

UNIVERSITY STUDENTS OF ANXIETY REGARDING FUTURE TECHNOLOGIES

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ABSTRACT

The aim of this study was to identify the concerns of the university's students and future technologies it is to detect changes in anxiety after the training given to these students. Research in the 2016/2017 academic year, Computer and Instructional Technology at Sakarya University Education, Sociology and Turkish language studying in the Literature section was carried out with 100 students. A questionnaire developed by the researchers to collect data in this study. In a survey carried out by scanning the model it is applied to pretest students. SPSS 16 software was used to analyze the data obtained by post test administered after the training on the subject. The analysis of the data, frequency, one-way analysis of variance (ANOVA) was applied and the level of significance. 05 As has been adopted. According to the department where they have students in the survey results showed that the differences in pretest-posttest.

KeyWords:Future, technology, technologyconcerns

INTRODUCTION

Societies have changed for centuries depending on their characteristics and needs. In this process of change, science and technology also take place (İşman, 2001). Ayhan (2002) notes that in the twentieth century, especially in the last quarter of the century, there have been significant changes and transformations in the world, On the basis of these changes and transformations, universal socio-economic development and rapid and comprehensive changes in the field of science and technology. Aksoy (2003) states that technology exists with human history, Akgün, Yılmaz and Seferoğlu (2011) indicate that in the changing world, there is almost no space unconnected with technology.

Alkan (1998) defines technology as a discipline that is formed by combining various elements such as machines, processes, methods, processes, systems, management and control mechanisms at a certain level and serving as a bridge between science and practice, Braun (1998) suggests that technology, as a systematic application of scientific or other regular knowledge to practical tasks, According to Bruton and White (2007); As a practical application of learning and information by individuals and organizations to assist the human effort; Abetti (1989) is also a technologist; Techniques and tools that can be used to design, develop, manufacture and implement products, systems and services, resulting from science and experience.

While Goetsch (1984) expresses that computers, robots and satellites are seen as tools for solution of problems, today's commonly used hightechnology concept is used for data processing, production, information management and transfer, education, national defense, Entertainment, energy management, environmental pollution control, security, communication, and so on. Aksoy (2003) states that today, more emphasis is placed on the effect of technology on economic, cultural and social areas, while at the same time the issue of what might be anticipated should also be noted.

The Purpose of Research

Within the scope of the study, it was aimed to reveal the concerns of your future Technologies of the students who are studying in the Departments of Computer Education and Instructional Technology, Sociology and Turkish Language Literature at Sakarya University.

METHOD

In this section, information about the research model, the universe and sample, the data collection tool, and the data collection and analysis will be given.

Research Model

Survey screening model was applied. The main purpose of screening research is to describe the situation as it exists. Everything that is subject to research is tried to be defined as if it is within its own conditions (Karasar, 2005). The data obtained from pre-posttest students from the students constitute the screening part.

Universe and Sampling

Students of Sakarya University constitute the universe of the research in 2016/2017 education period. The sample is composed of 100 students studying in the Department of Computer Education and Instructional Technologies, Sociology and Turkish Language Literature at Sakarya University in Sakarya University in the academic year of 2016-2017 in 2016-2017 academic year.

Data Collection Tool

In order to collect data in the research, a scale prepared by the researchers was used to determine the concerns of university students about the future technologies. The scale consists of two parts. The first part consists of the items aiming to obtain the demographic information of the students while the second part consists of 22 items in the 5 likert type in order to determine the future concerns of the students.

Data Collection and Analysis

The data obtained by means of quantitative data collection in the study were analyzed using SPSS 16.0 (The Statistical Package for The Social Sciences) statistical program and the significance level was accepted as .05 in all the analyzes made in the research. Descriptive statistics, t-test, one way analysis of variance (Anova) were applied in the analysis of quantitative data.

Research Process

In the research process, the pre-test students who were prepared by the researchers to determine their concerns about the technology of the future were applied and the students were trained by the presentation titled "Future is Future to Us". The main topics covered in the given training are as follows:

Future computers, Future internet, 3D-4D Printers and Scanners, Virtual Reality, Artificial Intelligence, Bionic Human and Avatars, Robots, Holograms and their use in Education, Flying Cars, Magnetic Car be trains, Smart Eyes, Same Tv Different Channel Monitoring, Brain Reading Cloning, Cyber War, and Cybercrime, Ordering Children, Fatherless Children, Cloning, Solar Ranges, Nano Ships, Solar Energy, Space Tourism, Saving of Dreams, Consciousness Transmission, Consciousness Transmission, Future and Transmission Link, Orontal, Telapatic Communication and Media Listening, Nano, Technology Pico Technology Transition, Internet of Smart Houses and Objects, Future Education, Smart Classes, Hologram Teachers, etc. After the training, a post test was conducted to determine the concerns about future technologies and the students' Change has been tried to be determined.

FINDINGS

Table 1: Demographic information of students participating in the survey

		F	%
Gender	female	56	56
	male	44	44
Class	1	0	0
	2	29	29
	3	3	3
	4	68	68
Department	Departments of Computer Education and Instructional Technology	38	38
	Turkish Language Literature	32	32
	Sociology	30	30

Table 2: Students' future technologies and inventions interests me "relationship between the departments they read with their responses to questions.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	,479	2	,240	,362	,697
	Inside groups	64,111	97	,661		
	Total	64,590	99			
	Variance Source	Sum of squares	sd	Squares Average	F	p
Post test	Between groups	5,814	3	1,938	2,290	,083
	Inside groups	81,226	96	,846		
	Total	87,040	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "Future technologies and discoveries are interesting" and the pre-test and post-test made between the readings ($p > .05$).

Table 3: The relationship between students' responses to the question "I follow the printed or online magazines about the future" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	10,208	2	5,104	3,809	,026
	Inside groups	129,928	97	1,340		
	Total	140,90	99			
	Variance Source	Sum of squares	sd	Squares Average	F	p
Post test	Between groups	23,965	3	7,988	6,630	,000
	Inside groups	115,675	96	1,205		
	Total	139,640	99			

According to the results of the analysis, it is seen that there is a meaningful difference between the answers given by the students in the question "I follow the printed or online magazines about the future" and the pre-test and post-test made between the sections they read ($p < .05$). It is seen that the students who read in the Turkish language differ from the students who study in other departments to follow the printed or online magazines about the future.

Table 4: Students "I think it is a good development for Quantum computer technology of computers" relationship between the departments they read with their responses to questions.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	11,089	2	5,545	5,044	,008
	Inside groups	106,621	97	1,099		
	Total	117,710	99			
Post test	Between groups	1,196	3	,399	,468	,705
	Inside groups	81,714	96	,851		
	Total	82,910	99			

According to the analysis results, there was a significant difference between the answers given by the students in the question "I think Quantum computers are a good development for computer technology" and the part they read ($p < .05$). There is no difference in the final test ($p > .05$). With this result, it can be said that the difference between education and training is closed.

Table 5: The relationship between students' responses to the question "Internet environment is necessary for virtual reality" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	1,627	2	,813	,699	,499
	Inside groups	112,813	97	1,163		
	Total	114,440	99			
Post test	Between groups	,829	3	,276	,274	,844
	Inside groups	96,881	96	1,009		
	Total	97,710	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "Internet environment is necessary for virtual reality" and the pre-test and post-test conducted between the readings ($p > .05$).

Table 6: The relationship between students' responses to the question "I believe in the existence of bionic people" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	,354	2	,177	,135	,874
	Inside groups	127,646	97	1,316		
	Total	128,000	99			
Post test	Between groups	13,119	3	4,373	2,681	,051
	Inside groups	156,591	96	1,631		
	Total	169,710	99			

According to the results of the analysis, there was no significant difference between the answers given by the students in the question "Believe in the existence of bionic people" and the part they read ($p > .05$). There seems to be a difference in the final test ($p = <0.05$). With this result, it can be said that difference is realized with the education given.

Table 7: The relationship between students' answers to the question "I think it's useful to use hologram technology in education" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	,773	2	,386	,373	,689
	Inside groups	100,387	97	1,035		
	Total	101,160	99			
Post test	Between groups	8,231	3	2,744	2,250	0,87
	Inside groups	117,079	96	1,220		
	Total	125,310	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "I think it is useful to use hologram technology in education" and the pre-test and post-test between the parts they read ($p > .05$).

Table 8: The relationship between students' responses to the question "I think Maglev trains will bring new possibilities to transportation" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	1,819	2	,949	,627	,536
	Inside groups	146,861	97	1,514		
	Total	148,760	99			
Post test	Between groups	5,709	3	1,903	1,380	,254
	Inside groups	132,401	96	1,379		
	Total	138,110	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "I believe that Maglev trains will bring a new possibility to transportation" and the pre-test and post-test between the readings ($p > .05$).

Table 9: The relationship between students' responses to the question "We can read through people's minds with technological development" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	7,027	2	3,513	2,462	,091
	Inside groups	138,413	97	1,427		
	Total	145,440	99			
Post test	Between groups	5,077	3	1,692	1,008	,393
	Inside groups	161,163	96	1,679		
	Total	166,240	99			

According to the results of the analysis, it is shown that there is no significant difference between the answers given by the students in the question "We can read through technological development and people's minds" and between the pre-test and post-test conducted between the readings ($p > .05$).

Table 10: The relationship between students' responses to the question "Radiation is only in movies" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	9,658	2	4,829	2,258	,081
	Inside groups	179,695	97	1,872		
	Total	189,354	99			
Post test	Between groups	1,803	3	,601	,333	,801
	Inside groups	173,187	96	1,804		
	Total	174,990	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "Radiation is only in the films" and the pre-test and post-test between the readings ($p > .05$).

Table 11: The relationship between students' responses to the question "Future technological developments will take the place of teachers" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	13,901	2	6,951	4,008	,021
	Inside groups	168,209	97	1,734		
	Total	182,110	99			
Post test	Between groups	5,131	3	1,710	,981	,405
	Inside groups	167,429	96	1,744		
	Total	172,560	99			

According to the results of the analysis, it was found that there was a meaningful difference between the answers given by the students in the question "Technological developments in the future" ($p < .05$). There is no difference in the final test ($p > .05$).

Table 12: The relationship between students' responses to the question "I think that we can register our dreams by taking advantage of technological improvements" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	,175	2	,087	,054	,948
	Inside groups	157,535	97	1,624		
	Total	157,710	99			
	Variance Source	Sum of squares	sd	Squares Average	F	p
Post test	Between groups	8,689	3	2,896	2,017	,117
	Inside groups	137,821	96	1,436		
	Total	146,510	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "I think that we can register our dreams by using technological improvements" and the pre-test and post-test between the readings ($p > .05$).

Table 13: The relationship between students' answers to the question "I usually do research about the future" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	1,009	2	,504	,516	,598
	Inside groups	94,751	97	,977		
	Total	157,710	99			
	Variance Source	Sum of squares	sd	Squares Average	F	p
Post test	Between groups	,357	3	,119	,121	,947
	Inside groups	94,393	96	,983		
	Total	94,750	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "Generally research about the future" and the pretest-posttest made between the reading and the reading ($p > .05$).

Table14: The relationship between students' responses to the question "I think robots will take their place in the future" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	9,333	2	4,666	3,393	,038
	Inside groups	133,417	97	1,375		
	Total	142,750	99			
Post test	Between groups	10,897	3	3,632	2,391	,073
	Inside groups	145,853	96	1,519		
	Total	156,750	99			

According to the results of the analysis, it was seen that there was a significant difference between the answers given by the students in the question "I think the robots will take place in the future" and the ones they read ($p < .05$). There is no difference in the final test ($p > .05$).

Table15: The relationship between students' responses to the question "I find the development of technology useful for humanity" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	3,296	2	1,648	1,578	,212
	Inside groups	101,294	97	1,044		
	Total	104,590	99			
Post test	Between groups	,897	3	,299	,239	,869
	Inside groups	119,853	96	1,248		
	Total	120,750	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "I find the development of technology useful for humanity" and the pre-test and post-test conducted between the readings ($p > .05$).

Table 16: The relationship between the answer given by the students in the question "I would like to make an invention for the benefit of mankind" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	1,195	2	,598	,556	,575
	Inside groups	104,195	97	1,074		
	Total	105,390	99			
Post test	Between groups	11,646	3	3,882	5,443	,002
	Inside groups	68,464	96	,713		
	Total	80,110	99			

According to the results of the analysis, it was seen that there was not a significant difference between the answers given by the students in the question "I would like to make an invention for the benefit of mankind" and the part they read ($p > .05$). There seems to be a difference in the final test ($p = < 0.05$). With this result, it can be said that difference is realized with the education given.

Table 17: The relationship between students' responses to the question "I believe that technology improves our standard of living" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	12,229	2	6,115	3,945	,023
	Inside groups	150,361	97	1,550		
	Total	162,590	99			
Post test	Between groups	1,552	3	,517	,439	,726
	Inside groups	113,198	96	1,179		
	Total	114,750	99			

According to the results of the analysis, it was found that there was a meaningful difference between the answers given by the students in the question "I think that technology improves our living standards" and the part they read ($p < .05$). There is no difference in the final test ($p > .05$).

Table 18: The relationship between the answers given by the students in the question "Robots must be religious" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	2,391	2	1,196	,619	,541
	Inside groups	187,399	97	1,932		
	Total	189,790	99			
Post test	Between groups	,181	3	,060	,031	,993
	Inside groups	189,929	96	1,978		
	Total	190,110	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "The robots should be religious" and the pre-test and post-test between the readings ($p > .05$).

Table19: The relationship between students' responses to the question "I want to be a Ciberian warrior" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	3,768	2	1,884	,798	,453
	Inside groups	229,142	97	2,362		
	Total	232,910	99			
Post test	Between groups	5,535	3	1,845	,911	,439
	Inside groups	194,425	96	2,025		
	Total	199,960	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "I want to be a cyber warrior" and the pre-test and post-test between the readings ($p > .05$).

Table 20: The relationship between students' responses to the question "Cloning an ethical meeting" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	5,811	2	2,905	1,889	,157
	Inside groups	149,229	97	1,538		
	Total	155,040	99			
Post test	Between groups	5,272	3	1,757	,914	,437
	Inside groups	184,488	96	1,922		
	Total	189,760	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "Cloning an ethical meeting" and the pre-test and post-test between the sections they read ($p > .05$).

Table 21: The relationship between students' responses to the question "I have information about telepathic communication" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	5,943	2	2,971	2,361	,100
	Inside groups	122,057	97	1,258		
	Total	128,000	99			
Post test	Between groups	2,929	3	,976	,200	,896
	Inside groups	468,071	96	4,876		
	Total	471,000	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "Cloning an ethical meeting" and the pre-test and post-test between the sections they read ($p > .05$).

Table 22: The relationship between students' responses to the question "I think that knowledge and technology are effective in shaping the future according to futurism" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	12,981	2	6,491	3,086	,050
	Inside groups	204,019	97	2,103		
	Total	217,000	99			
Post test	Between groups	9,282	3	3,094	1,828	,147
	Inside groups	162,508	96	1,693		
	Total	171,790	99			

According to the results of the analysis, it is seen that there is a meaningful difference between the answers given by the students in the question "I think that knowledge and technology are effective in forming the future according to Futurism" and the part they read ($p = < .05$).

Table 23: The relationship between students' responses to the question "Doing self-designed designs for future technologies" and the departments they read.

	Variance Source	Sum of squares	sd	Squares Average	F	p
Pre-test	Between groups	3,804	2	1,902	1,092	,340
	Inside groups	168,946	97	1,742		
	Total	172,750	99			
Post test	Between groups	6,841	3	2,280	1,378	,254
	Inside groups	158,869	96	1,655		
	Total	165,710	99			

According to the results of the analysis, there is no significant difference between the answers given by the students in the question "Doing self-designed designs for future technologies" and the pre-test and post-test between the readings ($p > .05$).

CONCLUSION AND DISCUSSION

This study was undertaken to measure the extent to which university students are knowledgeable about the technology of the future and whether they are necessary or unnecessary due to their presence or absence of information. In this context, informational seminars have been given in certain areas concerning the future. At the beginning of this seminar, a questionnaire was filled to determine the future concerns of the students and the same questionnaire (pre-test and post-test) was replenished after the seminar. As mentioned above, it is observed that there is no meaningful change in the opinions of the students in some subjects, as there is a meaningful change between pre - test and post - test in some subjects. Particularly, students are observable concerns about artificial intelligence and robots. In the question-answer section of the seminar, quite a lot of researches about the technology of the future have been observed.

It is also observed that our country is very concerned about the future production of these technologies. Some students have shown that these technologies are utopian and that it is impossible to reach them. It has been observed that many students are disturbed by the fact that technology has entered our lives so much and many of the technological tools are concerned about increasing health problems. It has been observed that many of the

students have developed anxiety that they will increase the electro magnetism diseases they have spread from the device.

The questionnaire of the questionnaire above examined whether there was any difference between the pre-test and the post-test in terms of the section they read in the comment section. It has been observed that there are changes in some subjects when there is no change in some areas.

SUGGESTIONS

In the analyzes to be done later, students should examine the answers given to the questions prepared for each topic in terms of the answers given by the likert items in terms of the pre-test and the post-test, and because there is no information about the subjects for each field, it is necessary to look at the changes in terms of the following answers. Or will we be a spectator? "" It is absolutely necessary for the students of the university teaching department to have an upcoming anxiety.

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