

# Effects of Citizenship Education on Knowledge, Attitude, Subjective Norm and Behavioral Intention of High School Girls in Shiraz, Southern Iran

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## Abstract

**Background/Objective:** This study aimed to address the knowledge gap in citizenship education. In other words, there was an attempt to investigate the effect of a citizenship education program on knowledge, attitudes, subjective norms, and behavioral intention of high schools girls.

**Methods:** 228 female students, 91 in the experimental and 137 in the control groups participated in this study. A questionnaire was used to collect the data. The educational program was run in the experimental group using interactive teaching-learning techniques. The research data were, then, analyzed in SPSS, using inferential statistics.

**Results:** The mean score of the students' knowledge in the experimental group increased from  $7.35 \pm 1.93$  in the pretest to  $11.14 \pm 1.78$  in the posttest, while in the control group this score remained approximately the same in the pre- and post-tests. The pre- and post-test means of attitude scores were statistically different, but not in the control group. The pretest mean scores of the subjective norm in the experimental and control groups were relatively similar, but in the posttest it became significantly different (experimental:  $25.78 \pm 3.77$ , control:  $23.40 \pm 4.62$ ). The students' behavioral intention score increased from  $18.51 \pm 2.71$  to  $20.87 \pm 3.04$  in the experimental group. The mean scores of intention in the pretest and posttest were not statistically different in the control group. In the second posttests, the levels of these constructs remained unchanged in the control group, but they were significantly higher than pretest scores in the experimental group.

**Conclusion:** This study revealed the adolescents' need for as well as the efficacy of a citizenship education program.

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## Introduction

The future of the societies' advancement in a challenging, competing world is greatly determined by their current state of adolescents' health and development. Therefore, one of the essential duties of any society is to prepare its young people to lead productive and prosperous lives as adults. In this regard, citizenship education is highly acknowledged by experts as an important strategy for healthy youth development.<sup>1,2</sup> Citizenship has been defined

in various ways. In general, citizenship implies the rights and privileges each community or state considers for its citizens as well as behaviors and duties expected from them.<sup>3</sup> As defined by Dalton, citizenship is "a set of norms of what people think people should do as good citizens".<sup>4</sup> Definitions of citizenship share some aspects in common; among them are individual and collective responsibility,<sup>5</sup> awareness and understanding of the authorities and the processes of decision-making in the society, understanding and respect for historical and cultural

heritage and values in a country where he/she lives, having a sense of belonging to the society and social membership for active participation in community affairs, adherence to laws, and paying taxes.<sup>2,3</sup> In addition, most experts consider some fundamental aspects or components for citizenship. These aspects may include, but not limited to, civil, political, social and economic rights,<sup>3, 6</sup> national consciousness or identity, observance of rights and duties, and general intellectual skills.<sup>7</sup> With regard to community development, citizenship points to citizens' roles, qualifications, and other desired attributes contributing to their own and community/nation progresses.<sup>3</sup>

Evidence emphasizes significant interrelationships between citizenship, health, and social development. The society's health and development depends mostly upon its citizens who are qualified, self-efficacious, conscientious, knowledgeable, competent, actively participating in the community affairs, purposeful and make responsible choices.<sup>5, 8</sup> The changing nature of today's society and the effects of globalization on communities require citizens across different nations to be knowledgeable and skillful for coping with challenges in an effective manner, both at individual and collective levels.<sup>9</sup>

Citizenship can be learned and taught by carefully selecting curricular content and using appropriate teaching-learning strategies. Well-planned educational programs on citizenship could be effective in promoting prosocial behavior, reducing problem behaviors, enhancing academic motivation, improving educational achievement, and fostering democratic values and characters among adolescents in the schools.<sup>10</sup> To be effective, educational programs should be preplanned, theory-based and holistic in their approach, and select and use effective teaching-learning methods properly. The training initiatives most likely to achieve desired outcomes are based on a clear understanding of targeted behaviors, and the social/environmental context in which they occur.<sup>11</sup> Theory of health behavior provides a road map for studying problems, understanding and predicting health behavior, developing appropriate interventions, and evaluating their successes.<sup>12, 13</sup>

Since citizenship is an individually and most importantly socially derived phenomenon, theories of behavioral change seem very useful but necessary for both analyzing and setting training programs for nurturing citizenship-related behaviors and characters.<sup>14, 15</sup> One of the most researched theories of health behavior is the Theory of Reasoned Action (TRA). This theory and its extension, Theory of Planned Behavior (TPB), has been found to be very useful in explaining and predicting a wide range of behaviors. For instance, these theories

were utilized, with significant applicability, in investigating and formulating related interventions for behaviors like "adolescents' use and misuse of alcohol",<sup>16</sup> "teachers' decisions regarding the use of educational technology",<sup>17</sup> and explaining and predicting young adults' behavioral intentions to use amphetamines.<sup>18</sup>

The TRA suggests that the most immediate and important predictor (determinant) of volitional behavior is one's behavioral intention to engage in that behavior.<sup>19</sup> Behavioral intention represents a person's motivation in the sense of her/his conscious plan, decision or self-instruction to exert effort to perform the target behavior.<sup>20</sup> Behavioral intention is predicted, in turn, by two main determinants: attitude toward the behavior (AB) and subjective norm (SN). Attitude toward performing a behavior comprises personal beliefs that the behavior will lead to certain outcomes as well as the value the individual places on those outcomes; Subjective norms refer to the person's perceptions of social pressure to perform, or not to perform, a particular behavior.<sup>19</sup> In another word, subjective norms consist of a person's beliefs about whether important people like parents and teachers think he/she should engage in the citizenship-related behaviors.<sup>11</sup>

In sum, TRA approaches health behavior from two aspects: personal (intrapersonal) and social (interpersonal). Since citizenship-related behavior also comprises of these two aspects, this theory seems to be applicable for analyzing, as well as developing a citizenship education project. Heretofore, as far as we searched, the theories have rarely been applied to citizenship. Therefore, as the first theory-based citizenship education, it is reasonable to believe that TRA will provide a useful foundation to investigate citizenship-related intention and behavior.

In the present study, the main constructs of TRA, including attitude, subjective norms, and behavioral intention were used. Students' citizenship-related knowledge was measured as another impact factor. The aim of this study, therefore, was to evaluate the effect of an educational program on citizenship-related knowledge, attitude, subjective norm and behavioral intention of high school girls in Shiraz, the capital city of Fars province in southern Iran.

## Materials and Methods

### *Study Design and Sample*

In the present field trial, a pretest-posttest controlled design was used. From a total of 17 female high schools, in the third education area of Shiraz, having all three majors including mathematics-physics, experimental sciences, and human sciences, two schools were selected by using simple random sampling method. To

prevent possible leakage of information between subjects in the intervention and control groups, a clustered random allocation was used. Therefore, instead of students, schools were randomly allocated to intervention and control groups. Due to the low number of students in the control group, another school was randomly selected and added to that group. In each school, one classroom from the second grade of each major was selected in order to be enrolled in the study. In sum, a total of 228 students, including 91 in the intervention group and 137 in the control group, were recruited in this study. The inclusion criteria were (a) being in the second grade, (b) studying in one of the three majors in high schools including experimental, humanistic and math sciences, and (c) agreeing to participate in the study. In addition, absence in pre- and/or post-tests, and more than one session of the training program was considered as exclusion criteria.

#### *Measurements and Instruments*

In this study, a self administered questionnaire and a knowledge test, constructed by the research team, were used. The questionnaire was composed of questions, categorized in 4 parts, for assessing the participants' demographic information, attitude, subjective norms, and behavioral intention. After preparing the table of specifications and the survey forms, the content validity was approved, using the ideas of 7 specialists majoring in health education and social sciences. A pilot test in a sample of students ( $n=25$ ), using test-retest method, was run to evaluate the reliability of the tools.

The knowledge test was composed of 15 multiple choice questions, with a dichotomous scale scored 0 for wrong and 1 for correct answer. The test-retest analysis showed this test as reliable ( $r=0.82$ ,  $P<0.001$ ). Knowledge scores ranging from 0 to 7.99, 8 to 11.99, and 12 to 15 were considered as low or undesirable, average, and high or desirable knowledge levels, respectively. A 5-point Likert-type scale (scored 1, strongly agree, to 5, strongly disagree) was used for 22 questions of the attitude part (e.g. adherence to citizenship rules and behaviors makes a person feel socially secured). The scores ranged from 22 to 110. Scores from 22 to 65.99, from 66 to 87.99, and from 88 to 100 were considered as the low, average, and high (desirable) levels of attitude, respectively ( $r=0.94$ ,  $P<0.001$ ).

Seven items were used to assess subjective norms with a rating scale of very much, much, average, little, and very little, and a scoring range of 1 to 5 (e.g. How much do you think your parents want you to follow citizenship rules). The raw scores of SN were categorized as low (7 to 21.99), average (22 to 27.99), and high (28 to 35). The correlation coefficient ( $r$ ) of this construct was

0.97 ( $P<0.001$ ).

The behavioral intentions were assessed using 5 questions such as 'If you are knowledgeable about citizenship's characteristics and skills through a training program, do you intend to follow these in your life in the forthcoming month?' A rating scale (scored 1, extremely unlikely, to 5, extremely likely) was also used for eliciting the students' responses. The intention scores ranging from 5 to 14.99, 15 to 19.99, and 20 to 25 were considered as low, moderate and high levels of intention, respectively. This part was also reliable with a correlation coefficient of  $r=0.94$ , and  $P<0.001$ .

#### *Intervention*

The students were informed about the objectives, advantages, and conditions of taking part in or resigning from the study at the beginning of the research. The educational program, run in the experimental group, included four 60-90 minutes sessions of direct teaching using interactive lecture and small group techniques like buzz group and snowballing techniques as well as some guided individual learning tasks. For example, the students were receiving a number of questions for query using the project's booklet and other sources like internet and/or the library resources.

#### *Statistical Analysis*

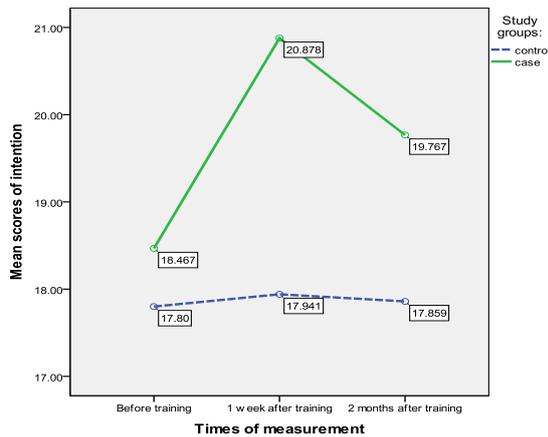
Data collection using the study tool was run at three times: before, a week after, and two months after termination of the educational intervention. The collected data were, then, analyzed in SPSS statistical software, version 11.5. The statistical tests used were Chi-squared or Mann-Whitney tests for comparing the study groups according to demographic and background variables and repeated measurement analysis with LSD test for comparing the trend of changes in the main study constructs within and between groups through 3 phases of measurement. The significance level was set as 0.05.

#### **Results**

Statistical analyses showed no significant differences between experimental and control groups in relation to their (students') demographic and academic background variables. Teachers in both groups were also similar regarding their degrees and majors.

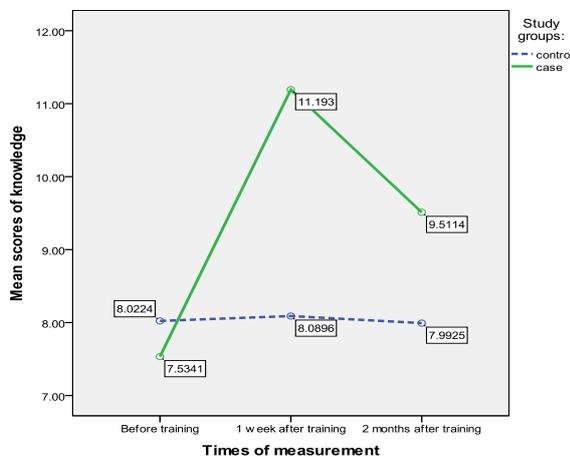
The mean scores of behavioral intention in the experimental and the control groups were  $(18.52\pm 2.72)$  and  $(17.79\pm 3.21)$ , respectively. The mean scores of the behavioral intentions in the experimental group increased up to 20.87 in the first post-test. The mean $\pm$ SD of this construct in this group, although decreased a

little in the second post-test (i.e.  $19.77 \pm 3.31$ ), was still higher than the pre-test level. The mean scores of the behavioral intention in the control group in the first and second post-tests were  $17.94 \pm 3.28$  and  $17.85 \pm 3.47$ , respectively. Using repeated measurement analysis and LSD multiple comparison test, trends of the observed changes through phases of measurements within and between the study groups were statistically significant ( $P < 0.001$ ) (Figure 1).



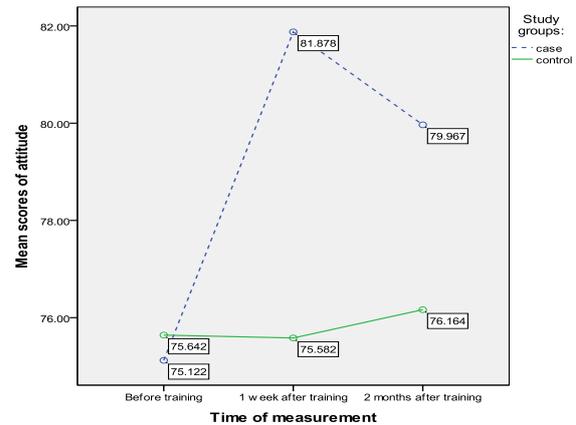
**Figure 1:** Comparison of the mean scores of behavioral intention between the study groups through phases of measurement.

The mean  $\pm$  SD of the participants' knowledge about citizenship in the experimental group, as compared to  $7.54 \pm 2.00$  in the pretest, increased to  $11.14 \pm 1.78$  in the post training phase. Their mean score of knowledge was  $9.46 \pm 2.49$  in the second post training measurement. As shown in Figure 2, the students' average knowledge levels in the control group remained relatively the same through three stages of measurement. Repeated measurement test with LSD multiple comparison test showed that trends of changes in knowledge levels within and between the study groups were statistically significant ( $P < 0.001$ ).



**Figure 2:** Comparison of the knowledge mean scores between the study groups through phases of measurement.

While findings in the control group showed no significant changes in their attitudes through pretest ( $75.48 \pm 7.66$ ), first ( $75.56 \pm 6.45$ ) and second posttest ( $76.16 \pm 8.29$ ), the post training measurements (first:  $81.88 \pm 5.48$ , second:  $79.97 \pm 7.26$ ) showed significantly higher levels of attitude scores than pre training scores ( $75.23 \pm 7.13$ ) in the experimental group. Repeated measurement analysis confirmed the significance of changes in the experimental group as well as the difference between this and the control group ( $P < 0.017$ ). But, based on this analysis, the difference between means in the first and second posttest in the experimental group was not statistically significant (Figure 3).

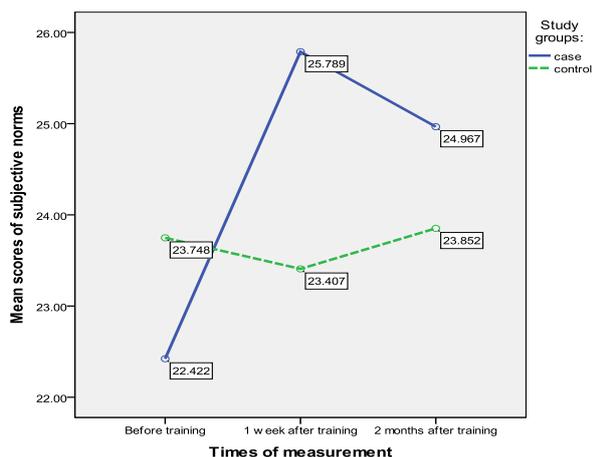


**Figure 3:** Comparison of attitude mean scores between the study groups through phases of measurement.

As shown in Figure 4, the mean  $\pm$  SD for subjective norms of the experimental and control groups were  $22.50 \pm 4.45$  and  $23.73 \pm 4.20$  at pretest, respectively. The first post-test showed a significant increase in the mean scores of this construct in the experimental group ( $25.78 \pm 3.77$ ). In spite of a little drop in the final post-test the mean scores of SN in the experimental group ( $24.96 \pm 4.03$ ) were still higher than those of the pretest. The mean scores of SN obtained in the control group through posttests were similar to those of the pretest. In general, the repeated measurement analysis confirmed that the trend of changes, specifically in experimental group, were statistically significant ( $P < 0.001$ ). However, the trend of changes was not statistically significant between experimental and control groups. This analysis also revealed that the difference between the pretest and the first posttest was significant ( $P < 0.001$ ).

**Discussion**

This study showed that a planned theory-based educational intervention about citizenship results in improved knowledge, attitudes, subjective norms, and behavioral intention. As discussed in the literature, knowledge is often considered as a



**Figure 4:** Comparison of the subjective norms mean scores of subjective norms between the study groups through phases of measurement.

prerequisite and predisposing factor to behavioral change.<sup>21</sup> For many social scientists, the single most important component of citizenship education and political engagement is knowledge.<sup>22</sup> Knowledge is considered as an essential attribute of responsible citizenship; in this regard, Milner argued that higher rates of civic knowledge are correlated with rates in political (community) participation such as voting.<sup>23</sup> Evidence, on the other hand, shows the efficacy of planned educational intervention in knowledge enhancement to facilitate acquiring desired behaviors, including expected citizenship practices.<sup>24</sup> With these facts in mind, the low levels of students' knowledge about citizenship, as found in the pretest phase of the present study, might be due to the lack of related educational programs in schools. Other studies have also shown that in many countries, including Canada, youth civic knowledge was low.<sup>22</sup> Therefore, the significantly post-intervention knowledge improvement of students in the experimental group, along with supportive evidence from other studies, is in favor of the efficacy of education intervention used in this study in enhancing their knowledge about citizenship.

In accordance with other studies, the findings of this study support the assumption that attitude is learned and, therefore, can be taught. Attitudes may change through personal experience, reflection on personal experience, group interaction, and other learning, professional, or social experiences.<sup>25</sup> Good attitudes are essential elements of responsible citizenship and thus developing them through effective educational initiatives is of great importance.<sup>26,24</sup> One of the most important attitudes expected from citizens is attitude of participation; effective and good citizens believe in the efficacy of civic participation, are interested in participating, engage in co-operative activities, and respect the diverse viewpoints.<sup>27</sup> Improvement of attitude in the students of the experiment group reveals

the effectiveness of the educational intervention on the change of attitude. As Abdullah and his co-researchers also showed, health education intervention was effective in improving young adults' AIDS-related attitudes.<sup>28</sup>

Numerous studies have also demonstrated that social influences have major impacts on individuals' behaviors through groups and their social environments including family and school.<sup>29,30</sup> This fact has also been emphasized in most theories/models of health behavior such as PRECEDE/PROCEED model<sup>21</sup> and social cognitive theory.<sup>13</sup> The influential psychosocial environment is clearly reflected in most citizenship definitions. Citizenship norms, what is expected of the public as 'good' citizens, is defined as a shared set of expectations about the citizen's role in politics. These norms tell citizens what is expected of them, and what they expect of themselves.<sup>4</sup> Therefore, as highlighted in TRA as subjective norm construct, involving important persons of potential influence may help behavioral changes in the target audience. Gottfredson and Wilson in their systematic review have recognized that approaches aimed at changing normative beliefs about drug use increase the effectiveness of school-based substance abuse prevention programs.<sup>31</sup> During the study, a brief orientation with the project for schools' principals and their assistants was conducted. Informing parents about the program was simply done through their children and, in part, by homework assigned for students as individual learning activities.

The relatively significant increase in the students' SN scores after the intervention can be interpreted as an indicator of the effectiveness of the study's educational program. However, the modest increase in subjective norm in this study as well as a slight decrease in the students' SN scores in the second posttest may be due to a number of reasons. Although this issue requires additional research, it is believed that interventions targeting at subjective norm have been limited; moreover, no sufficient data about how and to what extent the students' parents and teachers participated in a dialogue with students about citizenship were available. The situation might be as Liewllyn and Wertheimer reported from their study participants that families rarely shared civic knowledge with their children.<sup>22</sup> In their study on preventing the drug abuse in adolescents, Tavousi et al. also found that the educational intervention did not have a significant impact on increasing the subjective norm scores of the participants.<sup>32</sup> It is worth noting that at the same time when the second posttest of this project was running, the students were concerned about their final examinations in that academic year. Further, it seems that the duration of the intervention should be long enough and

preferably not overlapped with events such as examinations, to achieve more desirable results with subjective norm.

In the present study, a special intervention was neither designed nor performed in order to improve the knowledge, attitude, and involvement of potential influential individuals in social environment of the students. Although no similar interventional study regarding the content, methods as well as duration of intervention was found, it appeared that the training intervention was short in duration in the current study. It seems that a longer time is required for such a program to achieve more effective sustainable improvements. Similarly, a great number of students commented on the need of allocating more time to citizenship education for them.

Finally, according to the theory of reasoned action, intention is the most important predictor of behavior. Intention is actually the reflection of a person's motivation, preparation, and willingness in order to perform a healthy behavior. Therefore, people's behavioral intention is quite important in both analysis and prediction of healthy behaviors.<sup>33</sup> With regard to citizenship, the findings of some studies show that young people are not as active as they should be in social/political affairs. At the same time, there are gaps in the students' civic knowledge, experiences, and intentions.<sup>22</sup> Results of the present study support this hypothesis in that the behavioral intention can be improved through appropriate training programs. Many studies have also demonstrated the success of educational interventions on enhancing this important precedent of behavior. For instance, interventional studies on nutrition,<sup>34</sup> physical activity,<sup>35</sup> and natural childbirth<sup>36</sup> are worth mentioning. As the findings showed, the mean score of the students' behavioral intention increased in the experiment group, while no significant changes in behavioral intention was observed in the control group. Although a slight decrease in the students' intention score in the experimental group in the second posttest was observed, scores were still higher than those of the students in the control group. As a final point, concerning the main study variables, the slight decrease in students' knowledge, attitude, and intentions over the two month period compared to immediate post-intervention shows the need for periodic training of the students, accompanied by appropriate initiatives for involving the parents and teachers to gain more sustainable synergistic results.

#### Limitations

There were some limitations in this study. Sampling of 3 schools in one area of Shiraz city may have compromised the extent to which the study findings could be generalized to other

geographical locations. The results of the study may also partly be affected by the time situation in which the study, especially posttests, was implemented. The second month after the training program was overlapped with the last month of the academic year in which the teachers and students were concerned with issues such as finalizing courses and preparing for examinations.

#### Implications and Contribution

This study revealed the adolescents' need for as well as the efficacy of a well-planned citizenship education program. The present framework seems helpful for the education authorities in developing citizenship education programs. However, additional studies are required to further confirm these initial findings, using our approach as well as other theories of health behavior.

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**Conflict of Interest:** None declared

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