

How Volunteers Perceive Psychological Safety at International Events and Its Impact on Their Job Satisfaction

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Abstract:

Volunteers have played an important role in the success of international events. Yet, due to the nature of this short-term informal “job”, volunteers are usually in a disadvantaged situation in this temporary “workplace” and experience a variety of challenges, thus feelings of anxiety or frustration emerged, resulting in dissatisfaction of the “job” and quit from volunteering. However, this is not well addressed in prior research. Psychological safety is proved useful to improve job satisfaction and personnel retention. Adopting a quantitative method, this research is designed to measure volunteers’ perception of psychological safety at international events on the first stage; then, to examine the relationship between psychological safety and volunteering satisfaction with the collected quantitative data (n=489) from two high-impact international events in Hangzhou, China. Regression analysis suggests psychological safety is positively significant associated with volunteers’ job satisfaction. Three factors are found positively significant in predicting their job satisfaction. This research provides new insights into the altruistic volunteerism and volunteer management from the perspective of psychological safety at international events. Thus, it contributes to the literature via applying the theory of psychological safety in event studies area, and provides solutions to improve the volunteers’ job satisfaction through manipulating volunteers’ psychological safety.

Keywords: *Psychological safety, Temporary workplace, Volunteer, Job satisfaction*

I. INTRODUCTION

It is undeniable that volunteers, regarded as the third force of social development [1], are of great importance to business and nonprofit organizations. They produce multiple benefits to different engaged parties [2] by delivering services helping with our day-to-day operations, as well as special projects and events. Thus, both economic and social value of volunteering has been widely recognized [3]. This is exactly the case for international events, which usually happen in a short time and engage a large number of participants that request corresponding number of personnel to provide service before, during and post-events; therefore, volunteer recruitment is considered as an ideal solution to address the huge challenge of personnel shortage and budget deficit [4].

Special events are increasingly needed in our society for two reasons: one is from the demand side that both leisure time and discretionary spending of people in most part of the global village have kept growing [5-7]; another is from the supplying side that both the organizers (from profit) and sponsors (usually governments) recognize the value and functions of special events (e.g., cultural celebration, sports event, trade show, festival). Their production and success is largely relying on the “important input” of the volunteers [8]. Indeed, organizers often recruit considerable number of volunteers as their external staff to provide services for event consumers [9] and to assist in planning, organization, marketing and production of events [8]. The supply of volunteers is powered by neoliberal philosophy, with advocates citizens, as well as young people to perform their public duties, such as volunteering [10]. Among them, the growth of student volunteering is phenomenal, for example, in the UK over 725,000 students volunteered an average of 44 hours in a variety of activities, accounting for 31 per cent of all students in higher education [11]. Similarly, in 2017, the number of registered volunteers in China has reached 67 million and their service time exceeded 810 million hours [12]. However, university students are motivated by reasons beyond what neoliberal philosophy suggests [13,14]. Indeed, as a university student, volunteering can help them build life skills, gain learning experience, to establish friendship, engage in community, and contribute to their employability [15,16].

Volunteers work voluntarily on a regular, short-term, or occasional basis to provide services to the organization or to the people the organization serves (e.g., delegates or attendees of an event), but they are not paid staff. Therefore, volunteering at international events creates a special “job” at a unique “workplace”, in which, university students “work” temporarily during the staging of an international event with non-monetary pursuits. Given the nature of volunteering “job” and the uniqueness of the “workplace”, volunteers are usually in a disadvantaged position when serving the event consumers. Previous research confirms that volunteers experienced a variety of challenges when working with the client groups, and for many students such encounters elicited feelings of anxiety or frustration [17], because the volunteer-organization relationship is often considered as uncertain [18] and the role of volunteers is under the threat of ambiguity. Therefore, it is challengeable to make volunteers satisfied with their jobs. Studies have conducted to identify many factors, such as motivation [15], training [19], rewards [20,21], job design [20], and examine the influences of those factors on volunteers’ experience and their retention [21].

Yet, psychological safety, which has proved crucial to improve team performance and job satisfaction in conventional work environment [21-23], is largely overlooked in volunteer studies. Therefore, this research, adopting a quantitative method, aims to investigate the volunteers’ perception of psychological safety at international events (a special “workplace”), and to examine the relationship between psychological safety and volunteering satisfaction.

II. MATERIALS AND METHODS

Public recreation organizations, including those international event organizers, doubtlessly rely on volunteers, which also witness the vital importance of volunteer contributions to public recreation. For example, since 1984 the Olympic Games have recruited a large number of volunteers each year to support and fulfill the needs (TABLE I). Ferris [24] points out that some renowned metropolises have not been able to supply those public recreation/events until the sufficient support provided from the community volunteers. Thus, volunteers' attitudes toward the specific work they perform are highly concerned by event organizers and other stakeholders, which results in a serious concern of volunteers' job satisfaction [25, 26]. In this research, the attitude and satisfaction of volunteers are the materials for investigation, and quantitative method is adopted as explained in following sections.

TABLE I. Number of Volunteers Recruited by the Olympic Games (1984-2020)

Year	The Olympic Games	Host City	Volunteers Recruited
1984	23rd Olympic Game	Los Angeles, USA	28,742
1988	24th Olympic Game	Seoul, Korea	27,221
1996	26th Olympic Games	Atlanta, USA	47,466
2000	27th Olympic Games	Sydney, Australia	46,967
2000	27th Olympic Games	Sydney, Australia	46,967
2004	28th Olympic Games	Athens, Greece	60,000
2008	29th Olympic Games	Beijing, China	100,000
2012	30th Olympic Games	London, UK	70,000
2016	31st Olympic Games	Rio, Brazil	50,000
2020	32nd Olympic Games	Tokyo, Japan	70,000

2.1 Materials

Materials (data) were collected from two high-impact international events held in Hangzhou, namely, the United Nations World Geospatial Information Congress (UNWGIC) and the FINA World Swimming Championships (FINA-WSC). The UNWGIC 2018 recruited 760 volunteers, of whom 710 were college students. Similarly, the FINA-WSC selected 1,605 volunteers, including some 1,552 college students. The study used cluster sampling (based on the institution at which the students studied) to collect data and the sample is described below.

The research employed both paper and electronic questionnaires to collect data. A total of 400 paper questionnaires were distributed to target respondents and 348 were returned. Of these, 326 were considered valid and the final recovery rate was 81.5%. There is no specific target number of electronically delivered questionnaires and 185 questionnaires were recovered, 163 met data requirements. The final recovery rate of electronic questionnaires was 88.1%.

TABLE II. Data characterization

Classifications	Frequency	Accounting (%)	Effective accounting (%)	Cumulative proportion (%)
Gender				
Female	405	82.8	83.0	83.0
Male	83	17.0	17.0	100.0
Total	488	99.8	100.0	
School Level				
Undergraduate	422	86.3	86.3	86.3
Polytechnic	67	13.7	13.7	100.0
Total	489	100.0	100.0	
Majors studied				
Non-foreign language	226	46.2	46.3	46.3
Foreign language	217	44.4	44.5	90.8
Tourism major	45	9.2	9.2	100.0
Total	488	99.8	100.0	
Political status				
Com. youth league	293	59.9	63.8	63.8
Party activists	136	27.8	29.6	93.5
Party member	30	6.1	6.5	100.0
Total	459	93.9	100.0	
Volunteering Frequency				
Less	455	93.0	94.0	94.0
More	26	5.3	5.4	99.4
Many	3	.6	.6	100.0
Total	484	99.0	100.0	

Of the sample, (see TABLE II) most of the respondents were female (83%) and male only accounted for 17%. This gender distribution was basically in line with the characteristics of volunteers observed at the events. Meanwhile, it is close to the ratio of registered female volunteers to males has reached 1:3 in China [54]. Moreover, the sample also reflects educational levels, political outlooks and service experience. General undergraduate volunteers accounted for 86.3% and those from polytechnic were 13.7% of the total. It showed there are only 6% of them have previous volunteering experience at international events. The ratio is more balanced between those majored in foreign languages (44.5%) and those not majored in foreign languages (including tourism).

2.2 Methodology

The variables of this study were examined via Likert scale (1=strongly disagree, 7= strongly agree). To measure the volunteers' perception of their psychological safety at international events, the sophisticated psychological safety scale designed by Edmondson [27] was adopted with minor modifications on wording

and the number of question to better fit the research scenario. The modified scale has 13 items such as supports from team, team members towards mistakes, team member’s willingness to help, personal attitude to risk-taking, being respected. Some examples are as follows: “Event staff offered supports when problems encountered”, and “My personal skills match well with the volunteer service provided”, etc. The internal consistency coefficient of variables alpha was 0.941. In addition, other two sections regarding respondent characteristic and job satisfaction are also included in the questionnaire.

Both the reliability and validity of the modified scale of psychological safety were checked via statistical technique. The reliability of the scale is reflected by the value of Cronbach’s Alpha, i.e., 0.941 (TABLE III) indicating the scale is reliable for further analysis. Face validity of the scale was checked by the researchers and the potential respondents, minor changes were made according to their feedback. Structure validity was examined and KMO and Bartlett's Test=0.935, suggesting a strong validity of the data. Thus, further analysis were conducted to evaluate event volunteers’ perceptions of psychological safety, and to investigate the relationship between the perception of psychological safety and job satisfaction.

TABLE III. Reliability and validity of Scale

Reliability and Validity Statistics	
Cronbach's Alpha=0.941	N of Items=13
KMO and Bartlett's Test=0.935	

III. RESEARCH FINDINGS

3.1 The Perception of Psychological Safety

Event volunteers’ perceptions of psychological safety can be reflected by their ranking of the items. The higher they rank an item the higher degree of agreement on this item described regarding the aspects of psychological safety. Instead of listing all the items which might be overwhelmed to display, explorative factor analysis was conducted to reduce the dimension, which generated four factors and presented in TABLE IV, namely, the supportive factor (F1) refers to the support and respect from the event organizers; the contributive factor (F2) represents the efficacy of an individual volunteer to help at the event; the interactive factor (F3) shows the interaction between volunteers and the service recipients; the peer-relational factor (F4) defines the relationship among the volunteers.

TABLE VI. Explorative factor analysis of psychological safety

Rotated Component Matrix ^a				
	Component			
	F1	F2	F3	F4
Event staff offered supports when problems encountered.	0.820			

Organizer and staff respect my work.	0.815			
The communication with organizers and staff was successful.	0.806			
Collaborative relationship was formed between volunteers & event staff.	0.690			
My personal skills match well with the volunteer service provided.		0.798		
My volunteer service created value for the event.		0.769		
I can apply my knowledge and skill in volunteer service.		0.732		
My volunteer service brought changes to the event.		0.617		
It was easy to have need information from organizer.			0.750	
I have a good interaction with the volunteer service users.			0.725	
I have the power to decide how to finish the volunteer service.			0.593	
I found new friends during the volunteer time.				0.827
Favourable relationship formed among volunteers.				0.798
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 6 iterations.				

As displayed in TABLE V, volunteers at international events ranks all the factors with a high score (5.69-6.28 out of 7), yet the lowest ranked factor is interactive factor, which indicates that volunteers at international events have a lower degree of agreement to those three items in the scale: to get needed information from organizer, to have good interaction with the volunteer service users, and to decide how to finish the volunteer service. Another lower ranked factor is contributive factor that includes the items of personal skills match well with service, creating value for the event, applying knowledge in service, and bringing changes to the event. However, the highest ranking factor is peer-relational factor, followed by supportive factor.

In general, the overall mean score of the scale was high enough to prove that volunteers at these two international events relatively felt psychological safe. Yet, the authors hold alternative perspectives to the high score generated by the self-administrated questionnaires, which will be explained and discussed in the Discussion section.

TABLE V. Volunteers’ perceptions of the four factors generated from the scale

	N	Min.	Max.	Mean	Std. Dev.
Supportive factor (SupF)	485	2.00	7.00	6.06	0.96
Contributive factor (ContrF)	485	3.00	7.00	5.85	0.96
Interactive factor (InterF)	485	1.33	7.00	5.69	1.00
Peer-relational factor (PeRelF)	485	1.00	7.00	6.28	0.89
Valid N (listwise)	485				

3.2 The Impacts of Psychological Safety on Job Satisfaction

To examine how event volunteers’ perception of psychological safety (PsySafe) will influence their voluntary job satisfaction (JobSat), linear regression analysis was implemented, in which “job satisfaction” was considered as depend variable and “perception of psychological safety” was treated as independent variable.

However, a linear relationship between the independent variable and dependent variable is required for the implementation of a linear regression analysis. Thus, a scatterplot was produced to visualize the relationship between the perception of psychological safety and job satisfaction, as displayed in Fig 1, the linear relationship appears more or less. It indicates the suitability of data for linear regression analysis.

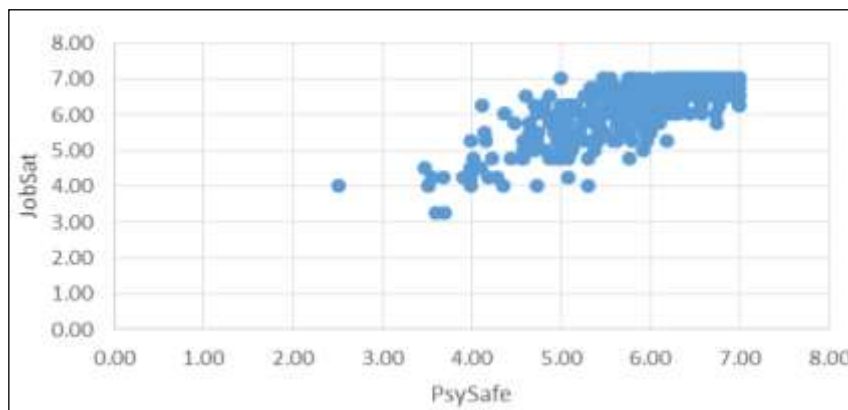


Fig 1: SCATTERPLOT (BIVAR) = PsySafe with JobSat.

Then, a linear regression was conducted to examine the impacts of perceived psychological safety on volunteers’ job satisfaction. The regression results are displayed in Table 6 and Table 7. As showed in Table 6, three of the predictable variables, i.e., supportive factors (SupF, $\beta=.40$), interactive factors (InterF, $\beta=0.19$) and peer-relational factors (PeRelF, $\beta=0.32$) are statistically significant (sig. at .000 level) to explain or predict the value of the dependent variable. Yet, the contributive factor is not statistically significant.

TABLE VI: Linear regression Coefficients ^a

Model		Unstd. Coefficients		Std. Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.775	0.147		12.06	0.000
	SupF	0.316	0.032	0.40	9.93	0.000
	ContrF	0.015	0.034	0.02	0.45	0.655
	InterF	0.143	0.03	0.19	4.71	0.000
	PeRelF	0.273	0.032	0.32	8.55	0.000

a. Dependent Variable: JobSat

The R Square in the model summary (Table 7) is 0.677, which indicates that approximately 68% of the variance in JobSat (Y) is explained by the perception of PsySafe (X). This result suggests the model fits well with the observed data. It further proves the effectiveness and power of the regression model, in other words, that how the volunteers perceive their psychological safety at international events generates statistically significant impacts on their voluntary job satisfaction. Therefore, the importance of psychological safety is recognized in the management and retention of university students who serve the international events as volunteers. The implications of the results will be further discussed in the following section.

TABLE VII. Linear regression model summary

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error
1	.823 ^a	0.677	0.674	0.42879
a. Predictors: (Constant), PeRelF, InterF, SupF, ContrF				
b. Dependent Variable: JobSat				

VI. CONCLUSION

4.1 Research Conclusion

The objectives of this research were to examine (1) volunteers’ perception of their psychological safety when serving an international event; and (2) the relationship between volunteers’ psychological safety and their job satisfaction. As to the first objective, descriptive results show the average level of perceived psychological safety is 5.97. This average value is slightly higher than the reported value of 5.31 perceived by health-care professionals [28]. Among the four factors (supportive factors, interactive factors, peer-relational factors, contributive factor), the value of peer-relational factor is the highest (6.28), and that of interactive factor is the lowest (5.69).

However, what the data show might mislead the judgment, because the high values simply indicate excellent perceptions of their psychological safety when volunteering at international events, yet the high value also hides the cultural bias that event volunteers get used to rate performance or indicators high. This is largely subject to their position in the evaluation system, as well as the overall social climate in which people are tend to be more positive to the items or people to be evaluated. Therefore, the comparative values between different factors are more meaningful, which explains which one is the best or worst perceived. In this research, peer-relational factor is the highest perceived factor signifying the relationship between volunteers is positive and favorable.

In respect of another objective, the research found out that the relationship between volunteers' perception of psychological safety and their job satisfaction is statistically significant. This is in line with many similar studies in the areas of healthcare [28], education [29], high-tech [30] and in general workplace [31]. Different from those studies, this research also examines the relationships between the four factors of psychological safety and volunteers' job satisfaction. Among those three factors the support from the organizers is more significant, suggesting the importance of the supportive practices from the organizer as well as the full time staff for volunteers to establish the feeling of psychological safety, which then creates job satisfaction. The other two have a relatively lower level of prediction on job satisfaction. Yet, the striking result emerge from the data is that the contributive factor is of no significance in predicting volunteers' job satisfaction.

This indicates that volunteers' willingness and competence to work for the event without the pursuit of monetary rewards (i.e., altruistic behavior) is not a predictor to job satisfaction. This result is contradictory to the discoveries of Silverberg, Marshall & Ellis [22] that serving efficacy is significantly associated with volunteer job satisfaction. Nevertheless, the results of this research offer the priority list for event managers to satisfy and retain the voluntary workforce for international events.

4.2 Theoretical and Managerial Implications

This study contributes to the literature theoretically twofold. One is the application of psychological safety into volunteer studies which is overlooked or neglected; yet, as discussed in this research, psychological safety has been used in many areas to improve the learning results, the innovation, as well as the satisfaction of people they serve in healthcare context. Another is the examination of the relationships between the four factors and volunteers' job satisfaction; especially the different result of contributive factor that is not aligned with prior studies, providing different understandings of volunteers' willingness and competence to work for international events. Additionally, a cultural interpretation of the descriptive results might add knowledge to understand university students' voluntary behavior in China.

From the managerial perspective, the study provides suggestions and solutions for both the supplying side (volunteer) and the employing side (event organizer and standing staff). From the volunteers' perspective, the research finding will help them to better adjust themselves to the temporary work environment, and propose appropriate requests to the organizers for a successful event. Meanwhile, the results also can assist the organizers to optimize their volunteer management, improve the efficiency of voluntary work, encourage speaking up behavior, and increase the satisfactory degree of volunteering work. Besides, the study also contributes to the protection, respect and encouragement of this altruistic behavior – volunteering, thus unleashes the power of the third force in current society.

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