

Study of the Effect of Citizenship Education Courses on Medicinal Plants in Land Scape Research, Training and Counseling Center of Tehran Municipality, District 12

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Abstract

The purpose of this study was to evaluate the citizenship training courses of the Center of landscape Research, Education and Counseling of district 12 of Tehran municipality. The statistical population of this study was the citizens who participated in training courses on native and medicinal plants. The sample size was $n = 210$ of which 193 questionnaires were returned. Questionnaire was used for data collection in order to achieve research goals. Based on the results, most of the respondents considered that these courses had a positive

effect on their interest in acquaintance with medicinal plants and stated that their learning (knowledge and skills) increased after training courses and their satisfaction with training courses was at a moderate level. T-test was used to evaluate the results of the questionnaires. The results showed that there is a significant relationship between the learning rate of citizens attending classes and their interest in preserving native plant and medicinal species.

Keywords: evaluation, Education Courses, citizens, medicinal plants

Introduction

Use of native plants in each area due to adaptation of the plant with the environment, If it is taken into consideration by the municipalities and those involved in urban green space, it can be implemented at the city level in the not too distant future. Educating citizens about recognizing and preserving these species creates their interest and preservation. In recent years, governments have given special emphasis to agricultural education programs and have invested heavily in their new position of promoting agricultural education and training. The increasing expansion of cities has exacerbated the negative effects of environmental pollution. The physical development of cities cuts off human relationships with the natural environment. This destroys urban green areas

and increases demand for urban land, which predisposes the destruction of green spaces in urban areas and the change of land use. One of the important goals of the development of the urban land scapes is to create beautiful and pleasant spaces and consequently mental relaxation. This is more possible with native or medicinal plants, because the use of these plant species is less expensive. For this reason, the development of these plants can expand the urban green space, reduce irrigation water use, fertilizers and pesticides and ultimately preserve the urban environment. Citizens can get acquainted with native and medicinal species of plants in Tehran Land scape education centers. The purpose of this study was to evaluate citizenship training courses at Land scape Research, Training and Counseling Center of Tehran municipality, district 12. The results of this study indicate the importance of evaluating citizenship education courses. And the purpose of our research is to succeed in

creating an interest in citizens in recognizing native and medicinal plants adapted to Tehran's environmental conditions. Citizens have also been asked about the quality of

Materials and Methods

The main purpose of this research is to evaluate citizen training courses in Land scape Research, Training and Counseling Center of Tehran municipality, district 12. Therefore, the research method of this study was based on applied purpose and field data were collected. The statistical population of this study is citizens attending in Land scape Research, Training and Counseling Center of Tehran municipality, district 12. 210 questionnaires were distributed to the citizens participating in the center classes, of which 193 were returned. T-test was used to compare and compare the means. Citizens were also categorized by age and education

trainin courses, So that its results can be used to improve citizenship education in Research, Training and Counseling Center of Tehran municipality. to be used in further studies if needed.

Results

Citizens participating in Land scape Research, Training and Counseling Center of Tehran municipality, district 12 courses were surveyed for gender, age, and educational attainment, with results listed below(Table 1). The majority of the sample was female (126 persons; 65.28%). The results showed that the mean age of the samples was 41.95 years and 24.87% of the population were in the age group of 47-38(Table 2). Most of the respondents in this study (62 persons, 32.12%) had a high school diploma(Table 3).

Adjective	Percent	Frequency	Items
Gender	65.28	126	Female
	34.71	67	Male
Total	100	193	

Table (1). Frequency distribution of the studied samples by gender (n = 193)

Age group (year)	Percent	Frequency
18-27	15.02	29
28-37	18.13	35
38-47	24.87	48
48-57	22.27	43
and above 57	19.68	38
Total	100	193

Minimum: 18, Maximum: 65, Average: 41.95, Standard deviation: 13.03

Table (2). Frequency distribution of the studied samples by age (n = 193)

Level of Education	Percent	Frequency
Under the diploma	9.32	18
Diploma	32.12	62
Associate Degree	20.20	39
Bachelor	21.24	41
Masters degree and higher	17.09	33
Total	100	193

Table (3). Frequency distribution of studied samples by educational level (n = 193)

The analysis of the results of the questionnaires shows that 91.14% of the citizens who participate in the educational courses believe that urban land scape plays an important role in improving the quality of urban life and according to 47.02 percent of class attendees, training courses of Land scape Research, Training and Counseling Center of Tehran municipality, district 12, have a direct and practical relationship with applied green space issues at home.

However, only 5.60% of these citizens were aware of the role of urban land scape in plant species preservation before attending classes. 95% of these citizens stated that these educational programs have played a significant role in increasing their interest in understanding native and medicinal plants. Also, 63.27% of the participants rated the impact of the center's classes as very effective Responding to a question about the role of classes in increasing citizens' interest in studying herbs and developing new ideas, 66.24% of participants chose the center's high impact option. Also, the green space education center classes were influenced by 52.42% of the participants in entrepreneurship and employment in the

in increasing their awareness of the importance and role of urban green space.

According to 67.72% of these citizens, the Land scape Research, Training and Counseling Center of Tehran municipality, district 12 courses have had a significant role in reducing the destruction of urban green space by citizens at the regional level.

92 percent of graduates said the center's classes have had a great impact on citizens' understanding of the common pests in urban greenery, gardens and homes, as well as how they are managed and And 58.33 percent of these citizens said the reduction in the amount of pesticides used to control plant pests in gardens and indoor areas by their familiarity with plant and non-chemical compounds in pest control was one of the positive outcomes of attending these courses.

production and cultivation of medicinal plants.

The percentage of responsiveness mentioned above has a significant difference with other options.

In general, the results of the research indicate that the citizens attending the courses have evaluated the effectiveness of the courses at a

good level and they are interested in learning about medicinal and native plants.

Although the training courses were not 100% effective, it can be claimed that the effectiveness of the training was appropriate for the respondents. The mean changes in the scores of knowledge and skills of the participants in the course of the study showed a significant difference compared to the results before and after. That is, the evaluation results show that the learners' knowledge and awareness is increased. This difference indicates that the training process is effective.

The results of this study showed that training courses increase citizens' knowledge and skills and create interest in learners, which increases their satisfaction and improves their behavior.

It is suggested that at the end of each training course, its effectiveness be measured by the use of statistical models, as it shows well the changes in learning and their behavioral levels and can be planned in the same direction to achieve a higher planning index. Training content needs assessment is also required for training courses, and organizing managers must have a track record of delivering these courses, in addition to their knowledge and expertise. Managers of the organizers of the classes will also be selected from experienced and specialized people in the field.

Use the new technologies in the classroom to increase the effectiveness of your lessons. It can also provide a platform for learners to Cavalcanti, S. C. H, Niculau, E. d. S, Blank, A.F, Camara, C. A. G, Araujo, I.N, and Alves, P.B,2010, Composition and acaricidal activity of *Lippia sidoides* oil against two-spotted spider mite(*Tetranychus urticae* koch), Bioresource Technology, 101, 829-832.

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share their research findings and experiences with other citizens and even to encourage entrepreneurship and employment in the field of medicinal plants.

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