



## Donor retention in health care in Iran: a factor analysis

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### Abstract

**Background:** Long-term financial support is essential for the survival of a charitable organization. Health charities need to identify the effective factors influencing donor retention.

**Methods:** In the present study, the items of a questionnaire were derived from both literature review and semi-structured interviews related to donor retention. Using a purposive sampling, 300 academic and executive practitioners were selected. After the follow-up, a total of 243 usable questionnaires were prepared for factor analysis. The questionnaire was validated based on the face and content validity and reliability through Cronbach's  $\alpha$ -coefficient.

**Results:** The results of exploratory factor analysis extracted 2 factors for retention: donor factor (variance = 33.841%; Cronbach's  $\alpha$ -coefficient = 90.2) and charity factor (variance = 29.038%; Cronbach's  $\alpha$ -coefficient = 82.8), respectively. Subsequently, confirmatory factor analysis was applied to support the overall reasonable fit.

**Conclusions:** In this study, it was found that repeated monetary donations are supplied to the charitable organizations when both aspects of donor factor (retention factor and charity factor) for retention are taken into consideration. This model could provide a perspective for making sustainable donations and charitable giving.

**Keywords:** Charitable Giving, Donor, Retention, Factor Analysis, Health care

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### Introduction

Health care industry needs an effective intervention in its financial system because of the deficiency in covering the increasing costs (1). These increasing costs show the burden of health care financing, which results in out-of-pocket payments. Unfortunately, out-of-pocket expenses become a considerable proportion of the total expenditure on health care, increasing the probability and risk of facing catastrophic payments for the households in Iran. This issue leads to more severe problems in the households with lower incomes. However, any kinds of subsidies and support could be a good solution (2) to reduce the effect of catastrophic expenditure (3).

Charitable giving was introduced as a world financing scheme by World Health Organization (4), which included the least proportion of health expenditure in healthcare in Iran (5). However, few scientific studies have been pub-

lished about this issue in Iran. Indeed, the trend of publications has been increasing in the recent years. In this regard, academic cooperation with research centers should be increased (6), whereas academics deal with the concept of charitable giving in a variety of disciplines from different perspectives worldwide (7). Nonetheless, one of the most important issues in implementing a health care financing system is the sustainability of the available resources (8).

Retaining donors is becoming a critical problem for keeping donors (9). Practically, this attrition has been considered as a main concern for charitable organizations (10). A definition of donor retention is provided by Royce (11): "Donor retention does exist if within a specified period, an individual voluntarily and repeatedly acted in favor of an organization and intends to continue to do so

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#### ↑What is "already known" in this topic:

Financial pressure and changes in work and personal conditions play a crucial role in withdrawing from charitable giving by donors. Recently, there are efforts to increase the contribution of charitable giving by Deputy Office of Social Affairs at Iran Ministry of Health and Medical Education.

#### →What this article adds:

Charity organizations should be active in fundraising and retaining for consistency over the time. However, lack of a database for the charitable giving and donors in Iran has limited the research in this area.

in the future.” In fact, retention is a behavioral pattern of donors to a charity (12). Findings indicate that numerous charity organizations lose more than half of their donors within the first year after they have been attracted to the institution (13). The sudden tendency toward donors and the abrupt withdrawal from it have been observed globally (14).

However, the academic community has not paid due attention to the factors influencing the tendency of people to continue their contributions (15). Apparently, financial pressure and changes in work and personal conditions play a crucial role in withdrawing from charitable giving by donors (16,17). Earlier studies have focused on the variables influencing donor retention. Sargeant and Hudson (16) identified the factors appearing to influence donor attrition, which are as follow: trust, commitment, perceptions, communications, satisfaction, pressure, and gap sources. Also, Naskrent and Siebelt (18) showed the positive influence of commitment, trust, satisfaction, and involvement on donor retention. Positive experience and affinity with the charitable organization, donors’ trust in the organization, and positive reputation of the charitable organization, as the determinants of donors’ intention to repeat their donations, have been outlined by Beldad, Snip (15). Bennett (19) indicated the “lifetime durations” that a donor remained with a charitable organization. Donor loyalty model in charitable giving consisting of passive and active commitment has been designed by Sargeant and Woodliffe (20). In this method, charities could manage and communicate the long-term relationship between donors and beneficiaries (17).

Nonetheless, these previous studies, which have implicitly confirmed donor and charity factors associated with donor retention, have not categorized variables into specific factors. Moreover, the evidence of donor retention in Iran’s health care system is scarce. Recently, the efforts have been done to increase the contribution of charitable giving by Ministry of Health and Medical Education. The Deputy Office of Social Affairs has been recently added to the organizational chart of the Ministry of Health and Medical Education to work along with other well-established deputy offices. This restructure can play an increasingly important role in policy making. Therefore, the findings of the present study may help the deputy of social affairs in Ministry of Health and Medical Education to manage charitable giving by donor retention. Thus, this study aimed at determining items and effective factors associated with donor retention in health care charities in Iran.

## Methods

This cross sectional survey was conducted on the health care system of Iran to identify factors affecting donor retention.

### Questionnaire

A questionnaire was developed to identify the importance of items affecting the retention of donors in health care system in Iran. Therefore, a process entailing qualitative and quantitative approaches was undertaken.

The questionnaire items for the quantitative part were derived from both the literature review and 8 semi-structured interviews with key informant experts (qualitative part). The experts selected both academic and experimental knowledge relating to health care charities. These participants constituted an appropriate sample because they were extremely familiar with health care and charity. The designed questionnaire included 2 parts: demographic data (including age, sex, educational level, and working experience); and 12 items associated with donor retention. A 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) was used as the response format to evaluate the effect of each item on the retention. A high score in an item indicated the effectiveness of that item on the retention. To clarify the survey for the respondents and to gain higher responding rates, a short introduction was used at the beginning of the questionnaire.

Academic experts in this domain confirmed that the questionnaire had appropriate content for face validity. Only minor changes were needed and implemented by these 8 experts. Moreover, content validity was assessed among 8 key experts; the total CVR (Content Validity Ratio) (21) and CVI (Content Validity Index) (22) were 0.95 and 0.96, respectively. None of the preliminary items was eliminated from the questionnaire. To examine the internal consistency of the scale, Cronbach’s  $\alpha$ -coefficient was calculated for each extracted factor; additional detailed information presented in the full report (23).

### Sampling

To find appropriate participants, a purposive sample of 300 practitioners was selected. This sample was recruited based on the participants’ academic and executive experience in charitable giving. The questionnaire was distributed to all provinces of Iran in health care charities. Data were collected through anonymous self-administrated questionnaires. After the follow-up, a total of 243 usable questionnaires were received (response rate of 81%). This process lasted more than 5 months.

### Statistical Analysis

Questionnaires were coded for data analysis. EFA (Exploratory Factor Analysis) was used to evaluate all the items. In addition, statistical analyses were executed by SPSS v.22, except for CFA (Confirmatory Factor Analysis), which was carried out by LISREL V.8.54. Varimax rotation was used to reduce the items; and Kaiser-Meyer-Olkin (KMO) and Bartlett’s test were computed. Furthermore, content validity and reliability (Cronbach’s  $\alpha$ -coefficient) were computed using the Microsoft Excel and SPSS v.22, respectively.

### Ethical Considerations

This research was derived from a PhD dissertation and was approved by Islamic Azad University (code no: 3663). All respondents were informed about the purpose and necessity of the study and were assured of data confidentiality, then, they filled the questionnaire voluntarily.

## Results

A total of 243 individuals participated in this study.

**Table 1.** Respondents' Demographic Characteristics (n = 243)

Variable	Category	n	%
Sex	Male	154	63.37
	Female	89	36.6
Age group (year)	<30	41	16.87
	31-40	86	35.39
	41-50	67	27.57
	>51	49	20.16
Educational level	Diploma	10	4.11
	Associate	23	9.46
	Bachelor	122	50.20
	Master	65	26.74
	PhD	23	9.46
Work experience(year)	<10	134	55.14
	10-20	65	26.74
	21-30	26	10.69
	>30	18	7.40

About 63% (n = 153) of the respondents were males. Most participants (36%) aged 31 to 40 years, and half of them (n=121) had a bachelor's degree; moreover, more than half of the participants had less than 10 years of work experience (55%). The respondents' demographic characteristics are summarized in [Table 1](#).

Initially, Kaiser-Meyer-Olkin was computed to show the sample adequacy (0.91), and Bartlett's test of independence was conducted to establish the correlation matrix ( $\chi^2 = 1620.726$ ;  $p < 0.001$ ).

In addition, varimax rotation was used to reduce the data. Factors that had an eigenvalue greater than 1 were retained. Then, 2 factors were extracted from EFA. Factor 1 included 7 items and was labeled as donor factor for retention; factor 2 included 5 items and was named charity factor for retention. [Table 2](#) demonstrates factor names, ei-

genvalues, explained variances, the items comprising each factor, and factor loading of each item. In addition, [Table 2](#) displays Cronbach's  $\alpha$ -coefficient of 90.2 for Factor 1, and 82.8 for Factor 2.

The findings, based on CFA, were compared with the recommended cutoff values proposed by Hu and Bentler (24):

Chi-square divided the degree of freedom ratio ( $\chi^2/df = 2.55$ ), standardized root mean square residual (RMSEA = 0.080), incremental fit index (IFI = 0.98), normed fit index (NFI = 0.97), non-normed fit index (NNFI = 0.97) and comparative fit index (CFI = 0.98). In general, the findings support the final proposed model.

**Table 2.** Results of exploratory factor analysis for the two factors of donor retention

Factors/Items	Statements of the Items	Loading	
		Factor1	Factor2
Factor 1: Donor Factor for Retention			
Eigenvalue = 6.301; Variance = 33.841%; Cronbach's $\alpha$ -coefficient = 90.2			
DR4	Connection	0.822	0.280
DR7	Positive feedback	0.807	0.181
DR2	Satisfaction	0.792	0.252
DR5	Motivation	0.787	0.236
DR6	Altruism	0.670	0.331
DR1	Incentives	0.573	0.521
DR3	Celebrations	0.570	0.552
Factor 2: Charity Factor for Retention			
Eigenvalue = 1.245; Variance = 29.038%; Cronbach's $\alpha$ -coefficient = 82.8			
DR10	Membership	0.147	0.800
DR11	Specified and short period of time	0.143	0.730
DR9	reminder frequency	0.403	0.700
DR8	Solicitation methods	0.296	0.681
DR12	Lobbying	0.294	0.664

Note. DR=Donor Retention

**Table 3.** Summary of fit statistics from confirmatory factor analysis and recommended values

Model	$\chi^2/df$	RMSEA	IFI	NFI	NNFI	CFI
CFA	2.55	0.080	0.98	0.97	0.97	0.98
Criteria	$3 > \chi^2/df > 1$	$< 0.08$	$> 0.95$	$> 0.90$	$> 0.90$	$> 0.95$

Note.  $\chi^2/df$ : Chi-square divided degree of freedom ratio, RMSEA: Standardized Root Mean Square Residual, IFI: Incremental Fit Index, NFI: Normed Fit Index, NNFI: Non-Normed Fit Index, CFI: Comparative Fit Index.

## Discussion

The present study aimed at identifying factors related to the retention of donors in health care system of Iran. The effective factors and variables for the donor retention are recognized in 2 categories: donor factor for retention and charity factor for retention. Shelley and Jay Polonsky (25) indicated processing determinants which were categorized into donor experience of contribution. This led to future donations and could increase loyalty through time.

### *Factor 1: Donor factor for retention*

An effective relationship and connection between charities and donors results in donor retention (16). Similarly, the good quality of communication between charities and donors raises charitable giving (15). Indeed, to have a regular communication with donors, charities should understand the future needs and preferences of donors (13). The results of another study revealed that for financial support in long-term charitable giving, donors want to stay in touch with the sponsored child (17). Likewise, acknowledgement mechanisms play an important role in this issue(9). Hence, sponsoring a patient could be developed in the health care industry. Our findings demonstrated that the close connection between organizations and donors was the most important item to increase sustainable charitable giving.

One of the reasons why donors leave the charity was the lack of positive feedback and unawareness of the ways the charitable giving was spent (16). Ward and Mckillop (26) pointed out that donors' resource management and retention improvement were made possible by providing good feedback practice of volunteers in Ireland. In other words, quality of services provided to the donors and informing them of the effect of their giving highly affected their retention (27). Thus, receiving positive feedback for the charitable giving and observing the direct effect of the contribution, encourage the donors to continue their cooperation and contribution to the charity organizations.

Naskrent and Siebelt (18) found that satisfaction, as a variable, indirectly influenced donor retention in Germany. The role of satisfaction was consistent with the findings of earlier studies (15, 28, 29). Consequently, personal satisfaction is one of the crucial variables for the donors to persist in their charitable giving.

Peachey, Lyras (30) revealed that themes related to the motivation of volunteers in a sport field finally lead to their retention. This study focused on volunteers who donated their time, but not their money. Hence, the incentives of the donors have to be taken into consideration. Policy makers of the charities have to illustrate different means of contribution corresponding to the different motives of the donors.

Altruism is a powerful sense, which has no limitation, and it is an endless intrinsic motivation of a donor to donate to a charity (31). Donors choose to be helpful in a charitable organization out of altruism. They care about and help others even though this sense brings no benefit to them. Therefore, policymakers can consider how to utilize this great potential behavior.

In many countries, charitable donations are deducted

from taxes and this could be an incentive for donors. Thus, designing appropriate tax policies could attract and retain donors (32). Many individuals, commercial firms, and trading companies have a twofold benefit in doing such deeds: charitable actions and tax exemption. Moreover, other incentives motivate donors to provide ongoing support to the charitable organizations.

Holding an appreciation ceremony is an effective variable for the donor retention. Paying attention to this variable would increase charitable contributions in the long term (33). Moreover, a thank-you letter from a needy patient can be a reason for sustainability of the charitable donations.

### *Factor 2: Charity factor for retention*

Belonging to a charity, like being a member of that organization, is associated with willingness to donate continuously (34). Developing a comprehensive database can be useful (35). Besides, providing an ID card makes a kind of commitment and obligation to frequently donate to a charity in the future. Providing such guarantee could be a helpful strategy for charity managers to gain continuation of the donors' support. However, in an unorganized system with a weak supervision, the possible misuses of the card should also be considered; and this is why some institutions refrain from providing this card.

Likewise, providing the chance of donation in different times could make a long-term supportive relationship with more donors. However, short deadlines could enhance charitable giving (36). In fact, extending the deadlines for the donors is stated as decreasing the income of the charity organizations.

According to Breman (36), the frequency of reminding the donors to contribute to the institutes raises their retention. She stated that monthly donors are the best ones for the charities. Therefore, time track strategies are highly useful and charities could design a reminder media to maintain donors. A charitable organization has to plan for reminders by SMS on cellphones, email, and telephone.

Solicitation methods of a charitable organization include telephone, direct mail, letter, social media and could influence the retention of donors. However, the donors are the decision makers (37) and their positive word of mouth (38) have been the most fundamental factor in their retention. The findings of this study revealed that the effort of the charity organizations and adding variety to their solicitation methods would give rise to the response rate of the donors, particularly those who have had experience in volunteering or charitable donations. Hence, the effort of the organizations and their use of diverse solicitation methods can be effective.

According to Olsen and Eidem (39), lobbying can be a fundraising activity, which is a potential factor for generating more revenue, and reduces donors attrition (16). Therefore, charities could increase their lobbying power to retain the donors.

### Limitations

This was only the first stage in understanding the underlying factors. The items were developed through a careful

literature review and interviews with key informant experts, so future research should gather additional data in donor retention items. Additionally, this single construct model requires more tests by replications in different situations.

### Conclusions

The findings of this study presented a broad range of variables playing substantial roles in donor retention. The factor grouping elucidates the important role of charities in fundraising and retaining activities (charity factor for retention) and also the important role of intervention in reinforcing donors for retaining (donor factor for retention). Therefore, charities should be sensitive to both factors for consistency over the time. These identified issues could shed light on how to retain donors in health charities. Suggestions provided in this paper could enhance the competitive advantage of the charities.

Unfortunately, lack of a database for the charitable giving and donors in Iran limited the research in this area. Despite this, authors suggest this fruitful field for the future research, especially in the health care industry. Further research is needed to explore the effect of social marketing in donor retention, future studies in donor retention, qualitative studies of donor retention, the reason of on-off donation, and termination of donors' support, and the effect of donor retention on health systems revenue. These studies can have positive impacts on charitable organizations and guide the experimental field of charitable giving in health care.

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