

The Effects of Training – Based on Knowles' Adult Education Principles – On Participants

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Received 26 September 2017 • Revised 12 October 2017 • Accepted 14 November 2017

ABSTRACT

In this research, it is planned to identify the effect of adult education principles of Knowles based first aid training on participants. Accordingly, this study aims to identify academic success of participants and analyze their views related to their first aid knowledge levels before and after the application of first aid training. Also, participants' views about training have been taken after first aid training. Within this context, research problem is: "What is the effect of first aid training on participants? Mixed design research model has been used in this research. Study group of this research include 120 participants from different sectors and institutions who attend first aid training. Within the scope of this study, academic success test, participants' views about their first aid knowledge levels survey and participants' views about training survey have been applied. Within the context of this study, it is concluded that first aid training -which is planned on basis of adult education principles- increases academic success related to first aid topics and that participants' views about their first aid knowledge change in a positive way after first aid training program.

Keywords: adult education, Knowles' principles, first aid training, andragogy

INTRODUCTION

The developments in many aspects of life make the change necessary, especially in human qualities which are needed in social life. Due to this necessity, knowledge and skills individuals get during basic education process fail to be sufficient for the rest of their life. "Lifelong Learning" approach has been grounded on basis of notion that the things people learn in their childhood may not be valid and useful until the end of their life.

European Commission (2002) defines lifelong learning as "all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competencies within a personal, civic, social and/or employment-related perspective".

With the lifelong learning approach, satisfying the educational needs of people in society in all periods of their life becomes one of new responsibility areas of educators. From this point of view, as intended population (learner population) will include not only children but also adults, it is noticed that adult education methods should be involved during education process as well as pedagogical methods.

The concept of "andragogy" attracts a great deal of attention when adult education history is reviewed. This concept was first used by German Alexander Kapp in 1833. Afterwards, researchers such as Dusan Savicevic and Lindeman made a big contribution to popularity of this concept. Malcolm Knowles -accepted as the father of adult education- is regarded as the researcher who makes the concept of andragogy most popular all around the world. When adult education started to be systematically organized in 1920s, Knowles noticed that traditional pedagogical model was not sufficient. Then, he created a new theoretical model in 1960s called as andragogy. Knowles used the word of andragogy to define the learning systems of adults, as distinguished from pedagogy. In response to pedagogy which mean "art and science of teaching children", he made a definition of andragogy "the art and science of leading or helping adults learn". Malcolm Knowles -who advocated that the needs of adults differed from children and therefore their educational needs and learning should differentiate- pointed out that there existed

Contribution of this paper to the literature

- First aid training increases academic success of attendants.
- It is concluded that first aid training program used in this study makes positive contributions in terms of acquiring new knowledge, facilitating learning through group study, recognizing false facts through sharing of experience and the chance of active participation into training.
- Participants who find the opportunity of self-expression and sharing of experiences, became more motivated during training and participated more actively into learning activities.

basic differences between children and adult learners and he explained those differences within the framework of six basic assumptions (Lindeman, 1926; Knowles et al., 1998; Terehoff, 2002; Reischmann, 2004; Thompson and Deis, 2004; Ozuah, 2005; Forrest III and Peterson, 2006; Yoshimoto et al., 2007):

1. **Need to Know:** Adults want to know why they need to learn something before undertaking learning. Facilitators must help adults become aware of their "need to know" and make a case for the value of learning.
2. **Self-Concept of Learners:** Adults believe they are responsible for their lives and they need to be seen and treated as capable and self-directed. Facilitators should create environments where adults develop their latent self-directed learning skills.
3. **The Role of the Learners' Experiences:** Adults come into an educational activity with different experiences than do youth. There are individual differences in background, learning style, motivation, needs, interests, and goals, creating a greater need for individualization of teaching and learning strategies. The richest resource for learning resides in adults themselves; therefore, tapping into their experiences through experiential techniques (discussions, simulations, problem-solving activities, or case methods) is beneficial.
4. **Readiness to Learn:** Adults become ready to learn things they need to know and do in order to cope effectively with real-life situations. Adults want to learn what they can apply in the present, rather than training focused on the future or which does not relate to their current situations.
5. **Orientation to Learning:** Adults are life-centered (task-centered, problem-centered) in their orientation to learning. They want to learn what will help them perform tasks or deal with problems they confront in everyday situations and those presented in the context of application to real-life.
6. **Motivation:** Adults are responsive to some external motivators (better job, higher salaries) but the most potent motivators are internal (desire for increased job satisfaction, self-esteem).

Recently, knowledge and skills of "first-aid" become included among the human qualities society need because people might be exposed to accidents, natural disasters and illnesses in their environments in any period of their life. A large number of people lose their life or become permanently disabled in home, work or traffic accidents.

Globally, in every year 1.17 million of people lose their life and more than ten million people become permanently disabled or injured as a result of traffic accidents (KAİK, 2013). In 2016 in Turkey, 7.300 people lost their life as a result of 185 thousand 128 accidents involving death or personal injury (TUIK, 2017).

The similar negative situation attracts the attention when it comes to work accidents. Globally, in every year approximately 270 million work accidents occur, and unfortunately approximately 5 thousand workers daily and 2 million workers annually lose their life and 160 million workers catch occupational illnesses. In Turkey, the number of insured workers who lose their life as a result of work accident in 2015 is 1252 (Bilir, 2016).

World Health Organization (WHO) (1998) aims to reduce accident and violence based death and injuries regarding youth by at least 50% until 2020. For this purpose, WHO started the projects for making first aid trainings more common in Turkey and all around the world. Within the framework of 4857 Number Labor Legislation The Ministry of Health First Aid Regulation (Official Journal: 18.03.2004 Issue: 25406); it is imposed as an obligation that all institutions must include 1 first aider per 20 personnel; and workplaces with heavy and dangerous works should must include 1 first aider per 10 personnel who have taken a certificate of "Basic First Aid Training" from authorized centers.

First aid includes saving life in any accident or situation which puts life at risk, until health officers are available, or drug-free treatment with current facilities for purpose of preventing the situation become worse in the accident place without using medical devices (İnan et al., 2011).

Early response can increase the chance of injured or sick people in an illness or accident situation which might be experienced by them in an unexpected time, it can also prevent it from becoming worse and make healing process easier. In order for proper and punctual response, there is a need for individuals with first aid training. Improper first aid practices can delay healing process, resulting in permanent injuries or death. Death and disability injuries can be reduced thanks to making conscious first aid interventions within the first minutes of accident. There

are some studies which indicate that 10 percent of death take place within first five minutes of accident and 50 percent within thirty minutes. Also, it is identified that death can be reduced by up to 38% thanks to a proper and punctual response in the accident area and the most efficient first aid practice is done within first five minutes (Singer et al., 2004; Lingard, 2002). These studies show that it is really vital people who witness accident situations should be knowledgeable about first aid. Therefore, notably risky groups such as workers who work at heavy and dangerous works, drivers, policemen, firefighters, and in the most general sense, all working groups of society should have knowledge about first aid. Increasing number of individuals with first aid training across the country will reduce the damage of accident victims with a proper and punctual intervention.

Public and private sector and individuals notice the significance the first aid trainings when they witness the efforts of increasing number of individuals with first aid training both in the world and Turkey. They resort to educational institutions who supply trainings about this subject in order to improve themselves. As a result of demand, those educational institutions feel themselves responsible for supplying this service to adults who need training about first aid. This situation makes it necessary for educational institutions to use methods appropriate for adult education in addition to teaching methods related to pedagogy because adult and children differ from each other in terms of many aspects such as physical and cognitive situation, experience and needs. Therefore, as Knowles emphasized, it is acknowledged that as the needs of adults differ from children, their learning and educational needs also differentiate (Birzer, 2004). Therefore, if intended population include adults who demand learning, planning of educational process should be appropriate for adult education process for achieving desired terminal behaviors. It is supposed to be really crucial that first aid training should be done at an intended level, which is expected to give rise to making a proper intervention in accident or illness situation, preventing the injured from becoming worse and making healing process easier. In this research, it is planned to identify the effect of adult education principles of Knowles based first aid training on participants. Accordingly, this study aims to identify academic success of participants and analyze their views related to their first aid knowledge levels before and after the application of first aid training. Also, participants' views about education have been taken after first aid training. Within this context, research problem is: "What is the effect of first aid training on participants?" Subproblems are listed as:

1. What is the effect of first aid training on participants' academic success?
2. What is the effect of first-aid training on participants' views about their first aid knowledge levels?
3. What are the participants' views about first-aid training?

METHOD

This section gives information about research model, study group, development of data collection tools and analysis of data. It also includes information about the development of first aid training program used in this research and its application process.

Research Model

This study aims to identify the effect of first aid training -which is based adult education principles of Knowles- on participants' academic success and participants' views about their first aid knowledge levels. Also, teachers' views have been taken about the training at the end of first aid training program. In accordance with this, mixed design research model has been used. It is possible to define mixed method as mixing both quantitative and qualitative research methods in one part of study or during two or more parts of research process (Balci, 2010). Thus, blending both quantitative and qualitative data sets have been analyzed in a richer understanding with adoption of strategies such as synthesis, triangulation and aggregation. In this way, especially the complexity of social phenomena is reduced by aggregating different methods and making a deeper discussion and this leads to better understanding of phenomena (Creswell, 2003).

Pre-experimental design has been used in quantitative part of study in order for identifying the effect of first aid training -which is based on adult education principles of Knowles- on participants' academic success. "One group pre-test post-test design has been preferred among pre-experimental designs (Cohen et al., 2007). In these studies, one observation model is used by applying independent variable on only one group and measuring the effect of independent variable on dependent variable (Karasar, 2002). **Table 1** shows the detailed research design of this model.

Table 1. Detailed Research Design

Experimental Group	Pre-tests	Application	Post-tests
	Academic Success Test	First aid Training	Academic Success Test

In qualitative part of study, participants' views about their first aid knowledge levels survey has been used before and after training for identifying participants' views about their first aid knowledge levels. Also, participant views about first aid training program survey has been used for analyzing participants' views about the training.

Study Group

Study group of this research include 120 participants from different sectors and institutions who attend first aid training.

Data Collection Tools

Within the scope of this study, academic success test, participants' views about their first aid knowledge levels survey and participants' views about training survey have been applied. There is a detailed information about data collection tools in the following paragraphs.

Academic success test

Success test has been developed for purpose of identifying the effect of Knowles principles of adult education based- first-aid training on participants' academic success scores. Academic success test is developed in accordance with objectives of first-aid training subjects. Within scope of 13 subjects, test is composed of 52 pilot items including at least three items intended for each subject's objectives. The items have been reviewed by field experts and their suggestions have been applied. Pre-implementation of test has been applied to 160 individuals (out of study group) who got this training before. 12 items have been removed from test whose item discrimination index is below 20 (Turgut, 1992). KR-20 value of this test is found to be .77. Based on this result, it possible to claim that the developed success test is a reliable instrument.

Participants' views about their first aid knowledge levels survey

This survey is developed by researcher to identify how first aid training program affects participants' views about their first aid knowledge levels. This survey is a three point Likert scale (well informed, less informed, uninformed).

Participants' views about first aid training program survey

This survey -which is developed by researcher to identify participants' views about first aid training program- includes open-ended questions because it is anticipated participants give answers without any constraint. The survey consists of five open-ended questions.

First Aid Training and Its Application

First aid training program has been developed in accordance with adult education principles. In this regard, the following issues have been considered during program development process;

1. The need to learn: Adults want to know why they need to learn something before undertaking learning. Most of the adults have been sent to training due to the choice of their institutions. Therefore, participants who attend the first day of training come reluctantly and without feeling the need to learn this subject. In the beginning of training, individuals have been taught why people need to know this subject for a healthy and secure life with examples emphasizing the significance of first aid. In this way, training helps participants to understand in what kind of situations they will need this knowledge which increases their feeling of need to learn.
2. Learners' Self-Concept: Adults believe they are responsible for their lives and they need to be seen and treated in this way. Facilitators should create environments where adults develop their latent self-directed learning skills. For this reason, methods, techniques and environments appropriate for enhancing latent self-directed learning skills have been preferred and created.
3. The Role of Learners' Experience: The richest resource for learning resides in adults' own experiences; therefore, for purpose of utilizing their experiences through experiential techniques (discussions, simulations, problem-solving activities, or case methods), educational settings have been created which allow sharing of their experiences.
4. Readiness to Learn: Adults want to learn what they can apply in the present, making training focused on the future or not related to their current situations, less effective. For this purpose, the training includes the

most recent examples about first aid subject and it is often expressed that this knowledge will really help them all along their life.

5. Orientation to Learning: They want to learn what will help them perform tasks or deal with problems they confront in everyday situations. During training process, they have been given the problem scenarios calling for first aid situations which happen to them or might possibly happen in their private or professional life. Solutions have been recommended about these problem scenarios.
6. Motivation: Although adults are responsive to some external motivators (e.g., better job, higher salaries), the most potent motivators for them are internal ones. During training process, activities are planned in such a way to increase participants' internal motivations.

Educators who take part in training process take mission of guidance by facilitating learning, rather than a figure of authority. They are both teachers and learners at the same time. Changing the classic understanding between classroom and teacher, U sitting arrangement is done in class to create a comfortable and secure physical setting for participants. Training lasted two days with groups of 10 participants (16 hours at total). "Academic Success Test" and "Participants' Views about First Aid Knowledge Levels Survey" have been applied before and after training; and "Participants' Views about Training Program Survey" has been applied only after training.

Data Analysis

Frequency analysis has been done on qualitative data collected by surveys. "Qualitative Content Analysis" is used in analysis of data collected by open-ended questions. These phases are; identification of categories, exemplifications and determining coding rules in advance (Mayring, 2014). This analysis is done by two experts and transcribed results have been coded separately. Each question is regarded as a theme and subthemes have been created from codes depending on questions. Then, the ratio of agreements and divergences between experts have been identified. Intercoder agreement ratio has been calculated. Miles and Huberman (1994: as cited in Yanpar, 2003)'s inter-coder reliability formula has been used for its calculation (Reliability Formula: Agreement/Agreement + Disagreement). As a result of analysis of open-ended questions in the survey, intercoder reliability has been found to be 0.85 for first item, 1.00 for second and third items.

Quantitative data of this study is composed of related measurements because of pre-test and post-test measurements. It is checked whether academic success test pre-test - post-test scores distribute normally or not. For normality of distribution (N≥30) Kolmogorov-Smirnov results have been taken into consideration. As it appears that normality is not ensured, it is decided to make use of Wilcoxon test.

FINDINGS

The findings have been obtained with data collection tools developed within the context of this study. The findings obtained are given according to subproblems.

Findings Related to First Subproblem of Study

In this part, there are findings related to the effect of first aid training -which is based on adult education principles- on participants' academic success scores. Data about academic pre-test – post-test scores are given below.

At first, t-test analysis is planned to be used for analysis of difference between pre-test and post-test academic scores of participants in study group, and assumptions of this test have been checked. **Table 2** shows the normality test results related to disease knowledge academic success scores.

Table 2. Normality Test Related to First Aid Training Academic Scores

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PreTest	.162	120	.000	.927	120	.000
PostTest	.095	120	.010	.952	120	.000

As seen in **Table 2**, the normality of distribution is not ensured which is among the assumptions of this test, therefore Wilcoxon Test has been preferred. **Table 3** shows Wilcoxon Test results.

Table 3. Wilcoxon Test Results Related to Disease Knowledge Academic Success Test Scores

		N	Mean Rank	Sum of Ranks	Z	P
Academic Success	Negative Rank	0	.00	.00	-9.524	.000
Posttest – Academic Success	Positive Rank	120	60.50	7260.00		
	Equal	0	-	-		

Findings Related to Second Subproblem of Study

Table 4 shows the findings related to participants' views about their first aid knowledge levels.

Table 4. Descriptive Statistics About Participants' Views About Their First Aid Knowledge Levels (n:120)

First Aid Subjects	Well informed		Less informed		Uninformed	
	Pre-test f	Post-test f	Pre-test f	Post-test f	Pre-test f	Post-test f
Definition of first aid and its qualities	-	120	15	-	105	-
Definition of first aider and his/her qualities	-	120	15	-	105	-
Scene of Accident Investigation Principles	-	120	10	-	110	-
Principles of Evaluating the Sick or Injured	-	115	20	5	100	-
Normal Respiration Rate in Adults	-	120	5	-	115	-
Normal Respiration Rate in Children	-	120	5	-	115	-
Normal Respiration Rate in Babies	-	120	5	-	115	-
Normal Heart Rate in Adults	-	120	8	-	112	-
Normal Heart Rate in Children	-	120	8	-	112	-
Normal Heart Rate in Babies	-	120	8	-	112	-
Definition of Fracture and Its Types	2	120	10	-	108	-
Definition of Wounds and Its Types	3	120	9	-	108	-
Definition of Bleeding and Its Types	2	120	7	-	111	-
Definition of Ambustion and Its Types	3	120	15	-	102	-
Definition of Freezing and freezing points	1	120	8	-	111	-
Definition of Shock and Its types	-	115	7	5	113	-
Epilepsy	-	120	15	-	105	-
Patient handling techniques	1	117	17	3	102	-
Allergic Diseases	3	116	19	4	98	-

As seen in **Table 4**, when pre-test and post-test findings related to participants' views about their first aid knowledge levels are reviewed, it is observed that there is an increase in a positive way. **Table 5** shows the findings related to participants' views about their first aid knowledge levels.

Table 5. Descriptive Statistics Related to Participants' Views About Their Knowledge Levels Of First Aid Emergence Situations They Might Experience (n:120)

Situations They might experience in Hospital Grades Related to disease situations of children	Well informed		Less informed		Uninformed	
	Pre-test f	Post-test f	Pre-test f	Post-test f	Pre-test f	Post-test f
Investigating scene of accident when witnessing an accident or a situation	-	120	5	-	115	-
Primary assessment of a sick or injured person	-	116	2	4	118	-
Secondary assessment of a sick or injured person	-	116	2	4	118	-
Providing basic life support for an injured or sick person	2	120	12	-	106	-
Making appropriate first aid intervention for fracture incidences	1	117	20	3	99	-
Making appropriate first aid intervention for bleeding incidences	1	118	17	2	102	-
Making appropriate first aid intervention for foreign body in ear	1	120	24	-	95	-
Making appropriate first aid intervention for foreign body in the nose	1	120	24	-	95	-
Making appropriate first aid intervention for foreign body in the eye	1	120	24	-	95	-
Making appropriate first aid intervention for patients with Epileptic Seizure	5	120	27	-	90	-
Making appropriate first aid intervention for diabetic patients	3	120	17	-	100	-
Making appropriate first aid intervention for syncope incidences	11	120	23	-	96	-
Making appropriate first aid intervention for ambustion incidences	3	120	24	-	93	-
Making appropriate first aid intervention for freezing incidences	2	120	16	-	102	-
Making appropriate first aid intervention for high fever incidences	20	120	44	-	56	-
Making appropriate first aid intervention for airway obstruction	5	120	25	-	90	-

As seen in **Table 5**, when it is reviewed the pre-test and post-test findings related to participants' views about their knowledge levels of first aid emergency situations they may experience, it is observed that there is an increase in a positive way.

Findings Related to Third Subproblem of Study

Table 6 shows findings related to participants' positive views about first aid training.

Table 6. Descriptive Statistics Related to Participants' Positive Views About First Aid Training (n:120)

Positive Views	f
Acquiring new knowledge	112
Facilitating learning through group study	87
Recognizing "false" facts through sharing of experience	81
The chance of active participation into training	50
Experiencing entertaining educational environment	35
Increase in motivation with role play and case studies	30
Recognizing the Seriousness (Significance) of First Aid	30

As seen in **Table 6**, participants respond to the question -which asks for their positive views about training- as acquiring new knowledge, facilitating learning through group study, recognizing false facts through sharing of experience, chance of active participation into training. **Table 7** presents findings related to participants' negative views about training.

Table 7. Descriptive Statistics Related To Participants' Negative Views About Training (n:120)

Negative Views	F
Too many topics	70
Short duration of training	50
Stress created by post-implementation test	35

As seen in **Table 7**, participants expressed their negative views which include "too many educational topics and short duration of training".

Table 8. Descriptive Statistics Related to Participants' Views About First Aid Training (n:120)

Suggestions	F
Reducing and simplifying topics	65
Extending the duration of training	50
Removing test out of training	35

As seen in **Table 8**, participants make suggestions which include reducing the number of topics about first aid, extending the duration of training and removing test out of training.

DISCUSSION AND RESULT

Within the context of this study, it is concluded that first aid training -which is planned on basis of adult education principles- increases academic success related to first aid topics. During the training which is developed considering adult's needs and qualities, it is often emphasized that getting first aid knowledge is a significant necessity for a healthy and secure life. Methods and techniques appropriate for participants' qualities and needs have been used and it is ensured that participants share their experiences by actively participating in training process. In this way, it raises awareness about false facts, and the emphasis is made on situations which are examples and nonexamples. Also, by designing sitting arrangement in U form it is ensured that all individuals can see each other, interaction is increased with this method and a warmer environment is created. As a result, as asserted by Knowles, planning a program considering adults' needs and qualities in adult education process can make a substantial contribution to the expected learning. In this study, a first aid training program has been planned and applied by considering adults' needs and qualities. The results obtained show that training program has succeeded its aims. There are some other studies which show similar findings with this study (Kureckova et al., 2017). Increase in participants' academic success is an expected outcome within context of this study. Changing participants' views about their knowledge of first aid in a positive way supports the finding which shows an increase in their academic success. Therefore, their views about their own first aid knowledge show a positive increase in parallel with academic success. As noted above, it is thought that first aid training -which is planned on

basis of adult education principles- not only increases academic success but also makes a positive change in participants' views about their first aid knowledge.

In an educational setting which is planned in accordance with their own qualities, participants who find the opportunity of self-expression and sharing of experiences, became more motivated during training and participated more actively into learning activities. One of the reasons underlying this active participation is that training includes activities which are expected to increase their intrinsic motivations (Barnett, 2008; Bye et al., 2007; Johnston, 2010). Studies which are conducted with adults indicate that adults are mostly motivated by intrinsic factors. This motivation makes a positive change in participants' academic success and their views about first aid knowledge and this can be observed in their expressions related to training program. Participants mostly expressed positive views such as acquiring new knowledge related to first aid training program, facilitating learning through group study, recognizing false facts through sharing of experience and active participation into training. As a result, academic success results of participants, their views about first aid knowledge levels and their views about first aid training program all show parallel findings with each other.

However, participants expressed that the training which lasted two days (16 hours) and included 13 subjects was overloaded in terms of content and topics, they suggested either to reduce the number of topics or extend the duration of training. Unfortunately, it is impossible to reduce the number of first aid topics because they are included considering basic crucial accident and illness situations and their knowledge is indispensable for a healthy and secure life.

Within the framework of 4857 Number Labor Legislation The Ministry of Health First-Aid Regulation (Official Journal: 18.03.2004 Issue: 25406); it is imposed as an obligation that all institutions must include 1 first-aid per 20 personnel; and workplaces with heavy and dangerous works should must include 1 first-aid per 10 personnel who have taken a certificate of "Basic First-Aid Training" from authorized centers. Therefore, a large number of participants come from a variety of organizations and institutions and their workplaces think that the time spent in training is a loss. Therefore, some organizations regard even two days of training as a big trouble for continuity of their works. Despite all these conditions, the duration of training can be extended by consensus after authorized units contact these organization and institutions.

In an accident or illness situation, there is a need for individuals who got first aid training for an appropriate and early response. As noted above, while inappropriate or late first aid responses may cause death or permanent injuries, appropriate and punctual responses can reduce incidences of death or permanent injuries to a big extent (İnan, Kurt, Kubilay, 2011; Singer, Gulla, Thode and Cronin, 2004; Lingard, 2002). At the end of training, academic success of participants related to first aid topics and their views about first aid knowledge show a positive increase. Thanks to training, there has been an increase in the number of individuals who are knowledgeable about first aid and incidences of conscious intervention in an accident or illness situation. This kind of trainings have the potential of increasing competences of participants related to first aid. Studies which are conducted with different segments of society indicate that when educational needs of people are identified in advance who have insufficient knowledge of first aid, their first aid knowledge levels make a substantial increase at the end of training (Li et al., 2014; Kureckova et al., 2017). For this purpose, it is important to make this kind of trainings popular and increase the number of individuals who are knowledgeable about first aid for an appropriate and punctual response in first aid situations.

RESULTS

- It is concluded that first aid training program used in this study increases academic success of participants related to first aid topics.
- It is concluded that participants' views about their first aid knowledge change in a positive way after first aid training program.
- It is concluded that first aid training program used in this study makes positive contributions in terms of acquiring new knowledge, facilitating learning through group study, recognizing false facts through sharing of experience and the chance of active participation into training.
- It is concluded that it is better to extend the duration of first aid training program.

SUGGESTIONS

- As a result of study, first aid training -which is based on adult education principles- not only increases academic success of participants but also changes participants' views about their first aid knowledge in a positive way. If learner population is composed of adults, it is suggested to plan educational program by taking adult education principles into consideration.

- Early response can increase the chance of injured or sick people in an illness or accident situation which might be experienced by them in an unexpected time, it can also prevent the situation from becoming worse and make healing process easier.
- First aid training was planned to last two days (16 hours) by official organizations. Considering the topics and content, it is observed that there exist too many topics to be covered. Duration of training should be reorganized in order to facilitate learning and increase participants' motivation.
- It is suggested to make publicity stunts which will focus on significance of first aid and first aid training.

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