Heterogeneity of volunteer motivations at sports events in Slovakia

KRISTÍNA POLÁČKOVÁ¹, NATAŠA HLAVÁČOVÁ², RÓBERT POLAKOVIČ³, MICHAL PRUŽEK⁴

^{1,3,4}Department of Sports Education and Sports Humanistic, Faculty of Physical Education and Sports
Comenius University in Bratislava, SLOVAKIA

²Institute of Experimental Endocrinology, Biomedical Research Center, Slovak Academy of Sciences,
Bratislava, SLOVAKIA

Published online: July 31, 2021

(Accepted for publication July 15, 2021)

DOI:10.7752/jpes.2021.s3258

Abstract:

Problem Statement: Volunteers are one of the essential parts of the organization team for sports events. Without them, many sports events would not be as large. In today's world, where it is uncommon to help without expecting a reward, it is important to see and understand the motivation behind volunteering. **Purpose:** In our study, we focused on volunteers in Slovakia during five big international sports events to identify the motivations of volunteers and to explore relationships with selected variables. **Results:** A questionnaire was utilized to collect data from a total of 145 subjects. Using a Chi-Square contingency table analysis, we searched for the associations between observed indicators. A significant relationship between gender and volunteer motivation was revealed ($\chi^2 = 8.45$; $p \leq 0.05\%$). The strongest motivational factor for men was the love of sports and experiences/atmosphere/to make new contacts. For women, the strongest motivational factor was to take part at the event. The analysis also revealed the relationship between the sports events in which the volunteers participated and the volunteer motivation ($\chi^2 = 31.65$; $p < 0.01\%$), as well as the relationship between gender and the sport event ($\chi^2 = 16.3857$, $p < 0.01\%$). The relationship between volunteer motivation and educational level or employment status was not found. We searched whether the satisfaction of volunteers during sports events impacts future participation and found that there is a close dependency between the two. **Conclusions:** For the organizer of the sports events, it is important to understand behavior and motivate volunteers. Our findings on different motivations may help sports event organizers develop more effective volunteer management strategies.

Key Words: volunteering, motivational factors, satisfaction, gender, employment

Introduction

Due to increasing demands of society, increased capacity of sports venues, and the increasing number of spectators to be directed, sports events are becoming more and more complex to organize. Based on these attributes, there are also higher costs for organizers (Hallmann & Harms, 2012). Due to financial demands, volunteers are one of the options to cover the undemanding activities that a thoroughly organized sports event requires. The cost of sporting events without volunteers would, in many cases, be unbearable (Nichols & Ralston, 2015).

Volunteers are a particularly important part of the working community and they are also a strong component of human resources, especially for non-profit organizations (Wu et al., 2016). Volunteers are part of various events, whether at the mentioned sports events, festivals, or various charitable events. In sports, volunteers play a big role, especially during large sports events. For mega-sports events, such as the Olympic Games, organizers rely on a large number of volunteers to save costs and contribute to economic development (Dickson et al., 2015). For example, at the Rio 2016 Summer Olympics, 50,000 volunteers took part in the preparations and in the overall organization.

We can also define volunteering as one of the important components of tourism and leisure. As volunteering involves people traveling to participate in events, there is a development of tourism and a growing trend in tourism (Guttentag, 2009). Every year, around 1.6 million people around the world join projects where volunteers are needed. Jenkinson et al. (2013) claim that the volunteers themselves also have a positive inner feeling about volunteering, which is also beneficial to health. In their meta-analysis, they found that volunteers had a lower risk of death and Cohort studies showed volunteering had favorable effects on depression, life satisfaction, and wellbeing, but not on physical health. Stukas, Snyder and Clary (2016) noted that the feeling of being able to help others is one of the strongest rewards of the volunteer experience that leads to feelings of personal fulfillment and satisfaction. Another advantage that we observe is the development of the skills of individual volunteers to achieve a common goal, which is given by the organizers. By leading volunteers, their abilities increase (Koutrou et al., 2016). Despite the many benefits that volunteering demonstrates, the non-profit sector faces declining interest in volunteering (Bidee et al., 2013). Given the negative emotional attitude toward

volunteering in terms of exhaustion and subsequent lack of interest in participating in sports events, Cho et al. (2020) in their work dealt with the organizers of large sports events to contact volunteers earlier.

When searching for suitable volunteers, quality human resources are irreplaceable, especially when considering that volunteers are often a crucial element of success (Sharififar, Ganjouie, Tondnevis and Zarei, 2011). Volunteering is most effective when meticulously organized and managed. Event organizers rely on the help of volunteers, frequently in large numbers. Therefore, it is important to build a relationship between volunteers and event organizers and, at the same time, delegate their work with confidence. Nichols & Ralston (2011) argue that volunteers in sport build social capital. The close relationship between volunteers and event organizers is important, given the ease of progress, mutual trust, and good atmosphere. The quality of the relationship can be affected by how well the volunteer management processes are going (Taylor, Darcy, Hoye and Cuskelly, 2006).

Volunteers often represent a very diverse group of people. Volunteers come from different nationalities, cultures, genders, ages, economic status, career status, personality traits, and previous volunteering experience. This diversity will likely affect the motivation, needs, desires and behavior of individual volunteers (Alexander, Kim and Kim, 2015). Understanding the motives and characteristics of individual volunteers would best inform organizers about decisions on the most appropriate approaches and strategies for leading volunteers from the perspective of the event organizers. By segmenting volunteers, organizers of sports events can better understand some factors and motivational factors that influence volunteering at sports events. Based on this segmentation, they can recruit more efficiently and manage volunteers throughout the event more effectively (Alexander et al., 2015; Schlesinger & Gubler, 2016). Several papers in the past have investigated and shown that volunteers have formed homogeneous groups (e.g., Bang, Won, and Kim, 2009; Dickson, Benson, and Terwiel, 2014; Dickson, Benson, Blackman, and Terwiel, 2013; Dickson, Darcy, Edwards. & Terwiel, 2015; Khoo & Engelhorn, 2011; VanSickle, Pierce, & Diacin, 2015). However, there are also studies where the heterogeneity of volunteers has been confirmed. For example, in a study conducted by Schlesinger and Gubler (2016) which was done at the 2014 European Athletics Championships in Zurich, volunteer groups differed concerning socio-economic conditions, sports orientation, and previous volunteering experience. The results showed that motivational profiles varied between groups and that motives for volunteering sometimes combined. The study concluded that motivation-based segmentation is a useful way to gain a clearer understanding of the patterns underlying the heterogeneity of volunteers in sports events.

Studies to determine motivation based on demographic differences were completed by several authors, but the results are not consistent. Bang et al. (2009) found that men are more motivated by external rewards, such as financial rewards and work clothes, and a love of sports, while women are motivated by personal growth. On the other hand, the Pauline and Pauline (2009) study about volunteering at tennis events showed that gender had no significant effect on the motivation of volunteer. Additionally, a study by Ma and Draper (2016) on marathon volunteers did not confirm differences in motivation based on gender or education. VanSickle et al. (2015) examined the different motivations based on gender, age, education, and income. Fundamental differences were shown only in age and employment. In this study, community support was a key motivator factor for older volunteers and career advancement for young people. The different motivation resulted from education was also not confirmed in a study by Kim et al. (2018). They found only a minor difference found in volunteers with a higher education who also had the highest motivation in the search for career and social relationships category. Kim confirms different motivational factors depending on employment. The most common motivating factor for the unemployed and part-time workers is career and social growth. For retirees, the most frequent motivators were the love of sports or the community, altruists, and seekers of material benefits. Bang, Alexandris, et al. (2009) clearly showed in their study that people with higher education, employed full-time, or part-time will go to sports events as volunteers. Also, a study of the Women's Rugby World Cup 2010 confirmed that volunteers are mainly full-time employees (57.1%) and part-time employees (15.7%) (Koutrou, 2018).

It can be argued that motivation is one of the main concepts to understand volunteers interested in volunteering at sports events. Another study that looked at the heterogeneity of volunteers was from Alexander et al. (2015). The study was conducted on volunteers at the 2012 London Olympic Games, focusing on understanding the heterogeneity of volunteers in overall communication with event organizers. Another study contained a sample of volunteers from three separate sports events: The 2015 Australian PGA Championship event at the Gold Coast (Golf Tournament); the 2016 Gold Coast Airport Marathon event (Multi distance running event); and the 2016 Cycle Queensland event (Long distance, multi day Cycling event). Kim et al. (2018) also confirmed that volunteers are differently motivated and therefore need to be seen as heterogeneous groups. In the results of the study, Kim focuses on the organizers of sports events, paying more attention to the motivational profiles of volunteers. This research goal was to better understand volunteers and therefore establish cooperation with them for the long run and not only for a one-time event. With the declining trend in interest in volunteering, it is important to build good relationships between volunteers and organizers. Future participation as a volunteer in sports events is conditioned by the profile of the volunteers, motivation, experience, and level of sports commitment (Cuskelly et al, 2001). For example, Downward (2006) identified a positive impact of volunteer experiences and a love of sports from previous sporting events on future

volunteering. Koutrou (2018) examined the motivation factors and volunteer satisfaction in his study at the 2010 Women's Rugby World Cup. The following 8 motivational factors were confirmed: career orientation, patriotism, interpersonal contacts, leisure, altruism, expression of values, personal growth, and the love of rugby. Most studies on mega-sports events, such as the Olympic Games, define participation as a major motivational factor in participating in a unique event and being part of a large organizational team (Dickson, 2015).

In the environment of charitable sports events, Hyde, Dunn, Wust, Bax and Chambers (2016) examined the determinants of volunteer satisfaction, organizational commitment, and anticipated future interest. Their results suggest that several factors motivating volunteers, such as socialization, entertainment, and financial support, were positively associated with satisfaction. These determinants of motivation led them to more frequent volunteering intentions, not only for charitable purposes but also for other events. Also, a study conducted at 12 competition and non-competition venues of the 15th Asian Games in Doha, Qatar showed that motivation is positively and significantly related to satisfaction during volunteering (Giannoulakis, Wang, Felver, 2015).

The aim of the study was to verify the hypotheses: 1) We assume that there is a significant relationship between gender and volunteer motivation; 2) We assume that there is a significant relationship between the sports event in which the volunteers participated and volunteer motivation; 3) We assume that there is a significant relationship between gender and the sports event in which the volunteers participated; 4) We assume that there is a significant relationship between employment status and volunteer motivation; 5) We assume that there is a significant relationship between educational level and volunteer motivation.

Material & methods

Participants

The research group was composed of volunteers who participated in the following sports events: 2019 IIHF World Championships, 2019 Marathon BB Tour, ISU European Figure Skating Championships 2016, Spartan Slovakia Obstacle Course Races 2019, and World Cup Jasná 2021. A total of 145 volunteers participated in the study. The research group consisted of 79 women (54%) and 66 men (46%). Participants were categorized by age into four categories: under 24 years old ($n=61$, 42%), 25 – 34 years old ($n=37$, 25%), 35 – 44 years old ($n=28$, 19%) and more than 45 years old ($n=19$, 14%). According to their employment status, volunteers were divided into five groups, where the two largest groups represent employed ($n=61$, 42%) and students ($n=58$, 40%). All socio-demographic variables are shown in Table I.

Table 1: Socio-demographic variables

Gender	Men $n = 66$ (46%)		Women $n = 79$ (54%)		
Age	Under 24 years old $n = 61$ (42%)	25 – 34 years old $n = 37$ (25%)	35 – 44 years old $n = 28$ (19%)	More than 45 years old $n = 19$ (14%)	
Employment status	Unemployed $n = 9$ (6%)	Entrepreneur $n = 7$ (5%)	Self-employed $n = 10$ (7%)	Student $n = 58$ (40%)	Employed $n = 61$ (42%)
Educational level	Secondary school $n = 74$ (51%)		Bachelor's degree $n = 17$ (12%)		Master's degree $n = 54$ (37%)

Research method

A self-administered questionnaire was distributed to collect data. The adequacy of the questionnaire was consulted with two independent experts, the Director of International Relations of The Slovak Olympic Committee and the Volunteer Coordinator at several sports events including the IIHF 2019 World Championships, who is also the Project Manager of The Slovak International Hockey Federation. The questionnaire included socio-demographic variables, questions related to previous volunteering experiences, questions about motivational factors, and satisfaction with volunteering. For this research, four questions addressing socio-demographic information (e.g., gender, age, employment status, and the highest educational level) and an additional three questions addressing volunteering experiences (e.g., previous volunteer experiences before this event, main information source, and previous participation in non-sporting events) were asked. There was one question where subjects picked one of the strongest motivational factors for them. Then there was an open question in which volunteers expressed which other motivating factors encouraged them to participate in the sports event. The last part consisted of three questions about satisfaction (e.g., satisfaction with sports event, recommendation for friends, and further participation).

Data collection and analysis

The questionnaire was sent directly to the e-mail addresses of volunteers from the 2019 IIHF World Championships and the ISU European Figure Skating Championships 2016. E-mail addresses were provided by the volunteer coordinators of the individual sports events. Volunteers from Spartan Slovakia Obstacle Course Races 2019, World Cup Jasná 2021 and 2019 Marathon BB Tour were approached through private groups on social networks for their completion of the questionnaire. The questionnaire was sent to all volunteers in January

2021

2021. The data collected from the questionnaires were evaluated using GraphPad Prism 8. For statistical analyses, we used Chi-Square Contingency Table Analysis to evaluate the relationship between the observed indicators and based on this we designated the analyses.

Results

Volunteers were grouped by motivation type into four groups, due to which motivational factor they chose as the strongest: love of sports, to take part at the event, to have fun and to meet new people, or to gain new experiences and knowledge (Figure I).

Figure I: Volunteer motivation during sports events

Four groups of volunteer motivation (n = 145, woman = 79, men = 66).

To approach the hypothesis 1, that there is a significant relationship between gender and volunteer motivation, the Chi-Square test showed a significant relationship between the two observed indicators ($\chi^2 = 8.4498$, $p = 0.0376$ *). The strongest motivational factor for men was love of sports and to have fun and to meet new people (both 35%). For women, the strongest motivational factor was to take part at the event (37%). The second strongest motivational factor for women was to have fun and to meet new people (30%). The weakest motivational factor for both genders was to gain new experiences and knowledge. All data are shown in Figure II.

Figure II: The relationship between gender and volunteer motivation

Chi-Square Contingency Table Analysis was used for statistical analyses to find the relationship between gender and volunteer motivation.

To verify the hypothesis that there is a significant relationship between the sports event in which the volunteers participated and volunteer motivation, the Chi-Square test revealed a significant relationship between those two observed indicators ($\chi^2 = 31.6479$, $p = 0.0016$ **). At the 2019 IIHF World Championship, the strongest motivational factor was to take part at the event, which can be compared to the fact that volunteers at major sports events, which the 2019 IIHF World Championship can be considered as in terms of Slovak sports events, are interested in being part of the big event. At the 2019 Marathon BB Tour, respondent chose two motivational factors equally: to have fun and to meet new people and to gain new experiences and knowledge. At the ISU European Figure Skating Championships 2016, the strongest motivational factor was love of sports. Figure skating can possibly be seen as a type of event where spectators must love the sport to watch it or to

participate in it. The strongest motivational factor at the Spartan Slovakia Obstacle Course Races 2019 was to have fun and to meet new people. At the World Cup Jasná 2021, the strongest motivator was the love of sports. All data are shown in Figure III.

Figure III: The relationship between sports event and volunteer motivation.

For statistical analyses was used Chi-Square Contingency Table Analysis to find the relationship between sports event and volunteer motivation.

To test the hypothesis that there is a significant relationship between gender and the sports event in which the volunteers participated, using the Chi-Square test, we found a significant relationship between those two observed indicators ($\chi^2 = 16.3857$, $p = 0.0025^{**}$). From the various sports events, the 2019 IIHF World Championship had the most male participants, and their biggest motivation was love of sports (15 men of 29). The sports event where men participated the second most was the World Cup Jasná 2021. For comparison, at this event there were 21 men and 8 women. The sports event which had the most women participants was also the 2019 IIHF World Championship. From the 35 women who participated at the 2019 IIHF World Championship, 18 were motivated to take part at the event. Unsurprisingly, at the ISU European Figure Skating Championships 2016, there were 13 female and two male participants. All data are shown in Figure IV.

Figure IV: The relationship between gender and sports event.

Chi-Square Contingency Table Analysis was used for statistical analyses to find the relationship between gender and sports event.

In the case of verifying the hypothesis that there is a significant relationship between employment status and volunteer motivation, we could not use Chi-Square statistics, because of zero values in two indicators. Both unemployed and entrepreneur participants did not point at the volunteer motivation, to gain new experiences and knowledge. Based on this finding, we excluded both groups and created a new contingency table with only three types of employment status: self-employed, student, and employed. Using the Chi-Square test, we did not find a significant relationship between those two observed indicators ($\chi^2 = 3.8969$, $p = 0.6906$, $p = \text{NS}$).

To test hypothesis 5, that there is a significant relationship between educational level and volunteer motivation, the Chi-Square test did not show a significant relationship between those two observed indicators ($\chi^2 = 11.7526$, $p = 0.0677$, $p = \text{NS}$).

Previous volunteer experiences at sports events accounted for 68% of participants. For 32% of our participants, this was their first contact with volunteering in sports events (Figure V). Non-sports events attended 42% of them. When asked in which event they participated, most responses were festivals, school events, cultural or social events, various events for children, and charity events for non-profit organizations which help children and families at risk or in need.

Figure V: Experience with sports events (n = 145).

Satisfaction with the sports event was almost consistent. Almost all of volunteers were totally satisfied with the event, but some of them saw some small things that could have been better. The most repeated complaint was that the coordinator was superior and looked at the volunteers as subordinates. Some felt that they were there to do everything and sometimes they felt like “cheap labor”. Other complaints were about bad food and lack of communication. In the question if they would recommend volunteering, only one of them said no (reason – coordinator was shouting), and two said maybe (reasons – lack of communication and subsequent chaos, lot of physical work). Also, those three participants expressed that they have no interest to participate in future volunteering.

Discussion

The research aim was to find out the volunteers' individual motivational factors and to examine relationships with selected variables. In the study, we followed the volunteers' individual motivational factors, which were defined: love of sports, to take part at the event, to have fun and to meet new people, and to gain new experiences and knowledge. The most participants (32%) express that the strongest volunteer motivation is to have fun and to meet new people. Similarly, in review of 131 relevant items of research about volunteering motivation (Nichols et. al 2016), subjects claimed that young volunteers participated because of fun and to be with friends. Either Kay and Bradbury (2009) show that 72% of younger volunteers were attracted to the event because they thought it would be fun and enjoyable.

The second strongest motivational factor in our study was to take part at the event (30%). This was observed also by Dickson et al. (2014). In his study he made a ranking of volunteer motivation from the London 2012 Summer Olympics and the Vancouver 2010 Winter Olympics. Three strongest motivational factors during both sports events were: it was the chance of a lifetime, I wanted to make the Games a success, I am interested in the Games. The cluster, I wanted to be associated with the Games, ranked fourth place during the London 2012 Summer Olympics and during the Vancouver 2010 Winter Olympics at sixth place. These four factors are similar to and can be defined as our factor ‘to take part at the event’.

The next motivational factor in our sample of volunteers was love of sports, which was the most mentioned by volunteers who participated at the ISU European Figure Skating Championships 2016. The competition of figure skating is a type of event where spectators must love the sport to watch it or to participate in it. Noordegraaf, & Celebi (2015) also noted in their study that love of sports is not the main factor to be a volunteer. They showed that one of the most important factors are social benefits and career opportunities.

The last motivation factor to be identified was to gain new experiences and knowledge (12%). This statement is also approved by Ralston et al. (2003). They made a ranking of 32 motivational factors and one of them, I will learn new skills and capabilities, was in 12th place, with just 21% strongly agreeing. For comparison, the first factor had 71% strongly agreeing, and 20 other statements had 18%, or less, strongly agreeing. Also, Bondar and Petrenko (2015) examined motivational factors and just 2.2% of participants chose gaining experience.

Presented results showed a significant relationship of gender with sports event and volunteer motivation. We allow to say that we still can see differences between gender. In our study, we demonstrated

a significant relationship in both tests where gender included. We found the biggest difference between men and women in the volunteer motivation factor love of sports (62% men, 38% women). In other studies which dealt with love of sports, the authors found different results. Some studies pointed out that this difference is because of individual versus collective sports. Gitonga et al. (2003) noted that ball games such as soccer, rugby, hockey, basketball, etc. are more popular for men. This we also proved in our study. Of the 23 men who participated at the 2019 IIHF World Championship, 14 of them chose the volunteer motivation love of sports. Only 14 women were motivated by love of sports. Xiong (2015) remark that worldwide, women are not as established as men in sport, but in China, female athletes tend to win more medals than male athletes. The European Commission (2014) assumed that women are less active than their men counterparts. The women noted that they need more encouragement and support to be more active. This was also confirmed by Campos et al. (2017) in their study of 175 students at the Cuenca Campus at the Universidad Castilla La Mancha (Spain). On the other hand, Balga et al. (2019) described no gender differences at elementary school and between the ages of 8 and 13 years old pupils. That means that children are raised to love sport equally.

By comparing the volunteer motivation with educational level and employment status, we did not find a significant relationship between those two observed indicators. Kim et al. (2015) mentioned in their study that in developed countries, most volunteers are students from different universities. They also suggested that universities should create a program for the education of volunteers. Those universities could provide trained volunteers who are ready to participate at events. A study of 256 university students showed that the student attitude of volunteering is positive (Bondar and Petrenko, 2015). The study found that volunteering opportunities in their future jobs gives students a chance to gain experience in real work, gain more friends from the industry, and self-realization of what they want to do in the future (Bondar and Petrenko, 2015).

Satisfaction with volunteering is one of the important parts of future participation. As previously mentioned, nowadays there is a lower interest in volunteering. It is more difficult to find the right people for volunteering, so when good volunteers are found it is important to create a good relationship with them. In our study, there was nearly a 99% satisfaction rate with volunteering. We suppose that the percentage is so high because the volunteers received the questionnaire a long period after the sports event and the questionnaire was more likely filled by those who had good memories of the events. In the question if they would like to participate again and if they would recommend volunteering to someone else, every participant, besides three, answered yes. We can say that there is dependency between satisfaction and future participation in sports event for volunteers. Sreerag (2020), whose study dealt with future volunteering, claimed that future sports volunteering or other sport participation depends on previous interest for the sport and experience from previous volunteering opportunities.

Conclusions

It is necessary to understand that the existence and success of sports events strongly depends on volunteers, due to reducing the costs of human resources, and therefore the organizers of sports events should consider the motivational profiles of volunteers. Our results show that volunteers tend to be a diverse group and have different motivations. The strongest motivational factor in our sample of volunteers was to have fun and to meet new people, then to take part at the event, love of sports and the last motivation factor to be identified was to gain new experiences and knowledge. We found a significant association of gender with sports event and volunteer motivation showing the biggest difference between men and women in the volunteer motivation factor love of sports. Sports event organizers therefore need to pay more attention to volunteer motivations of different groups and the character of sports events. Another attribute which influences the decisions of volunteers is previous satisfaction with volunteering. If the volunteers are satisfied with the work they did during the sports event and if they received what they expected from the event, then they will also have a future interest in volunteering at other sports events.

Conflicts of interest - The authors have no conflicts of interest to declare.

References

- Alexander, A., Kim, S. B., & Kim, D. Y. (2015). Segmenting volunteers by motivation in the 2012 London Olympics games. *Tourism Management*, 47(15), 1–10.
- Balga, T., Antala, B., & Argajová, J. (2019). Attitudes of elementary school pupils towards physical education and their differentiation from the point of view of age, sporting level and gender, *Journal of Physical Education and Sport*, 19(1), 552-559.
- Bang, H., Alexandris, K., & Ross, S. D. (2009). Validation of the revised Volunteer Motivations Scale for International Sporting Events (VMS-ISE) at the Athens 2004 Olympic Games. *Event Management*, 12, 119–131.
- Bang, H., Won, D., & Kim, Y. (2009). Motivations, commitment, and intentions to continue volunteering for sporting events. *Event Management*, 13(2), 69–81.

- Bidee, J., Vantilborgh, T., Pepermans, R., Huybrechts, G., Willems, J., Jegers, M., & Hofmans, J. (2013). Autonomous motivation stimulates volunteers' work effort: A self-determination theory approach to volunteerism. *International Journal of Voluntary and Nonprofit Organizations*, 24, 32–47.
- Bondar, A., & Petrenko, I. (2015). The role of sports volunteering in the life of university students. *Slobozhanskyi Herald of Science and Sport*, 50(6), 40–43.
- Campos, F., Marques, M., Silva, S., Martins, F., Simoes, V., & Franco, S. (2017). Physical self-description and sport participation, by gender, of university students. *Journal of Physical Education and Sport*, 17 (1), 207–211.
- Cho, H., Li, C., & Wu, Y. (2020). Understanding sport event volunteers' continuance intention: An environmental psychology approach. *Sport Management Review*, 23(4), 615–625.
- Cunningham, G. B. (2013). Theory and theory development in sport management. *Sport Management Review*, 16(1), 1–4.
- Cuskelly, G., & Boag, A. (2001). Organizational commitment as a predictor of committee member turnover among volunteer sport administrators: Results of a time-lagged study. *Sport Management Review*, 4(1), 65–86.
- Dickson, T. J., Benson, A. M., & Terwiel, F. A. (2014). Mega-event volunteers, similar or different? Vancouver 2010 vs London 2012. *International Journal of Event and Festival Management*, 5(2), 164–179.
- Dickson, T. J., Benson, A. M., Blackman, D. A., & Terwiel, F. A. (2013). It's all about the games! 2010 Vancouver Olympic and Paralympic winter games volunteers. *Event Management*, 17(1), 77–92.
- Dickson, T. J., Darcy, S., Edwards, D., & Terwiel, F. A. (2015). Sport mega-event volunteers' motivations and post event intention to volunteer: The Sydney World Masters Games, 2009. *Event Management*, 19(2), 227–245.
- Dickson, T.J., & Benson, A.M. (2013). London 2012 Games Makers: Towards Redefining Legacy. Retrieved from: <https://assets.publishing.service.gov.uk>
- Downward, P., & Ralston, R. 2006. The sports development potential of sports event volunteering: Insights from the XVII Manchester Commonwealth Games. *European sport management quarterly*, 6, 333–351.
- European Commission (2014). Special Eurobarometer 412. Sport and Physical Activity. doi: 10.2766/73002
- Giannoulakis, C., Wang, C. H., & Felver, N. (2015). A modeling approach to sport volunteer satisfaction. *International Journal of Event and Festival Management*, 6(3), 182–199.
- Gitonga, E.R., Njororai, W.W.S., & Wahome, P. (2003). Participation motives of University athletes: The case of Kenyatta University. *Journal of Physical Education*, 1(1), 31–36.
- Guttentag, D. A. (2009). The possible negative impacts of volunteer tourism. *International Journal of Tourism Research*, 11(6), 537–551.
- Hallmann, K., & Harms, G. (2012). Determinants of volunteer motivation and their impact on future voluntary engagement: A comparison of volunteer's motivation at sport events in equestrian and handball. *International Journal of Event and Festival Management*, 3(3), 272–291.
- Hyde, M. K., Dunn, J., Wust, N., Bax, C., & Chambers, S. K. (2016). Satisfaction, Organizational Commitment and Future Action in Charity Sport Event Volunteers. *International Journal of Nonprofit and Voluntary Sector Management*, 21(3), 148–167.
- Jenkinson, C. E., Dickens, A. P., Jones, K., Thompson-Coon, J., Taylor, R. S., Rogers, M., & Richards, S. H. (2013). Is volunteering a public health intervention? A systematic review and meta-analysis of the health and survival of volunteers. *BMC Public Health*, 13(1), 773.
- KAY, T., & BRADBURY, S. (2009). Youth sport volunteering: Developing social capital?. *Sport Education and Society*, 14, 121–140.
- Khoo, S., & Engelhorn, R. (2011). Volunteer motivations at a national Special Olympics event. *Adapted Physical Activity Quarterly*, 28(1), 27–39.
- Kim, E., Fredline, L., & Cuskelly, G. (2018). Heterogeneity of sport event volunteer motivations: A segmentation approach. *Tourism Management*, 68, 375–386.
- Kim, S., Sung, J., Park, J., & Dittmore, S. (2015). The relationship among leisure attitude, satisfaction, and psychological wellbeing for college students. *Journal of Physical Education and Sport*, 15(1), 70–76.
- Koutrou, N. (2018). The Impact of the 2010 Women's Rugby World Cup on Sustained Volunteering in the Rugby Community. *Sustainability*, 10, 10–30.
- Koutrou, N., & Downward, P. (2015). Event and club volunteer potential: The case of women's rugby in England. *International Journal of Sport Policy*, 8(2), 1–24.
- Koutrou, N., & Pappous, A. S. (2016). Towards an Olympic volunteering legacy: Motivating Volunteers to serve and remain - A case study of London 2012 Olympic Games Volunteers. *Voluntary Sector Review*, 7(3), 269–291.
- Morgan, H. (2013). Sport volunteering, active citizenship and social capital enhancement: What role in the 'Big Society'?. *International Journal of Sport Policy*, 5(3), 381–395.
- Ma, X., Draper, J. (2016). Motivation and satisfaction of marathon volunteers: How important is volunteers' level of running experience?. *Journal of Convention & Event Tourism*. 18(1), 41–59.
- Nichols, G., & Ralston, R. (2011). Social inclusion through volunteering: The legacy potential of the 2012 Olympic Games. *Sociology*, 45, 900–914.

- Nichols, G., & Ralston, R. (2015). The legacy costs of delivering the 2012 Olympic and Paralympic Games through regulatory capitalism. *Leisure Studies*, 34, 389-404.
- Nichols, G., Knight, C., Boukouris, H. Uri, C., Hogg, E., & Storr, R. (2016). Motivations of Sport Volunteers in England. *A review for Sport England*. London: Sport England. doi: 10.13140/RG.2.2.16975.28323
- Noordegraaf, M., & Celebi, M., (2015). The challenges of volunteering during international sport organizations / events. *International Journal of Human Sciences*, 12(1). 1263-1279.
- Osipov, A., & Vonog, V. (2016). Ensuring a possibility of high quality training of students as sports volunteers for competitions in terms of organizing and running Universiade - 2019. *Journal of Physical Education and Sport*, 2, 361-364.
- Osipov, A., Zhavner, T., Klimuk, Y., Kudryavtsev, M., Vapaeva, A., Salyamova, P., Bliznevskiy, A., & Bliznevskaya, V. (2017). Training Criteria of the Sports Specialty Volunteers for the Service Support during Winter Sports Competitions. *Journal of physical education and sport*, 17(3), 942 – 947.
- Pauline, G., & Pauline, J. S. (2009). Volunteer motivation and demographic influences at a professional tennis event. *Team Performance Management*, 15(3/4), 172–184.
- Ralston, R., Downward, P. & Lumsden, L. (2003). Volunteering at the XVII Commonwealth Games (Manchester 2002): Stage 1. Report 1. Quantitative Analysis March 2003 UK Sport.
- Schlesinger, T., & Gubler, R. (2016). Motivational profiles of sporting event volunteers. *Sport in Society*, 19(10), 1-21.
- Sharififar, F., Ganjouie, F. A., Tondnevis, F., & Zarei, A. (2011). Effect of social factors and motives on commitment of sport events volunteers. *Technics Technologies Education Management-TTEM*, 6(1), 184–190.
- Sreerag, M., & Raizada, S. (2020). Sports Development Prospects of Sports Event Volunteering: An Insight from Maharashtra Open. *Annals of Tropical Medicine and Public Health*, 23(17). 231-748.
- Stukas, A., Snyder, M., & Clary, E.G. (2016). Understanding and encouraging volunteerism and community involvement. *The Journal of Social Psychology*, 15(3), 243–555.
- Taylor, T., Darcy, S., Hoyer, R., & Cuskelly, G. (2006). Using psychological contract theory to explore issues in effective volunteer management. *European Sport Management Quarterly*, 6(2), 123–147.
- VanSickle, J. L., Pierce, D. A., & Diacin, M. (2015). Volunteer motivations at the 2012 super bowl. *International Journal of Event and Festival Management*, 6(3), 166–181.
- VanSickle, J. L., Pierce, D. A., & Diacin, M. (2015). Volunteer motivations at the 2012 Super Bowl. *International Journal of Event and Festival Management*, 6(3), 166–181.
- volunteer sport administrators: Results of a time-lagged study. *Sport Management Review*, 4, 65–86.
- Wu, Y., Li, C., & Khoo, S. (2016). Predicting future volunteering intentions through a self-determination theory perspective. *International Journal of Voluntary and Nonprofit Organizations*, 27(3), 1266–1279.
- Xiong, H. (2015). Urbanization, women's body image, and women's sport under Chinese socialism 1949–1979: A historical review. *Sport History Review*, 46, 100–123.