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Master's Thesis of Global Sport Management

Investigation of Motivation, Satisfaction and Intention to Continue Volunteering:

Case of Tokyo 2020 Volunteers

자원봉사자의 동기, 만족, 지속 의도에 관한 연구:

2020 도쿄올림픽 자원봉사자를 중심으로

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Yevhen Cholombitko



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Case of Tokyo 2020 Volunteers

Advisor: LEE, Chung Gun

Submitting a master's thesis of Global Sport Management

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The Graduate School
Department of Physical Education
Seoul National University
Global Sport Management Major
Yevhen Cholombitko

Confirming the master's thesis written by

Yevhen Cholombitko

August 2022

Chair	<u>Lim, Choonghoon</u> (Seal)
Vice Chair	<u>Kim, Yukyoum</u> (Seal)
Examiner	<u>Lee, Chung Gun</u> (Seal)

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Abstract

Investigation of Motivation, Satisfaction and Intention to Continue Volunteering: Case of Tokyo 2020 Volunteers

Yevhen Cholombitko

Global Sport Management, Department of Physical Education

The Graduate School

Seoul National University

The volunteers provide a substantial support in the process of organizing of the Olympic Games. Developing a potential volunteer base who are willing to help with organization and hosting mega sporting event in the future is extremely important and organizations should seek ways to retain volunteers.

This study is focused on factors that determine volunteers' motivation, satisfaction and intention to continue volunteering with the purpose of finding how volunteers' motivation and satisfaction influence on intention to continue volunteering in the future. The study was carried out in the context of Tokyo 2020 Olympic and Paralympic Games volunteers.

The survey consisted of 42 questions and was completed by 330 volunteers. The findings evidenced that volunteers' satisfaction positively influenced the intention to continue volunteering, while motivation did not have a significant effect.

The implications of this research contribute to making improvements to the existing volunteer programs and prioritizing new features for HR managers and

Organizing Committees in regards of volunteer motivation and satisfaction.

Keywords: Volunteers, Tokyo 2020, Olympics, Paralympics, Motivation, Satisfaction, Intention to Continue Volunteering.

Student Number: 2020-27375

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Chapter 1. Introduction

1.1. Study background

The history of Olympic volunteering dates back to the first modern Olympic Games that took place in Athens 1896. Volunteers were represented by boy scouts, the army and the amateurs (IOC, n.d.). Further as the Olympic Games developed and gained popularity, the number of people willing to contribute their efforts and skills increased. Starting with Lake Placid 1980, the present-day model of Olympic volunteering began to emerge, as the tasks of recruiting, training and managing the volunteers were incorporated into the Organizing Committee's programs. The scale and dimensions of the Olympic Games have led to a very important role for volunteers in the structure for staging the Games, and today encourage the Organizing Committees for the Olympic Games to build and implement the best programs possible to deploy a motivated, well-trained and confident workforce during the Games. (IOC, n.d.)

Volunteers are critical to the success of the Olympic Games and have a tremendous impact on the creation of positive experiences and memories for all participants and spectators. Mega events, such as the Olympic Games, rely on a large number of volunteers for the successful running of the event (Fairley et al., 2007).

Due to the fact that volunteers play a significant role in a successful operation and conduct of mega sport events such as Olympics, FIFA World Cup and others, there has been a lot of research by scholars dedicated to the problems of volunteer satisfaction, motivation and retention. As Wicker (2017) has shown, millions of people volunteer each year, suggesting that sport organizations could not function without volunteers' time and talents. Volunteers' contribution is recognized by sport management scholars, and this topic has become one of the most researched areas in the field.

This study will consider the motivation, satisfaction and intention to continue volunteering in the future in terms of Tokyo 2020 Olympic Games volunteers who were selected by Tokyo Organizing Committee for the Olympic Games (TOCOG). Although volunteer positions at the Olympic Games suppose low level of expertise or no expertise at all (Taylor & McGraw, 2006), it is not the case with some functional areas that require volunteers with special language skills and competencies because they are assigned to assist dignitaries and delegations from each participating country in the Games. They act as liaison between the delegations and the Organizing Committee for the Olympic Games (OCOG) in terms of any inquiries by either party. For the OCOG international volunteers are much required in this functional area as they can be assigned to their national team and apply their

skills to the fullest extent. Therefore, both the teams and the volunteers benefit from such situation - the volunteers are more motivated and satisfied about helping their national team and the team benefits as their volunteers are native speakers.

Because of extensive range of tasks and responsibilities, volunteers work at different venues and stay overtime or off hours without additional compensation. Taking into account their efforts and contribution it is obvious that Olympic volunteers are essential for the smooth and successful operation of the Olympic Games (Minhong Kim, Steven Suk-Kyu Kim, May Kim & James J. Zhang, 2019).

Due to the outbreak of COVID 19 pandemic, mass meetings, such as the Olympic Games, require considerable preparation and measures by the host country. For this reason, Tokyo 2020 Olympic Games will implement “bubble” concept, which means that the athletes and officials stay isolated from the general public during the Games. The competitions will be staged in a defined COVID-safe bubble respecting a strict protocol that will ensure the safety not just of the athletes but also all the people involved in the organization. (IOC, 2021). This "bubble" concept was conceived as a way to safely hold the Olympics during the COVID-19 pandemic.

Implementation of the new “bubble” concept will impose certain

restrictions on volunteers and impact on volunteer motivation and satisfaction as their personal contracts won't be fully met. Better understanding of unique volunteer group's satisfaction factors within the context of a mega sport event will enable HR managers to retain the volunteers and successfully run the mega sporting event.

TOCOG announced that the Olympics and Paralympics would be held without spectators. It aroused lots of discussions. Naofumi Masumoto, a visiting professor of Olympic studies at Tokyo Metropolitan University and Musashino University thinks that holding the Tokyo Games behind closed doors or restricting spectators to Japan residents only will diminish the value of the Olympics and Paralympics. This decision took away the opportunity to promote cross-cultural understanding and cultural exchanges although safety is the priority when making a final call.

“It will be against the ideals of the Olympics, especially because children cannot interact with people from around the world,” he said, “making it more comparable to world championships than the multi-sport extravaganza it should be” (Japan Times, Mar 4, 2021)

TOCOG also took a decision to limit the number of international volunteers. The Japan Times, citing sources with knowledge of the matter, said that special exemptions could be made for up to 500 volunteers. These

volunteers would have specific skills required for the Games, with organizers having a potential pool for 2,000 volunteers to choose from. The volunteers would reportedly fulfil roles which cannot be performed by Japanese residents. This would include having expertise in certain languages.

Organizers have been forced to introduce numerous restrictions to ensure the Olympic and Paralympic Games in the Japanese capital can take place safely amid the pandemic. Among the measures is limiting athletes' stay in the Tokyo 2020 Village, aimed at reducing the potential risk of COVID-19 infections (Michael Pavitt, 2021).

Taking into account the abovementioned circumstances it is possible to assume that the volunteers' motivation, satisfaction and intention to continue volunteering would be greatly affected. Therefore, this study will seek to evaluate them and to find out to what extent they will be affected or whether they would not be affected at all.

This paper focuses on the phenomenon of voluntary activity at the Tokyo 2020 Olympic Games. It will seek to identify volunteer motivations, satisfaction with the mega sporting event and intention to participate as a volunteer in other events in the future. This research will evaluate which factors influence volunteer behaviors and intentions and seek the correlation between motivation, satisfaction and intention to continue volunteering.

1.2. Purpose of research and research questions

To better capture the importance of volunteers at the 2020 Tokyo Olympics, the purpose of this study was to examine the aspects of volunteers' motivation and satisfaction as well as their influence on volunteering in the future.

By doing so, it will be possible to evaluate the effectiveness of the Olympic legacy. Better understanding of unique volunteer group's satisfaction factors within the context of a mega sport event will enable HR managers to retain the volunteers and successfully run mega sporting events. Retaining volunteers or getting volunteers to return for the next event is more cost-effective and more managerially advantageous than recruiting new volunteers.

1. Which factors resulted in volunteers' motivation and satisfaction at Tokyo 2020?

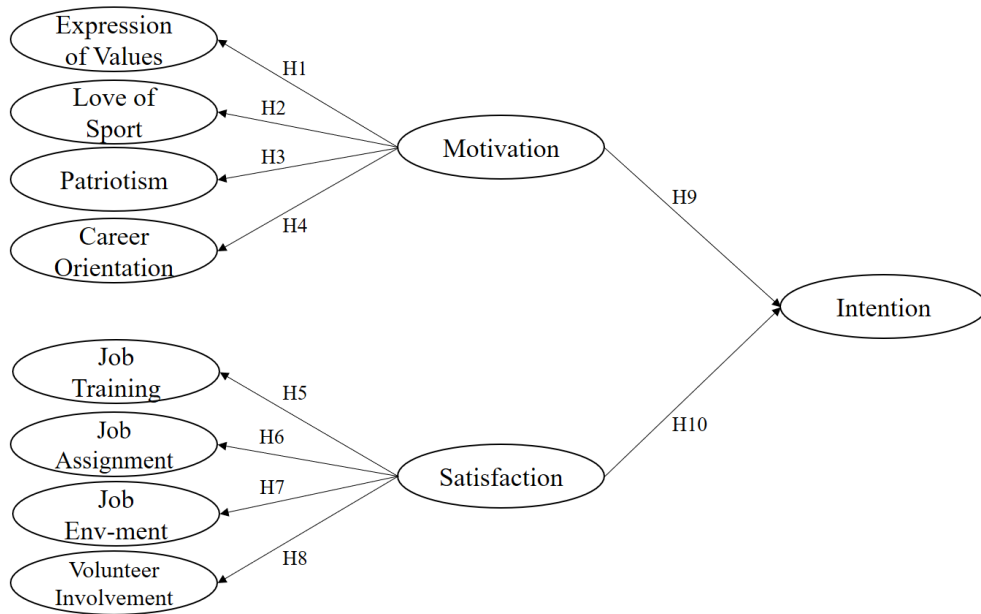
2. How will volunteers' motivation and satisfaction be affected by COVID-19 limitations at Tokyo 2020?

3. What is the impact of volunteers' motivation and satisfaction on intention to volunteer at the future sporting events?

The research is based on the model represented on Figure 1.2.1 and the aforementioned hypotheses.

Figure 1.2.1

Research model



Hypothesis 1 (H1). Expression of values will positively affect volunteer motivation in the context of Tokyo 2020 Olympic Games.

Hypothesis 2 (H2). Love of sport will positively affect volunteer motivation in the context of Tokyo 2020 Olympic Games.

Hypothesis 3 (H3). Patriotism and community involvement will positively affect volunteer motivation in the context of Tokyo 2020 Olympic Games.

Hypothesis 4 (H4). Career orientation will positively affect volunteer motivation in the context of Tokyo 2020 Olympic Games.

Hypothesis 5 (H5). Job training will positively affect volunteer satisfaction in the context of Tokyo 2020 Olympic Games.

Hypothesis 6 (H6). Job assignment will positively affect volunteer satisfaction in the context of Tokyo 2020 Olympic Games.

Hypothesis 7 (H7). Job environment will positively affect volunteer satisfaction in the context of Tokyo 2020 Olympic Games.

Hypothesis 8 (H8). Volunteer involvement will positively affect volunteer satisfaction in the context of Tokyo 2020 Olympic Games.

Hypothesis 9 (H9). Volunteer motivation will positively affect intention to continue volunteering in the context of Tokyo 2020 Olympic Games.

Hypothesis 10 (H10). Volunteer satisfaction will positively affect intention to continue volunteering in the context of Tokyo 2020 Olympic Games.

1.3. Research aims and objectives

Volunteers play a significant role in hosting the Olympic Games and also have a great impact on the host community. (Kim, Minhong, Kim, Steven Suk-Kyu, Kim, May, & Zhang, James J. 2019)

This study seeks to find out what motivates volunteers to contribute their time and efforts to the Olympic Games, why international volunteers travel to the host city of the Olympic Games, what are their personal contracts and expectations from the Tokyo Olympic Games. By measuring volunteer satisfaction of the Games it will be possible to evaluate the effectiveness of the Olympic legacy and provide implications for the future mega sporting events.

It is important to know what HRM practices, organizational goals, objectives and values impact on individual' s decision to volunteer, how it reflects on volunteer experiences, satisfaction and what are the outcomes of volunteerism.

Researchers can further investigate and differentiate satisfaction factors among various types of volunteers depending on their work duties. As

numerous volunteers with diverse tasks and responsibilities are needed for smooth event operations, including facility operation, medical operation and translators or interpreters, among others, researchers can compare the various factors that have led to volunteer satisfaction and retention among diverse volunteer groups.

Finally, the findings of this research will provide the organizing committees of mega sporting events, as well as small and mid-scale sporting events in general, with some practical implications that can be applied in the future.

1.4. Rationale and significance of this study

The special and unique environment of the Olympic Games greatly motivates the volunteers and they view volunteering at the Olympic Games as once-in-a-lifetime opportunity, so the researches focused on volunteers at mega-sporting events are well under way.

Existing studies from the individual perspective have mainly examined antecedents and experiences of volunteers in sport organizations and at sport events, focusing on topics such as motivation, commitment, and satisfaction, while consequences of volunteerism have attracted less research. (Wicker, 2017). For this reason, research efforts have been directed towards retention of volunteers through measuring their intention to volunteer in the

future. It is rare to find research of at a mega sporting event that focuses on the relationship between volunteer motivation, satisfaction and future volunteer intention with a valid and reliable scale assessing different aspects of volunteer satisfaction.

Although there has been plenty of research dedicated to examining volunteer motivation, satisfaction and intention to continue volunteering and the findings proved strong bond between volunteer satisfaction and future volunteer intentions, some aspects of volunteer activities were not fully investigated. For instance, previous findings have provided valuable data regarding volunteer motivations at special, large-scale sporting events, researchers have concluded that motivations of mega-sporting event volunteers are different and may be explained by such factors as love of sports, national pride in the host country, and pride in their community.

It is possible to assume that Tokyo 2020 volunteers will have specific motivations and satisfaction factors which are discrepant from those discovered by means of previous researches among overall number of volunteers.

Finally, the Olympic Games will take place in Japan that has own cultural traditions and approaches. This paper adds valuable information about sport event volunteerism in the Eastern country into a body of

knowledge that has predominantly focused on western settings.

1.5. Key terms for this study and abbreviations

IOC – International Olympic Committee

OCOG – Organizing Committee for the Olympic Games

TOCOG – Tokyo 2020 Organizing Committee for the Olympic Games

MTV – Motivation to Volunteer

VFI – Volunteer Function Inventory

SEVMS – Special Event Volunteer Motivation Scale

VMS-ISE – Volunteer Motivations Scale for International Sporting Events

OVMS – Olympic Volunteer Motivation Scale

ICV – Intention to Continue Volunteering

MSE – Mega Sporting Event

VMP – Volunteer Management Practices

VSI – Volunteer Satisfaction Index

TPB – Theory of Planned Behavior

ANOVA – Analysis of Variance

RMSEA – Root Mean Square Error of Approximation

GFI – Goodness-of-Fit Index

CFI – Comparative Fit Index

TLI - Tucker–Lewis index

CFA – Confirmatory Factor Analysis

SEM – Structural Equation Modelling

AVE – Average Variance Extracted

CR – Composite Reliability

Chapter 2. Literature review

2.1. The concept of Olympic volunteering and its evolution

The act of volunteering can take various forms, which is expressed in community work, cultural and social development, education, and sporting events (Cuskelly, Hoye & Auld, 2006). Generally, volunteering is defined as an altruistic act which represents a caring approach towards the community, resulting in participation in community projects and social development strategies (Bladen, 2008).

In previous studies numerous researches have defined and contextualized the concept of volunteering (Moreno, Moragas & Paniagua, 2000). It has also become clear that the concept of volunteering differs widely in accordance with social and cultural differences and the nature of the volunteers themselves (religious and political convictions, sports and health factors, etc.), however, it is still possible to establish a number of basic points in common:

- Voluntary commitment: that is individual, non-obliged commitment.
- Altruism: a lack of monetary reward, non-profit motivation.
- Social contribution: the task contributes in some way to society, it is socially useful.

That is, being a volunteer involves a commitment to act based on a

free personal decision which is motivated by principles of solidarity and altruism. (Generalitat de Catalunya, 1998)

Moreno, Moragas and Paniagua (2000) defined four basic stages of volunteer movement development at the Olympic Games:

1st stage. From the Olympic Games of Athens 1896 to Berlin 1936. At this stage volunteers were involved in carrying out work in federations and clubs and in the organization of the Olympic Games themselves. Their activities were characterized by the social and educational nature of sport in those years. Volunteers were represented by such groups as the boy scouts and the army.

2nd stage. From the London Games of 1948 to Montreal 1976. This stage is influenced by the social and political situation of the times. At this period most often the Olympic Games could be hosted by the well-developed countries which demonstrated the new political, social and economic dynamics. The overall importance of volunteer work was promoted among the population. The boy scouts and the army were still involved and contributed to the Olympic Games, although they were joined by increasing number of individuals. Volunteering at the Olympic Games began gaining the pace.

3rd stage. From the Lake Placid Games in 1980 until those of Seoul

1988. The concept of the present-day model of Olympic volunteering was conceived. In the Lake Placid Games, volunteers were incorporated into the Organizing Committee's programme and by the time of Los Angeles their role had become fundamental. The Games at Sarajevo, Calgary and Seoul relied on the volunteer activities, though from different organizational perspectives.

4th stage. From the Albertville 1992/Barcelona 1992 Games to the present day. The concept of the Olympic volunteer was first defined explicitly in an Olympic glossary produced as part of the Official Report on Barcelona 1992: “The volunteer is a person who makes an individual, altruistic commitment to collaborate, to the best of his/her abilities, in the organization of the Olympic Games, carrying out the tasks assigned to him/her without receiving payment or rewards of any other nature.” (IOC, n.d.).

This stage is characterized by further development of the volunteer model. Human resources and the Organizing Committees plan and develop complex programmes and volunteer management practices to involve individuals. As a result, number of people willing to participate as volunteers grows at a breathtaking pace. The dynamic of increase in volunteer numbers for the period from Los Angeles 1984 till now is represented in the table 2.1.1 below.

Table 2.1.1*Volunteers at the Olympic Games*

Summer Games	Number of Volunteers	Winter Games	Number of Volunteers
Los Angeles, USA, 1984	28742	Sarajevo, Yugoslavia, 1984	10450
Seoul, South Korea, 1988	27221	Calgary, Canada, 1988	9498
Barcelona, Spain, 1992	34548	Albertville, France, 1992	6422
Atlanta, USA, 1996	60422	Lillehammer, Norway, 1994	9054
Sydney, Australia, 2000	46967	Nagano, Japan, 1998	32000
Athens, Greece, 2008	45000	Salt Lake City, USA, 2002	22000
Beijing, China, 2008	70000	Torino, Italy, 2006	18000
London, England, 2012	70000	Vancouver, Canada, 2010	18500
Rio, Brazil, 2016	70000	Sochi, Russia, 2014	25000
Tokyo, Japan, 2020	80000	Pyeongchang, South Korea, 2018	23000

According to the statistics (IOC, 2014) people from 191 countries applied to become a volunteer at Rio 2016, which were the first Olympic

Games to be hosted in South America. Brazilians accounted for 60 per cent of the 242,757 applicants. The USA, Russia, China and Great Britain – all of whom have hosted their own Games in recent times – recorded the most interest which shows the positive impact of the Olympic Games on the volunteering legacy and intention to continue volunteering in future. Particularly, sport event volunteers have become essential not only in regards to the success of the sports events they apply for, but also to the financial and social development of the hosting country community (Green & Chalip, 2004). Since sports mega-events have greatly expanded over the last decades in numbers and in size, as well as in complexity (e.g. higher number of sports and participants, reinforced security and measures, new technologies and infrastructures), sports event managers have to adjust to the new challenges of hosting sports mega-events (Parent & Chappelet, 2015). Rio2016 Organizing Committee had to select and recruit only 70,000 of volunteers which means they had to eliminate approximately 70% of the overall received applications.

Application process for volunteers for the Tokyo 2020 Games ended on 21 December 2018 (IOC, 2019(2)). Organizers of the 2020 Tokyo Olympic and Paralympic Games stated that over 200,000 volunteer applications had been received by the TOCOG, far exceeding the required initial number of

80,000 when the online application process was opened in September 2018 (Japan Times, 2019).

Olympic volunteers are divided into three main categories:

(1) general profile volunteers, who handle general volunteer work that do not require special skills;

(2) specialist volunteers, who perform special volunteer work that requires special knowledge and skills; and

(3) sports volunteers, who conduct volunteer work related to sport competitions (Pestereva, 2015).

The current study focuses on the second group, namely specialist volunteers, who perform special volunteer work that requires special knowledge and skills.

Volunteer positions are divided into seven categories:

(1) game information, which includes spectator support, accommodation, and transportation;

(2) operational support, which includes administration support, general operations, and workforce management;

(3) media, such as press and broadcasting;

(4) technology, which includes IT and weather;

(5) protocol/languages, which include protocol, delegation support,

and interpretation;

(6) sport, such as sport and ceremonies; and

(7) medical services, which include medical services and doping control (PyeongChang 2018, 2016).

Qualified volunteers should be able to understand complex and lengthy passages, whether oral or written, in foreign languages from a broad range of topics. They should also communicate fluently with native speakers (PyeongChang 2018, 2016). The duration of volunteer period will be a minimum of three weeks for the Olympic Games and/or two weeks for the Paralympic Games, including the game preparation. Volunteers will work five days a week with an average of eight working hours per day. The preferred qualifications of volunteers in sport games are intermediate English proficiency, a university degree, previous relevant experience, and advanced sports skills. Tokyo 2020 Organizing Committee for the Olympic Games (TOCOG) announced that volunteers working at competition venues and the athletes' village will be known as the "Field Cast." The nicknaming trend emerged in 2012 at the London Games, where volunteers were known as "Games Makers". Those at Pyeongchang Winter Olympic Games were referred as "Passion Crew." (Japan Times, 2019).

Due to the fact that volunteer recruitment and selection for the

Olympic Games supposes massive numbers of volunteers, it constitutes a big challenge for the HR managers (Kim & Bang, 2012). Organizing Committees should focus on understanding the reasons that motivate individuals to volunteer at major sporting events. Thus, they will provide best experiences for volunteers by meeting their needs and, consequently, develop a potential volunteer base willing to help with future community events and organizations (Peter Williams, Karim Dosa & Lucy Tompkins 1995).

2.2. Motivation

Considering the importance of volunteers' impact on the successful operations of the Olympic Games, there has been a lot of research conducted in regards of volunteers and volunteer motivation in particular. International Olympic Committee (IOC) talked about the possibility that governments should use volunteer resources after the Olympics as a form of sustainable development and social capital. Olympic Organizing Committees should aim to make the best possible match of volunteers with the respective positions they are given. Therefore, understanding the motivations underlying volunteer participation in the Olympic Games is integral to achieving that goal (Monga, 2006).

Moragas et al. (2000) have outlined the following as key incentives for Olympic voluntarism:

- The spirit of solidarity and peace enshrined in the Olympic philosophy;

- Commitment as citizens, members of an association or nation;

- Individual challenge;

- Belonging to a group;

- Identification as a member of that group;

- Various forms of individual gratification

Clark and Wilson (1961) findings provided that volunteers are motivated by both tangible and intangible aspects. The literature defines the motivation to volunteer is multi-dimensional, partly attributed to altruism and partly to self-interest. They result from the material rewards including free admission to events, free transportation, and distribution of the uniforms or related apparel (Wu, 2002). Herewith, such an experience contemplates emotional benefits, such as enjoyment and friendship (Stebbins, 2013).

Scholars applied various theories in the attempts to conceive the core of volunteer motivation and developed several formalized scales for this purpose. Motivation to Volunteer (MTV) scale was developed by Cnaan and Goldberg-Glen (1991). MTV scale identifies motivations of egoistic and altruistic nature. The Volunteer Function Inventory (VFI) scale identifies six motivational aspects: altruistic, skills development, career opportunities,

social networking, self-esteem, and personal development (Clary, Ridge, Stukas, Snyder, Copeland & Miene, 2012)

Altruism (Cuskelly et al., 1998) and task and social cohesion (Doherty & Carron, 2003) were identified as the motives for individuals participating in systematic volunteering activities. Caldwell and Andereck (1994) pointed out three categories of motivations for volunteering: purposiveness (doing something useful to help society), solidarity (social interaction, group identification, and networking), and material incentives (tangible rewards).

In further studies Farrell, Johnston, and Twynam (1998) developed a measure specific for volunteers in a sport event setting, called the Special Event Volunteer Motivation Scale (SEVMS) which included 4 categories purposive, which was described as a willing to be useful and contribute to the community and the event; solidarity, which was classified as social interaction, group identification, and networking; external traditions which referred to family values and traditions, and the use of leisure that can be seen as an external contribution to an individual's volunteer career; and commitments represented by personal contracts, qualifications and skills with commitment to volunteering. The findings showed that purposive motives for volunteering were the most highly ranked. Other motives consisted of the desire to help make the successful event, to do something meaningful, to give

back to the community, and to make a better society. External influences turned out to be the lowest ranked motive reasons such as the need to keep busy in a free time or follow a family tradition of volunteering.

In their study Strigas and Jackson (2003) extended the SEVMS by adding a fifth factor. Their model included the following categories of motivation: purposive (a desire to benefit with volunteer actions and contribute to the sport events and the community), leisure (a need for leisure choices), external influences (relating to outside factor such as family traditions and significant others), material (relating to rewards of material goods or services in exchange for volunteer service), and egoistic (a need for social interaction and networking, self-actualization, self-esteem, and achievement).

Further, Giannoulakis, Wang, and Gray (2008) applied modifications to Strigas and Jackson's scale by introducing the Olympic Volunteer Motivation Scale (OVMS) specifically designed towards volunteers at the Olympic Games. The OVMS comprised the following three factors: Olympic related (a strong willingness to be privy to the Olympic movement, the Olympic Games, or encounter Olympic athletes); egoistic (a necessity for social interaction, interpersonal relationships, and networking); and purposive (an objective to take advantage of their actions such as completing

special tasks and being “behind the curtain” of the Olympic Games or interacting with Olympic athletes during the Games). Giannoulakis et al.’s (2008) findings contradicted Farrell et al.’s (1998) and Strigas and Jackson’s (2003) studies, indicating that Olympic related dimension was the strongest motivational factor for the Olympic volunteers and the purposive attribute was the weakest motivational factor for them.

Bang et al. (2019) figured out that the previous studies were mostly carried out on a national level. To fill the gap, (Bang & Chelladurai, 2009; Bang et al., 2009) developed the Volunteer Motivations Scale for International Sporting Events (VMS-ISE) which was appropriate for such mega sporting events as FIFA World Cup, Asian Games, Olympic Games, etc. The VMS-ISE proposed the following seven factors (Kim & Bang, 2012):

- Expression of Values: concern for others, the success of the event, and society
- Patriotism: pride in and love of the country, and allegiance to the country
- Interpersonal Contacts: meeting and interacting with people and forming friendships
- Personal Growth: gaining new perspectives, as well as feeling important and needed

- Career Orientation: career development such as gaining experience and career contacts

- Extrinsic Rewards: getting tangible rewards such as free uniforms, food, and admission

- Love of Sport: loving sport and any event related to sport.

It is necessary to mention that motivation of Olympic volunteers differs from the motivation of other volunteers due to the fact that the Olympics constitute a unique short-term volunteering event, as opposed to the commitments of the long-term volunteering activities. In addition, the unique nature of the Olympic Games ties up national pride and sports, two features that are uncommon in other types of volunteering (Koutrou, 2014).

Summarizing the abovementioned approaches, it is possible to conclude that research findings contemplate that Olympic volunteers are motivated by plenty of factors, which uniquely influence each volunteer and may vary by a wide margin. Some volunteers have altruistic motives, some wish to be engaged and favor their community and the promotion of sport, although others view volunteering as a chance to obtain a unique experience or expand the connections by means of Olympic volunteering so that they could benefit from it in the future by advancing their career or by creating social networks and establishing friendships (Koutrou, 2014).

2.3. Satisfaction

Critical problems of volunteer motivation, satisfaction, and experience are even more prevalent in mega sporting events and absent from sport volunteer studies in Asian countries (Giannoulakis, Wang, & Felver, 2015). There exist plenty of studies devoted to assessment of volunteer satisfaction. All of them applied different theories and models.

Farrell, Johnston, and Twynam (1998) were one of the first scholars to conduct a research that focused on volunteer satisfaction at mega sport events. They assessed volunteer satisfaction at the Canadian Women's Curling Championships by distinguishing three areas of satisfaction: satisfaction with volunteer experiences, organization of the tournament, and tournament facilities.

Chelladurai, 2006 defined satisfaction as the difference between what one wants and what one gets from his/her job. Such definition fits if satisfaction is regarded from the perspective of consumer behavior and can be best explained by social exchange theory.

Social exchange theory implies that interpersonal behavior or relationships are based on the considerations of exchange between rewards and costs (Homans, 1961) meaning that individuals act based on a subjective cost analysis (Zafirovski, 2005). If individuals believe their needs and goals

are satisfied through volunteer services at a sporting event, then they are more likely to be engaged in the volunteer activities than those who do not have such belief. Also, based on the degree of volunteer satisfaction in the event, volunteers may return or not return for the next opportunity (Miller & Wheeler 1992).

Pauline (2011) conducted the research among volunteers at an elite men's golf event on the Professional Golf Association circuit based on social exchange theory and by means of Volunteer Satisfaction Index (VSI). Introduced by Galindo-Kuhn and Guzley (2001) Volunteer Satisfaction Index measures volunteer satisfaction in five categories: communication quality, work assignment, participation efficacy, organizational support and group integration. VSI proved to be a reliable and valid tool for measuring volunteer satisfaction. The findings of Pauline (2011) proved the probability of high volunteer satisfaction with their volunteer experience in all five categories of VSI and had intention to volunteer for sporting events in the future. However, the five dimensions are not exactly captured by the VSI but are included by the VSI's satisfaction with organizational support, communication quality and work assignment (Minhong Kim, Steven Suk-Kyu Kim, May Kim & James J. Zhang, 2019).

Likewise, the research findings by Kim, Hong, and Andrew's (2013)

at the 13th International Association of Athletics Federations Championship indicated that volunteers felt satisfaction by their volunteer experience and expressed high level of commitment in regards of the sporting event due to the large scale and high ratings of the sporting event. With that, their satisfaction and commitment greatly contributed to the future intention to continue voluntary work for future events. Hyde, Dunn, Wust, Bax, and Chambers (2016) discovered that multiple volunteer motivation factors such as meeting and interaction with people, forming friendships, managerial support positively influenced volunteers' satisfaction and level of commitment to the sporting event, which resulted in increased intention to volunteer for other events in the future. According to the empirical research, SME volunteers will probably enroll in future sporting events as volunteers owing to positive experience in previous event and being satisfied with it (Doherty, 2009).

Psychological perspective is another way to view, examine and evaluate satisfaction. The basis for such a perspective lies in self-determination theory. Self-determination theory states that every person has three inherent psychological needs: competence, relatedness, and autonomy (Deci & Vansteenkiste, 2004). The studies of (VanSickle, Pierce & Diacin, 2012) showed that people are willing to participate in sports event

volunteering under the condition that their psychological needs are fulfilled. Thus, individuals attempt to maximize rewards and minimize costs and make decisions on developing social relationships with someone or an entity based on the perceived possible outcomes (Thibaut & Kelley, 1959).

According to (Sergent & Sedlacek, 1990) findings individuals would not express interest in being involved in volunteering activities unless the exchange of rewards is greater than what they expected to obtain. Put that in context, it is possible to achieve the fulfillment of psychological needs through engagement in meaningful and interesting activities (Rodríguez, Látková & Sun, 2008). If individuals believe that their motivational needs and desires are satisfied through their volunteering experience, then future volunteer intention and/or engagement in volunteer work can be an exchange commodity (Bang et al. 2019).

While event volunteering is episodic in nature, returning volunteers can help the operations of the event as they have the necessary training and knowledge regarding volunteer responsibilities and liabilities. As such, an effective volunteer program is a critical element in service organizations' strategic plans (Cuskelly, 2004). Research finds that the success of a volunteer program depends on finding the right volunteers, placing them in the right positions, and retaining them through effective management

(Brudney & Gazely 2002; Ferreira et al. 2012a).

To retain quality volunteers, the organization should determine the best way to empower current volunteers. One effective way to empower volunteers is to recruit volunteers whose knowledge, skills, and abilities match the job requirement and whose personal values and goals fit the organizational mission and goals (Kim, Trail, Lim & Kim, 2009).

In the HR domain, it has been common to argue that volunteers need to be managed differently because they are more likely than paid employees to leave an organization abruptly if they become dissatisfied. The main reason for this, it has been argued, is the fact that they do not have to find another job before deciding to leave. However, empirical studies of volunteers do not support the argument that they need to be more committed in order to remain with an organization (Taylor & McGraw 2006).

In conclusion, although satisfaction is required to improve volunteer involvement and retention, it is essential to view motivational component and find the ways to motivate potential volunteers to put in their efforts in running the mega sporting event. HR managers should try to elicit volunteers' expectations and fulfill them to the possible extent. Owing to a fact that the reasons contributing to an individual's overall motivation to volunteer are ample, HR managers must highlight the components of their event that would

draw volunteers' attention and raise their interest resulting in a positive and satisfying experience.

2.4. Intention to continue volunteering

The volunteer literature has presented that motivation factors influencing volunteerism are susceptible to change over time regardless of the organization where one is volunteering because of satisfaction and socialization during volunteer work (Kenyatta & Zani, 2014).

According to the theory of planned behavior (Ajzen, 1991), the behavior of an individual is best determined by the intention of the behavior. That is, an individual's intention to volunteer would be the best predictor of actual volunteering behavior.

In the context of volunteerism (Lee, Won & Bang, 2014), TPB consists of three elements:

- (a) an individual's evaluation of volunteering at a certain event
- (b) the individual's assessment of the opinions of significant others on volunteering for the event, and
- (c) the individual's perception of the ease of or difficulty in providing volunteer services.

In explaining volunteering behaviors, the TPB assumes that, similar to other decision-making processes, an individual systematically makes a

decision to participate in such activities after considering relevant social and contextual factors (Warburton & Terry 2000). Moreover, studies have found that commitment and satisfaction (Kim et al., 2013), intrinsic motivation (Hayton, 2016), and role identity are critical to continued and future volunteerism (Fairley et al., 2015).

According to IOC (2012), the volunteers' contribution to the Olympic Games is very valuable and publicly acknowledged. They are fostered to continue their volunteering efforts locally as a social legacy of the Olympic Games.

Winniford, Carpenter, & Stanley, 1995 consider that motivation factors for the initial decision of volunteering can be different from those that influence intention to continue volunteering. This indicates that even if an individual was initially motivated by multiple functional factors to volunteer at a mega sporting events, not all those motivational factors serve as predictors of future volunteer intention. There may be certain motivation factors fulfilled by volunteer satisfaction, causing positive intention to continue volunteering at future community events. But then there may be certain motivation factors lasting to be effective for future volunteer intention even without volunteer satisfaction; however, it is unnecessary for those motivation factors to be the same. In light of the different effects of motivation

factors, the present study sought to examine both direct and indirect effects of volunteer motivation factors on volunteer intention using path analysis (Bang et al., 2019).

Chapter 3. Method

3.1. Data collection

Quantitative research method was applied in this paper. Due to the fact that quantitative research method seeks to quantify data and generalize the results from the sample (Malhotra, 2017), it was selected for carrying out the study of volunteers' motivation, satisfaction and intention to continue volunteering. Availability of a large number of volunteers also supported the choice of quantitative research.

Participants of the quantitative research included volunteers who worked during the Tokyo 2020 Olympic Games from July 23 to August 8, 2021 and the Tokyo 2020 Paralympic Games from August 24 to September 5, 2021. All volunteers that were assigned to their respective roles and were part of the official Facebook group (n = 5500) of the Tokyo 2020 could see a post with a link and an invitation to complete online questionnaire that was administered upon the completion of the Games. The questionnaire was designed in Google forms and consisted of 42 questions. There were 5 questions regarding demographic of the participants, 14 questions measuring motivation, 17 questions measuring satisfaction and 6 questions measuring intention to continue volunteering. Prior to participation in the survey the participants were provided with the instructions and their consent was

obtained before they filled out the questionnaire. Participation in the survey fully granted anonymity and confidentiality of the responses by volunteers. No monetary reward for their participation was supposed and everyone could withdraw from the study at any time. The questionnaire took approximately 5-10 minutes to fill out.

Data was gathered over a period of six weeks from the mid-August to the end of September. Participants of the group received a reminder to fill in the questionnaire two weeks after the initial post was published upon the completion of the Tokyo 2020 Olympic and Paralympic Games. In the final analysis, 330 questionnaires were received with a response rate of 6%.

In order to consider demographic profiles, the survey included this section that consisted of 5 questions to measure gender, age, marital status, level of education and annual income of the respondents. In terms of gender, 42.4% (n = 140) were male, and 57.6% (n = 190) were female. In terms of level of education, 0.3% (n = 1) had less than middle school education, 11.8% (n = 39) had completed high school, 71.8% (n = 237) obtained bachelor degree, 14.8% (n = 49) obtained master degree, and 1.2% (n = 4) obtained PhD degree. With regards to marital status 43.6% (n = 144) were single, 48.8% (n = 161) were married, 3.9% (n = 25) were divorced, 0% (n = 0) were separated, 1.5% (n = 5) selected other marital status, 2.1% (n = 7) preferred

not to reveal this information. With regards to annual income 23.6% (n = 78) earned less than \$30000, 16.4% (n = 54) earned between \$30001 and \$40000, 11.2% (n = 37) earned between \$40001 and \$50000, 7.3% (n = 24) earned between \$50001 and \$60000, 16.7% (n = 55) earned more than \$30000, 24.8% (n = 82) preferred not to reveal this information.

Besides demographic items the questionnaire included other subscales. Each subscale's items were measured on a 7-point Likert-type scale from 1 (strongly disagree) to 7 (strongly agree). The literature demonstrates different methods to measure volunteer motivation and offers various scales developed by scholars, for instance the Sport Event Volunteer Motivation Scale (SEVMS); Volunteer Functions Inventory (VFI); Volunteer Motivations Scale for International Sporting Events (VMS-ISE); Olympic Volunteer Motivation Scale (OVMS). These scales have own properties and depending on the case studied, they can be combined with other aspects, like satisfaction, commitment, future behavior, intention to continue volunteering, etc. (Bang & Chelladurai, 2009; Clary et al., 1998; Fairley, Gardiner, & Filo, 2016; Farrell, Johnston, & Twynam, 1998; Giannoulakis, Wang, & Gray, 2007; Hallmann & Harms, 2012). Volunteer Satisfaction Index (VSI) proved to be a reliable and valid tool for measuring volunteer satisfaction (Galindo-Kuhn & Guzley, 2001).

3.2. Survey instrument

The questionnaire used in current research for measurement of volunteers' motivation was the Volunteer Motivations Scale for International Sporting Events VMS-ISE from (Bang, Alexandris, & Ross, 2009; Bang & Chelladurai, 2009) including such factors as expression of values, patriotism and community involvement, career orientation, and love of sport (Bang et al., 2019). Measurement of satisfaction and intention to continue volunteering was performed by means of a scale developed by Daehwan Kim, Chanmin Park, Hany Kim and Jeeyoon Kim who adopted the scale from the existing literature and modified by teaming up with the representatives from volunteer management in the Korean Sport & Olympic Committee (KOC). All observed variables that measured aspects of motivation, satisfaction, and intention to continue volunteering were designed with a seven-point Likert scale. Motivation consisted of such latent variables as Expression of Values (EV), Love of Sport (LS), Patriotism and Community Involvement (PCI) and Career Orientation (CO). Satisfaction consisted of the following latent variables – Job Training (JT), Job Assignment (JA), Job Environment (JE) and Volunteer Involvement (VI). Intention was measured with such latent variables as Future Volunteer Intentions (FVI) and Word-of-Mouth (WOM). Thus, hierarchical models were built for Motivation, Satisfaction and

Intention to Continue Volunteering, where these variables were represented as a second-order factors and measured indirectly through the indicators of the first-order factors (Kline, 2011), which were mentioned above.

3.3. Data analysis

The following criteria were used to assess the goodness of fit of the measurement model: standardized root mean square error of approximation (RMSEA), goodness-of-fit index (GFI), Tucker–Lewis index (TLI), comparative fit index (CFI) and chi-square divided by the degrees of freedom χ^2/df (Browne & Cudeck 1993, Joreskog & Sorbom 1984, Bentler 1990, Bentler & Bonet 1980, Marsh & Hocevar 1985). Confirmatory factor analysis (CFA) was performed to verify the factor structure of the observed variables.

Validity and reliability estimates, including factor loadings, factor correlations, average variance extracted (AVE), composite reliability (CR) were calculated.

A structural equation modelling (SEM) analysis was then conducted to test the relationship between volunteer motivation, satisfaction and intention factors.

Factor scores were subject to an ANOVA analysis to find out variances between groups on the basis of Tokyo 2020 Volunteer demographics data. Five independent variables were analyzed – gender, age,

education, marital status and income – to examine difference between groups on the factors.

Data were analyzed using IBM SPSS Statistics 26 and IBM SPSS AMOS 26 software.

Chapter 4. Results

4.1. Demographic characteristics and ANOVA results

Demographic characteristics of the survey participants are listed below in table 4.1.1.

Table 4.1.1.

The Descriptive Statistics of the Demographic Variables

Variable	N	Percentage
Gender (%)		
Female	190	42.4%
Male	140	57.6%
Age (%)		
18-24	45	13.3%
25-34	55	16.7%
35-44	74	22.4%
45-60	133	40.3%
>60	23	6.5%
Marital status (%)		
Single	144	43.6%
Married	161	48.8%
Divorced	13	3.9%
Separated	0	0.0%
Other	5	1.5%
Prefer not to say	7	2.1%
Educational level (%)		
Middle school or lower	1	0.3%
High school	39	11.8%
Bachelor degree	237	71.8%
Master's degree	49	14.8%
PhD	4	1.2%
Annual income (%)		
< \$30,000	78	23.6%
\$30,001 - \$40,000	54	16.4%

\$40,001 - \$50,000	37	11.2%
\$50,001 - \$60,000	24	7.3%
>\$60,000	55	16.7%
Prefer not to say	82	24.8%

In order to find out variances between groups on the basis of Tokyo 2020 Volunteer demographics data ANOVA test was conducted in SPSS. Factor scores of five independent variables were analyzed – gender, age, education, marital status and income – to examine difference between groups on the factors.

In regards of gender, ANOVA test showed differences between groups in volunteer involvement. See table 4.1.2.

In regards of age, ANOVA test showed differences between groups in career orientation, motivation, job environment, satisfaction, word-of-mouth and intention. See table 4.1.3.

In regards of marital status, level of education and annual income, ANOVA test showed no significant differences between groups. See table 4.1.4, 4.1.5 and 4.1.6 respectively.

Table 4.1.2*ANOVA Gender*

Variable		Sum of Squares	df	Mean Square	F	Sig.
EV	Between Groups	0.284	1	0.284	0.422	0.516
	Within Groups	221.118	328	0.674		
	Total	221.402	329			
LS	Between Groups	0.747	1	0.747	0.806	0.370
	Within Groups	303.761	328	0.926		
	Total	304.508	329			
PACI	Between Groups	4.601	1	4.601	2.838	0.093
	Within Groups	531.827	328	1.621		
	Total	536.428	329			
CO	Between Groups	2.129	1	2.129	0.662	0.417
	Within Groups	1054.866	328	3.216		
	Total					

	Total	1056.994	329			
MOTIVATION	Between	1.767	1	1.767	2.380	0.124
	Groups					
	Within	243.429	328	0.742		
	Groups					
	Total	245.195	329			
JT	Between	7.176	1	7.176	3.279	0.071
	Groups					
	Within	717.712	328	2.188		
	Groups					
	Total	724.888	329			
JA	Between	2.702	1	2.702	1.411	0.236
	Groups					
	Within	628.106	328	1.915		
	Groups					
	Total	630.808	329			
JE	Between	0.164	1	0.164	0.118	0.732
	Groups					
	Within	457.607	328	1.395		
	Groups					
	Total	457.771	329			
VI	Between	5.922	1	5.922	7.045	0.008
	Groups					

	Within	275.722	328	0.841		
	Groups					
	Total	281.644	329			
SATISFACTION	Between	2.257	1	2.257	2.903	0.089
	Groups					
	Within	254.987	328	0.777		
	Groups					
	Total	257.244	329			
FVI	Between	4.878	1	4.878	3.252	0.072
	Groups					
	Within	492.010	328	1.500		
	Groups					
	Total	496.888	329			
WOM	Between	0.077	1	0.077	0.091	0.764
	Groups					
	Within	279.433	328	0.852		
	Groups					
	Total	279.510	329			
INTENTION	Between	0.932	1	0.932	0.996	0.319
	Groups					
	Within	306.979	328	0.936		
	Groups					
	Total	307.911	329			

Table 4.1.3*ANOVA Age.*

		Sum of		Mean		
		Squares	df	Square	F	Sig.
EV	Between	3.761	4	0.940	1.404	0.232
	Groups					
	Within	217.641	325	0.670		
	Groups					
	Total	221.402	329			
LS	Between	2.078	4	0.520	0.558	0.693
	Groups					
	Within	302.430	325	0.931		
	Groups					
	Total	304.508	329			
PACI	Between	3.938	4	0.985	0.601	0.662
	Groups					
	Within	532.490	325	1.638		
	Groups					
	Total	536.428	329			
CO	Between	117.230	4	29.308	10.135	0.000
	Groups					

	Within	939.764	325	2.892		
	Groups					
	Total	1056.994	329			
MOTIVATION	Between	15.468	4	3.867	5.471	0.000
	Groups					
	Within	229.728	325	0.707		
	Groups					
	Total	245.195	329			
JT	Between	13.375	4	3.344	1.527	0.194
	Groups					
	Within	711.512	325	2.189		
	Groups					
	Total	724.888	329			
JA	Between	14.716	4	3.679	1.941	0.103
	Groups					
	Within	616.092	325	1.896		
	Groups					
	Total	630.808	329			
JE	Between	14.494	4	3.624	2.657	0.033
	Groups					
	Within	443.277	325	1.364		
	Groups					
	Total	457.771	329			

VI	Between	3.725	4	0.931	1.089	0.362
	Groups					
	Within	277.919	325	0.855		
	Groups					
	Total	281.644	329			
SATISFACTION	Between	8.312	4	2.078	2.713	0.030
	Groups					
	Within	248.932	325	0.766		
	Groups					
	Total	257.244	329			
FVI	Between	12.730	4	3.183	2.136	0.076
	Groups					
	Within	484.157	325	1.490		
	Groups					
	Total	496.888	329			
WOM	Between	10.981	4	2.745	3.323	0.011
	Groups					
	Within	268.529	325	0.826		
	Groups					
	Total	279.510	329			
INTENTION	Between	11.342	4	2.835	3.107	0.016
	Groups					

Within	296.569	325	0.913
Groups			
Total	307.911	329	

Table 4.1.4*ANOVA Marital Status*

		Sum of		Mean		
		Squares	df	Square	F	Sig.
EV	Between	2.258	4	0.564	0.837	0.502
	Groups					
	Within	219.144	325	0.674		
	Groups					
	Total	221.402	329			
LS	Between	5.303	4	1.326	1.440	0.220
	Groups					
	Within	299.205	325	0.921		
	Groups					
	Total	304.508	329			
PACI	Between	3.120	4	0.780	0.475	0.754
	Groups					
	Within	533.308	325	1.641		
	Groups					
	Total	536.428	329			
CO	Between	33.202	4	8.301	2.635	0.034
	Groups					
	Within	1023.792	325	3.150		
	Groups					

	Total	1056.994	329			
MOTIVATION	Between	3.274	4	0.818	1.100	0.357
	Groups					
	Within	241.922	325	0.744		
	Groups					
	Total	245.195	329			
JT	Between	19.862	4	4.966	2.289	0.060
	Groups					
	Within	705.025	325	2.169		
	Groups					
	Total	724.888	329			
JA	Between	12.137	4	3.034	1.594	0.176
	Groups					
	Within	618.671	325	1.904		
	Groups					
	Total	630.808	329			
JE	Between	9.642	4	2.410	1.748	0.139
	Groups					
	Within	448.129	325	1.379		
	Groups					
	Total	457.771	329			
VI	Between	4.118	4	1.030	1.206	0.308
	Groups					

	Within	277.526	325	0.854		
	Groups					
	Total	281.644	329			
SATISFACTION	Between	7.220	4	1.805	2.346	0.054
	Groups					
	Within	250.025	325	0.769		
	Groups					
	Total	257.244	329			
FVI	Between	4.738	4	1.184	0.782	0.537
	Groups					
	Within	492.150	325	1.514		
	Groups					
	Total	496.888	329			
WOM	Between	1.958	4	0.490	0.573	0.682
	Groups					
	Within	277.552	325	0.854		
	Groups					
	Total	279.510	329			
INTENTION	Between	2.587	4	0.647	0.688	0.600
	Groups					
	Within	305.324	325	0.939		
	Groups					
	Total	307.911	329			

Table 4.1.5*ANOVA Level of Education*

		Sum of		Mean		
		Squares	df	Square	F	Sig.
EV	Between	1.186	4	0.297	0.438	0.781
	Groups					
	Within	220.216	325	0.678		
	Groups					
	Total	221.402	329			
LS	Between	2.329	4	0.582	0.626	0.644
	Groups					
	Within	302.179	325	0.930		
	Groups					
	Total	304.508	329			
PACI	Between	8.422	4	2.106	1.296	0.271
	Groups					
	Within	528.006	325	1.625		
	Groups					
	Total	536.428	329			
CO	Between	21.262	4	5.315	1.668	0.157
	Groups					
	Within	1035.732	325	3.187		
	Groups					

	Total	1056.994	329			
MOTIVATION	Between	4.161	4	1.040	1.403	0.233
	Groups					
	Within	241.035	325	0.742		
	Groups					
	Total	245.195	329			
JT	Between	2.973	4	0.743	0.335	0.855
	Groups					
	Within	721.914	325	2.221		
	Groups					
	Total	724.888	329			
JA	Between	6.030	4	1.507	0.784	0.536
	Groups					
	Within	624.778	325	1.922		
	Groups					
	Total	630.808	329			
JE	Between	1.283	4	0.321	0.228	0.922
	Groups					
	Within	456.489	325	1.405		
	Groups					
	Total	457.771	329			
VI	Between	3.928	4	0.982	1.149	0.333
	Groups					

	Within	277.716	325	0.855		
	Groups					
	Total	281.644	329			
SATISFACTION	Between	1.219	4	0.305	0.387	0.818
	Groups					
	Within	256.025	325	0.788		
	Groups					
	Total	257.244	329			
FVI	Between	13.037	4	3.259	2.189	0.070
	Groups					
	Within	483.850	325	1.489		
	Groups					
	Total	496.888	329			
WOM	Between	4.662	4	1.165	1.378	0.241
	Groups					
	Within	274.848	325	0.846		
	Groups					
	Total	279.510	329			
INTENTION	Between	7.792	4	1.948	2.109	0.079
	Groups					
	Within	300.119	325	0.923		
	Groups					
	Total	307.911	329			

Table 4.1.6*ANOVA Annual Income*

		Sum of Squares	df	Mean Square	F	Sig.
EV	Between Groups	1.938	5	0.388	0.572	0.721
	Within Groups	219.464	324	0.677		
	Total	221.402	329			
LS	Between Groups	5.687	5	1.137	1.233	0.293
	Within Groups	298.821	324	0.922		
	Total	304.508	329			
PACI	Between Groups	11.625	5	2.325	1.435	0.211
	Within Groups	524.803	324	1.620		
	Total	536.428	329			
CO	Between Groups	31.816	5	6.363	2.011	0.077
	Within Groups	1025.179	324	3.164		
	Total					

	Total	1056.994	329			
MOTIVATION	Between	3.677	5	0.735	0.986	0.426
	Groups					
	Within	241.519	324	0.745		
	Groups					
	Total	245.195	329			
JT	Between	11.405	5	2.281	1.036	0.396
	Groups					
	Within	713.483	324	2.202		
	Groups					
	Total	724.888	329			
JA	Between	2.563	5	0.513	0.264	0.932
	Groups					
	Within	628.245	324	1.939		
	Groups					
	Total	630.808	329			
JE	Between	2.977	5	0.595	0.424	0.832
	Groups					
	Within	454.794	324	1.404		
	Groups					
	Total	457.771	329			
VI	Between	4.634	5	0.927	1.084	0.369
	Groups					

	Within	277.010	324	0.855		
	Groups					
	Total	281.644	329			
SATISFACTION	Between	1.634	5	0.327	0.414	0.839
	Groups					
	Within	255.611	324	0.789		
	Groups					
	Total	257.244	329			
FVI	Between	10.499	5	2.100	1.399	0.224
	Groups					
	Within	486.389	324	1.501		
	Groups					
	Total	496.888	329			
WOM	Between	5.175	5	1.035	1.222	0.298
	Groups					
	Within	274.335	324	0.847		
	Groups					
	Total	279.510	329			
INTENTION	Between	4.923	5	0.985	1.053	0.387
	Groups					
	Within	302.988	324	0.935		
	Groups					
	Total	307.911	329			

4.2. Confirmatory factor analysis (CFA)

Confirmatory factor analysis was employed to test the consistency between measures of a construct and the researcher's understanding of the nature of that construct (Awang, 2015) in order to find and eliminate the insignificant variables that poorly influence model fit indices. However, there is no precise definition among researchers which fitness indexes should be focused on (Hair et al., 1995, 2010). Smith, Lockstone-Binney, Holmes, Baum (2014) defined such model fit categories as Absolute Fit, Incremental Fit, and Parsimonious Fit. In order to evaluate goodness of fit it is advised to refer to at least one fitness index from each category of model fit. Absolute fit is determined by RMSEA that should be <0.06 and GFI that should be >0.9 (Hu & Bentler, 1999) to indicate that a model is a good fit. Incremental Fit is determined by AGFI, CFI, TLI and NFI and should be >0.9 (Herbert W. Marsh, Kit-Tai Hau & Zhonglin Wen, 2004). Parsimonious Fit is determined by a ratio of chi-square to degrees of freedom χ^2/df that should be < 5 (Wheaton, 1987). RMSEA, GFI, CFI, TLI and χ^2/df are frequently reported in literatures (Browne & Cudeck 1993, Joreskog & Sorbom 1984, Bentler 1990, Bentler & Bonet 1980, Marsh & Hocevar 1985), therefore, they will be focused on in the process of conducting CFA and evaluating goodness of fit.

Every measurement model of a latent construct needs to undergo CFA

before modeling in SEM (Awang, 2015). For this, in his book (Brown, 2006, p.323) provides the following guidelines regarding CFA for second-order factor models. Thus, the first-order factor model was developed with all the constructs correlated between each other.

The CFA for the first-order model allowed to reveal insignificant variables in Expression of Values (EV) factor (variable EV1), Job Environment (JE) factor (variables JE1, JE5) and Job Assignment (JA) factor (variable JA1). Variables were considered insignificant if their standardized factor loadings are <0.6 and squared multiple correlations R^2 is <0.4 . Such variables should be removed (Awang, 2015). Each variable with the lowest scores was deleted one at a time until required conditions were achieved. The results of the first-order factor loadings are presented in table 4.2.1 and table 4.2.2 below.

Table 4.2.1

Standardized Regression Weights First-Order Model CFA

			Estimate
EV3	<---	EV	0.615
EV2	<---	EV	0.633
EV1	<---	EV	0.34
LS3	<---	LS	0.603

LS2	<---	LS	0.778
LS1	<---	LS	0.906
PACI4	<---	PCI	0.769
PACI3	<---	PCI	0.818
PACI2	<---	PCI	0.662
PACI1	<---	PCI	0.72
VI1	<---	VI	0.853
VI2	<---	VI	0.804
VI3	<---	VI	0.889
VI4	<---	VI	0.866
JE7	<---	JE	0.787
JE6	<---	JE	0.655
JE5	<---	JE	0.578
JE4	<---	JE	0.66
JE3	<---	JE	0.707
JE2	<---	JE	0.697
JE1	<---	JE	0.55
JA1	<---	JA	0.501
JA2	<---	JA	0.779
JA3	<---	JA	0.821
FVI1	<---	FVI	0.838
FVI2	<---	FVI	0.887
FVI3	<---	FVI	0.876
WOM1	<---	WOM	0.801

WOM2	<---	WOM	0.812
WOM3	<---	WOM	0.617
JT3	<---	JT	0.806
JT2	<---	JT	0.904
JT1	<---	JT	0.826
CO4	<---	CO	0.762
CO3	<---	CO	0.855
CO2	<---	CO	0.877
CO1	<---	CO	0.708

Table 4.2.2

Squared Multiple Correlations First-Order Model CFA

Variable	Estimate
CO1	0.501
CO2	0.768
CO3	0.732
CO4	0.581
JT1	0.682
JT2	0.818
JT3	0.649
WOM3	0.381
WOM2	0.66
WOM1	0.642

FVI3	0.768
FVI2	0.786
FVI1	0.702
JA3	0.674
JA2	0.607
JA1	0.251
JE1	0.303
JE2	0.486
JE3	0.499
JE4	0.436
JE5	0.334
JE6	0.429
JE7	0.619
VI4	0.75
VI3	0.791
VI2	0.647
VI1	0.727
PACI1	0.519
PACI2	0.438
PACI3	0.669
PACI4	0.592
LS1	0.821
LS2	0.606

LS3	0.364
EV1	0.116
EV2	0.401
EV3	0.378

CFA for the first order-factor model showed reliable fit indices represented in the table 4.2.3.

Table 4.2.3

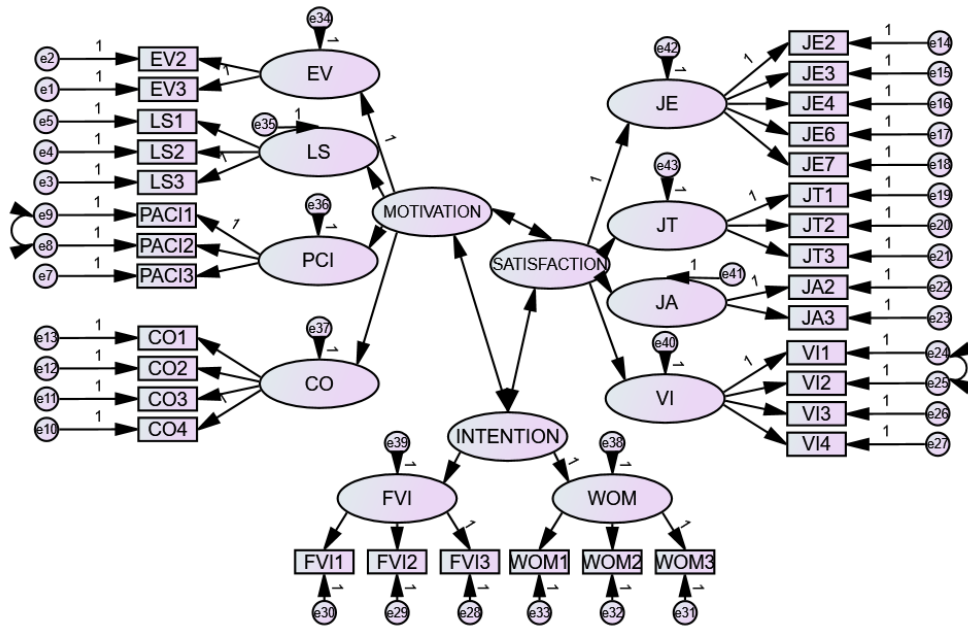
Fit indices for the First-Order Model CFA

Required values for good fit	Indices after first-order CFA
RMSEA <.06	.058
GFI >.9	.852
TLI >.9	.901
CFI >.9	.916
χ^2/df <5	2.11

All insignificant variables were removed, goodness of fit for the model was achieved, thus it was possible to proceed to building a second-order factor model and analysis for goodness of fit was conducted. This model is represented on Figure 4.2.1.

Figure 4.2.1

Second-Order Model CFA



First-order factors became endogenous due to addition of the exogenous second-order factors – Motivation, Satisfaction and Intention. Thus error variables were added to each of the first-order factors. Second-order factors - Motivation, Satisfaction and Intention - were correlated for running the CFA. All items had positive factor loadings showing significance by being equal >0.6 which is represented in table 4.2.4.

Table 4.2.4*Standardized Regression Weights Second-Order Model CFA*

LS2	<---	LS	0.755
LS1	<---	LS	0.957
PACI3	<---	PCI	0.733
PACI2	<---	PCI	0.649
PACI1	<---	PCI	0.791
CO4	<---	CO	0.759
CO3	<---	CO	0.859
CO2	<---	CO	0.875
CO1	<---	CO	0.709
JE2	<---	JE	0.701
JE3	<---	JE	0.726
JE4	<---	JE	0.646
JE6	<---	JE	0.646
JE7	<---	JE	0.763
JT1	<---	JT	0.815
JT2	<---	JT	0.907
JT3	<---	JT	0.814
JA2	<---	JA	0.745
JA3	<---	JA	0.852
VI1	<---	VI	0.822
VI2	<---	VI	0.769

VI3	<---	VI	0.896
VI4	<---	VI	0.882
FVI3	<---	FVI	0.871
FVI2	<---	FVI	0.891
FVI1	<---	FVI	0.84
WOM3	<---	WOM	0.613
WOM2	<---	WOM	0.811
WOM1	<---	WOM	0.805

However, some model fit indices were still low and did not fulfill the thresholds.

Table 4.2.5

Fit Indices for Second-Order Model before CFA

Required values for good fit	Second-Order Factor Model Fit Indices
RMSEA <.06	.063
GFI >.9	.832
TLI >.9	.886
CFI >.9	.896
χ^2/df <5	2.28

Thus, it was possible to assume that measurement model contained certain items that were redundant of each other. This redundancy caused poor

fit in the model. (Awang, 2015). The items redundancy was examined by checking the Modification Indexes (MI). If MI between two error terms was greater than 15 it meant they were redundant and to solve this issue it is possible either to delete one of the items or set these two correlated measurement errors as a “free parameter” and run the new measurement model until the fit indices reached the required thresholds (Awang, 2015). Modification indices values are represented in table 4.2.6. As a result of the modification indices analysis, PACI4 variable was eliminated because it had high values with two other variables and error variables for PACI1 and PACI2, VII and VI2 were correlated. Once the goodness of fit indices were compliant with the thresholds the CFA was finished.

Table 4.2.6

Modification Indices for Second-Order Model CFA

			M.I.	Par Change
e40	<-->	INTENTION	17.052	0.083
e40	<-->	SATISFACTION	11.792	-0.095
e40	<-->	e39	10.348	0.123
e41	<-->	MOTIVATION	6.647	-0.159
e43	<-->	INTENTION	21.778	-0.165
e43	<-->	SATISFACTION	4.235	0.108
e43	<-->	MOTIVATION	8.768	0.205

e43	<-->	e38	5.951	-0.08
e43	<-->	e39	6.237	-0.164
e43	<-->	e40	10.113	-0.164
e42	<-->	SATISFACTION	4.369	0.1
e42	<-->	e39	5.895	-0.149
e42	<-->	e40	9.404	-0.146
e42	<-->	e41	6.3	0.186
e42	<-->	e43	48.281	0.579
e36	<-->	SATISFACTION	7.255	0.131
e36	<-->	e40	4.247	0.097
e36	<-->	e43	4.182	0.165
e35	<-->	SATISFACTION	4.765	-0.061
e35	<-->	e39	5.015	0.075
e35	<-->	e36	6.557	-0.104
e34	<-->	e37	7.472	-0.255
e33	<-->	SATISFACTION	5.018	-0.082
e32	<-->	e43	4.339	-0.106
e31	<-->	INTENTION	13.706	-0.083
e31	<-->	SATISFACTION	41.236	0.222
e31	<-->	e39	4.298	-0.086
e31	<-->	e40	8.421	0.097
e31	<-->	e41	19.064	0.222
e31	<-->	e36	4.109	0.104
e29	<-->	SATISFACTION	6.506	-0.078

e29	<-->	MOTIVATION	5.661	0.092
e29	<-->	e40	4.824	-0.064
e29	<-->	e34	4.069	0.082
e29	<-->	e31	4.276	-0.066
e28	<-->	e38	4.402	0.041
e28	<-->	e40	17.092	0.13
e27	<-->	INTENTION	19.317	0.067
e27	<-->	MOTIVATION	8.147	-0.085
e27	<-->	e38	15.952	0.056
e27	<-->	e34	5.274	-0.071
e26	<-->	SATISFACTION	5.698	-0.056
e26	<-->	MOTIVATION	8.035	0.086
e26	<-->	e38	5.574	-0.034
e26	<-->	e39	17.527	0.12
e26	<-->	e41	5.621	-0.083
e26	<-->	e34	8.155	0.09
e26	<-->	e33	4.903	-0.059
e26	<-->	e28	10.995	0.078
e26	<-->	e27	6.348	0.04
e25	<-->	INTENTION	5.941	-0.049
e25	<-->	e27	9.542	-0.065
e24	<-->	e42	7.677	-0.11
e24	<-->	e31	6.731	0.071
e24	<-->	e25	20.246	0.106

e23	<-->	MOTIVATION	10.46	-0.212
e23	<-->	e34	8.523	-0.2
e23	<-->	e31	6.978	0.143
e23	<-->	e25	4.725	0.104
e22	<-->	e37	6.536	0.263
e21	<-->	MOTIVATION	4.103	-0.122
e21	<-->	e35	7.208	-0.107
e21	<-->	e26	6.043	-0.084
e21	<-->	e25	4.442	0.093
e20	<-->	e42	5.229	0.139
e20	<-->	e29	5.773	-0.087
e20	<-->	e28	4.343	0.082
e19	<-->	INTENTION	7.377	-0.081
e19	<-->	MOTIVATION	5.197	0.132
e19	<-->	e40	11.057	-0.145
e19	<-->	e42	9.89	0.219
e19	<-->	e32	4.339	-0.089
e19	<-->	e28	11.088	-0.15
e19	<-->	e27	8.299	-0.092
e19	<-->	e22	5.812	0.16
e18	<-->	e43	11.934	0.285
e18	<-->	e26	4.208	0.074
e17	<-->	e33	4.639	-0.119
e17	<-->	e18	4.737	0.159

e16	<-->	e21	5.59	0.205
e16	<-->	e17	6.498	-0.227
e15	<-->	e43	4.87	0.189
e15	<-->	e26	5.358	-0.087
e15	<-->	e23	7.486	0.222
e14	<-->	e19	7.97	0.23
e13	<-->	SATISFACTION	4.85	0.148
e13	<-->	e36	5.947	0.242
e13	<-->	e21	4.034	0.192
e12	<-->	e35	5.548	0.103
e12	<-->	e30	5.295	0.134
e12	<-->	e19	6.321	0.179
e12	<-->	e13	8.877	-0.303
e11	<-->	MOTIVATION	6.245	-0.178
e11	<-->	e35	4.12	-0.096
e11	<-->	e26	6.152	0.1
e11	<-->	e13	7.02	0.293
e10	<-->	e35	6.522	0.137
e10	<-->	e25	10.162	0.188
e10	<-->	e11	6.219	-0.259
e9	<-->	e41	6.323	-0.213
e9	<-->	e26	4.164	0.085
e8	<-->	e43	6.279	0.2
e8	<-->	e33	4.736	-0.118

e8	<-->	e31	5.325	0.117
e8	<-->	e13	4.114	-0.199
e8	<-->	e9	32.336	0.476
e7	<-->	MOTIVATION	4.345	-0.114
e7	<-->	e34	5.91	-0.139
e7	<-->	e27	5.343	0.07
e7	<-->	e25	4.446	0.085
e7	<-->	e17	4.773	-0.139
e7	<-->	e15	8.152	0.194
e7	<-->	e14	4.018	-0.155
e7	<-->	e11	5.181	-0.166
e7	<-->	e8	7.953	-0.173
e6	<-->	e37	6.286	0.26
e6	<-->	e24	17.635	0.16
e6	<-->	e18	5.849	-0.178
e6	<-->	e9	23.036	-0.399
e6	<-->	e7	20.63	0.272
e5	<-->	e21	8.118	-0.119
e5	<-->	e16	5.485	-0.126
e5	<-->	e12	11.725	0.157
e5	<-->	e11	5.771	-0.119
e4	<-->	SATISFACTION	4.757	-0.079
e4	<-->	e41	6.197	-0.132
e4	<-->	e36	8.034	-0.152

e4	<-->	e31	7.409	-0.103
e4	<-->	e29	5.997	0.082
e4	<-->	e24	8.262	-0.082
e4	<-->	e17	4.633	-0.115
e3	<-->	SATISFACTION	7.758	0.114
e3	<-->	MOTIVATION	5.138	0.118
e3	<-->	e36	10.724	0.199
e3	<-->	e35	19.81	-0.153
e3	<-->	e34	12.303	0.191
e3	<-->	e31	13.814	0.16
e3	<-->	e24	6.209	0.08
e3	<-->	e13	6.261	0.208
e3	<-->	e4	5.968	-0.109
e2	<-->	e37	5.211	-0.154
e2	<-->	e21	6.298	-0.114
e2	<-->	e7	5.178	-0.094
e2	<-->	e4	5.291	-0.08
e2	<-->	e3	21.922	0.184
e1	<-->	e42	4.234	-0.178
e1	<-->	e26	5.979	0.099
e1	<-->	e23	4.97	-0.195

Goodness of fit indices for the second-order factor model are represented in table 4.2.7.

Table 4.2.7*Fit indices For Second-Order Model after CFA*

Required values for good fit	Second-Order Factor Model Fit Indices after CFA
RMSEA <.06	.057
GFI >.9	.848
TLI >.9	.905
CFI >.9	.914
χ^2/df <5	2.08

4.3. Model reliability and validity analysis

Reliability assumes that the measurements and results are consistent, i.e. if the same test had to be conducted once more there would be no difference (Collis & Hussey, 2014). Reliability is significant as it ensures the consistency of the result in a long-term perspective and tests whether questions and factors accurately represent the total population (Heale & Twycross, 2018).

CFA was followed by checking model reliability and validity. The standardized factor loadings were used to determine composite reliability (CR), and average variance extracted (AVE) for each construct to verify the convergent validity. Bagozzi and Yi (1989) suggested that the threshold for the standardized factor loading should be >0.5. Since all low factor loadings

were eliminated at the previous step, this requirement was fulfilled. It was possible to proceed to measuring composite reliability (CR) and the average variance extracted (AVE). It is recommended that CR value should be >0.7 (Hair et al. 2010), while AVE value should be >0.5 (Fornell & Larcker, 1981).

For all constructs except Expression of Values (EV) the CR exceeded the recommended value of 0.7, as suggested by Hair et al. (2010) and AVE exceeded the recommended value of 0.5, as suggested by Fornell and Larcker (1981).

The results for CR and AVE are provided in table 4.3.1 accordingly. The data indicate strong evidence of construct validity and reliability for the model. Although AVE for motivation and satisfaction is < 0.5 it is still acceptable because the composite reliability is > 0.6 , therefore the convergent validity of the construct is still adequate (Fornell & Larcker, 1981). However, Expression of Values (EV) failed to fit the validity requirements due to low CR and AVE values, so this construct was eliminated.

Table 4.3.1

Composite Reliability and Average Variance Extracted

Item	Construct	Estimate	CR	AVE
Expression of Values	Motivation	1.003	0.757	0.477
Love of Sport		0.652		

Patriotism and Community		0.644		
Involvement				
Career orientation		0.251		
Job Environment		0.641	0.708	0.383
Job Training	Satisfaction	0.518		
Job Assignment		0.52		
Volunteer Involvement		0.764		
Future Volunteer Intentions	Intention	0.757	0.854	0.748
Word-of-Mouth		0.961		
EV3	Expression of	0.619	0.567	0.395
EV2	Values	0.639		
LS3		0.607	0.812	0.597
LS2	Love of Sport	0.775		
LS1		0.906		
PACI3	Patriotism and	0.692	0.784	0.549
PACI2	Community	0.682		
PACI1	Involvement	0.839		
CO4		0.758	0.878	0.646
CO3	Career	0.86		
CO2	Orientation	0.876		
CO1		0.707		
JE2	Job	0.701	0.774	0.486
JE3	Environment	0.725		

JE4		0.645		
JE6		0.646		
JE7		0.763		
JT1		0.815	0.883	0.716
JT2	Job Training	0.907		
JT3		0.813		
JA2		0.75	0.779	0.639
JA3	Job Assignment	0.846		
VI1		0.822	0.908	0.712
VI2	Volunteer	0.769		
VI3	Involvement	0.898		
VI4		0.881		
FVI3	Future	0.871	0.902	0.754
FVI2	Volunteer	0.892		
FVI1	Intentions	0.84		
WOM3		0.609	0.791	0.561
WOM2	Word-of-Mouth	0.814		
WOM1		0.806		

4.4. Assessment of normality of data

The normality assessment was conducted through analyzing the measure of skewness for every item. The absolute value of skewness of 1.0 or lower indicates the data is normally distributed (Awang, 2015).

Table 4.4.1*The assessment of normality distribution for items in the respective construct*

Variable	min	max	skew	c.r.	kurtosis	c.r.
VI1	-3.000	3.000	-1.204	-8.928	1.866	6.918
VI2	-3.000	3.000	-.924	-6.854	.587	2.177
VI3	-3.000	3.000	-1.517	-11.252	2.625	9.733
VI4	-3.000	3.000	-1.729	-12.821	3.906	14.483
LS2	-3.000	3.000	-1.972	-14.626	4.082	15.138
LS1	-3.000	3.000	-1.793	-13.297	3.633	13.472
CO4	-3.000	3.000	.035	.262	-1.295	-4.803
CO3	-3.000	3.000	.229	1.699	-1.272	-4.717
CO2	-3.000	3.000	.422	3.130	-1.064	-3.945
CO1	-3.000	3.000	-.167	-1.241	-1.229	-4.556
PACI4	-3.000	3.000	-.738	-5.471	-.222	-.823
PACI3	-3.000	3.000	-.962	-7.133	.507	1.879
PACI1	-3.000	3.000	-.764	-5.666	-.329	-1.220
FVI1	-3.000	3.000	-1.611	-11.948	2.291	8.495
FVI2	-3.000	3.000	-2.146	-15.915	4.835	17.927
FVI3	-3.000	3.000	-1.699	-12.604	2.884	10.695
WOM1	-3.000	3.000	-1.633	-12.110	2.900	10.752
WOM2	-3.000	3.000	-2.081	-15.430	5.647	20.940
JA2	-3.000	3.000	-.853	-6.325	-.065	-.242
JA3	-3.000	3.000	-1.204	-8.927	.705	2.615

JE2	-3.000	3.000	-.338	-2.505	-.893	-3.311	
JE3	-3.000	3.000	-.821	-6.092	.043	.158	
JE4	-3.000	3.000	-.479	-3.555	-.525	-1.946	
JE6	-3.000	3.000	-1.556	-11.537	2.013	7.466	
JE7	-3.000	3.000	-1.100	-8.155	.529	1.963	
JT1	-3.000	3.000	-.549	-4.072	-.470	-1.744	
JT2	-3.000	3.000	-.758	-5.619	.059	.218	
JT3	-3.000	3.000	-.561	-4.161	-.471	-1.746	
Multivariate							202.743 44.928

4.5. Hypothesis testing

Having ensured goodness of fit, validity and reliability as well as normal distribution of data in the model, SEM analysis was conducted for testing research hypotheses.

The hypotheses testing for the conceptual model was carried out in SPSS AMOS, checking for p-values in unstandardized regression weights, estimates in standardized regression weights and squared multiple correlations that explained various relationships between the factors studied in this research. Overall, out of 10 hypotheses, 3 were not supported (expression of values effect on motivation, career orientation on motivation, and motivation effect on intention to continue volunteering). Research results confirmed that 7 hypotheses resulted to be true. The following is a detailed description of each hypothesis and an overall summary is shown in table 4.5.1.

Hypothesis 1 (H1). Expression of values will positively affect volunteer motivation in the context of Tokyo 2020 Olympic Games. Composite reliability and average variance extracted values were too low, 0.567 and 0.395 respectively. Thus it was not possible to consider the effect of expression of values construct on the motivation as significant due to unreliability of data. Thus, it is possible to say that expression of values did not affect motivation.

Hypothesis 2 (H2). Love of sport will positively affect volunteer motivation in the context of Tokyo 2020 Olympic Games. This hypothesis was confirmed and research results imply that love of sport positively affected Tokyo 2020 volunteers' motivation due to the fact that $p < 0.05$ (Andrade, 2019). See table 4.5.1 for unstandardized regression weights. Also, it was confirmed by standardized estimates represented in table 4.5.2, and squared multiple correlations R^2 represented in table 4.5.3.

Hypothesis 3 (H3). Patriotism and community involvement will positively affect volunteer motivation in the context of Tokyo 2020 Olympic Games. This hypothesis was confirmed and research results imply that patriotism and community involvement positively affected Tokyo 2020 volunteers' motivation due to the fact that $p < 0.05$ (Andrade, 2019). See table 4.5.1 for unstandardized regression weights. Also, it was confirmed by standardized estimates represented in table 4.5.2, and squared multiple correlations R^2 represented in table 4.5.3.

Hypothesis 4 (H4). Career orientation will positively affect volunteer motivation in the context of Tokyo 2020 Olympic Games. Since there is a critical requirement that we should establish a scale for each latent variable in the model, including error terms meaning that one parameter has to be set as a free parameter by manually assigning its regression weight to 1 (Suhr,

2006), it is not possible to see unstandardized estimates and p-value for career orientation. In this case, standardized weights were referred to in order to verify the significance of this construct. $\beta < 0.6$ and $R^2 < 0.4$ so the effect was not significant. Hypothesis 4 was not proved meaning that career orientation did not have a significant effect on motivation. See table 4.5.2 for standardized regression weights and table 4.5.3 for squared multiple correlations.

Hypothesis 5 (H5). Job training will positively affect volunteer satisfaction in the context of Tokyo 2020 Olympic Games. This hypothesis was confirmed and research results imply that job training positively affected Tokyo 2020 volunteers' satisfaction due to the fact that $p < 0.05$ (Andrade, 2019). See table 4.5.1 for unstandardized regression weights. Also, it was confirmed by standardized estimates represented in table 4.5.2, and squared multiple correlations R^2 represented in table 4.5.3.

Hypothesis 6 (H6). Job assignment will positively affect volunteer satisfaction in the context of Tokyo 2020 Olympic Games. This hypothesis was confirmed and research results imply that job assignment positively affected Tokyo 2020 volunteers' satisfaction due to the fact that $p < 0.05$. See table 4.5.1 for unstandardized regression weights. Also, it was confirmed by standardized estimates represented in table 4.5.2, and squared multiple

correlations R^2 represented in table 4.5.3.

Hypothesis 7 (H7). Job environment will positively affect volunteer satisfaction in the context of Tokyo 2020 Olympic Games. Since there is a critical requirement that we should establish a scale for each latent variable in the model, including error terms meaning that one parameter has to be set as a free parameter by manually assigning its regression weight to 1 (Suhr, 2006), it is not possible to see unstandardized estimates and p-value for career orientation. In this case, standardized weights were referred to in order to verify the significance of this construct. $\beta > 0.6$ and $R^2 > 0.4$ so the effect was significant. Hypothesis 7 was proved meaning that job environment had a significant effect on satisfaction. See table 4.5.2 for standardized regression weights and table 4.5.3 for squared multiple correlations.

Hypothesis 8 (H8). Volunteer involvement will positively affect volunteer satisfaction in the context of Tokyo 2020 Olympic Games. This hypothesis was confirmed and research results imply that job assignment positively affected Tokyo 2020 volunteers' satisfaction due to the fact that $p < 0.05$ (Andrade, 2019). See table 4.5.1 for unstandardized regression weights. Also, it was confirmed by standardized estimates represented in table 4.5.2, and squared multiple correlations R^2 represented in table 4.5.3.

Hypothesis 9 (H9). Volunteer motivation will positively affect

intention to continue volunteering in the context of Tokyo 2020 Olympic Games. This hypothesis was not confirmed and research results imply that motivation did not have a significant effect on Tokyo 2020 volunteers' intention to continue volunteering due to the fact that $p > 0.05$ (Andrade, 2019). See table 4.5.1 for unstandardized regression weights. Also, it was confirmed by standardized estimates represented in table 4.5.2.

Hypothesis 10 (H10). Volunteer satisfaction will positively affect intention to continue volunteering in the context of Tokyo 2020 Olympic Games. This hypothesis was not confirmed and research results imply that Satisfaction had a significant effect on Tokyo 2020 volunteers' intention to continue volunteering due to the fact that $p < 0.05$ (Andrade, 2019). See table 4.5.1 for unstandardized regression weights. Also, it was confirmed by standardized estimates represented in table 4.5.2.

Table 4.5.1*Unstandardized Regression Weights*

			Est.	S.E.	C.R.	P
INTENTION	<---	SATISFACTION	0.404	0.116	3.47	***
INTENTION	<---	MOTIVATION	0.305	0.187	1.63	0.103
LS	<---	MOTIVATION	0.925	0.237	3.906	***
PCI	<---	MOTIVATION	1.576	0.402	3.918	***
CO	<---	MOTIVATION	1			
JT	<---	SATISFACTION	0.848	0.137	6.176	***
JA	<---	SATISFACTION	0.715	0.131	5.448	***
FVI	<---	INTENTION	1.489	0.179	8.304	***
WOM	<---	INTENTION	1			
VI	<---	SATISFACTION	0.798	0.106	7.502	***
JE	<---	SATISFACTION	1			

Table 4.5.2*Standardized Regression Weights*

INTENTION	<---	SATISFACTION	0.564
INTENTION	<---	MOTIVATION	0.285
LS	<---	MOTIVATION	0.494
PCI	<---	MOTIVATION	0.604
CO	<---	MOTIVATION	0.34
JT	<---	SATISFACTION	0.516
JA	<---	SATISFACTION	0.529
FVI	<---	INTENTION	0.751
WOM	<---	INTENTION	0.97
VI	<---	SATISFACTION	0.758
JE	<---	SATISFACTION	0.647

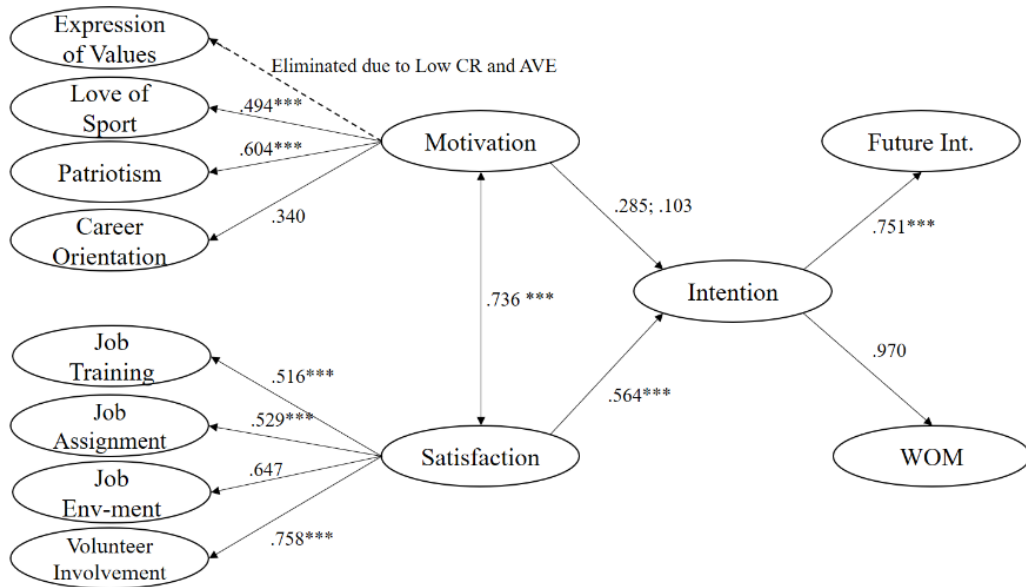
Table 4.5.3*Squared Multiple Correlations R²*

INTENTION	0.636
WOM	0.942
FVI	0.564
VI	0.575
JA	0.28
JT	0.267
JE	0.419
CO	0.116
PCI	0.365
LS	0.244

The research results evidence that patriotism and community involvement had the biggest impact on motivation, followed by love of sport, career orientation and expression of values. Two latter constructs had no significant effect on motivation though. As of satisfaction all the constructs had significant effect and the most important was volunteer involvement, followed by job environment, job assignment, and job training.

Figure 4.5.1

SEM results



Chapter 5. Discussion

5.1. Summary of key findings

The purpose of this study was to examine the impact of Tokyo 2020 volunteers' motivation and satisfaction on intention to continue volunteering and to determine the factors that influence motivation and satisfaction.

The findings regarding motivation imply that the most important factor that influenced Tokyo 2020 volunteers' motivation was patriotism and community involvement. This finding is compliant with the study by Twynam et al., 2003. These findings demonstrate the power of patriotism and community involvement among Japanese people who volunteered at Tokyo 2020 Olympic and Paralympic Games. Their priority was what they can provide to the community rather than what they can personally gain from the experience. Previous research has found that volunteers feel pride and prestige being just a national of a hosting country and volunteering in a mega sporting event. Pride and prestige were identified as major components of the Community factor (Kim et al., 2010).

Patriotism and community involvement was followed by the love of sport. This factor was identified as a primary motivator in similar studies (MacLean & Hamm, 2007; Giannoulakis et al., 2008; Bang & Ross, 2009). Olympics being one of the most popular sporting events in the world attract

3-3.5 billion viewers and lovers of sport (Stoll, 2021), so many volunteers participated in the event because they love sport and wanted to see the Games.

Unlike in other studies (VanSickle, Pierce & Diacin, 2015) career orientation did not impact motivation significantly, however, there were differences between groups depending on age. If we look at the demographic variables of age, the majority who took the survey (87%) were more than 25 years old. Thus, it is possible to assume that older volunteers have already succeeded with the career and had different motivation factors as a priority while younger volunteers were more career oriented in their motivations to contribute to Tokyo 2020 Olympic and Paralympic Games and saw volunteering as an opportunity of gaining skills and making connections to start a career in sports.

Expression of values was not significant in motivating volunteers too. CFA results showed that construct values were too low to be considered as reliable and valid in the model of the current research. Thus, it is possible to state that motivation was not affected by expression of values. These findings do not go along with the previous researches that found expression of values to be significant (Bang et al., 2019; Bang & Ross, 2009). One of the questions that measured expression of values was 'The Games needed a lot of volunteers'. Right before the Games TOCOG decided to reject all

international volunteers and also many local volunteers were rejected because there was no need in their positions. Due to the absence of spectators the volunteers who were supposed to work in the Olympic Park, stadiums, airport, etc., were not required anymore and their positions were cut down too, which is reflected in the findings of this study. Another question for this dimension was ‘I wanted to help make the Games a success’. It was hard to believe in the success of Tokyo 2020 Olympic and Paralympic Games due to COVID-19 restrictions. Everybody was concerned about the pandemic and the conditions under which the Games were organized. These attitudes towards the Games from the people and the circumstances resulted in a finding that expression of values did not influence motivation of Tokyo 2020 volunteers.

Although love of sport, patriotism and community involvement had a significant effect on motivation, the findings evidence that motivation did not influence the intention to continue volunteering. This result is different from previous research where findings supported hypothesis that motivation is effective in influencing volunteers’ intention to continue volunteering (Bang et al., 2018; Strigas & Jackson, 2003; Twynam et al., 2003; Bang & Chelladurai, 2009; and Bang & Ross, 2009). This might be explained by the fact that Tokyo 2020 were the most controversial Games in history. Being postponed for one year Tokyo 2020 Olympic and Paralympic Games were

held in the outbreak of COVID-19 and many Japanese people did not want the Games to be held. They went out on the streets with protests requiring to cancel the Games (Goldman, 2021). Considering such unfavorable situation and overall attitude to the Games from the whole nation, it's legit that volunteers were not very motivated to participate. However, high level of patriotism and community involvement encouraged them to contribute to volunteering at the Games and make the Games a success.

The findings regarding satisfaction imply that all 4 factors – job training, job assignment, job environment, volunteer involvement – greatly impacted satisfaction.

Contrary to the research that studied volunteer satisfaction and found that volunteer involvement did not significantly affect satisfaction (Kim, D., Park, C., Kim, H., & Kim, J., 2019), volunteer involvement was the most significant factor that influenced satisfaction in this research. However, this finding is supported by (Harrison, Xiao, Ott & Bortree, 2017) stating that volunteers who are highly involved in volunteering are more likely to have an intention to continue volunteering at sports event. For instance, Ledingham and Bruning (1998) findings imply that in the context of organization-public relationships, involvement influences public perception and can generate loyalty toward an organization. It supports our findings because volunteer

involvement positively influenced satisfaction and satisfaction positively influenced intention to continue volunteering meaning that volunteers will be retained because they are loyal to the organization.

Job environment was the second most significant factor that influenced satisfaction. It means that such things as food, transportation, work maintenance, insurance, uniform, security and welfare are very important for the satisfaction of volunteers. In fact, these findings align with social exchange theory (Thibaut & Kelley, 1959), that individuals would contribute their efforts in voluntary work when their perceived benefits are higher than their perceived costs meaning that their intention to continue volunteer increases as a result of the exchange.

Job assignment was also highly significant. This finding is aligned with the fact that volunteer empowerment by means of fitting of the volunteer to the appropriate task is very important (Kim et al., 2010) and volunteer satisfaction highly depends on the proper assignment to the most suitable role for the volunteer. By doing so, volunteers will be able to demonstrate their skills and contribute maximum efforts for the successful operation of a mega sporting event.

Job training also refers to the issue of proper fit. This factor was significant. Same as job assignment it implies that if a volunteer receives

proper training, it will maximize his or her efficiency (Costa, Chalip, Green & Simes, 1995).

Satisfaction that comprised of the job training, job assignment, job environment and volunteer involvement had a significant effect on intention to continue volunteering. This finding is supported by other research that studied volunteer satisfaction and intention. Despite adversity, Tokyo 2020 volunteers were overall satisfied with the Games and volunteering experience. Satisfaction with the event resulted in their willingness to apply for other Olympic and Paralympic Games in the future. Thus, if Japan hosts a mega sporting event in the future, there will be a good volunteer base ready to apply and contribute to the event, without any regards to external factors, such as pandemic or restrictions.

5.2. Theoretical and practical implications

HR managers of mega sporting events such as Olympics, World Cup, IAAF World Championships and other sporting events can benefit from the findings of this study. Although motivation was not significant in this study it shouldn't be neglected because many researches that were carried out before the outbreak of COVID-19 implied that motivation was very significant in regards intention to continue volunteering (Bang et al., 2018; Strigas and Jackson, 2003; Twynam et al., 2003; Bang and Chelladurai, 2009; and Bang

and Ross, 2009).

Since there were differences between groups as of career orientation in such demographic variables as age and marital status, it is recommended that organizations and organizing committees provide career opportunities for students and young people after they complete volunteering. This could be internships or trainings that would provide gaining new skills. Age category was the one that found most differences between groups besides career orientation. Differences were found in job environment, satisfaction, word-of-mouth and intention. It is possible to conclude that volunteers of different ages have different motives and aims which should be considered and properly addressed by the HR managers in order to retain volunteers for the next events.

Also these findings suggest that HR managers should focus on the volunteer contributions towards improving their community and their country's image on the international stage in the process of recruiting, selecting and training volunteers.

It should be considered that lots of volunteers apply due to the love of sport expecting to see the Games. Opportunity to get tickets and see the competitions on the day-off or after the shift will increase volunteer's motivation and satisfaction.

From managerial perspective, organizations dealing with recruitment of mega sport event volunteers should emphasize good fit of the volunteer skills to the role and duties. Organization and appropriate managerial treatment. Organizing committees should put efforts in improving job environment by providing good-quality and well-designed uniforms, transportation to the venues, accommodation, insurance and food. Proper job training will help volunteer to do his or her duties effectively and contribute to the overall satisfaction.

5.3. Limitations and future research

This research examined motivation and satisfaction factors and their influence on intention. Although this research provided valuable findings in terms of identifying factors that influence satisfaction and motivation as well as discovered the relationships between motivation, satisfaction and intention to continue volunteering, it was not without limitations. Future studies in this field can develop current research by applying the methods mentioned below.

Firstly, this study applied quantitative research method. However, it is recommended that quantitative research is complemented by qualitative in order to explain the findings obtained from the quantitative research (Malhotra, 2017). For this purpose, a series of interviews should be held with the volunteers, representatives and HR managers from the Tokyo Organizing

Committee for the Olympic Games in charge of volunteer selection and management. Follow-up interviews with dissatisfied or rejected volunteers or those who withdrew from volunteering may provide event managers with findings that would reveal significant factors affecting volunteer retention and recidivism (VanSickle, Pierce & Diacin, 2015).

Secondly, the participants of the research were only Japanese volunteers, because several months before the Olympics TOCOG announced there would be no volunteers from abroad. This decision was explained as a prevention measure against the spread of COVID-19 (Kyodo News, 2021). According to TOCOG foreign nationals made up roughly 10 percent of a total of 80,000 volunteers. Previous studies accounted for the international volunteers whose responses might have influenced the overall result of the survey. Since mega sporting events are international festivals, it is recommended to survey international volunteers for obtaining more precise and accurate results.

Thirdly, COVID-19 made a lot of limitations and restrictions. These Games were very different from any other Olympic and Paralympic Games. It is recommended to develop a new questionnaire that examines COVID-19 influence on mega sporting event volunteers, their satisfaction, motivation and intention to continue volunteering.

Chapter 6. Conclusion

Tokyo 2020 Games faced a huge challenge in hosting the Olympics and Paralympics due to the outbreak of COVID-19 pandemic. The organizers were forced to deal with many new initiatives and practices which have not been applied in the organization process before.

This research was aimed at investigating motivation and satisfaction aspects of Tokyo 2020 Olympic and Paralympic volunteers under the pandemic. After identifying what aspects had a positive impact on the respective construct the research sought to evaluate the impact of motivation and satisfaction on the intention to continue volunteering. Volunteers are Tokyo 2020 intangible legacy, thus it is important to know its effectiveness and consider the outcomes of Tokyo 2020 Olympic and Paralympic Games. These are the first Games that were held during COVID-19 pandemic under high pressure and restrictions. Having an effective legacy in terms of volunteers' intention to continue volunteering provides a reliable volunteer base for the future events hosted by Japan.

Data analysis revealed that patriotism and community involvement is the most important aspect of volunteer motivation followed by love of sport. Expression of values had no influence on motivation. Career orientation turned out to be not important for the overall number of respondents, however

there were differences between age groups meaning that it was important for the younger volunteers who haven't made a career yet. These findings imply that for Japanese society Tokyo 2020 Olympic and Paralympic Games were not desirable due to the threat of pandemic and they were not very motivated to volunteer. It is reflected in the results of motivation impact on the intention. Motivation did not have a significant influence on the intention.

As for the satisfaction all the aspects resulted to have a significant impact on the satisfaction. According to their significance they ranked the following way - volunteer involvement, job environment, job assignment, job training. These findings imply that these aspects should be carefully addressed by volunteer managers in the process of organizing future sporting events. Satisfaction in its turn had a significant effect on intention implying that the Games organization was proper and the volunteers were satisfied and intend to continue volunteering.

Tokyo 2020 Games set new standards for mega-sporting events and ensured a successful operation throughout the Games providing safe and secure participation and operations of all the parties. Research findings confirm this statement and imply that the Games were held successfully leaving a strong legacy consisting of volunteers who have intention to volunteer at the sporting events.

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Appendix I. Questionnaire

Dimension	Questions
Expression of Values	I wanted to do something worthwhile
	I wanted to help make the Games a success
	The Games needed lots of volunteers
Love of Sport	I am interested in the Olympic Games
	I have an interest in sport
	I have a passion for the Games
	I wanted to be associated with the Games
Patriotism and Community Involvement	I wanted to give something back to Tokyo and Japan
	I am proud of Tokyo and Japan
	I wanted to put something back into the community
	I wanted to feel part of the community
Career Orientation	I wanted to gain skills that I can use in future employment
	I wanted to make job contacts
	I wanted to gain experience which might lead to employment
	I wanted to establish contacts with experts from the same field
Job Training	I was satisfied with the educational contents, methods, and volunteer manuals.
	I was satisfied with the instructors' teaching skills and attitude.
	The job training was helpful for the volunteer work
Job Assignment	I was assigned to what I applied for
	The volunteer work fitted my skills
	I was satisfied with the job assignment
Job Environment	I was satisfied with the food provided during the volunteer work
	I was satisfied with the transportation during the volunteer work
	I was satisfied with the work maintenance during the volunteer work
	I was satisfied with the insurance provided during the volunteer work
	I was satisfied with the uniform provided during the volunteer work
	I was satisfied with the security provided during the

	volunteer work
	I was satisfied with the welfare provided during the volunteer work
Volunteer Involvement	Volunteering is _____ for me Absolutely unimportant (1) - Extremely important (7)
	Volunteering is _____ to me Absolutely Irrelevant (1) - Extremely Relevant (7)
	Volunteering means _____ to me. Nothing (1) - A lot (7)
	Volunteering is _____ to me. Absolutely Boring (1) - Extremely Interesting (7)
Future Volunteer Intentions	If I had the opportunity, I would re-volunteer at the Olympics in the future.
	If the Olympics management contacted me for volunteer participation, I would gladly participate in the volunteer program
	I definitely plan to re-participate in the Olympics Volunteer program
Word-of-Mouth	I would recommend the Olympics volunteer program to friends and others
	If my friends were looking for a volunteer job, I would recommend that they seek volunteer jobs at the Olympics
	I would talk positively about my Olympics volunteer experience to others

Abstract in Korean

자원봉사자의 동기, 만족, 지속
의도에 관한 연구:

2020 도쿄올림픽 자원봉사자를 중심으로

Yevhen Cholombitko

글로벌스포츠매니지먼트 전공

체육교육과

서울대학교 대학원

자원봉사자들은 올림픽 조직 과정에 상당한 지원을 제공한다. 올림픽 조직을 돕고 메가 스포츠 행사 개최에 기여하고자 하는 잠재적 자원봉사자들의 기반을 개발하는 것은 매우 중요하며 조직은 자원봉사자들을 보유할 수 있는 방법을 모색해야 한다. 본 연구는 자원봉사자의 동기와 만족감이 향후 봉사활동 지속 의도에 어떠한 영향을 미치는지 알아내는 것을 목적으로 자원봉사자의 동기, 만족감, 지속의사를 결정하는 요인들에 초점을

맞추었다. 본 연구는 2020 년 도쿄 올림픽과 패럴림픽 자원봉사자들을 대상으로 수행되었으며, 총 330 명의 자원봉사자가 42 개의 문항으로 구성된 설문조사에 참여하였다. 결과적으로 자원봉사자들의 만족감은 봉사활동 지속 의도에 긍정적인 영향을 미친 반면 동기에는 큰 영향을 미치지 않는 것으로 나타났다. 본 연구는 기존 자원봉사 프로그램 개선과 자원봉사자들의 동기 및 만족도와 관련하여 인사 관리자와 조직 위원회에게 새로운 측면들을 제공했다는 데에 의의가 있다.

주요어: 도쿄 올림픽, 패럴림픽, 동기, 만족, 자원 봉사 지속 의도

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