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**Original Article**

# VOLUNTEER MOTIVATION IN SPORTS EVENTS IN BRAZIL

## MOTIVAÇÃO DE VOLUNTÁRIOS EM EVENTOS ESPORTIVOS NO BRASIL

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**RESUMO**

O objetivo foi analisar as potenciais diferenças nos fatores de motivação de voluntários de acordo com os dados demográficos; sexo, nível de escolaridade e tipo de eventos no Brasil. A Escala de Motivação de Voluntários para Eventos Esportivos Internacionais foi aplicada a voluntários brasileiros por meio de um questionário online. A retrotradução foi usada para garantir a precisão entre as escalas originais. A análise fatorial confirmatória foi utilizada para realizar a adaptação transcultural. MANOVA foi utilizada para comparar diferenças nas variáveis demográficas. Os voluntários foram motivados por dois fatores: Amor ao Esporte e Envolvimento Comunitário. O nível de escolaridade verificou diferenças significativas apenas no fator amor ao esporte. A MANOVA revelou que os voluntários com menor escolaridade (escola primaria e incompleta) possuem níveis de motivação (amor ao esporte) maiores comparado aos voluntários com ensino médio, graduação, mestrado e doutorado. A interação entre sexo e escolaridade indicou diferença significativa no mesmo fator, e a interação sexo e tipo de evento com o fator Envolvimento na Comunidade. Portanto, os resultados identificam algumas diferenças demográficas. Conclui-se que a motivação dos voluntários está atrelada ao amor ao esporte e envolvimento com a comunidade e possui relações com sexo e escolaridade, destacando a importância de investigar as motivações do voluntariado entre os eventos esportivos para promover o desenvolvimento positivo das práticas de gestão, especialmente dos eventos esportivos brasileiros.
**Palavras-chave**: Voluntários. Motivação. Características Humanas. Recursos Humanos.

**ABSTRACT**

The purpose was to analyze the potential differences in the motivation factors of volunteers according to the demographics; sex, level of education, and type of events in Brazil. The Volunteer Motivations Scale for International Sporting Events was administered to Brazilian volunteers via an online survey. Back-translation was used to ensure accuracy between the original scales. Confirmatory factor analysis was used to perform the transcultural adaptation. MANOVA was utilized to compare differences in demographic variables. Volunteers were motivated by two factors: Love of Sports and Community Involvement. The level of education verified significant differences only in the love of sport factor. The MANOVA revealed that the volunteers with a lower level of schooling (incomplete and elementary school) have higher levels of motivation (love for sport) compared to volunteers with high school, undergraduate, master's and PhD degrees. The interaction between sex and level of education indicated a significant difference in the same factor, and the interaction sex and type of event with the factor Community Involvement. Therefore, the results identify some differences in demographics. It is concluded that Volunteers' motivation is linked to the love of sport and involvement with the community and is related to sex and schooling, highlighting the importance of investigating volunteer motivations amongst sports events to promote positive development in management practices, specially to Brazilian sports events.
**Keywords**: Volunteers. Motivation. Human Characteristics. Human Resources.

## Introduction

Volunteering is presented in many contexts and realities, such as in a culture or community[1]. In the context of sports events, volunteers are essential, since without the skills, time, and commitment of these individuals, these events would not be so successful[2]. Complementarily, regardless of the size of the event, there are several types of volunteers (e.g. maintenance, hospitality, accreditation) that perform activities for the development and production of the event, which may be before, during, and after the event.

It can be observed that each year the body of research in this area increases[1, 3-6], however although several authors discuss the motivation of volunteers in mega-events (e.g. Olympic Games), there is a gap in the literature with respect to the differences in volunteer motivation in mega-events and smaller events (e.g. social, recreational sport events)[2-4]. Researchers tend to focus on mega-events, however, non-mega-sporting events may also need volunteers. In this sense, based on the context of Brazilian sports events where volunteering has a particular connotation, explained in research context, the aim of this study is analyze the potential differences in the motivation factors of volunteers according to the demographics; sex, level of education, and type of events in Brazil.

Adding to existing research, by exploring the theoretical contribution of this study in connection with mega-events, non-mega-sporting events and the demographics with the motivation of volunteers at sporting events, we will align our findings with existing knowledge, intending to identify new insights and guidelines for future research, this article is result from a master's dissertation[7].

*Sporting Events*

In the last decade, there has been a notable increase in the number and importance of sports events, as well as their impact on society and the repercussions. Sporting events are considered as catalysts for economic and tourist growth in the places where they are conducted[8]. The achievement of a mega-sport event is associated with major changes to the urban infrastructure, economic return, and repositioning of the host city, as well as the ability to transmit promotional messages to billions of people through the media[9]. In this respect, sport mega-events have been investigated more frequently, while little attention has been given to small and medium-sized events. However, Coates[10] suggest that small-scale sporting events can have positive effects on host communities.

Sports events come in different types and sizes, generating a variety of both positive and negative impacts on the sites where they are hosted. Although there is no universal definition for the different types of events, nevertheless, they are often defined according to their assumed economic impact. There are examples in the studies of Barajas et al.[11], proceeding to an extension of the typology proposed by Gratton[12] which suggests that sports events can be classified into seven types: Type A, B, C1, C2, D1, D2, and Type E, given that, briefly, there are differentiations related to general characteristics (e.g., regularity, mediatism, the assistance of spectators) and economics (e.g., the frequency, competitiveness between countries or cities for the application, magnitude of economic activity. Effectively, the characterization of sporting events helps in the selection of methodologies to study their impacts.

In sports settings, the ability to offer high quality events and services is important, reported as a critical issue for professional sports organizations[13]. That said, in the sporting context, volunteering is an area of extreme importance, generating benefits for human resources[14]. Recent research[15,16] illustrates that volunteers are the structuring point for the “running” of an excellent event and the first ones to have contact with participants and spectators. In this sense, they should be trained to interact with stakeholders by assisting them to the maximum and with enthusiasm in the execution of their various activities. Consequently, volunteers are recognized for their work and will attract the return of stakeholders for upcoming events.

*Motivation of Sports Events*

Volunteering at sports events can be related to individuals participating in small, medium, or large events, in other words, local, regional, national, or international sports events of short duration[17]. Although many studies show that the motivation of volunteers

at sporting events may be more related to events of extraordinary magnitude such as the Olympic Games, the Soccer World Cup, and major marathons, among others, that is, international competitions[3,5,18], volunteers can also be involved in smaller, local and regional events, for which there are possibly different motivations to volunteer.

The literature on the motivation of volunteers suggests a complex system of reasons that differ depending on the characteristics of the event or organization[14,18]. In recent years there has been constant evolution and great interest in investigation and debate on motivation and satisfaction, especially in volunteers of sports events, aimed at management strategies[1,3-5].

More recently Bang and Chelladurai[3] developed the *Volunteer Motivations Scale for International Sporting Events* (VMS-ISE), which progressed to a six-dimensional scale, thus identifying the importance of *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), *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), and *interpersonal contacts* (meeting and interacting with people and forming friendships). In the same year Bang, Alexandris[2,] Bang and Ross[19], proposed a scale with seven factors, including one more factor, named *love of sport* (loving sport and any event related to sport) and renamed the patriotism factor to *community involvement* (helping the event by being part of the local community) since it was understood that the word patriotism would fit better for mega-events.

Further studies on the motivation of volunteers in the context of sports events[4] provide support for the application of the VMS-ISE in this environment and enable better understanding of various perspectives and differences in the motivation of volunteers[1, 2, 5,14,19].

*Research context*

This study investigated Brazilian volunteers from events such as the Olympic and Paralympic Games, FIFA World Cup, Tournaments of Golf, Marathon races, Triathlon, and Trail runs, among others, mega-events and non-mega-sporting events. In Brazil volunteerism can be slightly different from other countries; volunteers can be most easily found in social and religious contexts, engagement in the community, and solidarity issues, while interest in volunteering in the sports context seems to be reduced. Therefore, in countries such as Canada, Australia, the United Kingdom, and Germany, for example, the relevance of volunteers to the functioning of non-profit sport organizations and events can be more easily found[1,5,20].

Brazil does not have public policies to encourage volunteerism, so simple sports organizations need to motivate volunteers for events in order to be financially viable and socially legitimate. For mega-events the spirit of volunteering is always present, as these are the essence of sports practice, and in these cases volunteers will always be available. However, in the case of non-mega-sporting events, in Brazil the volunteers tend to be friends and family of the managers and it is difficult to find volunteers who do not have a relation with the location of the event or a strong relation with the sport, as a practitioner or as a spectator.

The selection of Brazilian volunteers in this study represents an initial effort to try to understand and help sport event managers to find and encourage people to volunteer for future events to connect the motivations for volunteering in order to promote positive development in management practices in the Brazilian context. Managers need to pay

attention to the motivations that influence volunteers in order to retain and attract more people[1, 14].

## Methodology

This research was completed through a multi-stage procedure adapted from Churchill[21]. It is an quantitative study. First, a preliminary analysis of the proposed items and content validity of the construct of voluntary motivation studies was conducted through expert review. In the second stage, an empirical assessment of the proposed scale was conducted through confirmatory factor analysis, followed by a subsequent multivariate analysis of variance (MANOVA) on the basis of three independent variables (sex, level of education, and mega and non-mega-sporting events).

*Instrument*

The questionnaire is based on the voluntary motivation studies proposed by Bang and Chelladurai[3] with the questions from the love of sports construct based on Bang and Ross[19]. All of the items included in the model were adapted from the definitions proposed in the literature to generate a better fit for sports event volunteer motivation. In addition, sociodemographic questions were asked, such as age, place of residence, level of education, volunteering frequency, and type of events where the individual volunteered. The typology of Gratton, Dobson[12] was used to categorize mega-events and non-mega-sporting events, according to type A, mega-events, and type D, non-mega-sporting events.

Prior to the application of the final measuring instrument, a back-translation was performed to ensure accuracy between the original scales in the English language and the versions translated into Portuguese[22].

The VMS-ISE scale was translated into Portuguese by two independent Portuguese native translators, which resulted in two Portuguese versions of the questionnaire. The translators compared and discussed the two versions and reached a consensus to obtain the first Portuguese consensual version. Then, a committee of three expert researchers in this field evaluated the semantic, idiomatic, conceptual and cultural equivalences of the questionnaire. These expert researchers provided recommendations on the intelligibility of the questionnaire's instructions and questions. This process resulted in the Portuguese consensual version 2. Afterwards, the Portuguese consensual version 2 was sent for back-translation to two other independent bilingual translators. This step aimed to assess whether the Portuguese version reflected the content of the original version in English. This stage generated two back-translations, which were analyzed together with the translators and expert researchers (college professor; club manager; sporting events manager and technical director of events working with volunteers). Lastly, the Portuguese consensual version 2 was submitted to a small sample of 6 volunteers (3 men and 3 women) to test the questionnaires' acceptability, understanding and adequacy. Volunteers' feedback were taken into account, resulting in the final Portuguese version of the VMS-ISE scale. All items were measured on the Likert 7-point scale ranging from (1) Strongly Disagree to (7) Strongly Agree.

After the translation, content validity was carried out by four researchers from the area of sport management (one college professor, club manager, sporting events manager and technical director of events working with volunteers). Each of these researchers received the description of the constructs and the list of proposed items to verify their relevance and clarity in the Brazilian context. At this point, the experts recommended all items be maintained but the wording of 12 of the 30 items should be changed to increase clarity. These recommendations were accepted, the changes made, and, subsequently, the

30 items proposed to assess the construct of sport volunteer motivation were randomized and placed into a questionnaire format to examine the reliability of the resulting instrument (see Table 2).

*Sample and Procedures*

The sample of this study was composed of Brazilians over 18 years of age who have volunteered at sporting events in Brazil, as described in research context, Brazilian volunteers from events such as the Olympic and Paralympic Games, FIFA World Cup, Tournaments of Golf, Marathon races, Triathlon, and Trail runs, among others, mega-events and non-mega-sporting events. Data were collected through an online questionnaire (i.e., e-mail and Facebook) between september and october 2017. All volunteers included in the study participated voluntarily and were informed about the study aims, procedures and characteristics, also signed the consent to be part of the study. To ensure that each participant answered only once, the IP addresses and e-mails were recorded in the database and further access from these addresses was denied, resulting in a total of 312 volunteers. The decision to collect data online was based on the advantages and logistical constraints highlighted in prior studies, such as reduced overall costs, and improved aesthetic and design capabilities (e.g., Wright[23]). Next, incomplete questionnaires and those containing 8 or more consecutive answers on the same scale number were excluded, leaving 255 useable questionnaire responses. Although the sample size may seem small, the rule of thumb of at least 200 observations is conservative and simplistic[24]. In addition, there is no absolute standard with regard to an adequate sample size and no rule of thumb that applies to all situations[25]. Therefore, after using a power analysis program with an anticipated effect size of .20 at a probability level of .05 and a statistical power level of .80[26], the researchers concluded that a minimum of 69 respondents was required, and thus the current sample was deemed suitable for this study.

*Data analysis*

The data were analyzed through SPSS 25 and AMOS 25 according to the following stages. First, a confirmatory factorial analysis (CFA) was performed to verify if the VMS-ISE scale could be replicated using the Portuguese translation of the items. Given that an 'a priori' theoretical structure of the VMS-ISE construct was proposed, there were no requirements to test an exploratory factor analysis[27]. To evaluate whether the questionnaire items were close enough to normal distribution, skewness and kurtosis were tested[28]. For each of the seven subscales, the internal reliability and composite reliability were examined to estimate how consistently participants answered the items on the scale. To evaluate the discriminant validity of the constructs, the average variance extracted (AVE) was performed, and to test the convergent validity. In addition, following Hair et al[29] the items with factor loadings above 0.6 as "high" were maintaining in the model, on the other hand, items with factor loadings below 0.4 as "low" were eliminated. The values of Maximum Shared Variance (MSV) and Average Squared Variance (ASV) were used in other to analyzing the discriminant and convergent validity, the accepted reference values are both being less than the AVE of each construct. Each item loaded on the construct was examined to evaluate if the scale seemed to be measuring the same construction[27]. Several goodness of fit measures were adopted, including: The ratio of chi-square to its degrees of freedom ($x^2$/df), Comparative fit index (CFI), Goodness-of-fit index (GFI), and Root mean square error of approximation (RMSEA).

Once the factors had been identified, the factor scores were subjected to a multivariate analysis of variance (MANOVA) on the basis of three independent variables (sex, level of education, and type of events) to examine differences in the factors between

groups. The assumptions of multivariate normality were estimated using the Kolmogorov-Smirnov test. This condition was not assumed for any of the samples of participants ($p<0.05$). However, the sample size the asymmetry and kurtosis values lower than | 3.0 | and | 7.0 |, respectively, suggest that the measures could be used in subsequent analyzes. Additionally, Tukey's HSD post-hoc tests were used to verify where the differences between the six groups (level of education) were found[30].

## Results

The characteristics of the entire sample are summarized in Table 1. The sample was mainly male (55.3%), female (44.7%), the age ranged from 18 to 73 years, with a mean of 34.85 and standard deviation of 12.34. Respondents with university degrees (or university students and graduate students) comprised the majority (61.2%) of the sample. Approximately half of the sample (48.6%) had participated in volunteering between one to three times and (20.8%) had participated more than ten times. Furthermore, the volunteers at the two different types of events presented different characteristics. While at the mega-events the majority of volunteers were female (42.1%), at the non-mega-sporting events, the majority of the volunteers were male (61.7%). The volunteers at the non-mega-sporting events had more schooling, with a bachelor's degree (61.5%).

**Table 1.** Demographic overview of the sports event's volunteers

| | **Total** | | **Megaevents** | | **Non-mega-sporting events** | |
|---|---|---|---|---|---|---|
| | N (255) | % | N (102) | % | N (153) | % |
| **Sex** | | | | | | |
| Male | 141 | 55.3 | 54 | 38.3 | 87 | 61.7 |
| Female | 114 | 44.7 | 48 | 42.1 | 66 | 57.9 |
| **Leve of Education** | | | | | | |
| PhD | 17 | 6.7 | 7 | 41.2 | 10 | 58.8 |
| Master | 54 | 21.2 | 27 | 50 | 27 | 50 |
| Bachelor Degree | 156 | 61.2 | 60 | 38.5 | 96 | 61.5 |
| High School | 20 | 7.8 | 7 | 35 | 13 | 65 |
| Elementary School | 4 | 1.6 | 0 | 0 | 4 | 100 |
| Incomplete School | 4 | 1.6 | 1 | 25 | 3 | 75 |
| **Volunteering frequency** | | | | | | |
| 1-3 times | 124 | 48.6 | 58 | 46.8 | 66 | 53.2 |
| 4-6 times | 52 | 20.4 | 18 | 34.6 | 34 | 65.4 |
| 7-9 times | 26 | 10.2 | 7 | 26.9 | 19 | 73.1 |
| 10 times and more | 53 | 20.8 | 19 | 35.8 | 34 | 64.2 |

**Source**: The authors

Regarding the performance in the CFA, items with factor loadings below 0.40 were eliminated following Hair´s and colleagues criteria. A total of 17 items remained in the final measurement model (see Table 2).

After the results from the CFA revealed that the Chi-square ($x^2$=246.304) per degree of freedom (df =104) indicated an acceptable fit to the data. The values of $X^2$ divided by their degrees of freedom ($X^2$/df=2.368) were below the normally accepted range of 3.0 [29]. Therefore, additional relative indices can be used to describe the model fit. Second, the comparative fit index (CFI≥0.9) reached an adequate value (CFI=0.96). The third index was the root mean square error of approximation (RMSEA≤0.07); the fourth, the goodness of fit index (GFI=.90); and the fifth, the ticker Lewis index (TLI=95). In summary, we concluded that the scale presented adequate measurement properties. The

values of CFI, GFI, and TLI were higher than the .90 criterion, indicating a good adjustment[29]. The value of RMSEA was within acceptable limits, being below the minimum of .08[31]. As shown in Table 2, the factorial loadings of the items of the constructs that compose the motivation of volunteers at sporting events ranged from .73 to .94.

**Table 2.** Results of CFA of the VMS-ISE (factor loadings, factor reliability and AVE values, average and standard deviation)

| Factors (items) | Factor loadings | Composite Reliability | AVE | MSV | ASV |
|---|---|---|---|---|---|
| **Expression of Values (M=5.40; SD=1.35)** | | .87 | .70 | .67 | .50 |
| I want to help out in any capacity | .81 | | | | |
| I want to do something worthwhile | .80 | | | | |
| I want to help make the event a success | .90 | | | | |
| I feel it is important to help others[a] | - | | | | |
| Volunteering creates a better society[a] | - | | | | |
| **Community Involvement (M=4.08; SD=1.52)** | | .91 | .78 | .50 | .31 |
| Because of my allegiance to my community | .86 | | | | |
| My love for my community makes me help it run a great event | .91 | | | | |
| I want to express my pride in my community | .88 | | | | |
| The event can increase the prestige of my community[a] | - | | | | |
| I'm proud of my community receiving this event[a] | - | | | | |
| **Interpersonal Contacts (M=5.03; SD=1.47)** | | .92 | .79 | .60 | .42 |
| I want to interact with others | .88 | | | | |
| I want to meet people | .85 | | | | |
| I want to develop relationship with others | .93 | | | | |
| I want to work with different people[a] | - | | | | |
| *Continuing Table 2…* | | | | | |
| **Career Orientation (M=5.50; SD=1.36)** | | .90 | .75 | .61 | .41 |
| I want to gain some practical experience | .94 | | | | |
| I want to gain work-related experience | .80 | | | | |
| I want to gain experience that would be beneficial in any job | .85 | | | | |
| Volunteering experience will look good on my resume[a] | - | | | | |
| I can make new contact that might help my business or career[a] | - | | | | |
| **Personal Growth (M=4.75; SD=1.58)** | | .84 | .72 | .65 | .42 |
| Volunteering makes me feel needed | .86 | | | | |
| Volunteering makes me feel important | .84 | | | | |
| I can explore my own strengths[a] | - | | | | |
| Volunteering allows me to gain a new perspective on things[a] | - | | | | |
| **Extrinsic Rewards** | | | | | |
| I want to get free food at the event | - | | | | |
| I want to get tickets / free admission | - | | | | |
| I want to get event uniform / licensed apparels[a] | - | | | | |
| **Love of Sport (M=5.53; SD=1.37)** | | .90 | .74 | .67 | .40 |
| I like any event related to sport | .73 | | | | |
| Sport is something I love | .92 | | | | |
| Factors (items) | Factor loadings | Composite Reliability | AVE | | |
| I enjoy being involved in sport activities | .92 | | | | |
| I like any event related to sports[a] | - | | | | |

**Note**: [a] The item was deleted after confirmatory factor analysis, after removing factor loadings below 0.4, a total of 17 items remained in the final measurement model.
**Source**: The authors.

The CFA results indicated that the measurement model achieved an adequate fit providing evidence of factorial validity and convergent validity of the study's measurement[28]. The convergent validity was examined according to composite reliability and the average variance extracted (AVE). The internal consistency of the measures was accepted with values of composite reliability varying from .84 (personal growth) to .92 (interpersonal contacts). The AVE values ranged from .70 (expression of values) to .79 (interpersonal contacts) indicating convergent validity for all constructs. In addition, the values of MSV and ASV showed discriminant and convergent validity to the constructs. Descriptive statistics of the measures and their correlations are reported in table 3. It is represented, the love of sport ratio presented the highest mean (M=5.53; SD=1.37), while community involvement presented the lowest mean (M=4.08; SD=1.52). None of the squared correlations exceeded the AVE values for each construct, indicating discriminant validity for all constructs.

**Table 3.** Descriptive Statistics and Correlations for all variables

| Variable | M | SD | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|
| 1. Expression of Values | 5.40 | 1.35 | 1.00 | | | | | |
| 2. Community Involvement | 4.08 | 1.52 | 0.50 | 1.00 | | | | |
| 3. Interpersonal Contacts | 5.03 | 1.47 | 0.59 | 0.33 | 1.00 | | | |
| 4. Career Orientation | 5.50 | 1.36 | 0.59 | 0.23 | 0.56 | 1.00 | | |
| 5. Personal Growth | 4.75 | 1.58 | 0.65 | 0.50 | 0.54 | 0.41 | 1.00 | |
| 6. Love of Sport | 5.53 | 1.37 | 0.67 | 0.28 | 0.40 | 0.61 | 0.37 | 1.00 |

**Source**: The authors

In order to test the differences in motivations according to the demographics sex, level of education, and mega and non-mega-sporting events in Brazil a multivariate analysis of variance (MANOVA) was conducted. The results indicated: sex ($\Lambda$ of Wilks=0.937, F=2.590, p<0.019, $\eta^2$=0.063); level of education ($\Lambda$ of Wilks=0.818, F=1.589, p<0.024, $\eta^2$=0.039); type of event ($\Lambda$ of Wilks=0.950, F=2.017, p>0.64, $\eta^2$=0.050); interaction of sex and level of education ($\Lambda$ of Wilks=0.899, F=1.387, p>0.130, $\eta^2$=0.035); interaction of sex and type of event ($\Lambda$ of Wilks=0.917, F=3.496, p<0.002, $\eta^2$=0.083); interaction of level of education and type of event ($\Lambda$ of Wilks=0.919, F=0.825, p>0.707, $\eta^2$=0.021); and interaction of sex, level of education, and type of event ($\Lambda$ of Wilks=0.910, F=1.226, p>0.233, $\eta^2$=0.031). The effects between the subjects revealed that in level of education only the love of sport motivation factor demonstrated significant differences (F=2.767, p<0.019); the interaction between sex and level of education had the same significant factor (F=2.876, p<0.037), and the interaction between sex and type of event had a significant factor in community involvement (F=4.206, p<0.041).

Table 4 presents the MANOVA results to compare the factor love of sport with level of education. The level of education (F=1.508, p<0.031) verified significant differences only in the love of sport factor. Elementary School and Incomplete School (M=6.91, DP=0.16) presented higher levels of love of sport motivation compared to Master (M=5.79, DP=1.05), High School (M=5.51, SD=1.39), and bachelor's degree (M=5.42, SD=1.43), while those with a PhD demonstrated a significantly lower love of sport motivation (M=5.05, DP=1.62).

**Table 4.** Results of MANOVA test

| | **Factor** |
|---|---|
| | **Love of Sport** |
| **F** | 1.589 |
| **Sig.** | 0.024 |
| **Power test** | 0.960 |
| **Level of Education** | **M(SD)** |
| PhD | 5.05(1.62) |
| Master | 5.79(1.05) |
| Bachelor Degree | 5.42(1.43) |
| *Continuing Table 2…* | |
| High School | 5.51(1.39) |
| Elementary School | 6.91(0.16) |
| Incomplete School | 6.91(0.16) |
| | **Comparison of the factor Love to Sport with the Levels of Education** |
| PhD x Master | .350 |
| PhD x Bachelor Degree | .884 |
| PhD x High School | .900 |
| PhD x Elementary School | .119 |
| PhD x Incomplete School | .119 |
| Master x Bachelor Degree | .507 |
| Master x High School | .969 |
| Master x Elementary School | .568 |
| Master x Incomplete School | .568 |
| High School x Elementary School | .383 |
| High School x Incomplete School | .383 |
| Elementary School x Incomplete School | 1.000 |

**Source**: The authors

## Discussion

The current study examined volunteer motivations according to the demographics sex, level of education, and type of events (mega and non-mega-sporting events) in Brazil. The study tested the structure of the translated VMS-ISE[2,3,19]. After modifications had been made, a parsimonious six-factor model was reached. The impacts of this modification is one questionnaire with capable of being replicated at other Brazilian sporting events and based on the sample of this study the construct that was excluded, extrinsic rewards, the volunteers maybe not understand the volunteerism how to getting tangible rewards such as free uniforms, food, and admission. In this aspect, the questionnaire have autonomy and competence in the Brazilian sport events to measure the volunteer motivations.

Prior studies do not demonstrate consistent results in terms of differences in motivation by demographic variables[32]. Even though our study showed a statistically significant result for sex, there was a low value of explained variance, in other words,

there is a low difference in motivation with respect to sex. Bang and Chelladurai[3] as well as Ma and Draper[32] found no differences in motivation between sexes, while Bang, Alexandris and Ross[2] Sand, Strittmatter and Hanstad[33] and Kim Fredline and Cuskelly[34] found differences. However, when our results indicated an interaction between sex and level of education the factor love of sport was significant, and the same occurred with the interaction sex and type of event with the factor community involvement.

Similar studies have shown level of education as a significant factor. The study of VanSickle, Pierce[1] found that Personal Growth was a stronger motivator for volunteers without a college degree when compared to those with bachelor's degrees, and volunteers with less schooling placed a higher value on Career motivation than more volunteers with more schooling.

The results of this study revealed a relationship with the factor Love of Sport, in other words, this factor presented significant differences with level of education; the volunteers with less schooling (incomplete and elementary school) placed a higher value on Love of Sport motivation when compared to those holding bachelor's degrees, master, high school, and PhD's. In the studies by Wollebæk, Skirstad[35] some differences in the level of education were found, although these differences were not statistically significant, while Ma and Draper[32] found no differences.

The results of the present study show an interaction between sex and level of education, expressing a significant difference in the factor Love of Sport. This factor is presented as significant in many papers linked to Bang and Ross[19] who found a strong motivational factor among event volunteers in the 2004 Twin Cities Marathon; Pierce, Johnson [6] examined the influence of student (volunteer) motivations on their satisfaction in volunteering at sporting events and Love of Sport was found as the top-rated motivation for volunteering and a significant predictor of satisfaction.

Johnson, Giannoulakis[35] found Love of Sport as the highest motivation ranking but it was not a significant predictor of satisfaction; Coyne and Coyne[37] found Love of Golf strongly influences veterans (who have already volunteered); on the other hand, according to VanSickle, Pierce[1], in the NFL Super Bowl volunteers, Love of Sport was the lowest ranked motivation factor; and Hallmann and Harms[5] discovered a non-significant impact in one event, while another event Love of Sport had a high and significant impact.

Wicker and Hallmann[38] state that although the Love of Sport factor has been neglected in the past, nowadays research should consider its inclusion appropriate as a primary influence of volunteering. The reasons for our result expressing differences in the factor Love of Sport could help aggregate knowledge from previous papers.

In Brazil, when discussing volunteers and their motivations, some studies suggest that working as a volunteer provides the possibility of being part of a big event and being involved in something considered historic and unique, a factor associated with a nationalistic spirit, as well as the opportunity to turn volunteer work into a professional advantage on the curriculum[17].

Finally, regarding the differences between types of event, i.e., differences in the motivation factors according to mega and non-mega-sporting events in Brazil, no dissimilarities were found. However, the findings on the significant interaction of sex and type of event with the factor community involvement, suggests that volunteers in mega and non-mega-sporting events in Brazil present some differences. The factor community involvement in the study of Bang and Ross[19] corresponds to the patriotism dimension assessed by Bang and Chelladurai[39] and demonstrates that this adaptation is acceptable for smaller events at the local community level. It is possible to allege in previous studies that when a volunteer is connected to the community it is possible to observe an

attachment between the volunteer workers, and this could be a motive involving their personal values[40, 20].

The results of Hallmann and Zehrer[41] demonstrated a medium correlation between event and community involvement, and in the authors' words "no matter the type of event, it implies that if ties to the community grow, involvement with the event increases, too". In this way, in the sports events context, the involvement and interaction between the community volunteers could be improved, and this action would help managers of these events to retain volunteers as well as supporting the intention of these individuals to continue volunteering in future events. Therefore, although there are several ways to classify sports events[9,11], the volunteers are the structuring point for an excellent event and the first to have contact with participants and spectators[15,16]. Pertaining to previous research, it has been found that volunteering might be different according to the socio-demographic profile of volunteers at the two types of event, or that team sports might differ from individual sports, or even differ because a new event is being held[5], however Bang and Chelladurai[3] found no significant differences in the type of event.

In Brazil when a municipality decides to host sports event, there is a large probability that the event will be small. Brazil contains 5,570 municipalities, 26 federal states, and the Federal District, with an area of 8,511,000 km² and when a sport event is introduced the need for involvement and interaction with the community is considerable. As Brazil has an extensive area and many municipalities, most of these types of events occur in areas with larger populations to try to attract more spectators and participants.

It is interesting to note that for many factors of volunteer motivation, no differences were found between the demographics; these results could be understood with the motivations as drivers of participation intentions. In other words, these groups of volunteers could have other objectives than the sports event. According to the factor's expression of values, interpersonal contacts, career orientation, and personal growth, these volunteers could be connected, which means that these motivation aspects represent important factors that need to be considered to bring volunteers to sports events.

This paper highlights the importance of investigating volunteer motivations amongst sports events to promote positive development in management practices. Positive formation through development of management practices further impacts volunteer motivations, which may help event management to effectively recruit volunteers and induce existing volunteers to repeat volunteering in future events.

*Practical implications*

One idea to facilitate these differences between the types of events could be to develop strategies for each sex, incorporating this into tasks that feel important for community involvement, which may help volunteers have other types of involvement and motivations, thus enhancing volunteer satisfaction and their engagement with future sports events. It is also noted that culturally in Brazil the population does not have the tradition of volunteering in the sports event context. To better address this aspect, managers should create strategies to attract people to volunteer and try to retain them for future events. Based on this, it is possible to elaborate a plan in which the manager is always in touch with the volunteer, trying to offer them the best experience, creating a relationship, making friends, providing feedback on work, and always encouraging the volunteers, thus, demonstrating their value.

The creation of social media as a channel of communication and social interaction could be interesting for volunteers to engage and spend time stimulating social interactions and the benefits of utilizing social media for managers further include monitoring volunteer activities, receiving feedback, and communicating more effectively

with volunteers. We suggest strategies such as providing tasks with higher responsibilities and granting more perks or incentives, so that organizers can attract people with a higher level of education.

*Limitations and future research*

The data for this study were collected from Brazilian volunteers, with no specificity regarding type of sports event, and considering that Brazil is a country of continental proportions, the sample is small in size. This constitutes a limitation regarding the generalization of the conclusions, as it is assumed that the type of event is of some importance when studying reasons to differentiate the motivations of two types of sports events; the findings give some support to this assumption. Therefore, it is recommended that the study should be replicated with larger samples of volunteers and specific sports events in future research. Another point is regarded to the questionnaire, the volunteer could answer only one alternative to represent if worked in mega or non-mega-sporting event. Probably participating in both types of events will have an influence on the results and interpretations.

Other point observed is the age and place of residence, the authors chose not to present these data separately by Brazilian regions and even a description of where these people came from could clarify some interpretations. Moreover, it is possible that the more highly motivated volunteers are over-represented among the respondents, which could inflate the average levels of the variables measured herein. Another limitation is the timing of the motivation measurements, (pre- or post-event) which could have a significant effect on the reported motivation of volunteers and our study did not analyze this aspect, so we encourage future studies to replicate this, gathering measurements at a time near the sports events. Lastly, the model for this study is not the same as the original, which would indicate the need perhaps to refine the items that were not present in the model.

## Conclusion

The evidence from this study identifies some differences through the demographics (difference in motivation with respect to sex; an interaction between sex and level of education the factor love of sport was significant, and the same occurred with the interaction sex and type of event with the factor community involvement; and the factor love of sport presented significant differences with level of education) and it is important for volunteer management to observe that volunteers present some different motivations which need specific attention, although other motivations were not significant which could mean that volunteers have a similar view regarding other aspects. This demonstrates that volunteer motivations compose an important aspect that need to be considered in sports events. It is relevant to state that volunteer motivations are important to event management, for example, if a potential volunteer is motivated, the possibility of the event increasing the next year or to a greater stage is higher, therefore, these studies need continuum to develop possibilities for the future of sports events and volunteers, especially in Brazil.

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