IDENTIFYING THE COMPUTER COMPETENCY LEVELS OF RECREATION DEPARTMENT UNDERGRADUATES

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ABSTRACT
Computer-based and web-based applications are as major instructional tools to increase undergraduates' motivation at school. In the recreation field usage of, computer and the internet based recreational applications has become more prevalent in order to present visual and interactive entertainment activities. Recreation department undergraduates should develop their knowledge and skills in the use of computer as entertainment tools as well as support and guide people to use these technologies for recreation activities. However, some drawbacks are encountered in the integration of computers to recreation classes. The aim of this study is to investigate how often recreation department undergraduates use computers and related software for recreational purposes. Based on the findings of the research, some practical suggestions have been put forward.
Keywords: Recreation department undergraduate undergraduates, Usage of computer, Computer Competency

INTRODUCTION

In recent years, computer technology has been increasingly utilized for educational settings. Undergraduates are substantially involved in technology in and out of the classrooms. Within the environmental conditions that the speed and substructure of internet networks, and digital technologies rapidly changes and improves, technology cannot be considered separated from education (Semiz, 2011). Most schools have been built according to computer technology needs and equipped with necessary hardware, software and network infrastructure for the internet access.

Nowadays the teachers have a position rather than a reflection of learning and teaching processes of information, also guiding undergraduates' learning. Undergraduates are also working to configure their own knowledge of learning environments, in a sense, learn to learn. Faculty is moving towards a student-centered direction (Geçer & Dağ, 2010). As Salinas states that "using technology as a fully instructional tool instead of an aid to teach or toy to fun, will conceive undergraduates who learn exploring and creating new knowledge, and be ready to the problems which await them in 21st century" (Salinas, 2008; p: 659).

Various studies carried out in order to examine the attitudes to investigate computer competency levels of different undergraduate groups from different departments (Guy & Lownes-Jackson, 2010; Wallace & Clariana 2005; Banta & Howard, 2004; Grant, Malloy, and Murphy, 2009; Gülbahar, 2008; Tella & Mutula, 2008; Yaman, 2007).

However, the Recreation department undergraduates' have not been investigated under the framework of computer competency researches. It is thought that this first study will help to cover the shortage of information related with computer competency in Recreation field.

Both the educators and the public accept that it is necessary for the undergraduates to be competent in computer use. In order to benefit from technology in education, both the teachers and undergraduates should have enough knowledge about computers. However the discussions about the limits of computer use in educational activities are still continuing because many schools computers are used only for internet access and game play. The suitability of computer applications with the curriculum and the applications in classroom is usually overlooked (Moursund, 1995). According to framework of The Council of Higher Education of Turkey, Recreation departments are settled as a sub unit of the Physical Education and Sports High Schools or Departments.

(1) Computer technology in physical education

It is not important the name of field or department but if it is educational area, creating rich environments for learners is very crucial in the teaching process. Teachers can easily reach to meaningful learning by the assist of instructional technologies. Therefore, teachers' competency in use of computer technology, integration of computer technology into the teaching and better facilitation of undergraduates learning by technology have been expected from physical education (PE) teachers (İnce et al, 2006).

Technological devices are commonly used in PE include laptop computers, LCD projectors, digital video and digital cameras, audio equipment, heart rate monitors, pedometers, portable devices like mobile phones, PDAs, GPS, game consoles, including exergame dance mats (Mohnsen, 2008). Integration of these technologies in PE

is named as the initial start for moving from traditional physical education into a more technological form of PE (Kretschmann, 2010).

Using the correct technological devices, teachers can record video clips of some physical skills and movements or can download such clips to their computers and then let the undergraduates access these videos through a web site. Physical education teachers can introduce the best players of a sport through technological devices. Moreover they can record one of the best undergraduates' serve or tourniquet and then explain these techniques to the classroom via their videos. In this way undergraduates will focus on the subject easier and the learning will be facilitated (Yaman, 2007).

On the other hand, various problems may occur during the integration of technology with physical education. The primary problem is that the procedure and the preparation of computer take very long time. Another problem is that enough financial resources could not be supplied for the new technological hardware. Finding suitable software is also an important problem (Bird, 1998). Such kind of problems may force the recreation department undergraduates to neglect the use of computers in their classrooms.

(2) Operational Definition and Aims of Recreation Departments
Recreation can be defined as those non-competitive physical activities that take place for leisure purposes in our community. It can be categorized into areas of aquatics, outdoor recreation and adventure, fitness, tracks and trails, and community recreation.

Active recreation plays a vital role in our wellbeing and brings people together to create stronger communities. Recreation departments are leading various projects throughout the state in order to achieve this aim. Recreation departments strive to improve the quality and level of recreation services in Turkey.

(3) Computer technology in recreation field
Today one of the most important problems in recreational field is the didactic way of entertainment. Another leading problem is the lack of communication and dialogue between recreation experts as well as people; also between communities.

Educational technology will contribute seriously to the solution of these problems if it is used truly. During the last few years educators have begun to use computer supported teaching methods more often to increase the participation of undergraduates to the learning activities and to promote access to learning materials. Computer supported teaching which is defined as the use of computer by the undergraduates in teaching is an interactive process, which makes learning easier (Azarmsa, 1991).

Researchers point out that computer contributes greatly to educators on adopting some 'structuralist methods' in which people cannot adopt successfully on their own (Jonassen et al., 1998). The education programs in Turkey have been designed according to the 'constructivist method' since 2005-2006 academic year, which is considered to be the most important innovation in the field of education. The use of computer in and out of classroom activities has gained more importance in this new curriculum (Yaman, 2006).

In addition; after graduation when recreation department undergraduates go into employment they could be employed in fields that frequently use informatics technologies and computer networks. Lawson and friends (2006) showed and accentuated the importance of using computer in recreation field.

In 1999, Wang and Manning have used computer simulation models for recreation management. Their study explored the utility of computer simulation as a tool for describing visitor travel by building a dynamic model of visitor travel on the carriage roads of Acadia National Park, Maine, USA.

Similarly, Manning and friends (2006) used computer and recreation-monitoring system at Acadia National Park, which is one of the most intensively used national parks in the United States. Although its' annual number of visitors (2.2 million in 2004) does not rise to the level of some of the "crown jewel" western national parks (Yellowstone National Park with 2.9 million in 2004), visits to Acadia are concentrated on its comparatively small size of less than 50.000 acres whereas Yellowstone, in comparison, it is about 2.2 million acres. Given the intensive character of visitor number in Acadia, it is vital to monitor recreational use and its associated impacts to help ensure protection of important park resources and the quality of the visitor experience.

The similar research showed that using computer in PE and also in recreation fields increasingly gains value and is going to be very important in the future (Mavi, 2007). Therefore, it must be a necessary educational tool for the undergraduates in recreation departments.

(4) Undergraduates' attitude towards using a computer
As individuals who are more integrated with technology, they can follow developments all over the world. Moreover, this contributes to their self-improvement. With the help of computer, it is not that difficult to reach to the source of information while it gives the chance to benefit from the experts in the field. When these advantages are considered, it can be understood that learning technology is inevitable.

The use of computers in learning processes can help to develop cognitive skills of undergraduates in thinking, problem solving and learning. It is necessary for all the teachers, candidates of being teacher or people who want to be an educator in different fields like recreational events to apprehend technology well and put the focus on the undergraduates or employees. Due to various factors many of the teachers and experts are still reluctant about integration of technological facilities in their classes. They need to develop their personal knowledge and ability in technology in order to help and guide their undergraduates and employees (Teotrakool, 2006; Long, L. & Long, N., 2004).

The teachers have defined some obstacles in integrating technology to their classes; time, education, technological support and hardware problems (Cuban, 2001).

Internet facilities help to all employees in physical education area to search in order to get information. In addition to this, at educational areas, physical education undergraduates get various capacities and properties for their future life. In that sense, technology gives opportunity to people to have self-differentiated features in order to get wide range of knowledge, and everyone has the same opportunities for achieving this knowledge (Yaman, 2007).

In Turkey context, wide range of information related to physical education and sports is accessible through the web sites of the General Directorate of Sports and Youth (www.gsgm.gov.tr) and Ministry of National Education (www.meb.gov.tr) as well as some other popular web sites like www.sporbilim.com, www.eurosport.com and www.sportengland.org. It is suggested that undergraduates are well informed about how to access useful information through Internet, and teachers need to know these resources themselves in order to be of their undergraduates' help. Physical education teachers teach practical, technical and theoretical aspects of teaching subjects. They should actualize and enrich their information not only using the books but also through internet facilities. Asking their undergraduates to return their homework via internet and find subjects on web sites, they can employ computers as the means of communication with their undergraduates (Yaman, 2007).

The main purpose of this study is to investigate the level of computer competency (skill level for Microsoft Windows Operating System, Microsoft Office Word, Microsoft Office Excel, Microsoft Office Power Point and Multimedia programs) of the recreation department undergraduate undergraduates as computer users. Secondly, the study aims to investigate their computer ownership rate, the availability of computer laboratories in their schools, the usage of computer by family members and the availabilities to access computer laboratories.

METHOD

(1) Sample
The research covers all the undergraduates who study at the School of Physical Education and Sport in Muğla University, Turkey in 2010 – 2011 academic years. The sample group of 139 recreation undergraduates was chosen randomly among department undergraduates.

(2) Procedure
In the research both quantitative and qualitative methods were used. The data was collected through administration of the survey called "The Survey of Recreational Technology Use" to the recreation department undergraduates. The survey was administered to 139 recreation department undergraduates at Muğla University College of Physical Education and Sport in Muğla, Turkey. In the research validity was defined according to the specialist's view.
The reliability of the instrument was calculated using Cronbach's Alpha. The pilot results from the Cronbach's Alpha demonstrated that the questions in the pilot questionnaire were reliable. An overall alpha score for the pilot data was found to be 0.977, which indicated high reliability of the instrument. The alpha scores for each skill section of the basic computer skills were as follows: Microsoft windows operating skills, r = 0.843; Microsoft office word skills, r = 0.922; Microsoft office excel skills, r = 0.936; Microsoft office power point

skills, r = 0.973; and multimedia programs using skills, r = 0.840. For each variable one way analysis and t-test technics were applied with SPSS statistical software. Also optimal scaling technic was used to reach detail information related with one of the research question.

(3) Instrument

For the research, a questionnaire with 43 items measuring different competences in the use of computer was developed. The undergraduates were invited to choose one answer among the four alternatives given as; "no experience", "little experience", "some experience" and "high experience".

In the analysis no experience was graded with 1 point, little experience with 2, some experience with 3, and high experience with 4 points.

The survey comprised of 6 parts. In the first part the presence of personal computers at home, the presence of computer laboratory at school, the possibilities of computer use and some demographical questions were asked. In the second part abilities in Microsoft Windows operating system use, in the third part Microsoft Office Word abilities, in the fourth part Microsoft Office Excel abilities, in the fifth part Microsoft Office Power Point abilities, and in the last part abilities in Multimedia programs use were questioned.

There were 9 questions about Microsoft Windows Operating System, 9 about Microsoft Office Word, 9 about Microsoft Office Excel, 8 about Microsoft Office Power Point and 8 about multimedia programs.

Open-Ended Questionnaire:

For gathering data on the perceptions of recreation academicians, four open-ended questions were asked. These questions addressed the expectations of academicians about the using of computer technology at their lectures, perceptions about the processes they experienced during the using computer technology, thoughts on what they gained from the using computer technology, and envisioned about the use of technology within their future lectures.

(4) Descriptive statistics of data

Demographical characteristics of participants

According to Table 1, it can be stated that 87.1 % of the undergraduates (*n* = 121) has personal computers at home but 12.9% (*n*= 18) of them do not own computers. 52.5 % of the undergraduates (*n*= 72) stated that their families use computers at home but 47.5 % of them (*n* = 67) stated that their families do not. Finally, 74.8 % of the undergraduates (*n* = 104) stated that they couldn't always have benefit from the computer laboratories of their schools but 25.2 % of them (*n* = 35) stated to have benefit.

Table 1: The frequencies of demographical characteristics of the sample group

		n	%
Ownership of personal computer	Yes	121	87.1
	No	18	12.9
Presence of computer laboratory at schools	Yes	73	52.5
	No	66	47.5
Computer use of the families	Yes	72	52.5
	No	67	47.5
Benefiting from computer laboratories	Yes	35	25.2
	No	104	74.8
	Total	139	100.0

The ability to use programs

According to Table 2, the results generally indicated that for the undergraduates' ability to use windows; most of the undergraduates stated to have fully experience with the start menu, settings menu, and programs menu. However, they stated to have little experience for files menu, control menu, search menu, help menu, run menu and play games. For the undergraduates' ability to use word; although some of the undergraduates stated to have experience with table menu, window menu and help menu, most of them stated to have little experience with all of the menus of word. For the undergraduates' ability to use excel, most of the undergraduates stated to have any experience and little experience with all of the excel menus, but approximately 9-12 % of them only stated to have fully experience with the excel menus. For the undergraduates' ability to use power point, the similar results were seen for the power point menus. However, almost half of the undergraduates stated to have fully experienced with multimedia program menus. The frequency of the undergraduates' statements for having any experience with the multimedia program menus was found very low (approximately 10%).

Table 2: The frequencies of the undergraduates' ability to use programs

The Ability to…		Have…							
		Any Experience		Little Experience		Experience		High Experience	
		n	%	*n*	%	*n*	%	*n*	%
Use Windows	Start Menu	-	-	4	2.9	39	28.1	96	69.1
	Settings Menu	-	-	4	2.9	41	29.5	94	67.6
	Programs Menu	-	-	4	2.9	40	28.8	95	68.3
	Files Menu	1	.7	9	6.5	37	26.6	92	66.2
	Control Menu	1	.7	8	5.8	42	30.2	88	63.3
	Search Menu	1	.7	9	6.5	39	28.1	90	64.7
	Help Menu	1	.7	7	5.0	40	28.8	91	65.5
	Run Menu	1	.7	9	6.5	38	27.3	91	65.5
	Play Games	5	3.6	9	6.5	38	27.3	87	62.6
Use Word	File Menu	8	5.8	37	26.6	60	43.2	34	24.5
	Edit Menu	10	7.2	41	29.5	60	43.2	28	20.1
	Insert Menu	10	7.2	43	30.9	60	43.2	26	18.7
	View Menu	12	8.6	46	33.1	53	38.1	28	20.1
	Format Menu	14	10.1	43	30.9	56	40.3	26	18.7
	Tools Menu	13	9.4	44	31.7	55	39.6	27	19.4
	Table Menu	13	9.4	38	27.3	61	43.9	27	19.4
	Window Menu	12	8.6	40	28.8	62	44.6	25	18.0
	Help Menu	12	8.6	36	25.9	67	48.2	24	17.3
Use Excel	File Menu	40	28.8	39	28.1	43	30.9	17	12.2
	Edit Menu	42	30.2	40	28.8	42	30.2	15	10.8
	Insert Menu	42	30.2	41	29.5	43	30.9	13	9.4
	View Menu	41	29.5	49	35.3	36	25.9	13	9.4
	Format Menu	44	31.7	43	30.9	39	28.1	13	9.4
	Tools Menu	43	30.9	44	31.7	39	28.1	13	9.4
	Table Menu	41	29.5	40	28.8	45	32.4	13	9.4
	Window Menu	42	30.2	39	28.1	44	31.7	14	10.1
	Help Menu	42	30.2	41	29.5	39	28.1	17	12.2
Use Power Point	File Menu	33	23.7	37	26.6	46	33.1	23	16.5
	Edit Menu	33	23.7	33	23.7	48	34.5	25	18.0
	Insert Menu	35	25.2	29	20.9	50	36.0	25	18.0
	View Menu	35	25.2	32	23.0	48	34.5	24	17.3
	Format Menu	35	25.2	33	23.7	46	33.1	25	18.0
	Tools Menu	35	25.2	34	24.5	47	33.8	23	16.5
	Table Menu	35	25.2	32	23.0	47	33.8	25	18.0
	Window Menu	34	24.5	32	23.0	46	33.1	27	19.4
Use Multimedia Program	File Menu	18	12.9	19	13.7	42	30.2	60	43.2
	Edit Menu	16	11.5	18	12.9	44	31.7	61	43.9
	Insert Menu	14	10.1	16	11.5	46	33.1	63	45.3
	View Menu	15	10.8	19	13.7	42	30.2	63	45.3
	Format Menu	15	10.8	19	13.7	42	30.2	63	45.3
	Tools Menu	15	10.8	22	15.8	39	28.1	63	45.3
	Table Menu	15	10.8	19	13.7	42	30.2	63	45.3
	Window Menu	14	10.1	21	15.1	40	28.8	64	46.0

RESULTS

The analyses of the responses can be stated and illustrated as in the following:

(1) t-test result for undergraduates' ability to use programs and gender of participants

When we looked at the *t*-test results of the undergraduates' ability to use programs and gender, it can generally be stated that there is no significant differences between computer competency results and gender variables (p>0.05). According to results of mean values of use of programs of males and females, both genders' showed high experience to use Windows and low level experience to use Microsoft Excel programs.

(2) t-test results for ownership of personal computers

In order to measure the level of program usages of the undergraduates by being an ownership of personel computer; the averages of all the subtitles of each program are compared with t-test analysis. The results indicated that the ownership of personal computer was found significant for use of windows programs (M = 3.66, $p < .001$), use of word (M = 2.84, $p < .000$), use of excel (M = 2.30, $p < .001$), use of power point (M = 2.55, $p < .001$) and use of multimedia programs (M = 3.18, $p < .001$).

Table 2 One way Anova results for class and computer competency

	Mean Square	F	Sig.	Group
Windows use	2,52	10,52	,000	1-3, 2-3, 4-3
Microsoft Word	3,61	6,05	,001	2-1, 4-1
Microsoft Excel	6,55	8,34	,000	2-1, 3-1, 4-1
Microsoft PPT	12,40	15,72	,000	2-1, 3-1, 4-1
Microsoft MM	6,56	7,93	,000	1-3, 2-3, 3-4

(3) One way Anova results for use of computers by class of undergraduates

The results showed that use of computers by class variable was found significant for computer competency of all programs (Table 2). According to one way anova results there is a significant difference between all programs and different classes of undergraduates ($p < .001$). After that Tukey test was performed to find detail statistical information about which class made differences related with computer competency. The results indicated that fourth, second and first class students have superiority to use windows and multimedia to third class undergraduates ($p < .001$). Moreover, second, third and fourth have superiority about using of Microsoft excel and power point to first class undergraduates. When we look the results related with Microsoft word program second and fourth class undergraduates have a high level experience than first class undergraduates ($p < .001$).

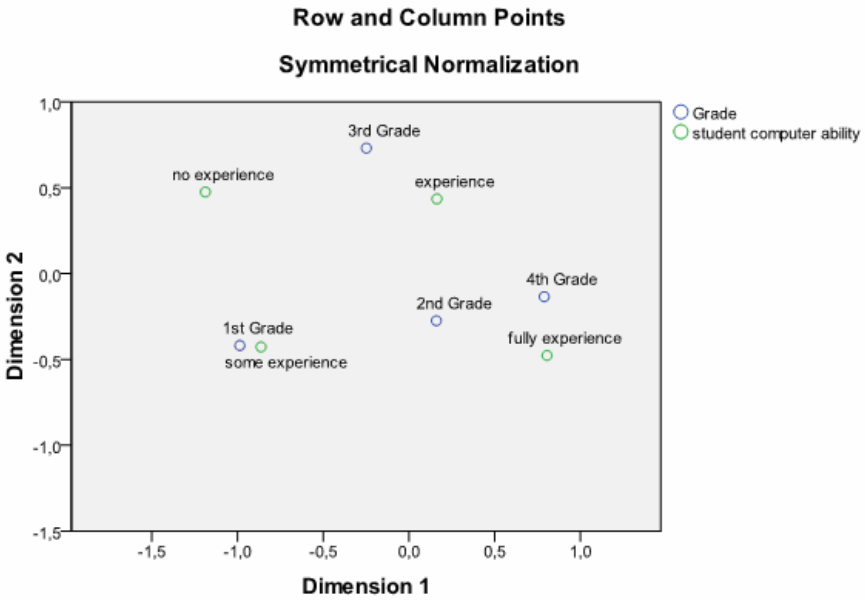

Figure1. The results of optimal scaling between class and computer competency.

Finally, optimal scaling results showed detail analyze between class variable and computer competency. According to results of some classes of recreation department, undergraduates' opinions about computer competency can be collected in one dimension. Also, the computer skills of first class undergraduates are at the low level. Moreover, the usage skills of second and fourth class undergraduates are at high level. Most experienced class is found as fourth class undergraduates. However, even they defined themselves as an experienced class in using of computer; third class undergraduates were in second dimension as different than others. In study there was no class which has no experience related with use of computer.

Qualitative Findings

The open-ended questionnaire, composed of four questions, was administered to recreation department academicians in order to understand their perceptions about the computer competency in detail.

The questions addressed their expectations from the using of computer technology on undergraduates, their perceptions on the processes they experienced during the using of computer technology in their lectures, their perceptions about the level of improvement they achieved by the using of computer technology and finally their future plans about the use of computer technology in their field.

Academician's expectations about the future benefits of having computer competency Academician's answers given to this question were completed under five categories. One of the expectations mentioned by the Academician's was improving computer skills and learning an effective use of computers (40%). One of the academician expressed that "My prior expectation was to develop undergraduates' skills about computer usage." Other academician agreed "I hoped to become a lecturer who explains to undergraduates the importance and benefits of using computers and utilizes them in their future career".

One of the academicians, who had supported his lecture's schedule by computer skills, noted that he was expecting to show the difference between planning computer-based supported schedule and traditional schedule related with how to develop and reach new attractions or programs about recreation and to develop new recreational activities (20%). One of the academicians pointed, "Using computers for developing schedules and activities should be first opinion in their mind. I thought that we should produce more concrete and valid opinions in their mind about the benefits of using computers for improving their creativities related with recreation field". 20% of the academicians expressed that undergraduates have fear, anxiety and worry about using computers in their field. One of the academicians framed that "I realized that from my undergraduates they have doubt to find the answers to such questions like, 'aren't computers things that are really such frightening? Will it really help?, if yes, how?, will I learn?". Another academician introduced that "Before the using computer technology undergraduates told us so many doubts like, "I had been a little bit frightened and felt that it was difficult for me to learn using computers". Also academicians shared some thoughts were mentioned that undergraduates should have just expected to gain theoretical knowledge like the use of media and innovations in technology (10%) with using computer technology more frequently. Finally academicians declared that they desired to learn how to teach more effectively (10 %) with computer technology. Academicians expressed their wish to teach the new teaching activities, ways and methods of finding new ways to love the subject matter about recreation. One of the academicians expressed that "I realized that using computer technology added too much to my teaching profession, learn a lot to practice in my own expertise field within recreation".

Second open-ended question was related with undergraduates' perceptions about processes of using computer technology. More than half of the academicians pointed out that undergraduates found fun to using computer technology in recreation field (35 %). They also believed that more computer technology in their field was so beneficial that all they learned was so permanent. Furthermore, they mentioned their willingness to carry on with this teaching strategy. One of the academicians stated, "The using of computer technology has expanded my repertoire of teaching style". The academicians who mentioned that they improved their computer skills were about 30 %. "Even though, I had used computer before, I was so amazed to find the possible instructional tasks that I could do with it" was claimed by one academician. Another academician uttered, "After start to use computer technology in my lecture I realized that it has added so much for me. With the help of computer technology, I had the opportunity to utilize what we have covered about visual design principles in recreation field". The academicians concluded that they learned actively by doing (20%). One of the academicians acknowledged that, "I realized using computer is not a difficult task. It becomes simpler when a facilitator exists as working on the computer. We were demonstrated what is most suitable for our undergraduates and how to utilize from computers throughout our prospective teaching profession".

Before the adding computer technology in their lecture schedule, academicians reported that they felt fear or anxiety but after having experience year by year they were not afraid of using computer technology, overcame

their anxiety and liked this teaching strategy anymore (10 %). Another academician posited that "Even though I am not familiar with technology in general, computers in particular, within the process of getting use to computer technology my attitude towards this issue has evolved regarding computer use and various activity preparation." The academicians realize the importance of reaching all sources about how to establish new activities or games and the use of technology in teaching-learning process about recreation was about 5 %. One of the academician s pointed out that "the using of computer technology is sustained by functioning different teaching games, projects and strategies, and was a best way to save the undergraduates from a monotonous atmosphere of lecture rooms".

Academicians' thoughts on what they gain from the using of computer technology in their lectures, their answers given to this question were grouped comprised of three categories. The ratio of the academicians who think that they learned how to use technology in education was 60%. One academician claimed, "I recognized how the use of technology impacts learning", while another stated "it gained me another dimension in my teaching background on effective teaching". Yet another academician added: "We, as scientist, have to make use of technology in such a modernized era. Or else, we will be disadvantaged in this era". The participants (20 %) have commented that they learned to reach worldwide sources about recreation as new games, activities, materials, and projects and their importance in recreation education. On that topic, one participant declared, "I became aware that all my thoughts were wrong about the needless to spend many hours in front of computer in teaching recreation".

Twenty percent of the academicians agreed that their computer skills have improved. On that issue, one academician informed, "I learned to use different software in my area", while another academician commented that, "I learned how to use computers more effectively." "Throughout use computer in my lectures, I learned how to develop various educational plans on computers."

Academicians' visions about the use of technology within their future classrooms academicians' answers given to this question were comprised of two categories. The percentage of the academicians claiming that they will utilize technology in their future classrooms was 75 %. One of the academician stated that, "computers are the essential part of my professional life anymore", where another noted that, "willingness to use technology in teaching has been formed in my mind, after some years." One another academician stated that, "a computer is a gift for us to increase the effectiveness of teaching." Twenty five percent of academicians asserted that they would continue increasing their knowledge and skills on computers in future. From that perspective, one academician has noted that, "my aim is to improve myself. Since I acquired a computer at home, I am searching the net in all my spare time." Another academician stated, "I am planning on how to integrate technology in my lectures about recreation. I know that some of my undergraduates will have a greater depth of knowledge than me in computer technology, I am aware that I have to adapt myself to technological innovations." One of the academicians also commented that, "Buying a computer should be a first step for recreation undergraduates. After that, everything will follow upon the knowledge they furnished themselves with."

CONCLUSION

Three main question areas are defined for the research and analyzed statically. As a result of the research the competence of recreation department undergraduates in computer competency is examined.

In the research first the relation between gender of participants and competence in Windows was analyzed. Results indicated that there is no significant differences between computer competency results and gender variables ($p>0.05$). According to mean value results males and females, showed high experience on many programs but they showed low level experience to use Microsoft Excel programs. While the analyzing similar researches about gender the reviews present different results. For example; some studies affirmed males had more positive attitudes than female (Bebetsos and Antoniou, 2009; Torkzadeh & Van Dyke, 2002). On the contrary, other study found that females were more competent and positive affirmed than males (Rugayah & Mustapha, 2004). These results indicated that there are supported and contrast studies about gender variable.

When it comes to ownership of personal computers and competence in Windows was analyzed. As a result of the analysis it is found out that the undergraduates who have personal computers are more competent in using all programs. The studies analyzing the impact of owing computer were explored that this factor had a significant effect (Pamuk & Peker, 2009; Akbulut, 2008). These results are supportive for our study.

The relationship between undergraduates' classes and computer competency results (one way anova) showed that there is a significant difference. While looking for the resource of differences between classes it was found

that fourth, second and first class students are more competent to use windows and multimedia than third class undergraduates. Moreover, second, third and fourth classes were more competent about using of microsoft excel and power point than first class undergraduates. When we look the results related with microsoft word program second and fourth class undergraduates were more competent than first class undergraduates.
According to our findings the following suggestions can be made:

Presenting CDs which include recreation techniques should become a habitual part of places.

The analysis of recreation techniques should first be taught through computer supported analysis and then performed practically.

In order to reach actual information about sports, computer and internet use should be promoted.

The undergraduates should be encouraged to receive and send their assignment via e-mails.

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