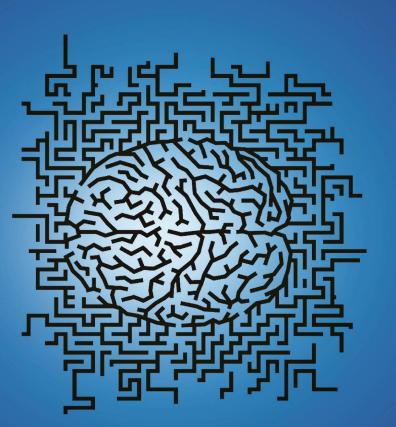




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Factors Influencing Citizens' Willingness for Participation in the Management of Forest Parks in Tehran City

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Abstract

The main objective of this study was to investigate factors influencing citizens' willingness for participation in the management of forest parks in Tehran city. This study was a correlational-descriptive research. The statistical population consisted of the visitors of four major Tehran forest parks out of which a sample of 202 visitors. The findings revealed that variables such as willingness for participation in executive activities of administration of forest parks, use of internet and attitude towards public participation in administration and conservation of forest parks could explain 43.8% of the variation in citizens' willingness for participation in the management of Tehran forest parks.

Keywords: Participation, forest parks, willingness, citizen;

1. Introduction

Citizens' participation is the essential and undeniable principle in all of the urban affairs. In the recent years, this principle has been discussed in urban forestry and green space and is a main infrastructure for success in related projects (Nowak, 2006). A sustainable city should be created by the people. A long with the development of cities and different dimensions of urbanity, improvement of life quality of citizens is facing with constrains and challenges such as centralized urban planning and management systems, planning and budgeting from up to down and uncoordinated goals (Mehta and Heinen, 2001). From this viewpoint, the real, dynamic, active and meaningful participation needs to revise in different levels of management (Luttik, 2000; Mukherjee and Borad 2004). Thus, the important solution for solving problems of cities is active participation of people.

The basic principle in governance is distribution of power, authority and responsibilities between different stakeholders and urban societies (Sanesia and Chiarello, 2006). In the conditions of developing countries, increase of participation of people and private sector depend on strengthening local governments and changing administrative - political structure.

Urban forestry is one of the dimensions of community forestry and the people are main core for participation in managerial and executive affairs. Generally, the goal of urban forestry is to plant trees in the different places such as forest parks, Green belts, public places and the streets of city that executive capacity will be more by people's participation that people's participation increase implementation capacity of urban forestry projects (Lalehpour, 2007; Oke, 1989).

People's participation in urban forestry projects has many advantages such as optimal use from local resources, increase of responsibility of the people for protection and conservation projects and increase of their awareness. Today, one of the important criteria of countries is sufficient access to urban forests and public participation in related projects, because the real understanding of forest resources importance will be achieved through public participation (Oral, 2008). People's Participation in different contexts of natural resources will be realized if appropriate linkage is established between people and government.

For improving quality of projects related with urban forestry, participation should be involved in overall project stages that it needs to motivate people and investment by government. Thus, it is necessary to understanding factors influencing people's willingness for participation.

In a project in Spain, citizens proposed for how to pay taxes for better administration of public and green spaces and the best proposal was chosen.

In the study of Sanesia and Chiarello (2006) was indicated that 89.2% of respondents have willingness for participation in the management of urban forests (Sanesia and Chiarello, 2006).

Oral's research (2008) showed that there is positive and significant correlation between use of internet and willingness for participation.

Wagle (2000) studied the role of democracy and participation in the administration of the city (Tyrväinen, et al., 2007). The results of this research showed citizens' participation with emphasize on the democracy and involvement in decision-making enhance skills of people in administration of the city. The results of Carver's

research (2000) revealed that education level and use of Internet were significantly correlated with the people's participation in the management of urban green space (Yang, et al., 2005).

This study was done to analyze factors influencing citizens' tendency for participation in the management of forest parks in Tehran city. Other objectives in this study were:

- Analysis of characteristics of visitors of forest parks,
- Priority setting of indicators of citizens' willingness for participation in the management of forest parks,
- Correlation analysis between selective variables and extent of citizens' willingness for participation in the management of forest parks,
- Comparison of willingness for participation in the management of forest parks among different job groups,
- Regression analysis to explain variation in citizens' willingness for participation in the management of forest parks.

2. Material and methods

This study was a corelational-descriptive research. The statistical population consisted of the visitors of four major Tehran forest parks (Chitgar, Lavizan, Taleghani and Sorkhehesar) out of which a sample of 202 visitors was selected through simple random sampling method. A questionnaire was used to collect data. For determining validity of the questionnaire, the content validity was used by an experts' panel judgment. Cronbach's alpha was used to measure reliability of research scales and identification of irrelevant statements. Cronbach's alpha coefficient for citizens' willingness for participation in the management of forest parks was equal to 0.91. Data were analyzed using descriptive and inferential statistics such as mean, Kruskal-Wallis test and regression.

3. Results and Discussion

3.1. Characteristics of the visitors of forest parks

According to the results, 51.5% of the visitors were male and 48.5% were female. The average age of the visitors was about 44 years. About 36% of the visitors had completed high school and 33.3% were Bachelor of Science. The largest proportion of the visitors had governmental jobs and 2% were retired. 34.8% of the visitors came to forest parks just one time in a month. 60.9% of the visitors came to forest parks along with their family. Minimum extent of internet use among 52.2% of them was about 1 to 3 hour during 24 hours.

3.2. Priority setting of indicators of citizens' willingness for participation in the management of forest parks

Table 1 showed that citizens had willingness for participation in the following managerial activities: Cooperation for attaching participation of others in the management of forest parks, giving consultation services, cooperation for establishment of community committees and associations, participation in decision making and planning of forest parks, giving physical supports, giving technical information and financial supports for administration of forest parks.

<u>Table 1. Priority setting of indicators of citizens' willingness for participation in the management of forest parks</u>

Statements	Mean*	priorit y
Cooperation for attaching participation of others in the management of forest parks	2.16	1
Giving consultation services and informing to people about forest park conservation	2.07	2
Cooperation for establishment of community committees and urban forestry associations	2.07	2
Participation in decision making and planning of forest parks	2	3
Giving physical supports in conservation activities of forest parks	1.95	4
Giving technical information for administration of forest parks	1.79	5
Giving financial supports for administration of forest parks	1.28	6

^{*} Between 0-5

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3.3. Correlation analysis between selective variables and extent of citizens' willingness for participation in the management of forest parks

Table 2 shows that use of internet, attitude towards public participation in administration and conservation of forest parks and willingness for participation in executive activities of administration of forest parks were positively and significantly (p<0.01) correlated with citizens' willingness for participation in the management of forest parks. The experiences noted by Oral (2008) and Carver (2000) arrive the same conclusions. Moreover, there is positive and significant correlation (p<0.05) between extent of visitors' use of forest parks during a month and citizens' willingness for participation in the management of forest parks.

<u>Table 2. Correlation analysis between selective variables and extent of citizens' willingness for participation in the management of forest parks</u>

Variable	r
Age	-0.115
Income	-0.003
Education level	0.11
Household size	0.022
Extent of visitors' use of forest parks during a month	0.142*
Use of internet	0.221**
Satisfaction of forest parks management	0.14
Satisfaction of forest parks facilities	0.062
Attitude towards public participation in administration and conservation of	0.223**
forest parks	
Citizens' viewpoint regarding functions of forest parks	0.118
Willingness for participation in executive activities of administration of forest	0.627**
parks	

^{*:} p<0.05 and **: p<0.01

3.4. Comparison of willingness for participation in the management of forest parks among different job groups

Data presented in Table 3, indicates that job of visitors of forest parks do not influence on their willingness for participation in the management of forest parks. Therefore, different job groups have similar willingness for managerial activities.

<u>Table 3. Comparison of willingness for participation in the management of forest parks among different job</u> groups

Statement	\mathbf{X}^2	Sig.
Giving technical information for administration of forest park	4.12 6	0.66
Giving consultation services and informing to people about forest parks	6.26	0.39
conservation	9	4
Giving physical supports in conservation activities of forest parks	6.16	0.40
	1	5
Giving financial supports for administration of forest parks	6.47	0.37
	6	2
Participation in decision making and planning of forest parks	6.87	0.33
	3	3
Cooperation for attaching participation of others in the management of forest	2.00	0.67
parks	3.99	8
Cooperation for establishment of community committees and urban forestry	3.85	0.69
associations	1	7

3.5. Regression analysis to explain variation in citizens' willingness for participation in the management of forest parks

Stepwise multiple regression analysis was used to determine the links between a range of independent variables and citizens' willingness for participation in the management of forest parks and to explain variations in extent of willingness for participation by independent variables. We regressed factor of willingness for

participation with independent variables. Based on Table 4, willingness for participation in executive activities of administration of forest parks, use of internet and attitude towards public participation in administration and conservation of forest parks could explain 43.8% of variation in citizens' willingness for participation in the management of forest parks. The following model was estimated:

 $Y = Constant + \beta_1 TPEA + \beta_2 UI + \beta_3 APAC$

Where

Y: extent of citizens' willingness for participation in the management of forest parks

β: coefficients of independent variables

Thus.

Y = -3.965 + 0.399 TPEA +2.208 UI +0.237 APAC.

<u>Table 4. Regression analysis to explain variation in citizens' willingness for participation in the management of forest parks</u>

Description	Label -	Tendency for participation		
		В	Beta	t
Comptont		-		-1.753
Constant		3.965		
willingness for participation in executive	TPEA	0.399	0.312	10.89**
activities of administration of forest parks				
Use of internet	UI	2.208	0.173	3.091**
Attitude towards public participation in	APAC	0.237	0.135	2.401*
administration and conservation of forest parks				
R ² adjusted=0.428	R ² =0.43		F =46.419**	

^{*}P<0.05, **P<0.01

4. Conclusion

Use of internet was positively and significantly correlated with citizens' willingness for participation in the management of forest parks. Thus visitors who have more communication they have more favorable viewpoint towards participation and have more tendencies for participation in the managerial activities of forest parks (e.g. giving technical information, giving consultation services and physical supports). Moreover, results indicate that visitors who come to forest parks several times in a month, they have sense of ownership to environment thus display more tendencies for participation in the management of forest parks.

Moreover, willingness for participation in executive activities was positively and significantly correlated with citizens' tendency for participation in managerial activities therefore, visitors who have willingness for participation in executive activities of administration of forest parks, they volunteer to participate in the management of forest parks and vice versa. In the line of aforementioned issues, the following recommendations are presented:

- Establishment of urban natural resources extension and public participation association
- providing appropriate and participatory structure
- Pay attention to essential motivations among youth for participation in conservation of urban environment
- Allocation of budget for executive and managerial programs of urban forestry
- Allocation of budget for development of educational programs in relation with the role and importance of urban forestry and public participation strategies in management and conservation of forest parks.

References

Lalehpour, M. (2007). Urban governance and management in developing countries. *Jostarhaye shahrsazi quarterly*, 6, 19-20.

Luttik, J. (2000). The value of trees, water and open spaces as reflected by house prices in the Netherlands. *Landsc. Urban Plan*, 48, 161–167.

Mehta, J.N. & Heinen, J.T. (2001). Does community-based conservation shape favorable attitudes among locals? An empirical study from Nepal. *Environ Manage*, 28, 165–177.

Mukherjee, A. & Borad, C.K. (2004). Integrated approach towards conservation of Gir National Park: the last refuge of Asiatic Lions. *India, Biodivers Conserv*, vol. 13, pp 2165–2182.

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- Nowak, D. J. (2006). Institutionalizing urban forestry as a "biotechnology" to improve environmental quality. *Urban Forestry & Urban Greening*, 5, 93–100.
- Oke, T.R. (1989). The micrometeorology of the urban forest. Philos. Trans. R. Soc. Lond, 324 (Series B), 335–349.
- Oral, B. (2008). The evaluation of the student teachers' attitudes toward Internet and democracy. *Computers & Education*, 50, 437–445.
- Sanesia, G. & Chiarello, F. (2006). Residents and urban green spaces: The case of Bari. *Urban Forestry & Urban Greening*, 4, 125–134.
- Tyrväinen, L., Mäkinen, K. & Schipperijn, J. (2007). Tools for mapping social values of urban woodlands and other green areas. *Landscape and Urban Planning*, 79, 5–19.
- Yang, J., McBride, J., Zhou, J. & Sun, Zh. (2005). The urban forest in Beijing and its role in air pollution reduction. *Urban Forestry & Urban Greening*, 3, 65–78.