Activating the Role of Digital Volunteering in Early Detection of Unhealthy Behavior on University Campus in the Era of Covid 19 Crisis

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Research

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Abstract

Background

The current study aims to identify unhealthy behaviors among university students, establish means of detecting them as well as identify obstacles to digital volunteering and also explore the relationship between volunteer preferred style of volunteering and the obstacles to volunteering.

Methods

Data for the study was gathered by administering unstructured, anonymous questionnaire to 207 female university students and staff. The survey design included questions about socio-demographic characteristics, views on different facets of volunteering, unhealthy behaviors and correlation between volunteering and unhealthy behaviors.

Results

The result revealed unhealthy behavior detected by the respondents (51.7%). Twenty-eight (13.5%) of the 207 respondents reported to use social media in detecting women with offending behavior. The value of Pearson's R is 0.245; thus is considered a weak or no correlation. There is hence no correlation between how respondents preferred volunteer work and the obstacle to volunteering. There is no much of difference in the obstacles to volunteering faced by respondents despite their preferred style of volunteering.

Conclusion

The findings reveal that digital volunteering is effectively gaining ground in detection and management of unhealthy behaviors among university students. Much more could be achieved through digital volunteering if more awareness is created and volunteering programs are designed to be more interesting and less time consuming to give more students the opportunity to participate.

Background

The outlook of volunteering is gradually changing in the 21st century in manners that bring significant problems as well as opportunities for managing disaster. Particularly, shifts in the pattern of paid jobs, values and lifestyles, and latest technology, has resulted in a decrease in 'conventional', high-commitment, long-term volunteering and an increase in more vast, flexible and periodic patterns of volunteering. Rising adulthood as a phase of life, to which higher education students belong, matches a phase of personality development and education, in the physical, mental, sexual, family, emotional and communal domains. Scientific facts show an elevated occurrence of unhealthy behaviors among university students which have a tendency to persevere all through life and to have a significant enduring brunt on their health and total well-being. According to [1, 2], "the commonest sources of information about COVID-19 for university students are the media [3, 4] and social networks". Followed by these sources of information were the World Health Organization, television, the Ministry of Health, friends and the Internet [1, 2]. This facet reveals the significance of the internet in conducting campaigns on health education targeted at students of higher education [3, 5], namely the various national websites [6] and international health authorities [7]. Certified announcements published by governments [2] were also part of the chief sources of information for students of university. The research done by Yang and colleagues [2] revealed that ninety-five percent of the students studied got awareness about COVID-19 in press releases by government and expressed credence in the information.

Rising adulthood as a phase of life, to which students of higher education belong, matches a phase of personality development and education, in the corporal, mental, family, sexual, emotional and communal domains [8]. Nevertheless, scientific evidence shows an elevated occurrence of unhealthy behaviors among students of universities [9] which have a tendency to persevere all through life as well as to possess a significant enduring impact on their health and total well-being [10]. Furthermore, students of university should be considered emerging advancement agents, hinged on the idea that they have advantaged knowledge owing to their educational background and, as a result, possess the ability to manipulate a population's health. This can be exercised either via their personal decisions, via theoretical prospective vocations which entail responsibilities in creating health guidelines or decision making procedures about them [11, 12, 13]. These rising adults are liable for opening a variety of precautionary options to the public based on communication of knowledge and the implementation of preventive behaviors regarding possible communicable diseases in this respect.

Digital volunteering offers immense potentials for disaster management in the aspect of disaster announcement, as well as challenges and risks [14, 15]. Major challenges arise from strains between the command - control tradition in emergency management and the very flat and auto-organizing character of several digital volunteering. Research points out that command - control configurations "do not easily adapt to the expanding data-generating and -seeking activities by the public" [16]. Certainly, digital volunteering forms a prospective force for decentralizing and dispensing influence within emergency management. It entails not merely a shift in technology but as well a course of quick delegation of control. With enormously little obstacles to access, several new applicants are emerging in the fields of emergency and disaster response [17].

Latest technologies have therefore opened up "virtual spaces" for volunteer activism and participation that give an authority podium for people "to make their voices heard, to coordinate activities across the globe and to mobilize public opinion" [18]. In the perspective of disaster, digital volunteers are able generate and use the virtual spaces as podiums to manage unofficial rejoinders that may or may not be incorporated with and corresponding to the official emergency management system.

The enormous impact of novel communications technology is another revolution that has extensive inferences for the manner in which unofficial, post-disaster volunteering come about, and incontestably all disaster volunteering. The United Nations Volunteer program states that "technological developments

are opening up spaces for people to volunteer in ways that have no parallel in history" [19]. Electronic or digital volunteering "has eliminated the need for volunteerism to be tied to definite times and locations. Thus, it greatly increases the freedom and flexibility of volunteer engagement and complements the outreach and impact of volunteers serving in situ" [19]. The burst in mobile technology and social media in particular has lowered the information and communication impediments to partaking in disaster response and recovery [17]. Therefore, it has facilitated a development in "digitally-enabled volunteering" due to disasters that occur both digitally and physically, or, as is frequently the case, in interaction [20, 21]. Meier (2012) [22]; Zook *et al.* (2010) [23] stated that "The trend of digital volunteering in particular has earned noteworthy research attention since the immense response of digital volunteers to the 2010 Haiti earthquake". This was a turning point event that paved way for "digital humanitarianism" that is really global in reach [17]. To a large extent, online volunteers have been reported to be more successful than conventional government organizations at organizing, collating, managing and disseminating the "data deluge" that is prompted by disasters in the Internet age in close to real time to increase conditional awareness [24]. According to Haworth and Bruce (2015), a key strength of digital volunteering arises from the huge capability of the internet to facilitate crowd-sourcing, mostly for volunteered geographic information (VGI). VGI "involves the sharing and mapping of spatial data through voluntary information gathered by the general public" [15], and it is especially influential for disaster circumstances. This is progressively more recognized by well-known actors. Conspicuously, the Information Services Section (ISS) of the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) started a digital volunteering network—The Standby Taskforce—to create live, crowd-sourced crisis maps for the 2011 Libyan revolution that was afterwards used by humanitarian organizations to coordinate their relief activities [22].

Unhealthy behavior refers to any action an individual takes with intensity or at a rate that raises risk of injury or disease [25]. It might sum up into a risky way of life which influences emotions, cognitive performance, and the general value of life. A great deal of the sicknesses and deaths result from individuals' behavioral styles; polluted environment, poverty or psychological affairs, [26]. A research carried out by Poortinga (2007) established that many university students binge drink, smoke tobacco, don't eat sufficient fruits and vegetables and do not exercise enough [27] (Danaei, Ding and Mozaffarian, 2009) identified five groups of behaviors that have been found consistently to associate with increased sickness and death. The list includes "low levels of physical activity and high levels of sedentary activity; eating a diet high in fat and sodium, calories, and low in nutrients; smoking cigarettes; substances abuse including alcohol, illicit and remedy drugs, and risky sexual behaviors" [28]. Latest advancements in brain research have established a precarious connection between youths and unhealthy behaviors, expounding the reality that adolescence is the significant stage of risk for both unhealthy behaviors and its outcome. Adults are less susceptible to unhealthy behavior than adolescents because the sections of the brain that control decision making, judgment, impulse control and emotion are not yet completely developed in adolescents. Thus, teens are more likely to take risks than adults, including engaging in dangerous behaviors and experimenting with drug abuse [29]. The chances of undertaking several unhealthy behaviors increase over the process of growth, principally during the teenage years. Through sexual risk physical risks and experimentation with substances, some adolescents attain unhealthy behaviors and peers that endure and dampen the cultivation of other self-regulatory attitudes. Notwithstanding efforts made towards health promotion, young adults continue to practice high levels of unhealthy behaviors as established by (Das and Horton, 2012) [30]. It is essential to understand unhealthy behaviors among youths, as early detection of such behaviors and their subsequent modifications can significantly improve every aspect of health, and reduce the risk of chronic diseases later in life [31].

The objective of the study is to identify unhealthy behavior among university students; establish the means of detection of unhealthy behavior; identify the obstacles to volunteering; and obtaining the relationship between volunteer preferred style of volunteering and the obstacles to volunteering.

Methods

In order to gather data for the study, an anonymous structured questionnaire was administered to both students and staff at Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia. 207 validly filled questionnaires were retrieved. The respondents were all females within the age range of 18 and above.

The questionnaire for this study was developed by the authors, it was in Arabic language and never been used before.

The survey design included questions about socio-demographic characteristics, views on different facets of volunteering, unhealthy behaviors and correlation between volunteering and unhealthy behaviors.

The data gathered was subjected to Statistical Package for Social Science (SPSS) 2020. Descriptive statistics were used to report the percentages for definite variables while mean values with standard deviations were used to report continuous variables. Missing data were omitted on a basis analysis-by-analysis and valid percentages were reported. The data was also subjected to correlation analysis to determine the relationship between volunteer preferred style of volunteering and the obstacles to volunteering.

Results

The demographic characteristics of the respondents revealed age ranging from 18 years to above 35 years. It is not surprising that the marital status of most (92.8%) of the respondents were single as the sample population comprised mainly students. Table 1

Table 1
Social demographic characteristics of the respondents

Variable	Frequency	Percent
Age		
18 to 23yrs	169	81.6
24 to 28yrs	31	15.0
29 to 34yrs	2	1.0
35yrs and above	5	2.4
Total	207	100.0
University_Education_Level		
1st Year	4	1.9
2nd Year	54	26.1
3rd Year	14	6.8
4th Year	16	7.7
After 5th Year	109	52.7
Postgraduate	10	4.8
Total	207	100.0
Marital_Status		
Single	192	92.8
Married	14	6.8
Divorced	1	.5
Total	207	100.0
Occupation		
Student	178	86.0
Student + Self-employed	6	2.9
Self Employed	4	1.9
Partly Employee	19	9.2
Total	207	100.0
Monthly income of the Family		
Less than SR 3,000	36	17.4
3,000 to 3,499 riyals	22	10.6
3,500 to 4,900 riyals	11	5.3
5,000 to 6,499 riyals	4	1.9
6,500 to 7,999 riyals	6	2.9
8,000 to 10,000 riyals	19	9.2
Above 10,000 riyals	67	32.4
Undefined/Unspecified	42	20.3
Total	207	100.0

Regarding the source of income of the respondents, most (42%) of the respondents had their source of income from university reward; this is followed by 25.1% of the respondents whose source personal income were from all of university reward, parents and grandparents. Others had their personal source of income ranging from monthly salary, husband, internship, donation and alms, business, social security, charities and other sources as listed in the Table 2 below.

Table 2
Source of personal income of respondents

Source of Personal Income	Frequency	Percent
No Job	1	0.5
University Reward	87	42.0
University Reward/Parents/GrandParents	52	25.1
Parents/Grandparents	12	5.8
Donation and Alms	1	0.5
Monthly Salary	2	1.0
Position after the University	18	8.7
Position after the University/University Reward/Parents/Grandparents	12	5.8
Husband	6	2.9
University Reward/Parents/GrandParents/Social Security	2	1.0
Position after the University/University Reward/Charity/Social Security	2	1.0
Internship	6	2.9
University/Social Security	2	1.0
Position after the University/University Reward/Husband	1	0.5
Position after the University/Husband	1	0.5
University Reward/Business	1	0.5
Position after the University/Charity/Social Security	1	0.5
Total	207	100.0

With regards to the mode of volunteering, it seems that the pandemic of covid 19 affected the expected voluntary behaviors. Results showed that 30% of the respondents prefer to volunteer through groups. This percentage was expected to be more but due to the pandemic of Covid 19 it was less since students cannot meet and work in groups. The results also show that nowadays most of the respondents prefer electronic volunteering, due to the limitation of gathering and outdoors activities because of Covid 19. (Table 3).

Table 3
How do you prefer volunteering

Variable	Frequency	Percent
In Group	63	30.4
Individual	10	4.8
group (In hospital)	37	17.9
Individual/Group	10	4.8
Individual/Group/Electronic	21	10.1
Individual/Group/Electronic/Cafe/Coffee shop.	39	18.8
Individual/Group/Hospital	16	7.7
Group/Electronic	9	4.3
Individual/Electronic	2	1.0
Total	207	100.0

Lack of time constitutes the greatest obstacle to digital volunteering, representing almost half (48.8%) of the entire data while lack of conviction/interest/time represent constitute the least obstacle (0.5%). Other factors that hinder digital volunteering as shown by the table include Lack of time + weak interest (15.0%), lack of awareness and culture (7.2%). Table 4.

Table 4
Obstacles to volunteering

Obstacles to volunteering (Variables)	Frequency	Percent	Cumulative Percent
Lack of time	101	48.8	48.8
Lack of awareness and culture	15	7.2	56.0
Lack of Interest	11	5.3	61.4
Lack of time + weak interest	31	15.0	76.3
Lack of time + lack of conviction	8	3.9	80.2
Lack of time/conviction/awareness	16	7.7	87.9
Lack of conviction/interest/time/awareness	4	1.9	89.9
Lack of time/conviction/awareness/culture/interest	11	5.3	95.2
Lack of conviction	3	1.4	96.6
Lack of conviction/interest/time	1	0.5	97.1
Lack of awareness/culture/Interest	3	1.4	98.6
Lack of Time and Transport	3	1.4	100.0
Total	207	100.0	

University administration has a positive role in the development of volunteering work. it is also observed that volunteering positively affect university volunteers. This is seen as most of the respondents agreed that volunteering enabled them develop sufficient interest to strive to continually update their information as development in the field persists. Most respondents reported enhanced communication skills; other positive roles include improved ability to tackle problems, and development of basic skills in the use of technology as shown in Table 5.

Table 5
The effect of volunteering on university volunteers

Variable	Frequency	Percentage
University Administration has a positive role in the development of volunteering work		
Strongly Agree	80	38.6
Agree	84	40.6
Neutral	38	18.4
Disagree	3	1.4
Strongly Disagree	2	1.0
Total	207	100.0
Volunteering triggered me to update my information as development in the field		
Strongly Agree	71	34.3
Agree	78	37.7
Neutral	36	17.4
Disagree	16	7.7
Strongly Disagree	6	2.9
Total	207	100.0
Volunteer work improved my ability to investigate and solve problem		
Strongly Agree	61	29.5
Agree	65	31.4
Neutral	44	21.3
Disagree	29	14.0
Strongly Disagree	8	3.9
Total	207	100.0
Volunteer work improved my communication skills		
Strongly Agree	87	42.0
Agree	74	35.7
Neutral	41	19.8
Disagree	5	2.4
Strongly Disagree	0	0
Total	207	100.0
Volunteer work helped me develop basic skills in the use of technology		
Strongly Agree	67	32.4
Agree	84	40.6
Neutral	44	21.3
Disagree	9	4.3
Strongly Disagree	3	1.4
Total	207	100.0

From Table 6 below, only 28 (13.5%) of the 207 respondents reported to use social media in detecting women with offending behavior.

Table 6
Social media in detecting women with unhealthy behavior

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	28	13.5	13.5	13.5
	NO	179	86.5	86.5	100.0
	Total	207	100.0	100.0	

When considering the most widely used methods of communication, Twitter is the most widely used method of communication as 50% (14) of the respondents (28) make use of it. This was followed by both Twitter & Instagram and Twitter, Snapchat, Phone calls, YouTube, LinkedIn, Whatsapp & Telegram which were utilized by 3 (1.4%) of the respondents each. 2 (1%) of the respondents use snapchat as a medium of communication, another 2 (%) of them utilize Twitter coupled with surfing the web; 1 (0.5%) of the respondents browse the web only as a means of communication. Table 7 and Fig. 1.

Table 7
The most widely used method of communication

How do you prefer volunteering?	The most widely used method of communication				
	SnapChat	Twitter	SnapChat/Twitter	Twitter/Snapchat/Instagram	Twitter/Snapchat/Phone calls/YouTube/LinkedIn/Whatsapp
In Group	0	10	1	0	0
Individual	0	0	0	0	1
group (In hospital)	0	1	0	1	0
Individual/Group	0	0	1	0	0
Individual/Group/Electronic/h.	2	0	0	0	0
Individual/Group/Electronic/Cafe/Coffee shop.	0	3	0	0	2
Total	2	14	2	1	3

Table 8 shows the mean and standard deviation of Reasons for participation and assistance mechanism to detect the unhealthy behavior in the university.

Table 8
Reasons for participation and assistance mechanism to detect the unhealthy behavior in the university

		CK	CL	CM	CN	CO	CP	CR	CT	CU
N	Valid	164	163	162	163	164	163	163	162	163
	Missing	43	44	45	44	43	44	44	45	44
Mean		2.9329	3.0000	2.7531	2.8650	2.4695	2.5153	2.7853	2.4198	2.5276
Std. Deviation		1.24896	1.20185	1.08096	1.12500	.99338	1.07356	1.08720	1.01375	1.05592

Key: CK = My exposure to blackmail by those who do the unhealthy behavior and my rejection of the behavior prompted me to participate in monitoring the offending behavior. CL = my ability to hack the websites, and by influencing others helped me to monitor the unhealthy behavior. CM = advertisement and invitations in the university led me to participate in reducing unhealthy behavior. CN = my friends volunteer in reducing unhealthy behavior encouraging me with their experiences, to experiment with monitoring the unhealthy behavior. CO = my values and principles of religion made me motivated to participate in the monitoring of the unhealthy behavior for the satisfaction of God. CP = my knowledge of the types of offending behavior and harm to the individual and society encouraged me to fight. CR = Peer indifference to the matter, out of fear, irresponsibility, or distance from problems was frustrating me on one hand and encouraging me on the other hand to uncover unhealthy behavior and follow-up and continue doing so. CT = My sense of security in terms of ease of tracking and lack of regulatory laws made it easy for me to contribute to uncovering the offending behavior. CU = Guidance and counseling by professors, clubs, volunteers and the Community Service Agency raised my spirits, so I made the unhealthy behavior and detection of it my priority.

Table 9 below, shows that 37 (17.9%) of the respondents indicated that Attack on Others and Properties is the most prevalent unhealthy behavior found among university students; this is followed by Bullying/Insults/Verbal abuse and Bullying (13.5%) and (8.7%) respectively.

Table 9
Unhealthy behavior detected by respondents

Unhealthy Behaviors		Frequency	Percent
Valid	Smoking/Drug Abuse	7	3.4
	Sexual Abnormalities	2	1.0
	Bullying/Insults/Verbal abuse	28	13.5
	Theft	6	2.9
	Attack on Others and Properties	37	17.9
	Bullying	18	8.7
	Smoking and Bullying	2	1.0
	Sexual Abnormalities and Bullying	1	0.5
	Sexual Abnormalities/Extortion/Bullying/Insults/Verbal Abuse	4	1.9
	Inappropriate disposal of waste/refuse	1	0.5
	Drug Abuse/Wrong Use of Medication	1	00.5
	Total	107	51.7
Missing	System	100	48.3
Total		207	100.0

Most of the respondents (70) who do volunteer work do it in the Princess Nourah University and have revealed to have helped detect unhealthy behavior among women. Others carry out their volunteering work at Community development association (11), charitable association (5), outside the university (10), both within and outside the university (21), the only respondent who carry out volunteer work electronically have not helped to detect any kind of unhealthy behavior. Table 10

Table 10
Detection of unhealthy behavior

		Have you ever helped to detect any kind of unhealthy behavior?			Total
		Did not reveal	Yes	No	
Where do you do your volunteer work?	None	2	31	24	57
	Princess Nourah University/Hospital/Ministry of Health	1	31	38	70
	Community Development Association	0	11	3	14
	Charitable Association	0	5	8	13
	Outside the University	0	10	5	15
	Both Within and Outside the University	1	21	15	37
	Electronically	0	0	1	1
Total		4	109	94	207

As shown in Table 11, the value of Pearson's R is 0.245; thus is considered a weak or no correlation. There is hence no correlation between how respondents preferred volunteer work and the obstacle to volunteering. There is no much of difference in the obstacles to volunteering faced by respondents despite their preferred style of volunteering.

Table 11
Correlation between how respondents prefer volunteer work and the obstacle to volunteering

Symmetric Measures		Value	Asymp. Std. Error ^a	Approx. T ^b	Approx. Sig.
Interval by Interval	Pearson's R	0.245	0.057	3.624	0.000 ^c
Ordinal by Ordinal	Spearman Correlation	0.231	0.064	3.405	0.001 ^c
N of Valid Cases		207			
a. Not assuming the null hypothesis.					
b. Using the asymptotic standard error assuming the null hypothesis.					
c. Based on normal approximation.					

With regards to the correlation between the four themes/axes of this study.

The first axis: the importance of volunteer work from the point of view of the volunteer; **The second axis:** the reasons for the existence of the phenomenon of offending behaviors on campus from the point of view generally volunteers; **third axis:** directing Volunteer efforts of the students, professors and human resources at the university for early detection of offending behavior in the university and establish a mechanism to reduce it; **The fourth axis :** Reasons for participation and assistance mechanism to detect the offending behavior in the university by those who actually participated

From Table 12, the correlation between the first and second axis is 0.139 indicating a weak relationship between the importance of volunteer work from the point of view of the volunteer and the reasons for the existence of the phenomenon of offending behaviors on campus from the point of view generally volunteers. The Sig. (2 tailed) is 0.045 indicating that there is no statistically significant correlation between the two variables. The correlation between *the first and third axis* and the *first and fourth axis* is 0.431 and 0.369 respectively, also indicating that there is no correlation between each pair of variables. Of all the variable pairs represented in above table there is only a moderate correlation between the third and fourth axis thus indicating that there is a relationship between the two variables.

Table 12
Correlation between the four themes/axes of this study

Correlations		FIRST_AXIS	SECOND_AXIS	THIRD_AXIS	FOURTH_AXIS
FIRST_AXIS	Pearson Correlation	1	0.139*	0.431**	0.369**
	Sig. (2-tailed)		0.045	0.000	0.000
	N	207	207	207	168
SECOND_AXIS	Pearson Correlation	0.139*	1	0.279**	0.258**
	Sig. (2-tailed)	0.045		0.000	0.001
	N	207	207	207	168
THIRD_AXIS	Pearson Correlation	0.431**	0.279**	1	0.665**
	Sig. (2-tailed)	0.000	0.000		0.000
	N	207	207	207	168
FOURTH_AXIS	Pearson Correlation	0.369**	0.258**	0.665**	1
	Sig. (2-tailed)	0.000	0.001	0.000	
	N	168	168	168	168
*. Correlation is significant at the 0.05 level (2-tailed).					
**. Correlation is significant at the 0.01 level (2-tailed).					

Discussion

This study was of clearly stated objectives. The features of the respondents were well represented, randomized sampling was also utilized; since the sample profile composed of students, this enable easy access and low cost for data collection. On the other hand, limited number of previous studies related to this topic was reported.

As comparing this study with other previously reported studies, the results of this study showed that youth and young adult form a greater part of volunteering. This is not surprising as the *Arab news* reported that "the majority of Saudi youth would be more than willing to get involved in volunteer work,

according to a survey” [32]. Volunteer work span across all work ages, university education level, occupation and marital status. It is revealed that most volunteers prefer volunteering in groups.

Contrary to Sills’ classic study on volunteering [33], people not only engage in volunteer work for altruistic motive only but also for other beneficial rewards such as learning new skills and self-development amongst others [34]. A major obstacle to volunteering is the lack of time (48.8%). Of the unhealthy behavior revealed in this study, attacks on others and properties were the most frequent (17.9%). This was followed by bullying, insults and verbal abuse (13.5%). Bullying is obviously among the top list of unhealthy behavior as it takes several forms [35, 36] from cyber-bullying to face-to-face bullying, insults and verbal abuses.

At a global scale, there is a rising anticipation that volunteers will cover a bigger responsibility in disaster management and disaster risk diminution in time to come than it has in the past. This is propelled by an increasing global focus on creating “resilience to disasters through a ‘bottom-up’ process in the form of volunteer initiatives rooted in the community” [19]. Lately, this focus was reemphasized in the 2015–2030 Sendai agenda for Disaster Risk Reduction, arrogated by the United Nation’s March 2015 General Assembly [37]. The guideline demanded that “responsibilities be shared” covering all stakeholders and sectors of society and vociferates “an all-of-society engagement and partnership”. Also, it renders an extensive catalog of proceedings for “civil society, volunteers, organized voluntary work organizations and community-based organizations” that states should encourage.

Nevertheless, the outlook of volunteering is gradually shifting in the 21st century in manners that bring significant problems as well as chances for disaster management. Particularly, shifts in the pattern of paid jobs, values and lifestyles, and latest technology, has resulted to a reduction in “traditional”, time-consuming, high dedication volunteering and an increase in more vast, flexible and periodic patterns of volunteering [38]. Considerably, “volunteer strategies in the emergency management sector still depend profoundly on the customary model of volunteering” [39, 40].

Volunteering definitions are changing, alongside the act of volunteering [41, 42]. In Australia, the highest national body lately arrogated a more comprehensive definition: “Volunteering is time willingly given for the common good and without financial gain” [43]. The recent definition cuts across a greatly wider array of budding and less conventional kinds of volunteering juxtaposed to the past, including unofficial and periodic volunteering, group volunteering where member of staff time is contributed, electronic or online volunteering, and activism. This kind of shifts towards more general knowledge of what makes up volunteering in the contemporary perspective are accompanied by the likelihood of higher acknowledgment, legitimacy and protection for the greater variety of volunteering that has constantly taken place in disaster situations. However, greater recognition also brings the prospective for more government mediation, which stressed has tendency to influence the drives and developing behaviors that inspire unofficial volunteering negatively [42].

Conclusions

The findings reveal that digital volunteering is effectively gaining ground in detection and management of unhealthy behaviors among university students. Much more could be achieved through digital volunteering if more awareness is created and volunteering programs are designed to be more interesting and less time consuming to give more students the opportunity to participate. Based on these facts this study hereby makes the following recommendations: More opportunities should be given to students to participate in volunteering work. There should be proper awareness and orientation about new and existing volunteering work. Students should be encouraged to participate in digital volunteering. Students should be afforded opportunities volunteer outside the university and access the diversity of volunteer opportunities. There should be partnerships among the university, institutions and volunteer associations, which will give another character to female students and develop extracurricular thinking skills for female volunteers, as there are specializations that pay more attention to this aspect, as is the case in the disciplines of social service, psychology and others. Volunteer programs should be design to be less time consuming and more interesting to students while serving the purpose for which there were created.

Declarations

Abbreviations

Not applicable.

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Authors’ contribution

All authors were responsible for the initiation, conceptualization and leadership of the guideline development process. AA and SA were responsible for the respondent’s survey. RA and SA were responsible for the data statistical analysis and interpretation of results. AA was the primary author of the manuscript. All coauthors were responsible for writing, reviewing, and revising the manuscript for important intellectual content. All authors read and approved the final manuscript.

participated in the study and questioner design, data analysis, drafted the manuscript, and approved it before submission.

Ethics approval and consent to participate

Ethics approval was obtained for this study from the International Review Board (IRB) in Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia with IRB Log Number: 20-0113. The IRB has determined that the proposed project poses no more than minimal risk to the participants. Therefore, the proposal has been deemed exempt from IRB review. Participants were informed that all the information derived from the research tool “the questionnaire” will be dealt with in the strictest confidence and will only be used for scientific research purposes only. Anonymity and confidentiality were explained to participants. Participants were identified with codes to ensure anonymity. Questions that could cause any form of psychological trauma on participants were avoided.

Consent for publication

Not applicable.

Availability of data and materials

Any raw data or materials used in the preparation of this manuscript are available upon reasonable request to Dr. Samar Alshawwa (samarzuhair@yahoo.com)

Competing of interests

The authors declare that they have no competing interests.

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Figures

Figure 1

The most widely used methods of communication

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