alternative Rationale for the Public Subsidy of Major League Sports Facilities. *Journal of Sport Management*, 18, 40-58.

- Cunningham, J. (2014). The Olympics – Going for Gold and What Else? *Lund University*, 1-67.
- Dyer, G. (2009). *Beijing Olympics failed to boost tourism, figures show*. Retrieved July 28, 2015, from Financial Times: <http://www.ft.com/cms/s/0/6a0fd5ae-dd77-11dd-930e-000077b07658.html#axzz3hDCSaB9B>
- Eckstein, R., & Delaney, K. (2002). New Sports Stadiums, Community Self-Esteem, and Community Collective Conscience. *Journal of Sport & Social Issues*, 26(3), pp. 235-247.
- Ellemers, N., Kortekaas, P., & Ouwerkerk, J. W. (1999). Self-categorization, Commitment to the Group Self-esteem as Related but Distinct Aspects of Social Identity. *European Journal of Social Psychology*, 29, 371-389.
- Fetter, F. A. (1915). *Economics, vol. 1: Economic Principles*. New York: The Century Co.
- FIFA Fan Fest. (2014). Retrieved June 09, 2015, from <http://www.copa2014.df.gov.br/fanfest/5164-fan-fest>
- Flyvbjerg, B., & Stewart, A. (2012). Olympic Proportions: Cost and Cost Overrun at the Olympics 1960-2012. *Saïd Business School working papers*, pp. 1-23.
- Folha de S. Paulo. (2016). *Public Money to Cover More than Half of All Private Projects Ahead of Rio Olympics*. Retrieved August 25, 2019, from Folha de S. Paulo: <https://www1.folha.uol.com.br/esporte/olimpiada-no-rio/en/2016/04/1757400-public-money-to-cover-more-than-half-of-all-private-projects-ahead-of-rio-olympics.shtml>
- Frawley, S., & Adair, D. (2013). The Olympic Games: Managerial and Strategic Dimensions. In S. Frawley, & D. Adair (Eds.), *Managing the Olympics* (p. 218). New York: Palgrave Macmillan.
- Frey, J., & Eitzen, S. (1991). Sport and Society. *Annual Review Sociology*, 17, 503-522.
- Funk, D. C., Toohey, K., & Bruun, T. (2007). International Sport Event Participation: Prior Sport Involvement; Destination Image; and Travel Motives. *European Sport Management Quarterly*, 7(3), pp. 227-248.

- G1. (2017). *Rock in Rio movimentou R\$1,4 bilhão na economia da cidade*. Retrieved August 24, 2019, from G1: <https://g1.globo.com/musica/rock-in-rio/2017/noticia/rock-in-rio-movimentou-r14-bilhao-na-economia-da-cidade.ghml>
- G1. (2018). *Lollapalooza movimentou R\$ 152 milhões em SP na edição de 2018, diz prefeitura*. Retrieved August 24, 2019, from <https://g1.globo.com/pop-arte/musica/lollapalooza/2018/noticia/lollapalooza-movimentou-r-152-milhoes-em-sp-na-edicao-de-2018-diz-prefeitura.ghml>
- G1. (2018). *Rock in Rio 2019 divulga mapa e aumenta área do evento*. Retrieved August 24, 2019, from G1: <https://g1.globo.com/pop-arte/musica/rock-in-rio/2019/noticia/2018/11/10/rock-in-rio-2019-divulga-mapa-e-aumenta-area-do-evento.ghml>
- Gelan, A. (2003). Local Economic Impacts: The British Open. *Annals of Tourism Research*, 30(2), 406-425.
- Gibson, H. J. (1998). Sport Tourism: A Critical Analysis of Research. *Sport Management Review*, 1, 45-76.
- Gibson, H. J., Qi, C. X., & Zhang, J. J. (2008). Destination Image and Intent to Visit China and the 2008 Beijing Olympic Games. *Journal of Sport Management*, pp. 427-450.
- Gratton, C., Shibli, S., & Coleman, R. (2006). The economic impact of major sports events: A review of ten events in the UK. *The Sociological Review*, 52(2), 41-58.
- Green, C. (2001). Leveraging Subculture and Identity to Promote Sport Events. *Sport Management Review*, 4, 1-19.
- Gursoy, D., & Kendall, K. W. (2006). Hosting Mega Events: Modeling Locals' Support. *Annals of Tourism Research*, 33(3), 603-623.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. F., Tatham, R. L., & a. (2010). *Multivariate Data Analysis* (7th ed.). New York: Pearson.
- Haley, A. J., Snaith, T., & Miller, G. (2005). The Social Impacts of Tourism: A Case Study of Bath, UK. *Annals of Tourism Research*, 32(3), 647-668.

- Havitz, M., & Dimanche, F. (1999). Leisure Involvement Revisited: Drive Properties and Paradoxes. *Journal of Leisure Research*, 31(2), 122-149.
- Hiller, H. (1990). Urban Transformation of a Landmark Event: The 1988 Calgary Winter Olympics. *Urban Affairs Quarterly*, 26(1), 118-137.
- Hiller, H. (2002). Mega-Events, Urban Boosterism and Growth Strategies: An Analysis of the Objectives and Legitimations of the Cape Town 2004 Olympic Bid. *International Journal of Urban and Regional Research*, 24(2), 440-458.
- Horne, J., & Manzenreiter, W. (2004). Accounting for Mega-Events: Forecasts and Actual Impacts of the 2002 Football World Cup Finals on the Host Countries Japan/Korea. *International Review for the Sociology of Sport*, 39(2), 187-203.
- Horne, J., & Manzenreiter, W. (2006). An introduction to the sociology of sports mega-events. *Sociological Review*, 54, pp. 1-24.
- Johnson, B. K., & Whitehead, J. C. (2000). Value of Public Goods from Sports Stadiums: the CVM Approach. *Contemporary Economic Policy*, 18(1), 48-59.
- Kerlinger, F. N. (1986). *Foundations of Behavioral Research* (3rd ed.). New York: Holt, Rinehart and Winston, Inc.
- Kim, J., Kang, J. H., & Kim, Y.-K. (2014). Impact of Mega Sport Events on Destination Image and Country Image. *Sport Marketing Quarterly*, 23, pp. 161-175.
- Kim, W., & Walker, M. (2012). Measuring the Social Impacts Associated with Super Bowl XLIII: Preliminary Development of a Psychic Income Scale. *Sport Management Review*, 91-108.
- Knott, B., Fyall, A., & Jones, I. (2015). The Nation Branding Opportunities Provided by a Sport Mega-Event. *Journal of Destination Marketing & Management*, 4, pp. 46-56.
- Knowledge@Wharton. (2010). *Brazil's Gold: How Rio Won Its Olympic Bid*. Retrieved August 24, 2019, from Wharton: <https://knowledge.wharton.upenn.edu/article/brazils-gold-how-rio-won-its-olympic-bid/>
- Lee, C.-K., & Taylor, T. (2005). Critical reflections on the economic impact assessment of a mega-event: the case of 2002 FIFA World Cup. *Tourism Management*, 26, pp. 595-603.

- Li, S., & McCabe, S. (2013). Measuring the Socio-Economic Legacies of Mega-events: Concepts, Propositions and Indicators. *International Journal of Tourism Research*, 15, pp. 388-402.
- Lin, Y. (2013). A Critical Review of Social Impacts of Mega-Events. *The International Journal of Sport and Society*, 3, pp. 57-64.
- Liu, D. (2015). The image impact of mega-sporting events perceived by international students and their behaviour intentions. *International Journal of Sports Marketing & Sponsorship*, 16(2), pp. 103-117.
- Lollapalooza. (2019). *LineUp 2019*. Retrieved August 12, 2019, from Lollapalooza Brasil: <https://www.lollapaloozabr.com/lineup-2019/>
- Luhtanen, R., & Crocker, J. (1992). A Collective Self-Esteem Scale: Self-Evaluation of One's Identity Theory. *Personality and Social Psychology Bulletin*, 18(3), 302-318.
- Maenning, W., & Zimbalist, A. (Eds.). (2012). *International Handbook on the Economics of Mega Sporting Events*. Cheltenham, Inglaterra: EE.
- Mahalik, B. J., & Simonetta, L. (1999). A Midterm Assessment of the Host Population's Perceptions of the 1996 Summer Olympics: Support, Attendance, Benefits and Liabilities. *Journal of Travel Research*, 37, 244-248.
- Malfas, M., Theodoraki, E., & Houlihan, B. (2004). Impacts of the Olympic Games as mega-events. *Municipal Engineer*, 157(ME3), pp. 209-220.
- Malhotra, N. K., Nunan, D., & Birks, D. F. (2017). *Marketing Research: An Applied Approach* (5th ed.). Harlow, United Kingdom: Pearson.
- Marshall. (1996). Barcelona—Fast Forward? City Entrepreneurialism in the 1980s and 1990s. *European Planning Studies*, 4(2), pp. 147-165.
- Marshall, A. (1890). *Principles of Economics; an Introductory Volume*. London, UK: Macmillan.
- McGehee, N. G., Yoon, Y., & Cárdenas, D. (2003). Involvement and Travel for Recreational Runners in North Carolina. *Journal of Sport Management*, 17, 305-324.

- Miami Herald. (2017). *A year since the Rio Olympics, legacy of the Games is tattered*. Retrieved August 24, 2019, from Miami Herald: <https://www.miamiherald.com/news/nation-world/world/americas/article168120297.html>
- Monclús, F.-J. (2003). The Barcelona Model: an Original Formula? From 'Reconstruction' to Strategic Urban Projects (1979-2004). *Planning Perspectives*, 18, 399-421.
- Mules, T. (1998). Taxpayer Subsidies for Major Sporting Events. *Sport Management Review*, 25-43.
- Murphy, N. M., & Bauman, A. (2007). Mass Sporting and Physical Activity Events—Are They “Bread and Circuses” or Public Health Interventions to Increase Population Levels of Physical Activity? *Journal of Physical Activity and Health*, 4, pp. 193-202.
- Newsweek. (2016). *Why Japan Is Excited About the 2020 Tokyo Olympics*. Retrieved February 10, 2020, from Newsweek: <https://www.newsweek.com/2016/03/18/japan-tokyo-2020-olympics-433780.html>
- Nickerson, C. (1995). Red Dawn in Lake Placid: The Semi-Final Hockey Game at the 1980 Winter Olympics as Cold War Battle Ground. *Canadian Journal of History of Sport*, 26(1), pp. 73-85.
- O'Reilly, N., Lyberger, M., McCarthy, L., Séguin, B., & Nadeau, J. (2008). Mega-Special-Event Promotions and Intent To Purchase: A Longitudinal Analysis of the Super Bowl. *Journal of Sport Management*, pp. 392-409.
- Observatório Sebrae/RJ. (2016). *Painel Regional: Cidade do Rio de Janeiro*. Rio de Janeiro: Sebrae.
- Olympic Movement. (2009). *2016 Host City Election*. Retrieved August 24, 2019, from Olympic.org: <https://www.olympic.org/2016-host-city-election>
- Olympic Movement. (2016). *Rio 2016*. Retrieved August 25, 2019, from Olympic Games: <https://www.olympic.org/rio-2016>
- Olympic Movement. (2017). *IOC Makes Historic Decision by Simultaneously Awarding Olympic Games 2024 and 2028 to Los Angeles*. Retrieved August 24, 2019, from International Olympic Committee: <https://www.olympic.org/news/ioc-makes-historic->

decision-by-simultaneously-awarding-olympic-games-2024-to-paris-and-2028-to-los-angeles

- Olympic Movement. (2019). *Olympic Games Candidature Process*. Retrieved August 24, 2019, from <https://www.olympic.org/all-about-the-candidature-process>
- Olympic Movement. (2019). *Olympic Games Editions*. Retrieved August 07, 2019, from Olympic Games: <https://www.olympic.org/olympic-games>
- Olympic Movement. (2020). *Unprecedented Levels of Excitement Around the Olympic Games Tokyo 2020*. Retrieved February 10, 2020, from Olympic Movement: <https://www.olympic.org/news/unprecedented-levels-of-excitement-around-the-olympic-games-tokyo-2020>
- Parent, M. M. (2013). Olympic Games Stakeholder Governance and Management. In S. Frawley, & D. Adair (Eds.), *Managing the Olympics* (p. 218). New York: Palgrave Macmillan.
- Parent, M. M., & Séguin, B. (2008). Toward a Model of Brand Creation for International Large-Scale Sporting Events: The Impact of Leadership, Context, and Nature of the Event. *Journal of Sport Management*, pp. 526-549.
- Phua, J. J. (2010). Sports Fans and Media Use: Influence on Sports Fan Identification and Collective Self-Esteem. *International Journal of Sport Communication*, 3, 190-206.
- Porter, P. K., & Fletcher, D. (2008). The Economic Impact of the Olympic Games: Ex Ante Predictions and Ex Poste Reality. *Journal of Sport Management*, pp. 470-486.
- Prynn, J. (2012). *The Olympics boom created 100,000 jobs in London*. Retrieved August 12, 2015, from Standard: <http://www.standard.co.uk/news/london/the-olympics-boom-created-100000-jobs-in-london-8214954.html>
- Qu, L., & Spaans, M. (2009). The Mega-Event as a Strategy in Spatial Planning: Starting from the Olympic City of Barcelona. *The 4th International Conference of the International Forum on Urbanism (IFoU)* (pp. 1291-1300). Amsterdam/Delft: International Forum on Urbanism (IFoU).

- Reiter, C. L. (2010). *Mega-Events and Their Impact on the Economy: A Tourism and Economics Analysis* (1^a ed.). lulu.com.
- Reuters. (2005). *China sees Beijing jobs bonanza from 2008 Olympics*. Retrieved August 12, 2015, from China Daily: http://www.chinadaily.com.cn/english/doc/2005-09/09/content_476467.htm
- Reuters. (2007). *Brazil officially named 2014 World Cup hosts*. Retrieved August 15, 2019, from Reuters: <https://uk.reuters.com/article/uk-soccer-world-brazil-idUKL3026608120071030>
- Reuters. (2017). *Rio 2016 price tag rises to \$13.2 billion*. Retrieved August 24, 2019, from Reuters: <https://www.reuters.com/article/us-olympics-brazil-cost/rio-2016-price-tag-rises-to-13-2-billion-idUSKBN19539C>
- Reuters. (2018). *Rio de Janeiro Games legacy incomplete, says IOC*. Retrieved August 24, 2019, from Reuters: <https://www.reuters.com/article/us-olympics-2018-rio-legacy/rio-de-janeiro-games-legacy-incomplete-says-ioc-idUSKCN1G205V>
- Revista Veja. (2013). *Lollapalooza admite prejuízo, mas confirma edição em 2014*. Retrieved March 13, 2014, from Veja: <http://veja.abril.com.br/noticia/entretenimento/organizador-do-lollapalooza-admite-prejuizo-mas-confirma-edicao-em-2014/>
- Ribeiro, T., & Correia, A. (2020). The relationship between organisational issues and social impacts of Rio Olympic Games: a volunteer's perspective. *Journal of Policy Research in Tourism, Leisure and Events*. doi:10.1080/19407963.2019.1708921
- Riley, C. (2012). *Do the Olympics cost too much for host cities?* Retrieved March 13, 2014, from CNN Money: <http://money.cnn.com/2012/07/30/news/economy/olympics-cost/>
- Rio de Janeiro City Hall. (n.a.). *Rio 2016: Olympics and Legacy*. Rio de Janeiro. Retrieved August 07, 2019, from http://www.rio.rj.gov.br/dlstatic/10112/4379008/4129850/RIO2016_estudos_ING.pdf
- Roche, M. (1992). Mega-Events and Micro-Modernisation: on the Sociology of the New Urban Tourism. *British Journal of Sociology*, 43(4), 563-600.

- Roche, M. (2000). Mega-Events and Modernity: Perspective and Themes. In M. Roche, *Mega-Events and Modernity: Olympics and Expos in the Growth of Global Culture* (pp. 1-30). London: Routledge.
- Rock in Rio. (2019). *Rock in Rio 2019: Dates & Rock in Rio Card*. Retrieved August 25, 2019, from Rock in Rio: <http://rockinrio.com/rio/en/news/rock-in-rio-2019-datas-e-rock-in-rio-card>
- Segrave, J. O., & Chu, D. (1996). The Modern Olympic Games: A Contemporary Sociocultural Analysis. *QUEST*, 48(1), pp. 2-8.
- Siegfried, J., & Zimbalist, A. (2000). The Economic Impact of Sports Facilities, Teams and Mega-Events. *The Australian Economic Review*, 39(4), 420-427.
- Terborgh, G. W. (1928). Psychic Income, Total Utility, and Consumer's Surplus. *The American Economic Review*, 18(1), pp. 75-79.
- The Atlantic. (2019). *Carnival 2019 in Brazil*. Retrieved August 15, 2019, from The Atlantic: <https://www.theatlantic.com/photo/2019/03/brazil-carnival-2019-photos/584050/>
- The Economist. (2013). *Why would anyone want to host the Olympics?* Retrieved March 13, 2014, from The Economist: <http://www.economist.com/blogs/economist-explains/2013/09/economist-explains-0>
- Tien, C., Lo, H.-C., & Lin, H.-W. (2011). The Economic Benefits of Mega Events: A Myth or a Reality? A Longitudinal Study on the Olympic Games. *Journal of Sport Management*, pp. 11-23.
- United States Holocaust Memorial Museum. (2003). *The Nazi Olympics: Berlin 1936*. Washington, DC: USHMM.
- Uol. (2016). *Jogos do Rio 2016 melhoram percepção do Brasil para estrangeiros, diz pesquisa*. Retrieved February 09, 2020, from Uol: https://maquinadoesporte.uol.com.br/artigo/jogos-do-rio-2016-melhoram-percepcao-do-brasil-para-estrangeiros-diz-pesquisa_31224.html
- USA Today. (2014, May 07). *NBC Universal pays \$7.75 billion for Olympics through 2032*. Retrieved August 06, 2019, from USA Today:

<https://www.usatoday.com/story/sports/olympics/2014/05/07/nbc-olympics-broadcast-rights-2032/8805989/>

USA Today. (2018). *What Is the Carnival in Brazil?* Retrieved August 15, 2019, from USA Today: <https://traveltips.usatoday.com/carnival-brazil-100582.html>

Veja. (2016). *Opinião de brasileiros sobre Rio-2016 é ambígua*. Retrieved February 09, 2020, from Veja: <https://veja.abril.com.br/esporte/opiniao-de-brasileiros-sobre-rio-2016-e-ambigua/>

Villela, F. (2016). *Cai número de cariocas que creem em benefícios deixados pela Olimpíada no Rio*. Retrieved April 07, 2016, from EBC Agência Brasil: <http://agenciabrasil.ebc.com.br/geral/noticia/2016-01/cai-numero-de-cariocas-que-creem-que-olimpiadas-trarao-beneficios-para-o-rio>

Waitt, G. (2003). Social Impacts of the Sydney Olympics. *Annals of Tourism Research*, 30(1), 194-215.

Wann, D. (1995). Preliminary Validation of the Sport Fan Motivation Scale. *Journal of Sport & Social Issues*, 19(4), 377-396.

Xing, X., & Chalip, L. (2009). Marching in the Glory: Experiences and Meanings When Working for a Sport Mega-Event. *Journal of Sport Management*, pp. 210-237.

Xu, X. (2006). Modernizing China in the Olympic Spotlight: China's National Identity and the 2008 Beijing Olympiad. *Sociological Review*, 54(Suppl. 2), 90-107.

APPENDICES

Appendix A – Translation of the scale used by Kim e Walker (2012)

Dimension	Original Formulation of the Items	Translation from English to Portuguese	Back translation	Final Formulation of the Items: Sample Before the Event	Final Formulation of the Items: Sample After the Event
Enhanced collective self-esteem	<i>Hosting Super Bowl XLIII in my community is a compliment to me.</i>	Sediar as Olimpíadas na minha cidade será um elogio a mim.	<i>Hosting the Olympics in my city will be a compliment to myself.</i>	Eu me sinto honrado em ter as Olimpíadas na minha cidade.	Eu me senti honrado em ter as Olimpíadas em minha cidade.
	<i>I feel good about being a resident of my community because of hosting Super Bowl XLIII.</i>	Eu me sentirei bem em ser carioca porque Rio de Janeiro sediará as Olimpíadas.	<i>I will feel good about being a carioca because Rio de Janeiro will be hosting the Olympics.</i>	Como carioca, eu fiquei satisfeito em ter as Olimpíadas em minha cidade.	Como carioca, eu fiquei satisfeito em ter as Olimpíadas em minha cidade.
	<i>Super Bowl XLIII has made my community residents appreciate their way of life more.</i>	As Olimpíadas farão com que os moradores apreciem mais seu estilo de vida.	<i>The Olympics will make residents appreciate their lifestyle more.</i>	As Olimpíadas farão com que os cariocas apreciem mais seu estilo de vida.	As Olimpíadas fizeram com que os cariocas apreciassem mais seu estilo de vida.
	<i>Super Bowl XLIII increased my community confidence.</i>	As Olimpíadas aumentarão a confiança dos moradores minha cidade.	<i>The Olympics will increase the confidence of my city's residents.</i>	As Olimpíadas aumentarão o orgulho dos cariocas.	As Olimpíadas aumentaram o orgulho dos cariocas.
	<i>Super Bowl XLIII increased my self-respect for the community.</i>	As Olimpíadas aumentarão o meu respeito pela minha cidade.	<i>The Olympics will increase my respect for my city.</i>	As Olimpíadas aumentarão o meu respeito pela minha cidade.	As Olimpíadas aumentaram o meu respeito pela minha cidade.
	<i>Super Bowl XLIII contributed to my personal well-being.</i>	As Olimpíadas contribuirão com meu bem estar pessoal.	<i>The Olympics will contribute to my well-being.</i>	As Olimpíadas contribuirão com o meu bem estar pessoal.	As Olimpíadas contribuíram com o meu bem estar pessoal.
Tangible focus for social bonding	<i>Super Bowl XLIII increased cooperation among groups in my community.</i>	As olimpíadas aumentarão a cooperação entre as pessoas da minha cidade.	<i>The Olympics will increase the cooperation among people in my city.</i>	As Olimpíadas aumentarão a disposição para cooperação entre as pessoas da minha cidade.	As Olimpíadas aumentaram a disposição para cooperação entre as pessoas da minha cidade.
	<i>Super Bowl XLIII increased my social interactions within my community.</i>	As olimpíadas aumentarão minhas interações sociais na minha cidade.	<i>The Olympics will increase my social interactions in my city.</i>	As Olimpíadas aumentarão minhas relações sociais na minha cidade.	As Olimpíadas proporcionaram uma oportunidade para interagir com mais pessoas.
	<i>Super Bowl XLIII increased opportunities to spend time with family.</i>	As Olimpíadas aumentarão as oportunidades de passar mais tempo com a família.	<i>The Olympics will increase the opportunities to spend more time with family.</i>	As Olimpíadas aumentarão as oportunidades de passar mais tempo com a família.	As Olimpíadas aumentaram as oportunidades de passar mais tempo com a família.
	<i>Super Bowl XLIII increased sense of belongings in various community groups.</i>	As Olimpíadas aumentarão o senso de pertencimento em diferentes grupos.	<i>The Olympics will increase the sense of belonging in the different groups.</i>	As Olimpíadas aumentarão as minhas possibilidades de criar vínculos sociais.	As Olimpíadas aumentaram as minhas possibilidades de criar vínculos sociais.
	<i>Super Bowl XLIII provided more socializing opportunities.</i>	As Olimpíadas gerarão mais oportunidades de socialização.	<i>The Olympics will generate more opportunities to socialize.</i>	As Olimpíadas aumentarão as oportunidades de socialização.	As Olimpíadas aumentaram as oportunidades de socialização.
	<i>Super Bowl XLIII strengthened my friendships in my community.</i>	As Olimpíadas fortalecerão minhas amizades na minha cidade.	<i>The Olympics will strengthen my friendships in my city.</i>	As Olimpíadas fortalecerão minhas amizades na minha cidade.	As Olimpíadas fortaleceram minhas amizades na minha comunidade.

Excitement from the event and visitors	<i>I enjoyed interacting with visitors.</i>	Eu gostarei de interagir com os visitantes.	<i>I am going to appreciate interacting with visitors.</i>	Eu terei prazer em interagir com os visitantes durante as Olimpíadas.	As Olimpíadas proporcionaram uma oportunidade para interagir com visitantes de outras culturas.
	<i>I was excited by many visitors during Super Bowl XLIII.</i>	Eu ficarei empolgado com os vários visitantes durante as Olimpíadas.	<i>I will be excited by the many visitors during the Olympics.</i>	Eu ficarei empolgado pela presença dos visitantes durante as Olimpíadas.	Eu fiquei empolgado pela presença dos visitantes durante as Olimpíadas.
	<i>Super Bowl XLIII brought excitement to the community.</i>	As Olimpíadas trarão empolgação para a cidade.	<i>The Olympics will bring excitement to the city.</i>	As Olimpíadas trarão empolgação para os cariocas.	As Olimpíadas trouxeram empolgação para os cariocas.
	<i>Super Bowl XLIII provided entertainment to the community.</i>	As Olimpíadas oferecerão entretenimento para as pessoas da minha cidade.	<i>The Olympics will offer entertainment to the people of my city.</i>	As Olimpíadas oferecerão entretenimento para os cariocas.	As Olimpíadas ofereceram entretenimento para os cariocas.
	<i>Super Bowl XLIII provided new activities to the community.</i>	As Olimpíadas oferecerão novas atividades para as pessoas da minha cidade.	<i>The Olympics will offer new activities to the people of my city.</i>	As Olimpíadas oferecerão novas atividades para os cariocas.	As Olimpíadas ofereceram novas atividades para os cariocas.
	<i>The night life was more exciting because of Super Bowl XLIII.</i>	A vida noturna será mais animada por conta das Olimpíadas.	<i>The night life will be more exciting because of the Olympics.</i>	A vida noturna carioca será mais animada por conta das Olimpíadas.	A vida noturna carioca ficou mais animada por conta das Olimpíadas.
Emotional involvement with a sport event	<i>Hosting Super Bowl XLIII in my community was very important to me.</i>	Sediar as Olimpíadas na minha cidade será muito importante para mim.	<i>Hosting the Olympics in my city will be really important to me.</i>	A escolha do Rio de Janeiro para sediar as Olimpíadas foi muito importante para mim.	A escolha do Rio de Janeiro para sediar as Olimpíadas foi muito importante para mim.
	<i>Hosting Super Bowl XLIII was great news to me.</i>	Sediar as Olimpíadas foi uma grande notícia para mim.	<i>Hosting the Olympics was great news to me.</i>	A escolha do Rio de Janeiro para sediar as Olimpíadas foi uma grande notícia para mim.	A escolha do Rio de Janeiro para sediar as Olimpíadas foi uma grande notícia para mim.
	<i>I enjoyed more watching football games since I know my community host Super Bowl XLIII.</i>	Eu passei a gostar mais de acompanhar os esportes olímpicos desde que eu soube que a minha cidade ia sediar as Olimpíadas.	<i>I started to enjoy more watching Olympic sports ever since I knew that my city would host the Olympics.</i>	Eu passei a acompanhar mais os esportes olímpicos desde que eu soube que a minha cidade ia sediar as Olimpíadas.	Eu passei a acompanhar mais os esportes olímpicos desde que eu soube que a minha cidade ia sediar as Olimpíadas.
	<i>I liked to watch Super Bowl in my community.</i>	Eu gostarei de assistir as Olimpíadas na minha cidade.	<i>I will like to watch the Olympics in my city.</i>	Eu terei prazer em assistir as Olimpíadas na minha cidade.	Eu tive prazer em assistir as Olimpíadas em minha cidade.
	<i>Super Bowl XLIII increased my fan involvement with football.</i>	As Olimpíadas aumentarão meu envolvimento como torcedor dos esportes olímpicos.	<i>The Olympics will increase my involvement as a fan of Olympic sports.</i>	As Olimpíadas aumentarão meu envolvimento com os esportes olímpicos.	As Olimpíadas aumentaram meu envolvimento com os esportes olímpicos.
	<i>Super Bowl XLIII increased my interests in football.</i>	As Olimpíadas aumentarão meu interesse nos esportes olímpicos.	<i>The Olympics will increase my interest in Olympic sports.</i>	As Olimpíadas aumentarão meu interesse nos esportes olímpicos.	As Olimpíadas aumentaram meu interesse nos esportes olímpicos.

Community pride resulting from increased visibility	<i>I am proud of my community because my community was exposed to outsiders as a result of Super Bowl XLIII.</i>	Estou orgulhoso(a) da minha cidade porque ela será exposta para pessoas de fora do RJ como resultado das Olimpíadas.	<i>I am proud of my city because it will be exposed to people outside RJ as a result of the Olympic Games.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque a minha cidade será exposta para pessoas de fora do RJ em virtude das Olimpíadas.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque a minha cidade foi exposta para pessoas de fora do RJ em virtude das Olimpíadas.
	<i>I am proud of my community because outsiders know more about my community after Super Bowl XLIII.</i>	Estou orgulhoso(a) da minha cidade porque pessoas de fora do RJ saberão mais sobre minha cidade depois das Olimpíadas.	<i>I am proud of my city because people outside RJ will know more about my city after the Olympic Games.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque pessoas de fora do RJ saberão mais sobre minha cidade depois das Olimpíadas.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque pessoas de fora do RJ sabem mais sobre minha cidade depois das Olimpíadas.
	<i>I am proud of my community because Super Bowl XLIII enhanced media visibility of my community.</i>	Estou orgulhoso(a) da minha cidade porque as Olimpíadas aumentarão a visibilidade da minha cidade na mídia.	<i>I am proud of my city because it will increase the visibility of my city on the media.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque as Olimpíadas aumentarão a visibilidade da minha cidade na mídia.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas aumentaram a visibilidade da minha cidade na mídia.
	<i>I am proud of my community because Super Bowl XLIII gave my community an international identity.</i>	Estou orgulhoso(a) da minha cidade as porque as Olimpíadas darão para a minha cidade uma identificação internacional.	<i>I am proud of my city because the Olympic Games will give an international identity to my city.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque as Olimpíadas proporcionarão a minha cidade uma identidade internacional.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas reforçaram o reconhecimento do Rio de Janeiro como uma cidade internacional.
	<i>I am proud of my community because Super Bowl XLIII helped my community to become a nationally known city</i>	Estou orgulhoso(a) da minha cidade porque as Olimpíadas ajudarão a minha cidade a ficar nacionalmente conhecida.	<i>I am proud of my city because the Olympic Games will help my city to become nationally known.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque as Olimpíadas contribuirão para a minha cidade ficar nacionalmente conhecida.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas contribuíram para a minha cidade ficar ainda mais conhecida nacionalmente.
	<i>I am proud of my community because television stations broadcasted my community as well as Super Bowl XLIII.</i>	Estou orgulhoso(a) da minha cidade porque as estações de TV exibirão mais sobre a minha cidade enquanto transmitem os jogos.	<i>I am proud of my city because the TV stations will broadcast more about my city while they transmit the games.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque a TV exibirá mais sobre a minha cidade enquanto transmite os jogos.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque a TV exibiu mais sobre minha cidade enquanto transmitiu os jogos.

Civic pride from being a sport event host city	<i>I am proud of my community because my community can host other major sport events in the future.</i>	Estou orgulhoso(a) da minha cidade porque ela poderá sediar outros grandes eventos esportivos no futuro.	<i>I am proud of my city because it will be able to host other major sport events in the future.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque a minha cidade poderá sediar outros grandes eventos esportivos no futuro.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque a minha cidade poderá sediar outros grandes eventos esportivos no futuro.
	<i>I am proud of my community because my community could show the ability to host a major sport event, Super Bowl XLIII.</i>	Estou orgulhoso(a) da minha cidade porque ela poderá mostrar que tem a habilidade de sediar grandes eventos esportivos.	<i>I am proud of my city because it will be able to show it has the ability to host major sport events.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque a minha cidade poderá mostrar que tem a habilidade de sediar grandes eventos esportivos, tais como as Olimpíadas.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque a minha cidade pôde mostrar que tem a habilidade de sediar grandes eventos esportivos, tais com as Olimpíadas.
	<i>I am proud of my community because my community gained a positive image of Super Bowl event host city.</i>	Estou orgulhoso(a) da minha cidade porque ela obterá uma imagem positiva como sede das Olimpíadas.	<i>I am proud of my city because it will obtain a positive image as host of the Olympic Games.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque a minha cidade obterá uma imagem positiva como sede das Olimpíadas.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque a minha cidade obteve uma imagem positiva como sede das Olimpíadas.
	<i>I am proud of my community because my community gained positive recognition of a major sport event host city.</i>	Estou orgulhoso(a) da minha cidade porque ela obterá reconhecimento positivo como uma cidade sede de um grande evento esportivo.	<i>I am proud of my city because it will receive positive recognition as host city of a major sport event.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque a minha cidade obterá reconhecimento positivo como uma cidade sede de um grande evento esportivo.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque a minha cidade obteve um reconhecimento positivo como uma cidade sede de um grande evento esportivo.
	<i>I am proud of my community because not many communities could host a Super Bowl game.</i>	Estou orgulhoso(a) da minha cidade porque não há muitas cidades que podem sediar Jogos Olímpicos.	<i>I am proud of my city because there are not many cities that can host the Olympic Games.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque não há muitas cidades no Mundo que possam sediar os Jogos Olímpicos.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque não há muitas cidades no mundo que possam sediar os Jogos Olímpicos.
	<i>I am proud of my community because Super Bowl XLIII enhanced the image of my community as a major city.</i>	Estou orgulhoso(a) da minha cidade porque as Olimpíadas elevarão a imagem dela como uma cidade importante.	<i>I am proud of my city because the Olympics will enhance its image as an important city.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque as Olimpíadas realçarão a imagem da minha cidade como uma cidade importante.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas realçaram a imagem da minha cidade como uma cidade importante.
	<i>I am proud of my community because Super Bowl XLIII gave an opportunity to show what my community can do.</i>	Estou orgulhoso(a) da minha cidade porque as Olimpíadas gerarão oportunidades para mostrar o que a minha cidade pode fazer.	<i>I am proud of my city because the Olympics will generate opportunities to show what my city is able to do.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque as Olimpíadas gerarão oportunidades para mostrar o que a minha cidade é capaz de fazer.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas geraram oportunidades para mostrar o que a minha cidade é capaz de fazer.

Pride in efforts to resuscitate deteriorated areas	<i>I am proud of my community because Super Bowl improved our public facilities (e.g., roads, traffic patterns, the convention center).</i>	Eu estou orgulhoso(a) da minha cidade porque as Olimpíadas melhorarão as instalações públicas da cidade (ex. ruas, sinalizações de trânsito, centros de convenções).	<i>I am proud of my city because the Olympics will improve the public facilities of the city (e.g., streets, traffic signs, convention centers).</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque as Olimpíadas melhorarão as instalações públicas da minha cidade (ex. ruas, sinalizações de trânsito, centros de convenções).	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas melhoraram as instalações públicas da minha cidade (ex.: ruas, sinalizações de trânsito, centros de convenções).
	<i>I am proud of my community because Super Bowl XLIII helped my community to improve the appearance of the city.</i>	Eu estou orgulhoso(a) da minha cidade porque as Olimpíadas ajudarão a melhorar aparência da cidade.	<i>I am proud of my city because the Olympics will improve the appearance of the city.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque as Olimpíadas ajudarão a melhorar a aparência da minha cidade.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas ajudaram a melhorar a aparência da minha cidade.
	<i>I am proud of my community because Super Bowl XLIII helped urban regeneration.</i>	Eu estou orgulhoso(a) da minha cidade porque as Olimpíadas ajudarão na revitalização urbana.	<i>I am proud of my city because the Olympics will help urban revitalization.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque as Olimpíadas ajudarão na revitalização urbana da minha cidade.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas ajudaram na revitalização urbana da minha cidade.
	<i>I am proud of my community because Super Bowl XLIII improved the quality of community public services.</i>	Eu estou orgulhoso(a) da minha cidade porque as Olimpíadas melhorarão a qualidade dos serviços públicos da cidade.	<i>I am proud of my city because the Olympics will improve the quality of the city's public services.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque as Olimpíadas melhorarão a qualidade dos serviços públicos da minha cidade.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas melhoraram a qualidade dos serviços públicos da minha cidade.
	<i>I am proud of my community because Super Bowl XLIII improved the quality of police and fire services.</i>	Eu estou orgulhoso(a) da minha cidade porque as Olimpíadas melhorarão a qualidade dos serviços da polícia e do corpo de bombeiros.	<i>I am proud of my city because the Olympics will improve the quality of police and fire department services.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas Porque as Olimpíadas melhorarão a qualidade dos serviços de segurança (polícia e corpo de bombeiros) da minha cidade.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas melhoraram a qualidade dos serviços de segurança (polícia e corpo de bombeiros) da minha cidade.
	<i>I am proud of my community because Super Bowl XLIII promoted opportunities to revive the community.</i>	Eu estou orgulhoso(a) da minha cidade porque as Olimpíadas melhorarão promoverão oportunidades de renovação da cidade.	<i>I am proud of my city because the Olympics will promote opportunities to renew the city.</i>	Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas porque as Olimpíadas promoverão oportunidades de renovação da minha cidade.	Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas porque as Olimpíadas promoveram oportunidades de renovação da minha cidade.

Overall	<i>The right choice.</i>	Sediar as Olimpíadas no Rio de Janeiro foi uma boa escolha.	<i>Hosting the Olympics in Rio de Janeiro was a good choice.</i>	Sediar as Olimpíadas no Rio de Janeiro foi uma boa decisão.	Sediar as Olimpíadas no Rio de Janeiro foi uma boa decisão.
	<i>Outweigh negative consequences.</i>	As consequências negativas de sediar as Olimpíadas serão compensadas.	<i>The negative consequences of hosting the Olympics will be compensated.</i>	Sediar as Olimpíadas no Rio de Janeiro valerá a pena, apesar das eventuais consequências negativas.	Sediar as Olimpíadas no Rio de Janeiro valeu a pena, apesar das eventuais consequências negativas.
	<i>Ongoing positive impacts.</i>	As Olimpíadas trarão impactos futuros positivos.	<i>The Olympics will bring positive future impacts.</i>	As Olimpíadas trarão impactos futuros positivos para o Rio de Janeiro.	As Olimpíadas trarão impactos futuros positivos para o Rio de Janeiro.
	<i>Supported hosting the Super Bowl.</i>	Eu apoiei o fato do Rio de Janeiro sediar as Olimpíadas.	<i>I supported the fact that Rio de Janeiro will host the Olympics.</i>	Eu apoio a decisão de sediar as Olimpíadas no Rio de Janeiro.	Eu apoiei a decisão de sediar as Olimpíadas no Rio de Janeiro.
	<i>Paying extra taxes.</i>	Eu concordo em pagar impostos mais altos para sediar as Olimpíadas.	<i>I agree to pay higher taxes to host the Olympic Games.</i>	Eu concordo em pagar impostos mais altos para sediar as Olimpíadas no Rio de Janeiro.	Eu acho justo pagar mais impostos em virtude da realização das Olimpíadas no Rio de Janeiro.
	<i>Overall, I favored.</i>	De forma geral, eu sou favorável as Olimpíadas serem no Rio de Janeiro.	<i>In general, I am in favor of Rio de Janeiro hosting the Olympics.</i>	De forma geral, eu sou favorável à decisão de sediar as Olimpíadas no Rio de Janeiro.	De forma geral, eu fui favorável à decisão de sediar as Olimpíadas no Rio de Janeiro.

Appendix B – Questionnaire Version 01 (Sample 1: Before the Olympics)

Universidade Federal do Rio de Janeiro
Instituto COPPEAD de Administração



Versão 01

Resultado Psicológico de um Megaevento Esportivo

Thárcyla Mourão – tharcyla.mourao@coppead.ufjf.br
Departamento de Marketing e Negócios Internacionais
Telefone: (21) 3938-9848

<Ler para o entrevistado> O Instituto COPPEAD de Administração está realizando um estudo sobre megaeventos esportivos. As perguntas não levam mais de 10 minutos para serem respondidas. O importante é a sua opinião, seja ela qual for. As informações fornecidas por meio deste questionário serão mantidas em sigilo e você não será identificado.

1. Você mora no Rio de Janeiro?*	() Sim () Não
2. Você é natural do Rio de Janeiro?*	() Sim () Não
3. Você participará dos jogos (atleta, voluntário, membro de comitê)?	() Sim () Não Como?
4. Você pretende assistir ao vivo (comprou ou comprará ingressos)?	() Sim () Não
5. Qual universidade estuda?	6. Qual o curso?
7. Quantos anos você tem?	8. Sem perguntar. Gênero: () Masculino () Feminino

<Instrução> Caso as perguntas 1 e 2 sejam negativas, agradecer a atenção e encerrar a entrevista. Caso sejam afirmativas, entregar o cartão com a escala para o entrevistado.

<Ler> Por favor, responda de acordo com o cartão com números que variam de 1 (discordo totalmente) a 7 (concordo totalmente).

<Ler> Por favor, avalie cada uma das frases.

9. Eu me sinto honrado em ter as Olimpíadas na minha cidade.	(1) (2) (3) (4) (5) (6) (7)
10. Como carioca, eu fiquei satisfeito em ter as Olimpíadas em minha cidade.	(1) (2) (3) (4) (5) (6) (7)
11. As Olimpíadas farão com que os cariocas apreciem mais seu estilo de vida.	(1) (2) (3) (4) (5) (6) (7)
12. As Olimpíadas aumentarão o orgulho dos cariocas.	(1) (2) (3) (4) (5) (6) (7)
13. As Olimpíadas aumentarão o meu respeito pela minha cidade.	(1) (2) (3) (4) (5) (6) (7)
14. As Olimpíadas contribuirão com o meu bem estar pessoal.	(1) (2) (3) (4) (5) (6) (7)

<Ler> Por favor, avalie cada uma das frases.

15. As Olimpíadas aumentarão a disposição para cooperação entre as pessoas da minha cidade.	(1) (2) (3) (4) (5) (6) (7)
16. As Olimpíadas aumentarão minhas relações sociais na minha cidade.	(1) (2) (3) (4) (5) (6) (7)
17. As Olimpíadas aumentarão as oportunidades de passar mais tempo com a família.	(1) (2) (3) (4) (5) (6) (7)
18. As Olimpíadas aumentarão as minhas possibilidades de criar vínculos sociais.	(1) (2) (3) (4) (5) (6) (7)
19. As Olimpíadas aumentarão as oportunidades de socialização.	(1) (2) (3) (4) (5) (6) (7)
20. As Olimpíadas fortalecerão minhas amizades na minha cidade.	(1) (2) (3) (4) (5) (6) (7)

<Ler> Por favor, avalie cada uma das frases.

21. Eu terei prazer em interagir com os visitantes durante as Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
22. Eu ficarei empolgado pela presença dos visitantes durante as Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
23. As Olimpíadas trarão empolgação para os cariocas.	(1) (2) (3) (4) (5) (6) (7)
24. As Olimpíadas oferecerão entretenimento para os cariocas.	(1) (2) (3) (4) (5) (6) (7)
25. As Olimpíadas oferecerão novas atividades para os cariocas.	(1) (2) (3) (4) (5) (6) (7)
26. A vida noturna carioca será mais animada por conta das Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)

<Ler> Por favor, avalie cada uma das frases.

27. A escolha do Rio de Janeiro para sediar as Olimpíadas foi muito importante para mim.	(1) (2) (3) (4) (5) (6) (7)
28. A escolha do Rio de Janeiro para sediar as Olimpíadas foi uma grande notícia para mim.	(1) (2) (3) (4) (5) (6) (7)
29. Eu passei a acompanhar mais os esportes olímpicos desde que eu soube que a minha cidade ia sediar as Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
30. Eu terei prazer em assistir as Olimpíadas na minha cidade.	(1) (2) (3) (4) (5) (6) (7)
31. As Olimpíadas aumentarão meu envolvimento com os esportes olímpicos.	(1) (2) (3) (4) (5) (6) (7)
32. As Olimpíadas aumentarão meu interesse nos esportes olímpicos.	(1) (2) (3) (4) (5) (6) (7)

<Ler> Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas...

33. Porque a minha cidade será exposta para pessoas de fora do RJ em virtude das Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
34. Porque pessoas de fora do RJ saberão mais sobre minha cidade depois das Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
35. Porque as Olimpíadas aumentarão a visibilidade da minha cidade na mídia.	(1) (2) (3) (4) (5) (6) (7)
36. Porque as Olimpíadas proporcionarão a minha cidade uma identidade internacional.	(1) (2) (3) (4) (5) (6) (7)
37. Porque as Olimpíadas contribuirão para a minha cidade ficar nacionalmente conhecida.	(1) (2) (3) (4) (5) (6) (7)
38. Porque a TV exibirá mais sobre a minha cidade enquanto transmite os jogos.	(1) (2) (3) (4) (5) (6) (7)

<Ler> Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas...

39. Porque a minha cidade poderá sediar outros grandes eventos esportivos no futuro.	(1) (2) (3) (4) (5) (6) (7)
40. Porque a minha cidade poderá mostrar que tem a habilidade de sediar grandes eventos esportivos, tais como as Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
41. Porque a minha cidade obterá uma imagem positiva como sede das Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
42. Porque a minha cidade obterá reconhecimento positivo como uma cidade sede de um grande evento esportivo.	(1) (2) (3) (4) (5) (6) (7)
43. Porque não há muitas cidades no mundo que possam sediar os Jogos Olímpicos.	(1) (2) (3) (4) (5) (6) (7)
44. Porque as Olimpíadas realçarão a imagem da minha cidade como uma cidade importante.	(1) (2) (3) (4) (5) (6) (7)
45. Porque as Olimpíadas gerarão oportunidades para mostrar o que a minha cidade é capaz de fazer.	(1) (2) (3) (4) (5) (6) (7)

<Ler> Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas...

46. Porque as Olimpíadas melhorarão as instalações públicas da minha cidade (ex. ruas, sinalizações de trânsito, centros de convenções).	(1)	(2)	(3)	(4)	(5)	(6)	(7)
47. Porque as Olimpíadas ajudarão a melhorar a aparência da minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
48. Porque as Olimpíadas ajudarão na revitalização urbana da minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
49. Porque as Olimpíadas melhorarão a qualidade dos serviços públicos da minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
50. Porque as Olimpíadas melhorarão a qualidade dos serviços de segurança (polícia e corpo de bombeiros) da minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
51. Porque as Olimpíadas promoverão oportunidades de renovação da minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

<Ler> Por favor, avalie cada uma das frases.

52. Sediar as Olimpíadas no Rio de Janeiro foi uma boa decisão.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
53. Sediar as Olimpíadas no Rio de Janeiro valerá a pena, apesar das eventuais consequências negativas.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
54. As Olimpíadas trarão impactos futuros positivos para o Rio de Janeiro.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
55. Eu apoio a decisão de sediar as Olimpíadas no Rio de Janeiro.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
56. Eu concordo em pagar impostos mais altos para sediar as Olimpíadas no Rio de Janeiro.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
57. De forma geral, eu sou favorável à decisão de sediar as Olimpíadas no Rio de Janeiro.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

58. Por que você concorda (ou discorda) com a decisão do Rio de Janeiro sediar as Olimpíadas?

<Ler> Caso você tenha interesse em receber o resultado dessa pesquisa, por favor, informe seu e-mail.

E-mail

<Ler> Muito obrigado pelo seu tempo.

Dados da Entrevista

Data:		Horário:		Entrevistador:	
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Appendix C – Questionnaire Version 02 (Sample 1: Before the Olympics)

Universidade Federal do Rio de Janeiro
Instituto COPPEAD de Administração



Versão 02

Resultado Psicológico de um Megaevento Esportivo

Thárcyla Mourão – tharcyla.mourao@coppead.ufrj.br
Departamento de Marketing e Negócios Internacionais
Telefone: (21) 3938-9848

O Instituto COPPEAD de Administração está realizando um estudo sobre megaeventos esportivos. As perguntas não levam mais de 10 minutos para serem respondidas. O importante é a sua opinião, seja ela qual for. As informações fornecidas por meio deste questionário serão mantidas em sigilo e você não será identificado.

1. Você mora no Rio de Janeiro?*	() Sim () Não
2. Você é natural do Rio de Janeiro?*	() Sim () Não
3. Você participará dos jogos (atleta, voluntário, membro de comitê)?	() Sim () Não Como?
4. Você pretende assistir ao vivo (comprou ou comprará ingressos)?	() Sim () Não
5. Qual universidade estuda?	6. Qual o curso?
7. Quantos anos você tem?	8. Gênero: () Masculino () Feminino

Por favor, responda de acordo com o cartão com números que variam de 1 (discordo totalmente) a 7 (concordo totalmente).

Por favor, avalie cada uma das frases.

9. Eu me sinto honrado em ter as Olimpíadas na minha cidade.	(1) (2) (3) (4) (5) (6) (7)
10. Como carioca, eu fiquei satisfeito em ter as Olimpíadas em minha cidade.	(1) (2) (3) (4) (5) (6) (7)
11. As Olimpíadas farão com que os cariocas apreciem mais seu estilo de vida.	(1) (2) (3) (4) (5) (6) (7)
12. As Olimpíadas aumentarão o orgulho dos cariocas.	(1) (2) (3) (4) (5) (6) (7)
13. As Olimpíadas aumentarão o meu respeito pela minha cidade.	(1) (2) (3) (4) (5) (6) (7)
14. As Olimpíadas contribuirão com o meu bem estar pessoal.	(1) (2) (3) (4) (5) (6) (7)

Por favor, avalie cada uma das frases.

15. As Olimpíadas aumentarão a disposição para cooperação entre as pessoas da minha cidade.	(1) (2) (3) (4) (5) (6) (7)
16. As Olimpíadas aumentarão minhas relações sociais na minha cidade.	(1) (2) (3) (4) (5) (6) (7)
17. As Olimpíadas aumentarão as oportunidades de passar mais tempo com a família.	(1) (2) (3) (4) (5) (6) (7)
18. As Olimpíadas aumentarão as minhas possibilidades de criar vínculos sociais.	(1) (2) (3) (4) (5) (6) (7)
19. As Olimpíadas aumentarão as oportunidades de socialização.	(1) (2) (3) (4) (5) (6) (7)
20. As Olimpíadas fortalecerão minhas amizades na minha cidade.	(1) (2) (3) (4) (5) (6) (7)

Por favor, avalie cada uma das frases.

21. Eu terei prazer em interagir com os visitantes durante as Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
22. Eu ficarei empolgado pela presença dos visitantes durante as Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
23. As Olimpíadas trarão empolgação para os cariocas.	(1) (2) (3) (4) (5) (6) (7)
24. As Olimpíadas oferecerão entretenimento para os cariocas.	(1) (2) (3) (4) (5) (6) (7)
25. As Olimpíadas oferecerão novas atividades para os cariocas.	(1) (2) (3) (4) (5) (6) (7)
26. A vida noturna carioca será mais animada por conta das Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)

Por favor, avalie cada uma das frases.

27. A escolha do Rio de Janeiro para sediar as Olimpíadas foi muito importante para mim.	(1) (2) (3) (4) (5) (6) (7)
28. A escolha do Rio de Janeiro para sediar as Olimpíadas foi uma grande notícia para mim.	(1) (2) (3) (4) (5) (6) (7)
29. Eu passei a acompanhar mais os esportes olímpicos desde que eu soube que a minha cidade ia sediar as Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
30. Eu terei prazer em assistir as Olimpíadas na minha cidade.	(1) (2) (3) (4) (5) (6) (7)
31. As Olimpíadas aumentarão meu envolvimento com os esportes olímpicos.	(1) (2) (3) (4) (5) (6) (7)
32. As Olimpíadas aumentarão meu interesse nos esportes olímpicos.	(1) (2) (3) (4) (5) (6) (7)

Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas...

33. Porque a minha cidade será exposta para pessoas de fora do RJ em virtude das Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
34. Porque pessoas de fora do RJ saberão mais sobre minha cidade depois das Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
35. Porque as Olimpíadas aumentarão a visibilidade da minha cidade na mídia.	(1) (2) (3) (4) (5) (6) (7)
36. Porque as Olimpíadas proporcionarão a minha cidade uma identidade internacional.	(1) (2) (3) (4) (5) (6) (7)
37. Porque as Olimpíadas contribuirão para a minha cidade ficar nacionalmente conhecida.	(1) (2) (3) (4) (5) (6) (7)
38. Porque a TV exibirá mais sobre a minha cidade enquanto transmite os jogos.	(1) (2) (3) (4) (5) (6) (7)

Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas...

39. Porque a minha cidade poderá sediar outros grandes eventos esportivos no futuro.	(1) (2) (3) (4) (5) (6) (7)
40. Porque a minha cidade poderá mostrar que tem a habilidade de sediar grandes eventos esportivos, tais como as Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
41. Porque a minha cidade obterá uma imagem positiva como sede das Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
42. Porque a minha cidade obterá reconhecimento positivo como uma cidade sede de um grande evento esportivo.	(1) (2) (3) (4) (5) (6) (7)
43. Porque não há muitas cidades no mundo que possam sediar os Jogos Olímpicos.	(1) (2) (3) (4) (5) (6) (7)
44. Porque as Olimpíadas realçarão a imagem da minha cidade como uma cidade importante.	(1) (2) (3) (4) (5) (6) (7)
45. Porque as Olimpíadas gerarão oportunidades para mostrar o que a minha cidade é capaz de fazer.	(1) (2) (3) (4) (5) (6) (7)

Eu estou orgulhoso(a) do Rio de Janeiro sediar as Olimpíadas...

46. Porque as Olimpíadas melhorarão as instalações públicas da minha cidade (ex. ruas, sinalizações de trânsito, centros de convenções).	(1)	(2)	(3)	(4)	(5)	(6)	(7)
47. Porque as Olimpíadas ajudarão a melhorar a aparência da minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
48. Porque as Olimpíadas ajudarão na revitalização urbana da minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
49. Porque as Olimpíadas melhorarão a qualidade dos serviços públicos da minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
50. Porque as Olimpíadas melhorarão a qualidade dos serviços de segurança (polícia e corpo de bombeiros) da minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
51. Porque as Olimpíadas promoverão oportunidades de renovação da minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

Por favor, avalie cada uma das frases.

52. Sedar as Olimpíadas no Rio de Janeiro foi uma boa decisão.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
53. Sedar as Olimpíadas no Rio de Janeiro valerá a pena, apesar das eventuais consequências negativas.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
54. As Olimpíadas trarão impactos futuros positivos para o Rio de Janeiro.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
55. Eu apoio a decisão de sediar as Olimpíadas no Rio de Janeiro.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
56. Eu concordo em pagar impostos mais altos para sediar as Olimpíadas no Rio de Janeiro.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
57. De forma geral, eu sou favorável à decisão de sediar as Olimpíadas no Rio de Janeiro.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

58. Você concorda ou discorda da decisão do Rio de Janeiro sediar as Olimpíadas? Por quê?

Caso você tenha interesse em receber o resultado dessa pesquisa, por favor, informe seu e-mail.

E-mail

<Não preencher>

Dados da Entrevista

Data:		Horário:		Entrevistador:	
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Appendix D – Questionnaire Version 01 (Sample 2: After the Olympics)

Universidade Federal do Rio de Janeiro
Instituto COPPEAD de Administração



Versão 01

Resultado Psicológico de um Megaevento Esportivo

Thárcyla Mourão – tharcyla.mourao@coppead.ufrj.br
Departamento de Marketing e Negócios Internacionais
Telefone: (21) 3938-9848

<Ler para o entrevistado> O Instituto COPPEAD de Administração está realizando um estudo sobre megaeventos esportivos. As perguntas não levam mais de 10 minutos para serem respondidas. O importante é a sua opinião, seja ela qual for. As informações fornecidas por meio deste questionário serão mantidas em sigilo e você não será identificado.

1. Você mora no Rio de Janeiro?*	() Sim () Não
2. Você é natural do Rio de Janeiro?*	() Sim () Não
3. Bairro onde mora?	
4. Você participou dos Jogos Olímpicos?	() Sim () Não
5. Como? () Expectador () Trabalho remunerado () Voluntário () Outros: _____	
6. Você acompanhou os Jogos Olímpicos por alguma mídia?	() Sim () Não
7. Escolaridade: () 1º grau incompleto () 1º grau completo () 2º Grau completo () Superior	
8. Quantos anos você tem?	9. Sem perguntar. Gênero: () Masculino () Feminino

<Instrução> Caso as perguntas 1 e 2 sejam negativas, agradecer a atenção e encerrar a entrevista. Caso sejam afirmativas, entregar o cartão com a escala para o entrevistado.

<Ler> Por favor, responda de acordo com o cartão com números que variam de 1 (discordo totalmente) a 7 (concordo totalmente). Por favor, avalie cada uma das frases.

10. Eu me senti honrado em ter as Olimpíadas em minha cidade.	(1) (2) (3) (4) (5) (6) (7)
11. Como carioca, eu fiquei satisfeito em ter as Olimpíadas em minha cidade.	(1) (2) (3) (4) (5) (6) (7)
12. As Olimpíadas fizeram com que os cariocas apreciassem mais seu estilo de vida.	(1) (2) (3) (4) (5) (6) (7)
13. As Olimpíadas aumentaram o orgulho dos cariocas.	(1) (2) (3) (4) (5) (6) (7)
14. As Olimpíadas aumentaram o meu respeito pela minha cidade.	(1) (2) (3) (4) (5) (6) (7)
15. As Olimpíadas contribuíram com o meu bem estar pessoal.	(1) (2) (3) (4) (5) (6) (7)

<Ler> Por favor, avalie cada uma das frases.

16. As Olimpíadas aumentaram a disposição para cooperação entre as pessoas da minha cidade.	(1) (2) (3) (4) (5) (6) (7)
17. As Olimpíadas proporcionaram uma oportunidade para interagir com mais pessoas.	(1) (2) (3) (4) (5) (6) (7)
18. As Olimpíadas aumentaram as oportunidades de passar mais tempo com a família.	(1) (2) (3) (4) (5) (6) (7)
19. As Olimpíadas aumentaram as minhas possibilidades de criar vínculos sociais.	(1) (2) (3) (4) (5) (6) (7)
20. As Olimpíadas aumentaram as oportunidades de socialização.	(1) (2) (3) (4) (5) (6) (7)
21. As Olimpíadas fortaleceram minhas amizades na minha comunidade.	(1) (2) (3) (4) (5) (6) (7)

<Ler> Por favor, avalie cada uma das frases.

22. As Olimpíadas proporcionaram uma oportunidade para interagir com visitantes de outras culturas.	(1) (2) (3) (4) (5) (6) (7)
23. Eu fiquei empolgado pela presença dos visitantes durante as Olimpíadas.	(1) (2) (3) (4) (5) (6) (7)
24. As Olimpíadas trouxeram empolgação para os cariocas.	(1) (2) (3) (4) (5) (6) (7)
25. As Olimpíadas ofereceram entretenimento para os cariocas.	(1) (2) (3) (4) (5) (6) (7)

26. As Olimpíadas ofereceram novas atividades para os cariocas.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
27. A vida noturna carioca ficou mais animada por conta das Olimpíadas.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

<Ler> Por favor, avalie cada uma das frases.

28. A escolha do Rio de Janeiro para sediar as Olimpíadas foi muito importante para mim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
29. A escolha do Rio de Janeiro para sediar as Olimpíadas foi uma grande notícia para mim.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
30. Eu passei a acompanhar mais os esportes olímpicos desde que minha cidade foi escolhida para sediar as Olimpíadas.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
31. Eu tive prazer em assistir as Olimpíadas em minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
32. As Olimpíadas aumentaram meu envolvimento com os esportes olímpicos.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
33. As Olimpíadas aumentaram meu interesse nos esportes olímpicos.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
34. As Olimpíadas proporcionaram uma oportunidade para vivenciar o espírito olímpico.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

<Ler> Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas...

35. Porque a minha cidade foi exposta para pessoas de fora do RJ em virtude das Olimpíadas.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
36. Porque pessoas de fora do RJ sabem mais sobre minha cidade depois das Olimpíadas.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
37. Porque as Olimpíadas aumentaram a visibilidade da minha cidade na mídia.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
38. Porque as Olimpíadas reforçaram o reconhecimento do Rio de Janeiro como uma cidade internacional.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
39. Porque as Olimpíadas contribuíram para a minha cidade ficar ainda mais conhecida nacionalmente.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
40. Porque a TV exibiu mais sobre minha cidade enquanto transmitiu os jogos.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

<Ler> Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas...

41. Porque a minha cidade poderá sediar outros grandes eventos esportivos no futuro.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
42. Porque a minha cidade pôde mostrar que tem a habilidade de sediar grandes eventos esportivos, tais com as Olimpíadas.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
43. Porque a minha cidade obteve uma imagem positiva como sede das Olimpíadas.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
44. Porque a minha cidade obteve um reconhecimento positivo como uma cidade sede de um grande evento esportivo.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
45. Porque não há muitas cidades no mundo que possam sediar os Jogos Olímpicos.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
46. Porque as Olimpíadas realçaram a imagem da minha cidade como uma cidade importante.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
47. Porque as Olimpíadas geraram oportunidades para mostrar o que a minha cidade é capaz de fazer.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
48. Porque as Olimpíadas adicionaram mais uma marca relevante na história da minha cidade.	(1)	(2)	(3)	(4)	(5)	(6)	(7)

<Ler> Eu estou orgulhoso(a) do Rio de Janeiro ter sediado as Olimpíadas...

49. Porque as Olimpíadas melhoraram as instalações públicas da minha cidade (ex.: ruas, sinalizações de trânsito, centros de convenções).	(1) (2) (3) (4) (5) (6) (7)
50. Porque as Olimpíadas ajudaram a melhorar a aparência da minha cidade.	(1) (2) (3) (4) (5) (6) (7)
51. Porque as Olimpíadas ajudaram na revitalização urbana da minha cidade.	(1) (2) (3) (4) (5) (6) (7)
52. Porque as Olimpíadas melhoraram a qualidade dos serviços públicos da minha cidade.	(1) (2) (3) (4) (5) (6) (7)
53. Porque as Olimpíadas melhoraram a qualidade dos serviços de segurança (polícia e corpo de bombeiros) da minha cidade.	(1) (2) (3) (4) (5) (6) (7)
54. Porque as Olimpíadas promoveram oportunidades de renovação da minha cidade.	(1) (2) (3) (4) (5) (6) (7)

<Ler> Por favor, avalie cada uma das frases.

55. Sedar as Olimpíadas no Rio de Janeiro foi uma boa decisão.	(1) (2) (3) (4) (5) (6) (7)
56. Sedar as Olimpíadas no Rio de Janeiro valeu a pena, apesar das eventuais consequências negativas.	(1) (2) (3) (4) (5) (6) (7)
57. As Olimpíadas trarão impactos futuros positivos para o Rio de Janeiro.	(1) (2) (3) (4) (5) (6) (7)
58. Eu apoiei a decisão de sediar as Olimpíadas no Rio de Janeiro.	(1) (2) (3) (4) (5) (6) (7)
59. Eu acho justo pagar mais impostos em virtude da realização das Olimpíadas no Rio de Janeiro.	(1) (2) (3) (4) (5) (6) (7)
60. De forma geral, eu fui favorável à decisão de sediar as Olimpíadas no Rio de Janeiro.	(1) (2) (3) (4) (5) (6) (7)

61. Por que você concorda (ou discorda) com a decisão do Rio de Janeiro sediar as Olimpíadas?

<Ler> Caso você tenha interesse em receber o resultado dessa pesquisa, por favor, informe seu e-mail.

E-mail

<Ler> Muito obrigado pelo seu tempo.

Dados da Entrevista

Data:		Região:		Entrevistador:	
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