

Prioritizing Motivational and Satisfactorily Factors of Volunteer Medical and Health Personnel in Natural Disasters

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ABSTRACT

Background: Currently, volunteer forces are among the main members of the healthcare services, particularly in the treatment sector, and play a key role in healthcare and treatment services. Since efficient human resources are the greatest and most important assets of all organizations, they constantly work to train, retain, and get the best of these valuable assets. The main objective of this work was to prioritize the motivational factors and satisfaction of the volunteer forces participating in treatment and health programs in the case of emergencies.

Materials and Methods: The study population of this research was all volunteers (N=600) in treatment and health programs of Kerman Province. Using the Morgan Table, 360 subjects were selected. The data-gathering instrument was Andam's questionnaire of motivational factors with reliability of 0.94, and Galindo-Kuhn and Guzley (2001) questionnaire of satisfaction with reliability of 0.92. To determine research data distribution, Kolmogorov-Smirnov test was applied. Moreover, for data analysis inferential statistics tests of Friedman, Mann-Whitney U, and Kruskal-Wallis were used at significance level of $P < 0.05$.

Results: The present research revealed that the most and least important motivational factors in volunteers of treatment and health units were purposeful motivation and financial motivation with average rankings of 5.45 and 1.99, respectively. In addition, among the satisfaction factors, the volunteers reported communication with volunteers and organizational communication as the most and least important satisfaction factors, respectively. The results of this research indicated that the female volunteers participated in volunteer activities with greater occupational, support, progress, and social motivations. In addition, single participants had greater occupational, social, and financial motivations towards participation in these activities as compared to married participants.

Conclusion: The results of this research revealed that to absorb a higher number of volunteers in health and treatment organizations, commitment and purposeful aspects must be emphasized on, as by improving the motivational and satisfaction factors, we can expect that satisfaction and retention level increases in volunteers. Furthermore, by knowing the volunteers' motivations, the managers of the health and treatment organizations can provide their retention and satisfaction and play a key role in crisis management during disasters by exploiting the volunteer services.

Keywords:

Volunteers, Motivational factors, Satisfaction, Disasters

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1. Introduction

Willing to help is an important aspect of human nature, and some people, in particular, have an altruistic behavior toward helping others known as “volunteer behavior” [1]. A large number of people annually participate in various volunteer activities and offer many services such as aiding the injured people, or providing medical, managerial, and athletic services [2]. A general definition describes a volunteer as an individual who helps without expectation and considers volunteering as an activity for improving others’ lives and helping them. There are more comprehensive definitions that consider volunteering as a willing, consistent, and systematic act without reward expectation, or a conducive behavior enhancing others’ welfare, which occurs in an organizational environment [3].

Today, volunteers are among the main components of the healthcare system, and play a key role in caregiving. Because of their major impact on different levels of the society, volunteers have many economic and social advantages [4]. A research by the Volunteer Institute (2010) showed that 61.8 million Americans have been volunteers and participated about 8 billion hours of volunteer work in 2008. Among these volunteers, 12.9 million were in non-profit organizations and their work value is estimated about US\$ 160 billion in 2010. Moreover, this institute estimated the value of volunteer work in European Union as US\$ 41 billion, a huge financial interest through exploiting volunteer work. Thus, the volunteer works largely contribute to the health sector and other classes of societies [2, 5].

Considering the economic deflation and climax of the financial problems and budget splits, governmental role in financing many services has been decreased. This condition highlights the important role of nonprofit organizations for providing these services. The majority of nonprofit organizations have recruited more volunteers during 2008 to 2009 and predicted that this recruiting process would expand in the future years. The rising demand for work force leads to a sustainable decrease in their resources. Over the past decade, volunteer work force has witnessed a 25% drop, and shifted from 83 million in 2000 to 61.8 million in 2008. The importance of volunteer forces and reduction in their number necessitates the study of the motivation and satisfaction level of the volunteers [6]. Few studies have been conducted on crisis and disasters.

In general, motivation is an important tool in understanding volunteering behaviors. Motivation describes

causes and goals directing an individual toward volunteer activities [7]. Recently, researchers have studied motivation in volunteering behaviors in various fields, including communities, organizations, commerce, and business [3]. Understanding the motivations toward the volunteer activities is a vital issue for managers and health organizations. Studies on the motives of volunteers reveal some interesting and rather contradicting results. Reviewing the literature revealed a rather consensus over the multi-aspect nature of volunteers’ motivations and the altruistic purposes in people’s willingness toward volunteering activities. Some researchers believe that volunteers spend their time and efforts because of different causes.

A conventional approach describes the volunteer’s motives based on the altruistic and autistic theories. Classifying volunteers into these 2 groups seems to be simple. However, once it is intended to study motivation of the volunteers, this 2-group classification of the volunteers might not suffice for the detection of the particular cases related to volunteers’ management and recruiting [7]. Further studies showed that volunteering motivations are not limited to a particular group of motivations and volunteers have different motivations. Many motivation models are used for classification and interpretation of the motivations in volunteers. In this regard, the most frequently used model is the multi-aspect model proposed by Kalari et al. (1998) which introduces 6 motivational factors of the volunteers, including value, cognitive, social, occupational, support, and progress motives. This model is widely accepted by the researchers and used in many cases. However, the models such as the one proposed by Kenan and Goldberg received less attention due to their empirical and theoretical flaws [4,8]. Apparently, the motivational factors of the volunteers in the treatment and health sector are different from those of other sectors.

Moreover, researchers define the “satisfaction” term in social, mental, human resource management, and organizational behavior fields. Understanding satisfaction of volunteers is a key factor in absorption and retention of volunteers in health organizations. Methods evaluating satisfaction level among volunteers are considerably different. The majority of the performed studies emphasize on a single aspect of satisfaction [9]. Omoto and Schneider (1995) used the 7-point Likert-type scale and evaluated satisfaction in volunteers using the aspects of interest, importance, and reward. Gidoren (1983) evaluated satisfaction in volunteers in a general fashion, where he identified 12 different factors as the satisfaction sources in the volunteers. On the other hand, Galindo-Kuhn and Guzley (2001) developed a volunteer satisfaction model

using a 4-aspect scale. Generally, multi-aspect scales are more effective for evaluating the satisfaction level in volunteers. Because specific and general aspects of satisfaction (like job, organization, and individual independence) affect motives (value, social, and progress), an appropriate satisfaction evaluation must cover all these factors. This discrepancy among the various studies regarding their evaluation approaches (used for satisfaction measurement) also yields different outcomes [10].

Recent studies have shown that age, religion, ethnicity, culture, and other environmental factors can also affect motivation of the volunteers. Age is an important demographic factor in the motivation of the volunteers. Generally, young people are motivated through factors different from those of old people. Young volunteers are typically motivated by altruistic, occupational, social, and understanding as compared to the old volunteers. In addition, gender-based differences are highly important in volunteers' motivation [11]. Rokach and Wenkin (2009) reported that the majority of the volunteers are females and people with high education. Apparently, females are more willing toward engagement in volunteer activities. Many studies have been conducted on gender differences in volunteers, and researchers have found that women have higher motivation for volunteer programs as compared to men [12]. Nassir McMillan mentioned that education level plays a key role in volunteering action and is considered as a valid predictor of volunteer activities. In addition, White stated that people with higher education are more willing to participate in various organizations [13].

There are 40 types of natural disasters, from which 32 have occurred in Iran. Therefore, Iran is considered among the 10th and 4th most disastrous countries of the world and Asia, respectively. Many countries claiming their high potentials in rescuing process are not competent during the harsh and large-scale disasters and even lose some of their rescue forces; implying that along with the advanced rescue equipment, there must be efficient and well-trained human resources. Because the most important problems occurring after disasters is related to the human resources, programming and considering motivation and satisfaction in volunteers in treatment sector is an indispensable issue.

Many investigations have been carried out on motivation and prioritization of the sport volunteers [14]. However, few studies have been performed about motivating factors of the treatment volunteers during the crisis and disaster, and whether there is a difference in their motives considering their demographic characteristics. Be-

cause in Iran only the Red Crescent organization uses the well-established organized volunteer forces, and volunteer sector in the health sector has poor function and does not receive adequate attention, the researchers of the present article made an effort to investigate motivational and satisfaction factors of the volunteers in the view of healthcare staff.

2. Materials and Methods

The present research is a descriptive causal-comparative study conducted to prioritize the motivational and satisfactory factors among volunteers in the treatment and healthcare system. The study population of this research was all treatment and healthcare volunteers in Kerman Province working in this system from 2012 to 2013. Based on Morgan's table, the number of subjects required for this research was determined as 360 and sampling was performed through the random clustering method. The instrument used in this research consists of a demographic questionnaire and a 5-point Likert-type scale (from "I strongly disagree"=1 to "I strongly agree"=5) motivational factors inventory extracted from Andam's volunteer motivation questionnaire with the reliability of 0.94, which evaluates 7 motivational factors (occupational, financial, social, support, purposeful, commitment, and progress) among the volunteers of healthcare system.

Occupational factor covers the opportunities of a volunteer to gain a job and experience. Financial motivational factor is the opportunity for gaining profit and benefits for the volunteers, whereas social motivation is a chance for being with friends and engaging in social activities for the volunteers. The next factor is progress motivation, which implies the individuals' need for self-actualization, self-esteem, success, and attention to the private interests and benefits. Purposeful motivational factor is related to the philanthropic and altruistic aspects and indicates the volunteer's willingness towards giving effective and valuable help to the organization and society. Support motivational factor is about eliminating negative feelings and thoughts by volunteers through engaging in the voluntary work. Finally, commitment motivational factor involves expectations of others (family, friends, and organization) of their skills. After being fitted with perspectives of the volunteers working in healthcare sector, the motivation questionnaire was also confirmed by 10 related experts [1].

The satisfaction level was evaluated among the volunteers using the volunteers' satisfaction questionnaire, extracted from satisfaction questionnaire of Galindo-Kuhn and Guzley (2001), a 5-point Likert-type scale ("I am

strongly satisfied”=1 to “I am strongly dissatisfied”=5). The satisfaction questionnaire consists of 3 parts. Part 1 or organizational communications contains 10 questions evaluating satisfaction towards the mutual relationships between staffs inside the organization. Part 2 or individual interest contains 10 questions dealing with individual interests and benefits of the staffs and their involvement in organization, independence, individual growth, and sense of satisfaction through offering financial aids, and spending time and effort on the volunteer work.

Part 3 or communications with colleagues have 4 questions asking about satisfaction through developing communications with other colleagues [14]. After being translated, edited, and adjusted with activities related to treatment and healthcare sector, the questionnaire was submitted to the experts and confirmed by them. The reliability of this questionnaire was calculated as 0.94 using the Cronbach α . After applying ethical considerations, the questionnaire was finally distributed among the subjects. To determine distribution of the variables used in this study, Kolmogorov-Smirnov test was used. In addition, for inferential statistics, Friedman, Mann-Whitney U, and Kruskal-Wallis tests were used at significance level of $P < 0.05$.

3. Results

Among the 360 participants of this work, 66.4% were males and the rest (33.6%) were females. Participants’

ages varied from 20 to 60 years, with the mean and standard deviation of 32 and 9.06 years, respectively. The study results revealed that the majority (61.1%) of the subjects were married. In addition, 50% of them were employed; a lot of them (39.4%) had a bachelor degree, and the majority of them (79.2%) were graduates in paramedics. Among the participants, 188 subjects had the volunteering work experience in disaster events such as earthquake, flood, and so on. Using the normal data distribution (Kolmogorov-Smirnov test), it was found that the studied variables (except occupational, progress, and support factors among the motivational factors, and organizational benefit and individual benefit, among the satisfaction factors) have a significant difference ($P < 0.05$) with normal distribution. Therefore, nonparametric Friedman test was applied in this research.

The results of this work revealed that there is a significant difference among the motivational priorities of the volunteers. The most important motivational factors among volunteers of healthcare system are purposeful, commitment, support, progress, social, and financial motives. Since not all studied variables were normal in this research, Mann-Whitney U analysis was used for comparing the motivation aspects in male and female volunteers.

According to Table 3, there is a significant difference between 2 genders with regard to occupational, progress, and social motives (i.e. female volunteers participated in

Table 1. Motivational preferences of the volunteers in healthcare system.

Motivational factors	Mean ranking	Chi-square	Degrees of freedom	Sig. level
Purposeful	5.54			
Commitment	4.15			
Occupational	4.43			
Support	4.02	71.531	6	0.001*
Progress	3.59			
Social	3.65			
Financial	1.99			

* Significant at $P < 0.05$.

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Table 2. The satisfaction preferences in volunteers of healthcare system.

Motivational factors	Mean ranking	Chi-square	Degrees of freedom	Sig. level
Communication with volunteers	2.63			
Individual interests	2.71	13.165	2	0.001
Organization interest	1.74			

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Table 3. A gender-based comparison among the motivational factors.

Motivational factors	Group	Mean	Standard deviation	Mean ranking	Mann-whitney U test		
					Calculated Z	U value	Sig. level
Purposeful	Male	3.78	0.06	73.179	-0.198	14276	0.84
	Female	3.09	0.06	02.182			
Commitment	Male	3.44	0.27	64.162	-4.584	10190	0.001*
	Female	3.28	0.16	79.215			
Occupational	Male	3.45	0.67	95.177	-0.655	13851	0.51
	Female	3.06	0.37	53.185			
Support	Male	3.53	0.09	22.170	-2.639	12003	0.008*
	Female	3.26	0.09	80.200			
Progress	Male	3.13	0.08	80.167	-3.447	11252	0.001*
	Female	3.88	0.08	207			
Social	Male	3.81	0.08	42.172	-2.083	12529	0.037*
	Female	3.04	0.48	45.196			
Financial	Male	2.66	0.59	173	-1.925	12666	0.054
	Female	2.88	2.01	32.195			

* Significant at P<0.05.

Table 4. A comparison among the motivational factors with regard to marital status.

Motivational factors	Group	Mean	Standard deviation	Mean ranking	Mann-whitney U test		
					Calculated Z	U value	Sig. level
Purposeful	Single	3.84	0.58	172.66	-1.146	14302.500	0.25
	Married	2.91	0.62	185.49			
Commitment	Single	3.69	0.64	195.24	-2.147	13336.500	0.032*
	Married	3.49	0.74	171.12			
Occupational	Single	3.50	0.72	172.14	-1.219	14230	0.22
	Married	3.59	0.77	185.82			
Support	Single	3.54	0.88	192.66	-1.772	13523	0.076
	Married	3.38	0.93	172.76			
Progress	Single	3.49	0.76	191.17	-1.556	13906	0.12
	Married	3.37	0.89	173.71			
Social	Single	3.38	0.80	193.91	-1.963	13523	0.050*
	Married	3.17	0.89	171.97			
Financial	Single	2.96	0.97	205.65	-3.662	11879	0.001*
	Married	2.59	0.95	164.50			

* Significant at P<0.05.

volunteering programs with stronger occupational, support, progress, and social motivations). The results also indicated that there is a significant difference between the single and married volunteers of the healthcare programs regarding occupational, social, and financial motivations. In other words, the single volunteers have stronger occupational, social, and financial motivations

towards participation in volunteering programs. Table 5 presents a comparison among the motivations of the volunteers in terms of their education degrees. The results revealed that people with diploma seek purposeful motives and those with bachelor's degrees seek financial motives.

Table 5. A comparison among the motivational factors in terms of academic field of study.

Motivational factors	Group	Mean	Standard deviation	Mean ranking	Chi-square	df	Kruskal-wallis test Sig. level
Purposeful	Diploma	4.01	0.56	201.25	12.003	5	0.035*
	Associate degree	3.93	0.56	186.51			
	Bachelor	3.77	0.64	164.08			
	Master & higher	3.69	0.61	151.16			
Occupational	Diploma	3.65	0.74	192.11	6.290	5	0.279
	Associate degree	3.62	0.67	191.14			
	Bachelor	3.49	0.71	168.53			
	Master & higher	3.47	0.73	161.87			
Commitment	Diploma	3.67	0.73	195.79	10.039	5	0.074
	Associate degree	3.49	0.69	170.36			
	Bachelor	3.50	0.76	173.79			
	Master & higher	3.37	0.88	155.95			
Support	Diploma	3.67	0.94	205.82	15.747	5	0.008
	Associate degree	3.34	0.85	168.72			
	Bachelor	3.35	0.89	169.75			
	Master & higher	3.05	0.88	136.37			
Progress	Diploma	3.58	0.77	199.99	6.825	5	0.234
	Associate degree	3.34	0.80	172.81			
	Bachelor	3.36	0.84	172.99			
	Master & higher	3.17	0.86	153.37			
Social	Diploma	3.05	0.88	161.58	10.938	5	0.053
	Associate degree	3.45	0.95	203.10			
	Bachelor	3.10	0.84	163.57			
	Master & higher	3.25	0.89	174.31			
Financial	Diploma	2.94	1.05	201.39	11.497	5	0.0425
	Associate degree	2.58	0.90	165.32			
	Bachelor	2.69	0.95	175.93			
	Master & higher	2.37	0.71	145.95			

* Significant at $P < 0.05$.

4. Discussion

This research was conducted on volunteers of treatment and healthcare programs in Kerman Province, Iran, during 2012-2013. The present work revealed that the most important motivational factors among volunteers in the treatment and health organizations, by order of importance, are purposeful, commitment, and occupational motives, while the financial motives is the least important one. This finding is in agreement with findings of Salas, Gonzales, Finkelstien, and Adam who reported purposeful and commitment motives as the most important motivational factors [3, 10, 14, 15]. However, this finding is not consistent with the findings of Moharramzadeh and

Afrozeh who reported value (purposeful) as the least important motivational factor among the student volunteers. This severe contradiction might be attributed to the study population of Moharramzadeh whose research subjects were students mainly seeking the financial and occupational interests [2].

Purposeful motive is based on a desire for performing a conducive work effective on the society [16]. The volunteers of treatment and health sector understand the volunteer job properly because of their altruistic and religious beliefs, which is not surprising considering the cultural and Islamic context of Iran. Young mentioned that religion values could affect important factors of indi-

viduals' motivation [12, 17]. Thus, religious commands can serve as a driving force for the volunteers and play a key role in their satisfaction and commitment. Another point extracted from this work is professional responsibility, religiousness, and ethics among the volunteers of treatment sector, who regard contribution to the disaster-stricken people as a professional responsibility.

This factor, coupled with the cultural and religious beliefs, can serve as a factor in commitment towards the altruistic issues. Occupational motivation is among the important motivations in the treatment volunteers; as increase in occupational motivation enhances satisfaction level in them. Occupational factor considerably assists volunteers for gaining job and experience. This finding was in agreement with results reported by Marta et al. that occupational motivation is significantly related to satisfaction [18]. In addition, the results of the present work are consistent with those of Gonzales and Hu Han Thi who believed that the volunteers are mainly motivated towards gaining job experiences [6, 10].

However, our results are in disagreement with those of Finkelstien and Adam who explored the relationship between motivational factors and satisfaction level in sport volunteers; they reported that occupational progress is of less importance in the volunteers. This inconsistency might be attributed to the older age of the samples studied in their work that had a low occupational motive [3, 15]. The treatment and health volunteers of the present work consider volunteering process as a tool for developing and improving their occupational skills as well as gaining experience. Azbog and Web reported that the employed people consider volunteering as a credit for themselves [19, 20].

Since a number of volunteers in our study were students of nursing, medicine, and other paramedics, like the employed volunteers, they redeem occupational motivation as a good resume for their future job and consider it as a factor enhancing their skills when dealing with disasters. These volunteers understand the importance of participation in volunteer activities, particularly in social responsibilities and professional skills, and realize its benefit in their future activities. The results of this research also revealed that the financial motives are the least important factors in volunteers of health sector. The low importance of this factor can be attributed to the employment of the majority of volunteers of this research as well as their professional responsibility and ethics. Thus, they, particularly the nursing volunteers, emphasize less on financial aspects. Nevertheless, managers of the health and treatment organizations must realize this factor among the needs of treatment volunteers

and try to fulfill that, which in turn leads to retention of the volunteers.

Stifen mentioned that irrespective of the philosophical objective of volunteering, many people receive some form of payment for their volunteer job [11]. Here, the financial factor indicates the desire of an individual for gaining tangible interests such as financial rewards and different services. The results of the present research are in agreement with those of Johnson and Hoerber who consider financial motives among the less important factors [12, 21]. The results also revealed that communication with volunteers and organizational communications are the most and least important satisfaction factors in the volunteers of the health sector, respectively. This finding is in agreement with those of Salas [14].

McKey mentioned that many people participate in volunteering acts for developing friendly relationships with others. Through the volunteering, they could communicate with other volunteers, share their common values, and have a friendly relationship, which provides a feeling of satisfaction for them [22]. Health and treatment organizations are organized and official media, which provide an opportunity for the volunteers to communicate in a friendly environment. Hence, these activities serve as a tool for developing the social capital among the participants in health sector and, in general results in better performance and higher satisfaction of the volunteers. Our results are in agreement with those reported by Galindo-Kuhn and Guzley, Hung, and Kang [16, 19, 23].

Individual characteristics of the volunteers can be classified into the sociological and demographic characteristics. Hu Han mentioned that characteristics such as age, gender, ethnicity, health, income status, education degree, religion, political beliefs, as well as individual experiences and skills are crucial in motivational factors of the individuals [6]. The results of this research revealed that the difference among the female and male volunteers in terms of occupational, support, progress, and social motives. In other words, female volunteers have a stronger occupational, support, progress, and social motives towards the long-term volunteer activities. In general, women are more willing to participate in volunteer activities.

Many studies explore gender-based differences in volunteering motivations and found that women gains higher scores compared to men in terms of participation in volunteer activities [5-7]. This finding is consistent with that of Fletcher and Mitcher who believed that women are more eager towards the volunteer activities than men and progress, understanding, and value motives are

among their dominant motivations [24]. Women typically have an imitative behavior and are intrinsically willing to perform caring services. Such gender-based expectations might emphasize responsibility of the women for volunteering programs and make them more enthusiastic than men towards these programs.

Prentis (2000) reported that men are generally attracted by the utility motives such as occupational motivations, while women are mainly absorbed by the altruistic motives such as value. Sweitzer reported that value and progress motives are stronger in female medical volunteers as compared to the male ones [25]. The higher occupational performance of the men in comparison to women can be attributed to their assertiveness, emotionality, perseverance, and getting along with difficulties. However, both genders are mainly motivated with value, understanding, and progress motives. Researchers believe that, due to their social limitations, women are mainly familiar with care and training roles since the early stages of their lives and are expected to participate in long-term activities, unlike men who are generally engaged in short-term activities. This finding is in agreement with the results of the present research.

Our results also indicated that there is a significant difference between purposeful and financial motives and education level, and people with diploma or bachelor's degree follow the purposeful and financial motives, respectively. The findings of this research also revealed that the higher education level is weaker than the financial motives; as the financial preferences of volunteers with MS or MA degrees are weaker than those with lower educations. Due to lack of a job and its consequent financial problems, the volunteers with lower educations consider volunteering as a medium for gaining job experience, escape from unemployment, and partial supplying of their financial needs. On the other hand, people with higher education are not willing to attend the main crisis scenes and prefer to work in the programming and headquarters.

An uncontrollable limitation of our study was the lack of control over subjects' personal attitudes when responding the questions, probably because of their different interpretation of the questions due to factors such as their bias and carelessness, as well as the limited number of domestic studies on prioritization of the motivations of the volunteers active in health and treatment sector in disaster events.

5. Conclusion

In conclusion, motivation and satisfaction are generally among the important tools affecting the volunteering be-

haviors. One of the most important strategies for recruiting and retention of the volunteers is to know their motives and satisfactions. Detecting these valuable human resources is of great importance in applying and exploiting their potentials and skills in crisis management and emergencies. People occupied in treatment and health sectors perform volunteering duties with their own will without any expectation or only an insubstantial amount of money. Through exploring the motives of volunteers, the managers of the health and treatment organizations can detect the purposes and plans of the volunteers for participation and remaining in volunteering activities. This detection can be considered an important step in crisis management and emergencies. Apparently, if volunteers consider their activities valuable and important, and enhance their work experiences, feel responsible towards gaining knowledge and skills for performing them, and improve their communications and social interactions, they will be more satisfied. Therefore, by preparing suitable media for enhancing the social interactions, offering proper feedbacks, and using the rewarding, support, and acknowledgement policies, the managers of the health and treatment organizations can play a key role in satisfaction and constant participation of the volunteers in the disasters.

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