

## A Pattern Approach of Sports Volunteers at 2022 the 15th Cultural-Sports Olympiad in Iran: Motivations and Satisfaction Sports Volunteer and Intention to Continue

Received: 2023-10-18

Accepted: 2024-03-02

Vol. 5, No.2. Spring .2024, 12-28

Sajjad Pashaie<sup>1\*</sup>  
Yahqub Badri Azrin<sup>2</sup>  
Fateme Abdavi<sup>3</sup>  
Mohammad Rasoul Khodadadi<sup>2</sup>  
Mir Davood Hoseini<sup>2</sup>

<sup>1</sup>Department of Sport Management,  
Faculty of Physical Education  
& Sport Sciences, University  
of Tabriz, Tabriz, Iran.

<sup>2</sup>Faculty of Physical Education &  
Sport Sciences, Department of  
Sport Management, University of  
Tabriz, Tabriz, Iran

<sup>3</sup>Department of Sport Management,  
Faculty of Physical Education  
& Sport Sciences, University  
of Tabriz, Tabriz, Iran

**\*Correspondence:**

Masoud Taghiabadi, Ph.D. Student  
of Communication Science at  
Allameh Tabatabaai University,  
Tehran, Iran

Email: [sajjad.pashaie@yahoo.com](mailto:sajjad.pashaie@yahoo.com)

Orcid: [0000-0002-3933](https://orcid.org/0000-0002-3933)

DOI :

[10.22098/RSM.2024.13849.1284](https://doi.org/10.22098/RSM.2024.13849.1284)

### Abstract

**Purpose:** Maintaining volunteers who work at sporting events is one of the major issues faced by event organizers. This research paper examines the motivations, satisfaction, and future volunteering intentions of sports volunteers at the 15th cultural-sports Olympiad in Iran.

**Methods:** The current research is a correlational type, where the data was collected in the field and, by convenience sampling method. A questionnaire was used to collect data. The study utilizes structural equation modeling (SEM-AMOS™ 23) to analyze the responses of 150 volunteer students in the year 2022 from the University of Tabriz and validate a theoretical model that encompasses these dimensions.

**Results:** The results indicate a strong association between motivation, volunteer experience, volunteer satisfaction, and intention to continue volunteering. The findings highlight the importance of addressing volunteer incentives and motivations to enhance satisfaction and encourage continued involvement.

**Conclusion:** This research contributes to the growing literature on volunteerism in sports by offering insights into the different dimensions of volunteer satisfaction and the impact of information and communication technology in sports organizations. Moreover, it suggests that understanding the heterogeneity of volunteer motivations is crucial for recruitment, retention, and maintenance of volunteer contingents. The study acknowledges its concentration on a specific cultural sports event, outlining paths for future research. Our findings serve as a resource for event managers aiming to improve volunteer management practices and as a contribution to the field's body of knowledge on sports event volunteerism.

**Keywords:** Volunteer Motivation, Volunteer Satisfaction, Sports Events, Volunteerism, Sports Olympiad, Iran, and Event Management.

## Introduction

Undoubtedly, many sports and social organizations face problems with their survival without the presence of volunteers (Auld & Cuskelly, 2001). Interest in this element of volunteering has grown as the need for volunteers at sporting events has increased (Shaw, 2009). For example, in Germany, voluntary involvement in sports is at its highest level. (Braun, 2011). Important sporting events are difficult to hold since there are numerous jobs, such as logistics and safety concerns, whose execution relies on volunteers (Ralston et al., 2005). The most important service provider and manager of sporting events is comprised of volunteers. and are essential for the survival of the sports system (Pauline & Pauline, 2009; Shaw, 2009), and their involvement in events produces long-lasting, positive benefits and ultimately helps the event succeed (Kim et al., 2019). In order to effectively organize big sporting events, volunteers play a crucial social, cultural, political, and economic role (Holmes et al., 2010).

Volunteers are demonstrably a sort of capital for organizations that can lower expenditures (Pauline, 2011; Wu et al., 2016). In order to effectively manage volunteers, one must ensure that they are well-organized and managed, as well as recognize their abilities and make the most of the available human resources to further the objectives of the organization (Sherr, 2008). Knowing the factors that create and maintain sports volunteerism will help sports organizations attract and retain volunteers and intend to continue it (Kim et al., 2010). Based on diverse organizations or programs, as well as the various characteristics of the volunteers themselves, it is important to manage volunteers in a variety of circumstances (Brudney & Meijs, 2014), because volunteer management has a direct impact on volunteers' willingness to stay involved and stick with their volunteer work.

Job satisfaction is a general measure of employee satisfaction and satisfaction with the job (Millette & Gagné, 2008). According to Clary et al., volunteer activity satisfaction is related to how well these functions are fulfilled by volunteering experiences (Clary et al., 1998). A behavior is activated by an internal process or mood called motivation (Georgiadis et al., 2006). It's critical for sports event organizers to comprehend volunteer behavior and motivation (Poláčková et al., 2021). One may say that one of the key ideas to understand why volunteers are drawn to working at sporting events is motivation (Alexander et al., 2015). Overall, motivation affects three crucial components of volunteering: beginning volunteer work, enjoying the experience, and continuing volunteer work (Clary & Snyder, 1999). The majority of the studies on the motivation of volunteers in large-scale sporting events (Hoye & Cuskelly, 2009). Numerous studies on volunteer work in the field of social service have discovered a variety of motives in this environment, including social interaction, benevolence, individual interests, and emotional needs (Yeung, 2004).

Today, sports events such as student sports Olympiads can be organized well when motivated people who are interested in volunteering help to organize them. Because the contributions of volunteers are essential to an event's success (Kim et al., 2019). Examining the studies of other researchers can help formulate a model of the motivations, experiences, and satisfaction of volunteers and their retention. In the following, some studies that have been done regarding the intention to continue volunteering (ICV) have been discussed. The findings Cho (2023), showed that the two personality traits were predictors of six motivation factors, including expression of value, community involvement, interpersonal contacts, career orientation, personal growth, and love of sport. In addition, expression of value, community involvement, personal growth, and love of sports positively predicted

continuance intention, while extrinsic rewards negatively predicted continuance intention (Cho et al., 2023). The results show that both men and women feel motivated in the dimensions of Understanding, Values and Enhancement, obtaining above. According to experience, volunteers with more experience had higher scores. Satisfaction with motivation can be predicted by enhancement, understanding and protective (Angosto Sánchez et al., 2023). Results show that volunteer motives significantly contribute towards enhancing volunteer commitment among volunteers in sport organisations. Furthermore, volunteer commitment, in turn, contributes towards volunteer satisfaction of volunteers in sport organisations (Tshabalala, 2022). Volunteering produces several economic and social benefits annually (Angosto Sánchez et al., 2021). The findings Li et al. (2021) indicated that enhance the understanding of the basic psychological needs and their relevance to psychological functioning in the context of sport volunteering. Egli et al came to the conclusion that the commitment and job satisfaction of volunteers play an effective role in retention and ICV (Egli et al., 2011). Studies related to voluntary participation in major sports events have so far been examined when compared to the Olympic Games (Alexander et al., 2015; Fairley et al., 2007). There is evidence to support a link between effective volunteer management and volunteers' desire to continue their service (Cho et al., 2020). Other findings revealed a significant connection between volunteers' motivation and volunteers' experience, contrasted with the fact that the pleasure of volunteers is significantly impacted by their experience (Giannoulakis et al., 2015).

According to a United Nations Development Programme (UNDP) report, due to the intangible nature of volunteering, social benefits are difficult to assess (UNDP, 2003). Also according to the state of the United Nations Volunteer (UNV) report, 109 million people are employed full-time, with 30% of

them participating in formal volunteer programs, and the number of female volunteers through various associations and organizations is 57% compared to 43% of men (UNV, 2018). Evidence shows that in 2016, adults (about 47%) in Australia participated in at least one event as a volunteer force (McGregor-Lowndes et al., 2017). However, according to the National Council of Voluntary Agencies (NCVA) (2018), it was estimated that almost a fifth of the UK population (22.0%) participates at least once a month (NCVA, 2018). It has been stated that volunteer event management is different from other forms of volunteering because short-term events demand greater effort and provide adequate training in a relatively short amount of time since cultural and sporting Olympiads are staged over a short period of time and with a very heavy burden (Getz, 1991; Kim & Cuskelly, 2017).

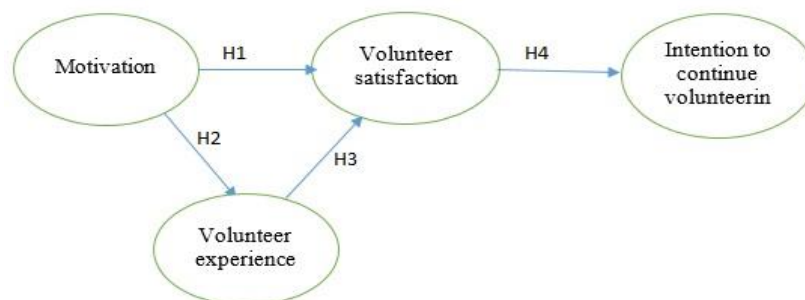
Volunteering is a core component of sport service delivery and remains essential to the viability of the sport system in many sport organisations and communities. To this end, it has become incumbent for them to ensure that a sufficient pool of volunteers exists (Tshabalala, 2022). The necessity of this work lies in the limited existing research on the motivations, satisfaction, and intention to continue volunteering among sports volunteers, particularly in the context of Iranian universities and cultural-sports Olympiads. This study fills this gap by empirically assessing the modeling approach of sports volunteers at the 15th cultural-sports Olympiad in Iran. By understanding the factors that motivate volunteers and contribute to their satisfaction and intention to continue volunteering, event planners and managers can develop effective strategies to attract and retain volunteers. While compulsory volunteering activities have been included in education programs in many countries, it is still unknown how compulsory volunteers' personal characteristics are related to their motivation and future volunteering behavior (Cho et al., 2023). The importance of

this research lies in its potential to contribute to the field of volunteer management in sports events. The findings highlight the significance of addressing volunteer incentives and motivations to enhance satisfaction and encourage continued involvement. This research can lead to creativity and innovation in volunteer management strategies, such as tailoring recruitment processes, providing appropriate training, and creating a supportive and communicative environment for volunteers.

By understanding the factors that influence volunteer satisfaction and intention to continue, event organizers can optimize the volunteer experience, leading to successful and well-organized sports events. This study's objective is to empirically assess the sports volunteers in 2022, the 15th cultural-sports Olympiad in Iran, with the role of motivations and satisfaction among sports volunteers and the intention to continue through a SEM. This proposed model

(see Fig.1 for more information) shows the relationship between sports volunteer models (Cho et al., 2020; Giannoulakis et al., 2015; Kim et al., 2007; Rozmiarek et al., 2021). This experimental study was carried out in the context of a significant student sporting event in Iran, taking into consideration the sample's characteristics and the cultural setting of the host nation and university (i.e., the University of Tabriz), and this is a good opportunity for the host university, which provides opportunities to strengthen and expand vitality, physical and mental health, friendship, empathy, and social interactions among the student community. In particular, the following research question was developed (the study framework is shown in Figure 1):

**RQ.** How is that pattern approach of sports volunteers at 2022, the 15th cultural-sports Olympiad in Iran?



**Fig. 1. Hypothesized framework**

## Material and Methods

The current research is a correlational study, where data were gathered in the field. In this study, the statistical population they were all the volunteers at the 15th Iranian Cultural and Sports Olympiad in 2022, which was held in the period of July and August and hosted by the University of Tabriz. The study utilized convenience sampling (e.g., availability, accessibility, willingness to participate, geographical proximity). It is difficult to establish general guidelines on sample size requirements for SEM (MacCallum et al.,

1999). There are numerous suggestions for the right sample size while using SEM (Pashaie et al., 2022; Pashaie & Sotiriadou, 2023). Therefore, statistical software can run any model with any sample size (Memon et al., 2020). According to Mundfrom et al. (2005), at least 100 samples are needed to perform SEM analysis using AMOS software. Some researchers recommend a sample size of 100 to 400 (Ahmad & Halim, 2017) and, 100–200 (Comrey & Lee, 1992; Pashaie & Sotiriadou, 2023). Following the most important piece of advice provided in academic literature, the

sample size for this study was chosen in consideration of these considerations ( $n = 150$ ). A quantitative research approach was chosen to evaluate the predetermined hypotheses, allowing the researchers to more fully understand the relationships between the variables based on statistical data at large (Pashaie, Abbaszadeh, et al., 2023). SEM is recognized as the best technique for investigating various correlations between independent and dependent variables (Pashaie, Golmohammadi, & Hoseini, 2023). It also offers the chance to test complex hypothetical models in an efficient manner (McQuitty, 2004).

To collect data on the motivational variable from Rozmiarek et al. (2021) questionnaire, which is in the form of three structures: purposeful, event-related, and egoistic. To collect data on the VE and VS, variable from the Giannoulakis et al. (2015) questionnaire, that VS which is in the form of 2 structures of communication and support and recruitment and training. So, to collect data on the ICV variable from the Kim et al. (2007) questionnaire, a Likert scale and five options were used. Five university professors with expertise in sports administration examined the questionnaire's structure and content to assess its validity. They also offered suggestions for improving the clarity of some of the questions. The study's final questionnaire was created after the comments were summarized. Finally, the institutional review board approved the method of this study. To evaluate internal consistency and reliability, the correlation of each component was examined, as well as Cronbach's alpha. Our value was higher than 0.7 in our investigation, which denotes acceptable internal consistency. The observed variable's total correlation item value, on the other hand, is greater than 3%. Finally, the 27-question questionnaire was accepted. The study's reliability, as measured by the Cronbach's alpha coefficient, was 0.90 for the complete questionnaire.

At this stage, the scale forms extracted from the volunteer students of the 15th cultural-sports Olympiad were checked, and the incorrectly or incompletely filled out forms were removed from analysis. The data were analyzed using SEM-AMOS with the covariance approach. The measuring model and the structural model make up the basic structure of SEM. By using a procedure known as confirmatory factor analysis (CFA), the study must first evaluate the measurement model of the latent concept for their dimensionality, validity, and reliability (See Fig 2). First, the authors evaluated the measurement model's fit using a number of metrics (Pashaie & Sotiriadou, 2023). The absolute fit indices utilized were the Chi square to degrees of freedom ratio ( $2/df 3.0$ ), the Root-Mean-Square Error of Approximation (0.05 RMSEA 0.08), the Goodness-of-Fit Index ( $GFI > 0.90$ ), and the Adjusted Goodness-of-Fit Index ( $AGFI > 0.90$ ). As the relative fit metric, Comparative Fit metric ( $CFI > 0.90$ ) was employed, and as the parsimony fit index, Parsimony Normed Fit Index ( $PNFI > 0.50$ ) (Hair et al., 2010; Pashaie et al., 2021; Pashaie & Sotiriadou, 2023). A model has a close fit if the RMSEA value is less than 0.05, a decent fit if the value is 0.08 or below, and a poor fit if the value is higher than 0.10, should not be considered (Browne & Cudeck, 1992).

Secondly, a measure of "the total amount of variance in the indicators accounted for by the latent construct" is the average variance extracted (AVE), which was also offered by the authors (Hair et al., 1998). Standardized factor loadings ( $\geq 0.50$ ), average variance extracted, and construct validity evaluation ( $AVE \geq 0.50$ ) (Fornell & Larcker, 1981; Hair et al., 1998), and composite reliability ( $CR \geq 0.70$ ) were calculated. In this research, values greater than 0.70 for Cronbach's alpha are considered sufficient (Nunnally, 1994).

The statistical analysis employed IBM® SPSS® Structural equation modeling using AMOS™ 23 software. The measurement tool can

be regarded as reliable for this investigation based on the values obtained. The handling of citations and references was also done using EndNote 20 software.

**Results**

*Provide information on examining the distribution of data*

Through data screening method, finally, 150 responses were used for data analysis. This survey included demographic questions related to age, gender, professionally active and experience in sports volunteering. The following sociodemographic traits applied (Table 1):

**Table 1. Participants**

Socio-Demographic Characteristics	Volunteers (n = 140)	
	n	(%)
<b>Gender</b>		
Men	75	50.0
Women	75	50.0
<b>Age</b>		
18–21	71	47.3
22–24	51	34.0
25 or more	28	18.7
<b>Professionally active</b>		
Yes	38	25.3
No	112	74.7
<b>Experience in sports volunteering</b>		
Yes	6	4.0
No	144	96.0

Source: Table developed by authors

Among the survey participants who offered to help in the 15th Cultural and Sports Olympiad, women constituted 50.0% and men—50.0%. More than 47.3% of respondents were 18-21 years old. Almost 100% of the respondents were students. Only 25.3% were professionally active and only 4.0% had previous sports VE.

*Evaluation of psychometric properties of criteria and measurement model*

Face validity was assessed by a group of professionals and specialists in the field of sports management. Additionally, CFA was used to test the construct and composite reliability (Pashaie & Sotiriadou, 2023) (see Table 2 for more information). All variables'

CR values were above the cutoff point of 0.70, ranging from 0.72 to 0.84 (Hair et al., 2010). The degree to which the items accurately reflect the desired latent construct is measured by convergent validity. It is evaluated using AVE and factor loadings (Hair et al., 2010). For samples of 150, all measurement items showed standardized loading estimates ( $\lambda$ ) of 0.45 or greater (Hair et al., 2006; Pashaie et al., 2022; Pashaie & Sotiriadou, 2023) (ranging from 0.67 to.88), demonstrating the measures for each construct are valid and convergent (Hair et al., 2010). The AVE values from each construct exceeded the minimum requirement of 0.50, ranging from 0.60 to 0.79 (Fornell & Larcker, 1981), providing evidence of convergent validity.

**Table 2. Psychometric Properties of the Measures**

Measures	$\lambda$	CR	AVA
<b>1- Purposive</b>			
Motivation			
• To help the others and the university community	.70		
• To support my university	.72	.72	.75
• Volunteer tradition in my family	.70		
• To support the spirit of volunteerism	.79		
• For nationalistic pride and university	.71		

	• Commitment as a student and citizen	.70		
	<b>2-Event related</b>			
	• Opportunity to meet with elite athletes	.74		
	• Passion for the Games	.70		
	• Being a volunteer at the Olympiad Games is considered to be prestigious	.85	.78	.79
	• To attend an Olympiad event	.79		
	• Memories that will last a lifetime	.77		
	<b>3-Egoistic</b>			
	• To make job contacts	.80		
	• To gain work experience which might lead to employment	.80		
	• Opportunity to establish contacts with experts from the same field	.86	.82	.70
	• To learn new skills	.79		
	• For materialistic rewards	.88		
	<b>4- Volunteer experience</b>			
	• Recognition and acknowledgment	.81	.77	.68
	• Volunteer experience in general	.80		
	• Organization of the Games	.80		
	<b>5- Communication and support</b>			
	• Communication style of supervisor	.82		
	• Support you received to do your job	.84	.84	.77
	• Feedback you received to do your job	.80		
	• Communication with other volunteers	.82		
	<b>6- Recruitment and training</b>			
	• Prior recruitment information you received	.69	.78	.60
	• Volunteer training you received	.73		
	<b>7- Intention to continue volunteering</b>			
	• I will volunteer for sports Olympiad next year.	.69	.80	.61
	• I will stop volunteering at the end of the season.	.67		
Volunteer satisfaction				

Source: Table developed by authors

Discriminant validity gauges how distinct the latent constructs are at this point (Siekpe, 2005), and it is found if a construct's square root AVE is higher than the correlation coefficients between the construct and other constructs (Fornell & Larcker, 1981). Since the study is quantitative, it is typically advised to use Cronbach's alpha( $\alpha$ ) to guarantee dependability. The reliability of the criteria was

then examined using the Cronbach's alpha test. According to Hair et al (2010), a Cronbach's alpha value of 0.70 or higher is regarded as acceptable. Table 3 shows the correlations and Cronbach's alpha for the squared inter construct. Indicating discriminant validity, all correlation coefficients between constructs were less than their respective square roots of the AVEs. Therefore, CFA was employed to establish that the data were measured correctly (see Fig. 2 for details).

**Table 3. Correlation between variables**

	$\alpha$	M	VE	VS	ICV
Volunteer Motivation (VM)	.80	1	.88	.80	.83
Volunteer Experience (VE)	.91		1	.86	.79
Volunteer Satisfaction (VS)	.88			1	.90
Intention to Continue Volunteering (ICV)	.83				1

Source: Table developed by authors

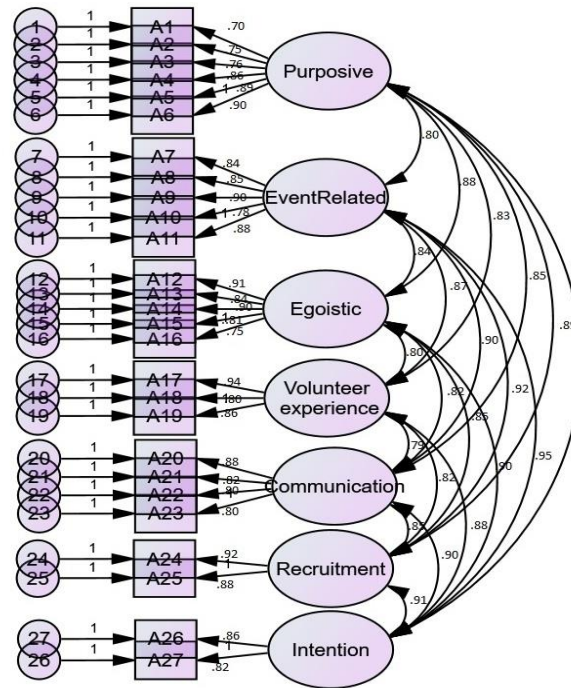


Fig. 2. CFA.

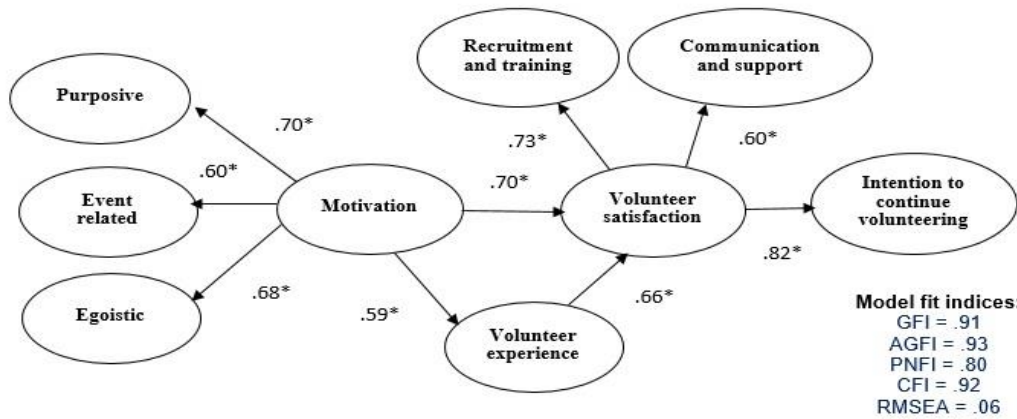
Given that the factor loadings in the research model are greater than 0.4, it indicates that the items in question are good indicators for the hidden variable.

*Structural model analysis (SEM)*

After conducting a validity and reliability analysis, a measurement model was achieved. Additionally, the SEM was developed to test the hypotheses that were put forth in this study. CFA was also carry out to analyze the goodness of fit of the constructs used in the model: motivation, volunteer experience, volunteer satisfaction, and intention to continue volunteering. We utilized numerous fit indices to measure how well the scales structures fit the data, such as the likelihood ratio  $\chi^2$ ,  $\chi^2/df$ ,

RMSEA, and CFI (Hair et al., 2010; Kim et al., 2015). Low amount of  $\chi^2$  denotes little differences between the conceptual model and the study findings. Since this index is very sensitive to the sample size, the  $\chi^2/df$  ratio is popularly used. If the  $\chi^2/df$  ratio is less than 3.00, it indicates its proper fit (Kim et al., 2015). Furthermore, a higher value of CFI (e.g., higher than 0.90; Hair et al., 2010; Kline, 2015) leads to a better fit of the measures while a lower value of RMSEA (e.g., lower than 0.10; (Steiger, 1998) leads to a better fit of the measures in the model. The values of the final model fit indices ( $\chi^2/df = 2.98$ , RMSEA = 0.06, CFI = 0.92, GFI = 0.91) demonstrated a good match between the model and the data.





**Fig 3. Results of structural model. \*p < .001**

Based on the data and structural analysis performed in the model, the outcomes match Table 4 (Fig. 3). In equation modeling analysis, if the beta coefficient ( $\beta$ ) are over 0.6, it suggests that there is a strong association between the two variables. There is a moderate correlation if it is between 0.3 and 0.6, and there is a weak correlation if it is less than 0.3. The beta coefficients in the significant number model are greater than 0.6. (except for one case which is .59) due to the number of results obtained for " a modeling approach of Sports Volunteers at the 2022 the 15th cultural-sports Olympiad in Iran: Motivations and satisfaction sport volunteer and intention to continue ", This is the average value across all variables and denotes a positive, strong and is the average between variables. Also, the "C.R. or t-value" demonstrates the significance of the effect of structures. If the value of "C.R." is more than 1.96, it suggests that there is a positive

influence and it is substantial. A substantial negative effect is present if it is less than -1.96, and no significant effect is there if it is between +1.96 and -1.96. In structural equations using the Amos software, the value of the "C.R." is actually the primary criterion for confirming or rejecting the hypotheses (Badri Azarin et al., 2018). It can be deduced that these relationships are significant at the confidence level of 0.95 because the number obtained for the relationships defined in the model is greater than 1.96.

*Evaluation of the proposed linkages*

For the 15th cultural-sports Olympiad in Iran in 2022, Table 4 shows a modeling approach of sports volunteers: motivations, satisfaction, and intention to continue. The fit test of the global model of the hypothesized structural model showed satisfactory results.

**Table 4. Direct path coefficient values and C.R.-statistic of the main hypotheses with the paths of the research model**

	Path	Estimate	S.E.	C.R.	Sig	Result
1	motivation → volunteer satisfaction	.70	.08	12.22	.001	Confirmed
2	motivation → volunteer experience	.59	.05	9.86	.001	Confirmed
3	volunteer experience → volunteer satisfaction	.66	.08	9.05	001	Confirmed
4	volunteer satisfaction → intention to continue volunteering	.82	.08	13.91	.001	Confirmed

Source: Table developed by authors

The results of Table 4 show the path coefficient of the relevant structures with a significant level. The findings of the hypotheses revealed a substantial association between each of the four hypotheses. The relationship between motivation to VS has confirmed by (H1: Estimate= 0.70; C.R= 12.22;  $p < .001$ ). The study's findings support the importance of motivation in maintaining volunteer satisfaction. The relationship between motivation use and VE has supported by (H2: Estimate= 0.59; C.R= 9.86;  $p < .001$ ). This study's findings provide compelling evidence in favor of hypothesis H2, which is shown in the final structural measurement model. H3 conveyed that VE significantly relates with VS and has been supported by (H3: Estimate =0.66; C.R= 9.05;  $p < .001$ ). So, more detailed planning to increase satisfaction, the fields of employment of volunteers should be examined from their own point of view. The relationship between VS and willingness to continue volunteering by (H4: Estimate =0.82; C.R= 13.91;  $p < .001$ ).

All study hypotheses are validated to a level of 99% in Fig. 3 and Table 4, and there is a favorable and strong association between the structures. Also, regression coefficients for the research model are also significant at the 0.001 level. All observed factor loadings were above 0.45, despite the fact that fitness indices occasionally fell below the advised range. Because of this, redundant entries were found by looking at modification indices. Then, they were connected with the improvement of the model's goodness-of-fit indices. The impact of each independent variable on the dependent variable is displayed (Fig. 3) in the standard estimate model stage of structural equations once it has been determined that there is a strong correlation between the independent and dependent variables. Therefore, the SEM used was confirmed as a strong theoretical model for the modeling approach of sports volunteers in

the 15th Sports Cultural Olympiad 2022: the role of motivations and satisfaction of sports volunteers and its continuation intention.

## Discussion

The goal of this study was to identify studies that had looked at volunteers' motivations, satisfaction with their experiences, and future goals for volunteering at sporting events, as well as their intention to continue doing so at Iran's 15th cultural-sports Olympiad in 2022. Examining a prospective model of the intention to continue volunteering was the study's main objective. The models were built on the premise that how well an organization supports volunteers' needs determines how long it can retain those volunteers. This review, which contrasts with the reviews by Kim (2018) and Kim and Cuskelly (2017), gives a summary of the last six years' worth of scholarly output on volunteering at sporting events (from 2017 to 2022). The success of sporting events, as well as volunteers and intention to continue, are all attributed in part to the goals' structure for the future. The linkages between these characteristics and their impact on the intention to continue volunteering have not been clearly defined in prior work. Therefore, we included several models including variables related to volunteer motivation (e.g., purposeful, event-related, and egoistic), VS (e.g., communication and support, and recruitment and training), volunteer experience, and ICV in the 15th cultural-sports Olympiad in Iran.

Volunteer motivation was positively correlated with volunteer satisfaction, according to all fit indices. This result confirmed previous research on volunteer motivation with VS (Bang et al., 2019; Bang & Ross, 2009; Lee et al., 2014; Nazarian et al., 2020; Rozmiarek et al., 2021; Vetitnev et al., 2018). The planning and organization of these events need to identify volunteer incentives to participate in and support these activities. Investigating the reasons people volunteer to take part in big events is essential. From an economic

standpoint, event managers can save money by keeping volunteers because their motivation and satisfaction will encourage them to continue working with them and return to the volunteering activities. On the other hand, recruiting new volunteers and paying for their training incurs significant costs. Consequently, it is essential to understand the elements that influence volunteers' pleasure. With appropriate incentive policies, it becomes easier and easier to achieve people's motivations for volunteering, and it is possible to increase the level of satisfaction of volunteers.

As far as volunteer experience (VE) is concerned, the study's findings offer hope for additional research into volunteer motivation in relation to VE at special sporting events. This outcome supported earlier studies on volunteer motivation using VE (Farrell et al., 1998; Giannoulakis et al., 2015). In general, it can be concluded that the level of experience of sports volunteers has a great effect on the quality of sports competitions and events. Some people look for volunteer opportunities, while others strive to persuade others to do so. Volunteers in the cultural and sports Olympiad were satisfied because of the fulfillment of their motivations related to the event. Additionally, the volunteers reported high levels of overall satisfaction with the event because they had a good time as well. More volunteers may participate if they are satisfied.

The findings indicated a favorable correlation between VE and volunteer satisfaction. Thus, our SEM supported the hypotheses of (Bang et al., 2019; Giannoulakis et al., 2015; Holmes et al., 2018). Volunteering at sporting events, however, is a hoped-for "once-in-a-lifetime" experience (e.g., an Olympics event) that overcame most prophylactic shortcomings (Holmes et al., 2018), meaning that volunteers' level of experience in sporting events increased satisfaction. Voluntary experience for students is an effective way to demonstrate professional skills, as well as show that you are a goal-

oriented person. Volunteering can open a new path for employment. The volunteer program provides a wonderful opportunity for students to experience the beauty and culture of sports while participating in sporting events to improve the quality of life for thousands of people. It seems that the generalized effect of volunteering experience at sports events is positive and influential on sustainable attitudes. Therefore, it is crucial to be satisfied with the duties carried out in the organization in order to forecast sustainability (Jiménez et al., 2009).

The findings of this structural equation survey provide new perspectives on the body of research that shows a positive correlation between VS and willingness to continue volunteering. As a result, our SEM confirmed the assumptions by (Cho et al., 2020; Egli et al., 2011; Kalateh Seifari et al., 2014; Kim et al., 2007; Rozmiarek et al., 2021; Wu et al., 2016). Different studies have shown that if volunteers felt that the tasks they were to complete satisfied their motivation, both their satisfaction with their VE and their ICV would increase (Clary et al., 1998; Omoto & Snyder, 1995). Thus, the joy of voluntarily taking part in a sporting event is really significant. Considering that it's crucial to assist the volunteers, stay in touch with them, and persuade them to cooperate and continue Voluntary service, in which the volunteer makes a free choice without considering his material interests and enters the field of service voluntarily and with personal motivation. If a volunteer receives positive support and recognition during participation in a volunteer program, future actions may be affected by it (Aisbett et al., 2015).

## Conclusion

This research paper explores the motivations, satisfaction, and intention to continue volunteering among sports volunteers at the 15th cultural-sports Olympiad in Iran. The results demonstrate that volunteer motivation and experience have a positive impact on

volunteer satisfaction, which in turn influences their intention to continue volunteering. These findings align with previous research on volunteer motivation, satisfaction, and intention to continue volunteering. The findings emphasize the importance of understanding and addressing volunteer incentives and motivations to enhance volunteer satisfaction and encourage their continued involvement. It highlights the role of volunteer experience in ensuring the quality of sports events and increasing overall satisfaction. The study suggests that event managers should focus on recruitment, retention, and maintenance strategies for volunteers, while considering their motivation, experience, and satisfaction. Based on the literature review and the empirical findings, the paper concludes that event planners and managers should pay special attention to factors (i.e., salary, reward, path to success, group motivation, non-monetary incentives, relationship with colleagues, relationship with leadership, company's culture, learning and development opportunities, processes within the company, personal life) that increase motivation, satisfaction, and intention to continue volunteering in order to attract and retain volunteers. It underscores the need for effective volunteer management and provides insights for sports organizations to better engage and retain volunteers. Based on the content provided, here are some suggestions to strengthen the research:

- Conduct follow-up studies: To enhance the generalizability of the findings, it would be beneficial to conduct similar research in different cultural and sporting contexts. This would provide a broader understanding of volunteer motivations, satisfaction, and intention to continue volunteering across various settings.
- Explore additional factors: Further investigation into other factors that may influence volunteer satisfaction and intention to continue volunteering, such as organizational support and volunteer rewards, would deepen the understanding of volunteerism in sports events. Examining these factors can provide insights into how to effectively support and retain volunteers.
- Incorporate qualitative methods: To gain a more in-depth understanding of volunteers' experiences and motivations, qualitative methods can be employed. Conducting interviews or focus groups with volunteers can provide rich insights into their perspectives, allowing for a more comprehensive analysis of their motivations and satisfaction.
- Consider moderating variables: It would be valuable to consider potential moderating variables that may impact the relationships between the constructs, such as age, gender, and previous volunteering experience. Analyzing these variables can provide a nuanced understanding of how different factors interact and influence volunteer motivations and satisfaction.
- Investigate differences in volunteer experiences: Exploring the differences in volunteer experiences and their effects on participants in various contexts and settings can provide valuable insights. Comparing the experiences of volunteers in different sports events or cultural contexts can shed light on the factors that contribute to satisfaction and intention to continue volunteering.

By implementing these suggestions, future research can further enhance the understanding of volunteer motivations, satisfaction, and intention to continue volunteering in the context of sports events. This knowledge can inform the development of effective volunteer management strategies and contribute to the success of sports events. Overall, the paper emphasizes the ethical responsibility of organizations to prioritize the well-being and satisfaction of volunteers in order to achieve the

goals of the sports events .

### Supporting Agencies

This paper was supported financially by the University of Tabriz, Tabriz, Iran.

### References

- [1] Ahmad, H., & Halim, H. (2017). Determining sample size for research activities. *Selangor Business Review*, 20-34.
- [2] Aisbett, L., Randle, E., & Kappelides, P. (2015). Future volunteer intentions at a major sport event. *Annals of Leisure Research*, 18(4), 491-509.
- [3] Alexander, A., Kim, S.-B., & Kim, D.-Y. (2015). Segmenting volunteers by motivation in the 2012 London Olympic Games. *Tourism management*, 47, 1-10.
- [4] Angosto Sánchez, S., Díaz-Suárez, A., & López-Gullón, J. M. (2021). Motivation and satisfaction in university sports volunteering.
- [5] Angosto Sánchez, S., Díaz-Suárez, A., & López-Gullón, J. M. (2023). Motivation and satisfaction in university sports volunteering. <https://doi.org/10.14198/jhse.2023.181.13>
- [6] Auld, C., & Cuskelly, G. (2001). Behavioural characteristics of volunteers: implications for community sport and recreation organisations. *Australian Parks and Leisure*, 4(2), 29-37.
- [7] Badri Azarin, Y., Pashaie, S., Hafezi, V., & Fateh, H. (2018). Analysis the mediating role quality of ticket sale electronic services the performance of electronic customer relationship management (E-CRM) of league football matches of iran. *Communication Management in Sport Media*, 5(3), 15-26.
- [8] Bang, H., Bravo, G. A., Mello Figuerôa, K., & Mezzadri, F. M. (2019). The impact of volunteer experience at sport mega-events on intention to continue volunteering: Multigroup path analysis. *Journal of community psychology*, 47(4), 727-742.
- [9] Bang, H., & Ross, S. D. (2009). Volunteer motivation and satisfaction. *Journal of venue and Event Management*, 1(1), 61-77.
- [10] Braun, S. (2011). *Ehrenamtliches und freiwilliges Engagement im Sport: Sportbezogene Sonderauswertung der Freiwilligensurveys von 1999, 2004 und 2009*. Sportverl. Strauß.
- [11] Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological methods & research*, 21(2), 230-258.
- [12] Brudney, J. L., & Meijs, L. C. (2014). Models of volunteer management: Professional volunteer program management in social work. *Human Service Organizations: Management, Leadership & Governance*, 38(3), 297-309.
- [13] Cho, H., Chen, M. Y. K., & Li, C. (2023). Compulsory volunteer experience in Singapore: Personality, volunteer motivation, and continuance intention to volunteer. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 34(2), 276-288. <https://doi.org/10.1007/s11266-022-00461-y>
- [14] Cho, H., Wong, Z. E., & Chiu, W. (2020). The effect of volunteer management on intention to continue volunteering: A mediating role of job satisfaction of volunteers. *Sage open*, 10(2), 2158244020920588.
- [15] Clary, E. G., & Snyder, M. (1999). The motivations to volunteer: Theoretical and practical considerations. *Current directions in psychological science*, 8(5), 156-159.
- [16] Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P. (1998). Understanding and assessing the motivations of volunteers: a

- functional approach. *Journal of personality and social psychology*, 74(6), 1516.
- [17] Comrey, A. L., & Lee, H. B. (1992). A first course in factor analysis, 2nd edn. hillsdale, nj: L. In: Erlbaum Associates.
- [18] Egli, B., Schlesinger, T., Candan, H., & Nagel, S. (2011). Commitment and volunteer job satisfaction as determinants for the intention to remain a volunteer in sports clubs. *Commitment in Sport Management*, 493-494.
- [19] Fairley, S., Kellett, P., & Green, B. C. (2007). Volunteering abroad: Motives for travel to volunteer at the Athens Olympic Games. *Journal of Sport Management*, 21(1), 41-57.
- [20] Farrell, J. M., Johnston, M. E., & Twynam, G. D. (1998). Volunteer motivation, satisfaction, and management at an elite sporting competition. *Journal of Sport Management*, 12(4), 288-300.
- [21] Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
- [22] Georgiadis, T., Spiliopoulos, P., Rampotas, C., & Rampotas, G. (2006). Motivation and volunteer participation in the «Athens 2004» Olympic Games. *Choregia*, 2.
- [23] Getz, D. (1991). *Festivals, special events, and tourism*. Van Nostrand Reinhold.
- [24] Giannoulakis, C., Wang, C.-H., & Felver, N. (2015). A modeling approach to sport volunteer satisfaction. *International Journal of Event and Festival Management*.
- [25] Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate data analysis. Englewood Cliff. *New jersey, USA*, 5(3), 207-2019.
- [26] Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Advanced diagnostics for multiple regression: A supplement to multivariate data analysis. *Advanced Diagnostics for Multiple Regression: A Supplement to Multivariate Data Analysis*.
- [27] Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). Multivariate data analysis (Vol. 6): Pearson Prentice Hall Upper Saddle River. In: NJ.
- [28] Holmes, K., Nichols, G., & Ralston, R. (2018). It's a once-in-a-lifetime experience and opportunity—Deal with it! Volunteer perceptions of the management of the volunteer experience at the London 2012 Olympic Games. *Event Management*, 22(3), 389-403.
- [29] Holmes, K., Smith, K. A., Lockstone-Binney, L., & Baum, T. (2010). Developing the dimensions of tourism volunteering. *Leisure Sciences*, 32(3), 255-269.
- [30] Hoye, R., & Cuskelly, G. (2009). The psychology of sport event volunteerism: a review of volunteer motives, involvement and behaviour. *People and work in events and conventions: A research perspective*, 171-180.
- [31] Jiménez, M. L. V., Fuertes, F. C., & Abad, M. J. S. (2009). Satisfacción en el voluntariado: estructura interna y relación con la permanencia en las organizaciones. *Psicothema*, 112-117.
- [32] Kalateh Seifari, M., Koozechian, H., Ehsani, M., & Hosseini, S. Y. (2014). Designing and providing a model for volunteer retention in student Sports: Case study of sports volunteers of Tehran province universities. *Research on Educational Sport*, 2(6), 33-50.
- [33] Kim, E. (2018). A systematic review of motivation of sport event volunteers. *World Leisure Journal*, 60(4), 306-329.
- [34] Kim, E., & Cuskelly, G. (2017). A systematic quantitative review of volunteer management in events. *Event Management*, 21(1), 83-100.

- [35] Kim, G. S., Chu, S. H., Park, Y., Choi, J. Y., Lee, J. I., Park, C. G., & McCreary, L. L. (2015). Psychometric properties of the Korean version of the HIV self-management scale in patients with HIV. *Journal of Korean Academy of Nursing*, 45(3), 439-448.
- [36] Kim, H., Choe, Y., Kim, D., & Kim, J. (2019). For sustainable benefits and legacies of mega-events: A case study of the 2018 PyeongChang Winter Olympics from the perspective of the volunteer co-creators. *Sustainability*, 11(9), 2473.
- [37] Kim, M., Chelladurai, P., & Trail, G. T. (2007). A Model of Volunteer Retention in Youth Sport. *Journal of Sport Management*, 21(2).
- [38] Kim, M., Zhang, J. J., & Connaughton, D. P. (2010). Comparison of volunteer motivations in different youth sport organizations. *European Sport Management Quarterly*, 10(3), 343-365.
- [39] Lee, C.-K., Reisinger, Y., Kim, M. J., & Yoon, S.-M. (2014). The influence of volunteer motivation on satisfaction, attitudes, and support for a mega-event. *International Journal of Hospitality Management*, 40, 37-48.
- [40] Li, C., Cho, H., & Wu, Y. (2021). Basic psychological need profiles and correlates in volunteers for a national sports event. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 1-12. <https://doi.org/10.1007/s11266-020-00307-5>
- [41] MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological methods*, 4(1), 84.
- [42] McGregor-Lowndes, M., Crittall, M., Conroy, D., Keast, R., Baker, C., Barraket, J., & Scaife, W. (2017). Individual giving and volunteering.
- [43] McQuitty, S. (2004). Statistical power and structural equation models in business research. *Journal of Business Research*, 57(2), 175-183.
- [44] Memon, M. A., Ting, H., Cheah, J.-H., Thurasamy, R., Chuah, F., & Cham, T. H. (2020). Journal of Applied Structural Equation Modeling.
- [45] Millette, V., & Gagné, M. (2008). Designing volunteers' tasks to maximize motivation, satisfaction and performance: The impact of job characteristics on volunteer engagement. *Motivation and emotion*, 32(1), 11-22.
- [46] Mundfrom, D. J., Shaw, D. G., & Ke, T. L. (2005). Minimum sample size recommendations for conducting factor analyses. *International journal of testing*, 5(2), 159-168. [https://doi.org/10.1207/s15327574ijt0502\\_4](https://doi.org/10.1207/s15327574ijt0502_4)
- [47] Nazarian, A., Akbari, P., Mousavi Gargari, S. S., & Adlparvar, A. (2020). Influence of volunteers, motivational factors on satisfaction and support of place with the mediating role of attitude (Case Study: thirteenth cultural and sport university students Olympiad). *journal of motor and behavioral sciences*, 3(1), 29-42.
- [48] NCVA. (2018). *National Council of Voluntary Agencies. UK civil society almanac 2018*. Available at: <https://data.ncvo.org.uk/a/almanac18/>
- [49] Nunnally, J. C. (1994). *Psychometric theory 3E*. Tata McGraw-hill education.
- [50] Omoto, A. M., & Snyder, M. (1995). Sustained helping without obligation: motivation, longevity of service, and perceived attitude change among AIDS volunteers. *Journal of personality and social psychology*, 68(4), 671.
- [51] Pashaie, S., Abbaszadeh, M., Abdavi, F., & Golmohammadi, H. (2023). Improving the Validity of Mixed and Multi-Methods through Triangulation in New Sports Management Research. *Research in Sport Management and Marketing*, 4(2), 16-27. <https://doi.org/10.22098/RSMM.2023.12593.1216>

- [52] Pashaie, S., Abdavi, F., BadriAzrine, Y., Cincimino, S., & Fişne, M. (2021). Designing and providing the appropriate structural model for success of customer relationship management in the sports service sector places in Iran: Multi-Method Analysis. *Applied Research in Sport Management*, 9(3), 41-56.
- [53] Pashaie, S., Golmohammadi, H., & Hoseini, M. D. (2023). Social Customer Relationship Management Capabilities in Sports Facilities. *Journal of New Studies in Sport Management*. <https://doi.org/10.22103/JNSSM.2023.21459.1191>
- [54] Pashaie, S., Piątkowska, M., Hoseini, M. D., Dostimehr, A., & Jahanbakhsh, I. (2022). Sociological Analysis of Branding of Professional Football League Players. *Physical Culture and Sport. Studies and Research*, 96(1), 1-11. <https://doi.org/10.2478/pcssr-2022-0014>
- [55] Pashaie, S., & Sotiriadou, P. (2023). The Anticorruption Effects of Information and Communication Technology in Sport Organizations: The Role of Organizational Health Mediation and Organizational Transparency. *International Journal of Sport Communication*, 1-12. <https://doi.org/10.1123/ijsc.2023-0058>
- [56] Pauline, G. (2011). Volunteer satisfaction and intent to remain: An analysis of contributing factors among professional golf event volunteers. *International Journal of Event Management Research*, 10.
- [57] Pauline, G., & Pauline, J. S. (2009). Volunteer motivation and demographic influences at a professional tennis event. *Team performance management: an international journal*, 15(3/4), 172-184.
- [58] Poláčková, K., Hlaváčová, N., Polakovič, R., & Pružek, M. (2021). Heterogeneity of volunteer motivations at sports events in Slovakia. *Journal of Physical Education and Sport*, 21, 2019-2027.
- [59] Ralston, R., Lumsdon, L., & Downward, P. (2005). The third force in events tourism: Volunteers at the XVII Commonwealth Games. *Journal of Sustainable Tourism*, 13(5), 504-519.
- [60] Rozmiarek, M., Poczta, J., & Malchrowicz-Moško, E. (2021). Motivations of sports volunteers at the 2023 European Games in Poland. *Sustainability*, 13(11), 6406.
- [61] Shaw, S. (2009). "It was all 'smile for Dunedin!'"': Event volunteer experiences at the 2006 New Zealand masters games. *Sport Management Review*, 12(1), 26-33.
- [62] Sherr, M. E. (2008). *Social work with volunteers*. Lyceum Books.
- [63] Siekpe, J. S. (2005). An examination of the multidimensionality of flow construct in a computer-mediated environment. *Journal of Electronic Commerce Research*, 6(1), 31.
- [64] Steiger, J. H. (1998). A note on multiple sample extensions of the RMSEA fit index.
- [65] Tshabalala, L. F. (2022). *Motives for volunteering in sport organisations and the relationship with volunteer commitment and volunteer satisfaction* Vaal University of Technology].
- [66] UNDP. (2003). United Nations Development Programme. Volunteerism and Development. *Essentials*, 12(October), 1-12.
- [67] UNV. (2018). *United Nations Volunteer-State of the World's Volunteerism Report 2018: The tread that binds*. Available at: <https://reliefweb.int/report/world/state-world-s-volunteerism-report-2018-thread-binds>
- [68] Vetitnev, A., Bobina, N., & Terwiel, F. A. (2018). The influence of host volunteer motivation on satisfaction and attitudes toward Sochi 2014 Olympic Games. *Event Management*, 22(3), 333-352.
- [69] Wu, Y., Li, C., & Khoo, S. (2016). Predicting future volunteering intentions



through a self-determination theory perspective. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 27(3), 1266-1279.

- [70] Yeung, A. B. (2004). The octagon model of volunteer motivation: Results of a phenomenological analysis. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 15(1), 21-46.