Original Article

OLYMPIC VALUE PERCEPTIONS INFLUENCE ON VOLUNTEERS' ENDORSEMENT OF JAPAN HOSTING THE TOKYO 2020 OLYMPIC GAMES

Abstract - Despite volunteers being essential to the success of the Olympic Games, research on Olympic volunteers' perceptions of Olympic values remains negligible. This study was aimed to investigate this phenomenon with the Tokyo 2020 Olympic Games volunteers. The researchers conducted a questionnaire survey related Olympic value perceptions and endorsement of Japan hosting the Tokyo 2020 Olympic games on 538 volunteers during the Games. The results identified that the value dimension of friendship had a significant influence on females' endorsement of Japan hosting the Tokyo 2020 Olympic Games, and the value dimension of excellence reduced both females' and males' favorable endorsement. The findings and recommendations have ramifications for the future organizing committees of Olympic and Paralympic Games in terms of games delivery and Olympic volunteer legacy.

Keywords: Olympic Games; volunteers' perceptions; Olympic values; Tokyo 2020.

INFLUÊNCIA DAS PERCEPÇÕES DOS VALORES OLÍMPICO NO APOIO DE VOLUNTÁRIOS AO JAPÃO, SEDE OS JOGOS OLÍMPICOS DE TÓQUIO 2020

Resumo - Apesar de que os voluntários serem essenciais para o sucesso dos Jogos Olímpicos, a investigação sobre a percepção dos valores olímpicos pelos voluntários continua a ser insignificante. Este estudo teve como objetivo investigar este fenómeno com os voluntários dos Jogos Olímpicos de Tóquio 2020. Os investigadores aplicaram um questionário relacionado com a percepção dos valores olímpicos e a aprovação do Japão no acolhimento dos Jogos Olímpicos de Tóquio 2020 em 538 voluntários durante sua realização. Os resultados identificaram que a dimensão do valor amizade teve uma influência significativa no apoio das mulheres ao Japão e a dimensão do valor excelência reduziu tanto o apoio favorável das mulheres como o dos homens. As conclusões e recomendações têm ramificações para os futuros comitês organizadores dos Jogos Olímpicos e Paraolímpicos em termos da sua realização e do legado do voluntariado olímpico.

Palavras-chave: Jogos Olímpicos; percepção dos voluntários; valores Olímpicos; Tóquio 2020.

LA INFLUENCIA DE LAS PERCEPCIONES DEL VALOR OLÍMPICO EN EL RESPALDO DE LOS VOLUNTARIOS AL JAPÓN, SEDE DE LOS JUEGOS OLÍMPICOS DE TOKIO 2020

Resumen - Aunque los voluntarios son esenciales para el éxito de los Juegos Olímpicos, la investigación sobre la percepción de los valores olímpicos por parte de los voluntarios sigue siendo insignificante. Este estudio tuvo como objetivo investigar este fenómeno con los voluntarios de los Juegos Olímpicos de Tokio 2020. Los investigadores aplicaron un cuestionario relacionado con la percepción de los valores olímpicos y la aprobación de Japón en la organización de los Juegos Olímpicos de Tokio 2020 en 538 voluntarios durante su realización. Los resultados identificaron que la dimensión del valor de la amistad tuvo una influencia significativa en el apoyo de las mujeres a Japón y la dimensión del valor de la excelencia redujo el apoyo favorable tanto de las mujeres como de los hombres. Los hallazgos y recomendaciones tienen ramificaciones para los futuros comités organizadores de los Juegos Olímpicos y Paralímpicos en términos de sus logros y el legado del voluntariado olímpico.

Palabras-clave: Juegos Olímpicos; percepción de los voluntarios; valores olímpicos; Tokio 2020.



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Introduction

The Olympic Games are a global sports festival held once every 4 years. However, they are more than just a sporting event. The games' vision will be to use sports to promote human growth and international peace, and both summer and winter Games are staged every four years¹. Baron Pierre de Coubertin, called as 'father of the modern Olympics', was confident that the Olympic ideals would aid in the promotion of universal values such as mutual understanding, friendship, and tolerance, resulting in a better and more peaceful world². Therefore, he invented the notion of Olympism¹, which was formalized in the Olympic Charter as 'Olympism is a philosophy of life'³. Historically, the Olympics have brought about a variety of positive effects on individuals and the societies of the host countries, which are considered to be part of the Olympics legacy.

Many studies that examined the populations' endorsement of their home country hosting the Olympic Games^{4-6,20} focused on the economic impact; only a few examined the effects of individual value perceptions on this endorsement⁷. Koenigstorfer and Preuss⁸ stated that value perceptions influence whether individuals in the host country believe the Olympic Games are beneficial (positively) or not beneficial (negatively), and whether they are willing to support the hosting Olympic Games. To make the Olympic Games a success, the International Olympic Committee (IOC) requires the host city of Olympic Games establish a strong communication and promotion program with their citizens⁹.

The Olympic Games rely on a huge number of volunteers owing to the similarly huge number of participants and the inherent complexity of organizing events and controlling crowds¹⁰. The IOC has emphasized the growing importance of volunteers in Olympics planning and execution, and it is recognized that participating volunteers are essential to the success on the Games¹¹. Although several studies have been conducted on the motivations of Olympic volunteers since the Sydney 2020 Olympic Games^{10,11,35}, no research has been conducted on volunteers' perceptions of Olympic values.

To fill this gap, the researcher conducted this study to evaluate the effects of Tokyo 2020 Olympic Games volunteers' perceptions of Olympic values on their endorsement of their home country (i.e., Japan) hosting the games. Three intersecting variables (i.e., Olympic values, Olympic volunteers, and endorsement) are introduced next.

Olympic values

There are two predominant viewpoints on Olympic values¹². The first is that the Olympic movement should promote a set of values³. Looking back at Olympism, excellence, friendship, and respect are its three pillar values¹³. These three values still serve as the pillars of the current Olympic movement because of in its promotion of sports, culture, and education in the pursuit of a better world. Excellence means doing one's best upon that playing field or at work. The most important aspect of excellence is not winning; it is the fact people may take part in, make progress together, and enjoy their healthy combination between body, will, and mind. The promoting Olympic movement is based on friendship in human. It encourages individuals to see sports as one of the tools for building cross-cultural understanding¹³. There are many examples of respect (e.g., respect for oneself and one's body, for others, for rules and regulations, for sports, and for the environment).

The other viewpoint is that particular values should be associated with the Olympic movement. Such values are concerned with people's perceptions of their worth, and Chatziefstathiou¹² demonstrated the they have changed since Coubertin launched the Olympic movement.

Koenigstorfer and Preuss⁸ argued that individuals' perceptions of what the Olympic Games stand for are reflected in their perceived values. They developed an Olympic Value Scale (OVS) that measure perceptions of Olympic values. In a study with 561 Olympic Games experts and 3,576 individuals from the U.S. and Germany, they calibrated the OVS, which contains 12 items that are loaded onto three factors. The first factor was named appreciation of diversity, and this factor has four items (anti-discrimination, diversity, equality, and tolerance). The second factor was named friendly relations with others, and this factor has four items (brotherhood, friendship, understanding, and warm relations with others). The third factor was named achievement in competition, and this factor has four items (achievement, achieving one's personal best, competition, and effort). These three dimensions align to reflect the three Olympic pillar values. The first factor reflected respect, the second factor reflected friendship, and the third factor reflected excellence.

Olympic volunteers

Although Olympic volunteers have become increasingly essential resources for planning Olympic Games and carrying out day-to-day duties since the 1980s, the Olympic movement has only recently begun to appreciate their significance. The value of Olympic volunteer participation as applied to the Olympic Games is relatively new, and the Lake Placid 1980 Olympic Games are considered its starting point¹⁴. Volunteers at the current Olympic Games devote a significant amount of time and effort to assisting organizers in achieving their objectives. As a result, they constitute an essential part of the human-resource calculus in Olympic preparation¹⁵. Former IOC President Jacques Rogge argued that volunteers are true Olympians, praising them as unsung heroes behind the successful organization of every Olympic Games¹⁶. Many studies indicate interest in the Olympic Games as a dimension included in the motivations of volunteer participation^{10-11,17}.

Endorsement

Hosting the Olympics is not limited to just the positive aspects. They span the political, social, economic, physical, and cultural realms, all of which can also have negative sides. Malfas and Theodoraki¹⁸ concluded that the legacy of Olympic hosting is difficult to define, prone to political interpretation, and multidimensional, as the prospect of economic expansion is the primary motivation behind Olympic bidding.

Davis and Allen¹⁹ found that people who had the most negative judgments about tourism also had the least knowledge about it, underscoring the importance of information and its impact on value assessments. Streicher and Schmidt²⁰ carried out surveys in 12 countries from western countries (Austria, France, Germany, Greece, Italy, Norway, Poland, Spain, Sweden, Switzerland, the U.K., and the U.S.) to study the factors of perceptions. They examined how residents' perceptions of economic and social issues influenced their willingness to support (or oppose) a fictional Olympic Games holding in their country. The findings revealed that perceived social and economic factors had a positive and significant influence, but that social (rather than economic) aspects had a stronger influence. This study had the greatest sample size of any previous one focusing on host-country perceptions with 12,000 participants.

In the study of Koenigstorfer and Preuss⁸ on perceived values related to the Olympic Games (Germany: n = 1,149; U.S.: n = 1,133), friendly relationships with others presented stronger correlations to attitudinal variables regarding appreciation of diversity and achievement in competition. Koenigstorfer and Preuss⁷ examined the relationship between participants' intentions to support hosting the Olympic Games in their home country and their perceptions of Olympic values, and the results depended on the extent to which the IOC is thought to be corrupt. Their result showed that when the IOC was recognized as corrupted, the value dimension of achievement in competition was reduced.

Methods

The goal of this study was to clarify the relationship between volunteers' perceptions of Olympic values and their endorsement of their country hosting the Tokyo 2020 Olympic Games. The researcher employed a quantitative research method and conducted a questionnaire survey.

Instrument

The researcher prepared a questionnaire which was consisted of three parts. The first part gathered general information, the second part gathered data about value perceptions, and the third part gathered endorsement data. In the second part, 12 OVS items and six control items proposed by Koenigstorfer and Preuss⁸ were applied. In the third part, attitudes toward endorsement were measured with three semantic differentials (negative or positive, unfavorable or favorable, and bad or good), as proposed by Becker-Olsen and Cudmore²¹. All items were formulated using a simple narrative for clarity and ease of understanding in Japanese. Two native bilingual speakers (Japanese and English) performed back-and-forth translations to ensure that the translations accurately captured the original English items' intended meanings. The Kasetsart University ethics committee reviewed the study instrument before to distribution to guarantee content validity and to minimize or alleviate any ethical difficulties. It was confirmed there were no ethical problems (COA No. COA64/048).

Samples

The researcher was a National Olympic Committee assistant at the Tokyo 2020 Olympic Games, and the survey was hand-distributed to volunteers (convenience sampling). All participants were informed that their participation in the study was completely voluntary, their personal information would be kept private. There were no incentives, and no questions asked participants to provide their names or other personally identifiable information. 546 of the 1,321 questionnaires distributed were returned to the researcher (41.3 % response rate). Our final sample consisted of 538 people after we eliminated eight people who had no variation in their judgments rating of value perceptions in regard to the Olympic Games.

Table 1 provides a sample description (n = 538) of respondents, who were 59.5% female and 40.5% male. This percentage is very close to the 58.2% (41,289 total) female and 41.8% (29,677 total) male volunteers that were reported by the Tokyo Organizing Committee of the Olympic and Paralympic Games (TOCOG), after the Games period (22). A large ratio (37%) of respondents stated that they had a strong interest in sports, and 29.0% stated that they had some interest (M = 5.83, SD = 1.148), as assessed on a seven-point rating Likert scale (1 indicated 'no interest at all' and 7 indicated 'strong interest').

Table 1 - Sample description (n = 538)

	Classification	Frequency	Percentage	
Gender	Female	320	59.5	
	Male	218	40.5	
	Total	538	100.0	
Age	18-24	59	11.0	
	25-39	85	15.8	
	40-54	198	36.8	
	55+	199	36.4	
	Total	538	100.0	
Interest in sport	7 (strong interest)	192	35.7	

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Classification	Frequency	Percentage 29.0	
6 (interest)	156		
5 (rather interest)	125	23.2	
4 (neither)	46	8.6	
3 (not rather interest)	13	2.4	
2 (not interest)	5	0.9	
1 (not interest at all)	1	0.2	
Total	538	100.0	

Analysis

The Olympic value perceptions scores from part two were assigned three factors, and structural equation modeling (SEM) was conducted to determine their validity. The researcher set the independent variables to match the factors of Olympic value perceptions listed above, and the dependent variable was set to endorsement; the gender differences were then compared using the standard regression coefficient (β). AMOS 28.0 for Windows was used.

Results

The study utilized six control items to look for stylistic response habits, which can be caused by acquiescence biases, issues distinguishing in discriminating Olympic value items, or people's natural predisposition to give high or low ratings. The mean of the six control items was subtracted from the individual item ratings, using same method as Koenigstorfer and Preuss⁸. The three Olympic value perception subscale scores were 'appreciation of diversity; respect' (M = 0.2647, SD = 1.07529), 'friendly relations with others; friendship' (M = 0.3558, SD = 0.74515), and 'achievement in competition; excellence' (M = 0.9260, SD = 0.78847).

Harman's single factor test was adopted. The results showed that the contribution rate of the first factor was 35.315% (< 50.0%). Therefore, the explanatory power of the first factor is not the majority. The measurement model ($\chi 2 = 2622.011$, df = 66, p < .001) confirmed that the common method variance bias was not a major threat in this study.

Impact to Volunteers' endorsement

Multiple models were set for SEM measurement, and the model with the best fit is shown in Figure 1. In this figure, 'Diversity' signifies the factor of 'appreciation of diversity', 'Friendly' signifies the factor of 'friendly relations with others', 'Achievement' signifies the factor of 'achievement in competition', and 'Endorsement' signifies the factor of 'endorsement of their host country hosting the Tokyo 2020 Olympic Games'.

Diversity F -0.049 F 0.611*** M 0.079 M 0.604*** F 0.146* M 0.150 e1 Friendly Endorsement $R^2 = F = 0.023$ $R^2 = M \ 0.087$ F 0.118**

F -0.110*

Figure 1 - Model of Olympic value perceptions' influence on endorsement

Note: ***p < .001, **p < .01, *p < .05

Achievement

Source: Author.

M 0.198***

Table 2 shows the goodness-of-fit (GFI) measures, that give the most basic indicator of how well the suggested model matches the data²³. The $\chi 2$ is the standard metric for assessing overall model fit and determining the extent of the gap between the covariance matrices of the sample and the fitted covariance matrices²⁴. The p-value of the proposed model was 0.157 ($p \ge 0.05$), which is not significant. This p-value indicated that this model is a good fit model. The root mean-square of approximation (RMSEA) is a statistic that shows how well a model with unknown however well-chosen parameter estimates matches the populations' covariance matrix²⁵. In recent years, RMSEA has established itself as one of the most useful fitness metrics²⁶. According to MacCallum and Browne²⁷ a score below 0.08 shows a good fit. The RMSEA of the proposed model

in this study was 0.040 (< 0.08), further indicating that this model is a good fit. Jöreskog and Sorbom³⁶ developed the GFI as an alternative to $\chi 2$, and it calculates the proportion of variance accounted for by estimated population covariance²⁸. The GFI had been advised with an omnibus cut-off score of 0.90. When factor loadings and sample sizes are low, simulation experiments demonstrate that a higher cut-off of 0.95 is more acceptable²⁹. The GFI of the proposed model was 0.997 (\geq 0.95), further indicating the good fitness of this model. All SEM programs contain the comparative fit index (CFI) index, which is one of the most used fitness indices because it is one of the least affected by sample size³⁰. A cut-off criterion of CFI \geq 0.90 has been promoted in the past. However, recent research has found that a value larger than 0.90 is required to ensure that incorrectly described models were not acceptable²⁴. As an outcome, a CFI score of larger than 0.95 is now considered to be indicative of a good fit. The CFI of the proposed model was 0.994 (\geq 0.95), confirming that this model is a good fit. Based on the results of the above indicator tests, the fitness of the proposed model is recognized to be very good.

Table 2 - Model fit index

	χ^2	df	χ²/df	p	RMSEA	GFI	CFI
Figure 1	3.705	2	1.853	0.157	0.040	0.997	0.994

The results show that the path from friendly to endorsement (β = 0.146, p < 0.01) was significant for females, and the path from achievement to endorsement was significant for both females (β = -0.110, p < .05) and males (β = -0.241, p < .001). The coefficients of determination (the R-squared of latent variables) were 0.023 for female and 0.087 for male.

Discussion

Due to the COVID-19 epidemic, the Tokyo 2020 Olympic Games, which were set to take place in 2020, had been postponed for a year. The Olympic Games had been cancelled five times (Summer Olympics 1916, Summer Olympics 1940, Winter Olympics 1940, Summer Olympics 1944, and Winter Olympics 1944) in the past due to the war, however this was the first time it had been postponed. On March 24, 2020, the IOC

President, Thomas Bach, sent an open letter stating "We can make a significant contribution to this post-COVID-19 world by uniting behind our Olympic ideals of peace, harmony, respect, and unity in all of our diversity (s.p)"³¹.

Volunteer support is a critical component of a successful bid to host the Olympic Games, as well as creating positive legacies after the Games has taken place. Based on a representative survey of Tokyo 2020 volunteers, the results of this study showed that achievement in competition lowered Tokyo 2020 volunteers' endorsement attitudes toward Japan hosting the Tokyo 2020 Olympic Games. There is also a gender gap in this influence, with males being strongly affected. It is not possible to clearly clarify by this study alone why this Olympic pillar value negatively affected volunteer endorsement.

In the context of two previous studies in the U.S. and Germany, the three dimensions were positively correlated with attitudes toward the games⁸, and in a Brazilian sample, excellence had a negative impact on attitudes when there was a perception of corruption in the IOC⁷. Thus, it may be inferred that the excellence factor has a negative impact on hosting endorsement under generally negative global situations.

One more notable result is the positive impact of friendship on endorsement. This finding is congruent to the results of the two cited studies, revealing that the friendship dimension of the Olympic pillar values has a strong influence on individuals' attitudes. This result alongside the findings of Koenigstorfer and Preuss⁸ and Koenigstorfer and Preuss⁷, is now presented as new evidence against the claim by Keys³² linking sport, friendship, and mutual under-standing, which seems to have been based on circular reasoning and little empirical evidence. However, since the coefficient of determination (R²) of this result (show in Figure 1) is not sufficiently high, it may be necessary to consider that other variables other than Olympic value perceptions influence endorsement.

Conclusion

This study contributed to the relationship's theoretical reasoning between Olympic value perceptions and volunteers' endorsement of their country hosting the Olympic Games. The goal of this research was to determine the Olympic value perceptions that influenced volunteers' endorsement of hosting the Tokyo 2020 Olympic Games. The results demonstrate that friendly relations with others had a significant

impact among females, whereas achievement in competition had a negative impact among both females and males.

Olympic Volunteers are an integral part of promoting the Olympic Movement and achievement of the Olympic Games. Thus, elucidating the relationship between their perceptions and their behaviors or attitudes toward the Olympics has great significance for Olympic studies. The researchers recommend that future research examine the relationship between the Olympic Values perceptions, volunteers' motivations, and satisfaction with involvement.

Limitations and out look

There are limitations to this research that hint toward future research needs. First, this survey was conducted in Japan among Japanese volunteers; hence, Japanese culture may have strongly influenced the results. Moreover, the OVS was developed and approved by western-culture organizations, and it was not tested in the Japanese culture. Although this study was limited to Japanese volunteers, future research may be able to generalize these findings to other host countries by sampling other socio-cultural participants.

Second, this study showed that the value dimension of achievement in competition reduced favorable evaluations during the COVID-19 pandemic situation. However, it did not elucidate whether COVID-19 was the cause. Thus, future studies are expected to elucidate the factors that constitute a negative opinion about holding the Olympic Games and its influence on endorsement.

Management Application

The Olympic movement is a key differentiator of the Olympic Games from other world championships. As demonstrated in the Olympic education program³³, the Olympic movement clearly aims to benefit individuals globally by promoting the Olympic pillar values of excellence, friendship, and respect. Furthermore, citizen endorsement for hosting the Olympic Games is crucial to governments, host cities, organizing committees, and athletic federations as it impacts bidding, planning, and executing the games³⁴.

This study was based on an extension of two previous studies; Koenigstorfer and Preuss⁸ and Koenigstorfer and Preuss⁷. The results of these three studies (two previous

studies and this study) taken together, confirm that a generally positive attitude toward hosting the games relies on individuals' belief that hosting the Olympics will lead to greater brotherhood, friendship, understanding, and warmer relationships. However, in negative situations (e.g., COVID-19 or perceptions of corruption) it is clear that the achievement in competition pillar value had a negative impact on endorsement.

Stakeholders (e.g., host cities and organizing committees) should increase their support for the Olympics while considering these findings and the social contexts of their nations as they promote the multidimensional Olympic values to their citizenry.

References

- 1 Parry J, Girginov V, Matsumoto N. The Olympic Games explained (in Japanese). Tokyo, Japan: Taishukanshoten; 2008.
- 2 Chatziefstathiou D, Müller N. Olympism, Olympic Education and learning legacies. Cambridge Scholars Publisher; 2014.
- 3 IOC. Olympic charter. Lausanne: International Olympic Committee; 2021.
- 4 De Boer W, Koning R, Mierau J. Ex Ante and Ex Post willingness to pay for hosting a large international sport event. Journal of Sports Economics. 2018;20(2):159-176.
- 5 Prayag G, Hosany S, Nunkoo R, Alders T. London residents' support for the 2012 Olympic Games: the mediating effect of overall attitude. Tourism Management. 2013;36:629-640.
- 6 Wicker P, Whitehead J, Mason D, Johnson B. Public support for hosting the Olympic Summer Games in Germany: The CVM approach. Urban Studies. 2017;54(15):3597-3614.
- 7 Koenigstorfer J, Preuss H. Olympic Games-Related Values and host country residents' pre-event evaluations in the Run-Up to the 2016 Olympic Games. Journal of Global Sport Management. 2019:1-26.
- 8 Koenigstorfer J, Preuss H. Perceived values in relation to the Olympic Games: development and use of the Olympic Value Scale. European Sport Management Quarterly. 2018;18(5):607-632.
- 9 IOC. Host City Contract: Operational Requirements. Lausanne: International Olympic Committee; 2015.
- 10 Bang H, Alexandris K, Ross S. Validation of the revised Volunteer Motivations Scale for International Sporting Events (VMS-ISE) at the Athens 2004 Olympic Games. Event Management. 2009;12(3-4):119-131.
- 11 Giannoulakis C, Wang C-H, Gray D. Measuring volunteer motivation in megasporting events. Event Management. 2008;11(4):191-200.
- 12 Chatziefstathiou D. The changing nature of the ideology of Olympism in the modern Olympic era [thesis]. Loughborough: Loughborough University; 2005.
- 13 IOC. The fundamentals of Olympic Values Education. Lausanne, Switzerland: International Olympic Committee; 2017.
- 14 Karlis G. Volunteerism and multiculturalism: A linkage for future Olympics. The Sport Journal. 2003;6(3):1-16.

- Ando R, Samahito S, Kutintara I, Noikasem S. Olympic Value perceptions influence on volunteers' endorsement of Japan hosting the Tokyo 2020 Olympic Games. Olimpianos Journal of Olympic Studies. 2022;6:144-157.
- 15 Koutrou N. Measuring Olympic Volunteers' motivation. 12th International Conference of Olympic Research. Western University London, Ontario, Canada; 2014.
- 16 International Olympic Committee. Volunteerism, a core value of the Olympic Movement. Lausanne: International Olympic Committee; 2011. Available at https://olympics.com/ioc/news/volunteerism-a-core-value-of-the-olympic-movement.
- 17 Koutrou N, Pappous A. Towards an Olympic volunteering legacy: motivating volunteers to serve and remain A case study of London 2012 Olympic Games Volunteers. Voluntary Sector Review. 2016;7(3):269-291.
- 18 Malfas M, Theodoraki E, Houlihan B. Impacts of the Olympic Games as mega-events. Proceedings of The Institution of Civil Engineers-municipal Engineer. 2004;157:209-20.
- 19 Davis D, Allen J, Cosenza R. Segmenting local residents by their attitudes, interests, and opinions toward tourism. J Travel Res. 1988;27(2):2-8.
- 20 Streicher T, Schmidt S, Schreyer D, Torgler B. Is it the economy, stupid? The role of social versus economic factors in people's support for hosting the Olympic Games: evidence from 12 democratic countries. Applied Economics Letters. 2016;24(3):170-4.
- 21 Becker-Olsen K, Cudmore B, Hill R. The impact of perceived corporate social responsibility on consumer behavior. Journal of Business Research. 2006;59(1):46-53.
- 22 Nikkan Sports Newspaper. Olympic volunteers receive awards: Nikkan Sport [cited 17 jun 2022]. 2021. Available at https://www.nikkansports.com/olympic/tokyo2020/news/202108080001260.html.
- 23 Hooper D, Coughlan J, Mullen M. Structural equation modeling: guidelines for Determining Model Fit. The Electronic Journal of Business Research Methods. 2007;6(1):53-60.
- 24 Hu Lt, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal. 1999;6(1):1-55.
- 25 Byrne BM. Structural Equation Modeling with Lisrel, Prelis, and Simplis: basic concepts, applications, and programming. New York: Psychology Press; 1998.
- 26 Diamantopoulos A, Siguaw JA. Introducing LISREL. CA, USA: SAGE Publications; 2000.
- 27 MacCallum RC, Browne MW, Sugawara HM. Power analysis and determination of sample size for covariance structure modeling. Psychological Methods. 1996;1(2):130-49.
- 28 Tabachnick BG, Fidell LS. Using multivariate statistics. London: Pearson Education; 2013.
- 29 Shevlin M, Miles JNV. Effects of sample size, model specification and factor loadings on the GFI in confirmatory factor analysis. Personality and Individual Differences. 1998;25(1):85-90.
- 30 Fan X, Thompson B, Wang L. Effects of sample size, estimation methods, and model specification on structural equation modeling fit indexes. Structural Equation Modeling: A Multidisciplinary Journal. 1999;6(1):56-83.
- 31 IOC. IOC President Bach writes to Olympic Movement: Olympism and corona. International Olympic Committee; 2020 [cited 20 May 2021]. Available at https://olympics.com/ioc/news/ioc-president-bach-writes-to-olympic-movement-olympism-and-corona.
- 32 Keys BJ. Introduction. The ideals of international sport. In: Barbara JK, editor. The Ideals of Global Sport: From Peace to Human Rights. Pennsylvania, USA: University of Pennsylvania Press; 2019. p. 1-18.

- 33 IOC. Delivering OVEP playbook. Lausanne: International Olympic Committee; 2016. 34 Maennig W, Vierhaus C. Winning the Olympic host city election: key success factors. Applied Economics. 2016;49(31):3086-99.
- 35 Wang P. Assessing motivations for sports volunteerism. Advances in Consumer Research. 2004;31:420-425.
- 36 Jöreskog K, Sörbom D. Recent developments in structural equation modeling. Journal of Marketing Research. 1982;19(4):404-16.