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Reviewing of media and technology usage and attitudes of students of arts and crafts teaching in terms of several variables

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Abstract

The era we live in has a quality allowing all new fields and different uses of media and technology. In this unavoidable development and transformation, the individual's attitude and usage of these contents also varies. It is important to focus on some concepts and relations before we talk about our study including these reviews The students of the Faculty of Education, Fine Arts Education, Arts and Crafts Department forms the universe of the research and randomly selected 96 volunteer students from the students of University Fine Arts Education Arts and Crafts Department form the sample. The age average of the sample in the study was 20.30 (n=96, ss=1.98). The average daily computer usage of the sample is 5.36 hours (n=96,ss=4.47). SPSS v21.0 Package Program was used in the analysis of the data. Before the statistical analysis of the data, normality tests were applied. It has been determined whether the parametric tests meet the preconditions with these normality tests. Accordingly, arithmetic mean, percentage, frequency, t-test for independent sample and one-way analysis of variance (ANOVA) tests and their non-parametric equivalents were used. Spearman rank difference correlation coefficient was calculated for the correlation. Significance was taken as .05. In the light of the results, we see that the increase in the daily internet usage time of the students makes them develop positive attitudes towards technology. The reason for this is that students using the internet more are more familiar with technology and use it more in daily life. More internet usage and a positive view of technology progress in direct proportion with students.

Keywords: Media, technology usage, attitudes, students,

1. Introduction

The era we live in has a quality allowing all new fields and different uses of media and technology. In this unavoidable development and transformation, the individual's attitude and usage of these contents also varies. It is important to focus on some concepts and relations before we talk about our study including these reviews.

According to the Turkish Language Association (TDK), 'Technology is the application knowledge covering the construction methods related to a branch of industry, the tools

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and equipment used, and their usage patterns. Technology can also be defined as the tools and equipment developed by Man to control and change his material environment and all the information related to them. (https://sozluk.gov.tr/ E.T.: 23.02.2022). If we refer to internet technology, it is a system in which computers, telecommunications, software and rules or protocols are brought together. Technology in education is tools or objects used to support learning and teaching processes. Therefore, it can be said that software such as computers, learning management systems or communication networks are technologies. However, technology and technological systems do not create meaning on their own. They are activated by communicating with commands and directives. (https://pressbooks.bccampus.ca /tonybates/chapter/E.T.:23.02.2022)

Media, which is the plural of the English word *medium*, means communication medium or means of communication according to TDK. In English, the word 'medium' is of Latin origin and means to be in the middle (median) or mediator or interpreter. (https://sozluk.gov.tr/ E.T.:23.02.2022)

We mostly use our senses when interpreting the media. In this context, we can talk about media 'channels' mediating ideas and images that carry text, graphics, sound and video. Therefore, in this sense, every interaction of ours with the media is just an interpretation. It requires the activation of the receiver and the renderer as it is required to write a text, draw or design graphics, to speak, to script or record for audio or video. Media, of course, is dependent on technology, but technology is only one element of the media. In other words, we can think of the Internet not only as a technological system, but also as a media containing unique forms and symbol systems serving to convey meaning and information. On the Internet, people are both producing and interpreting information. In informatics as a media environment; there are animations, online social networks, search engines as well as other elements such as designing and using simulations. In this context, we can say that the creation, transmission and interpretation of meaning are the factors that turn a technology into a media. (https://pressbooks.bccampus.ca/tonybates/chapter/ E.T:23.02.2022)

Attitude, on the other hand, comes from the Latin origin "aptus" meaning "harmony". Although there are different descriptions on the definition of attitude, it is generally the perception that a person has towards any subject, event, situation or object. In addition, Krech defines attitude as a permanent and continuous organization of the processes of the human mind, while Smith defines it as a tendency that regularly creates thoughts, feelings and behaviors related to a psychological object. Alport, on the other hand, defines it as the state of being ready to engage in a mental and neural behavior that creates a directing or effective power on the reactions and situations that the individual will show against all objects. (akt. Temizkan M. ve Sallabaş M.E., 2009).

2. Method

Research Model

The study was carried out using the general survey model. The general survey model is a model that the universe consists of a large number of elements and that the sample consists of a sample group taken from the universe in order to make a general judgment about the universe (Karasar, 2005).

Study group

The students of the Faculty of Education, Fine Arts Education, Arts and Crafts Department forms the universe of the research and randomly selected 96 volunteer students from the students of University Fine Arts Education Arts and Crafts Department form the sample. The age average of the sample in the study was 20.30 (n=96, ss=1.98). The average daily computer usage of the sample is 5.36 hours (n=96,ss=4.47).

The sample group is as follows: Female (69, 71.9%), male (27, 28.1%). First class (38, 39.6%), second class (30, 31.3%), third class (10, 10.4%), fourth class (18, 18.8%). Low socioeconomic status (5.5.2%), medium level (88, 91.7%), high level (3.1%). Computer competency little (8, 8.3%), satisfactory (50, 52.1%), good(38, 39.6%). Education level of mother and father, illiterate mother (2, 2.1%), father (0, 0%), literate mother(5, 5.2%), father (2, 2.1%), elementary mother(35, 36.5%), father (25, 26.0%), middle school mother (20, 20.8%), father(24, 25.0%), high school mother (26, 27.1%), father(24, 25.0%), University mother(7, 7.3%), father(17, 17.7%), postgraduate Mother(1,%1), father(4, 4.2%)

Data Collection Tools

Personal Information Form

The personal information form was prepared by the researcher in order to determine the demographic characteristics of the sample group participating in the research. In this form, there are questions about gender, age, class, academic grade point average, family socio-economic status, education levels of mother and father, computer competency and average internet usage time per day.

Media and Technology Usage and Attitudes Scale

The scale, adapted to Turkish by Özgür (2016), was developed by researchers from California State University (Rosen L.D. et al., 2013). The Cronbach's Alpha coefficients for the sub-factors of the Media and Technology Usage and Attitudes Scale ranged from .89 to .71, and the two half-test correlations for the sub-factors of the scale were between .71 and .85. While some of the 31 items in the first eight factors of the adapted scale measure the frequency of usage of old technologies (such as watching television), they also include different sub-factors designed to determine the frequency of usage of new technologies (such as smart phone usage, e-mail usage, research on the Internet). While two factors (nine items) in the scale aim to determine the frequency of usage of the

Facebook social network, another sub-factor (four items) aims to determine the number of friends on the Facebook social network. In this context, the names of different social networks can be used instead of the Facebook social network in these three sub-factors. The last four factors of the scale (16 items) consist of items asking about attitude statements aiming to reveal the anxiety and addiction to technology, as well as revealing the positive or negative attitudes of the individual towards technology in general, without making a specific technology distinction. One of these four sub-factors aims to determine the preferences of individuals on task switching while completing a task.

Analysis of Data

SPSS v21.0 Package Program was used in the analysis of the data. Before the statistical analysis of the data, normality tests were applied. It has been determined whether the parametric tests meet the preconditions with these normality tests. Accordingly, arithmetic mean, percentage, frequency, t-test for independent sample and one-way analysis of variance (ANOVA) tests and their non-parametric equivalents were used. Spearman rank difference correlation coefficient was calculated for the correlation. Significance was taken as .05.

3. Results

Table 1. Positive attitudes towards technology

Specifications		n	Mean	Std. Deviation	P Value
Gender					
	Female	69	22.81	0.55	.36
	Male	27	21.85	0.85	
Class					
	1	38	22.65	4.78	.69
	2	30	23.00	4.52	
	3	10	21.00	4.52	
	4	18	22.38	4.51	
Education Level of Mother					
	Illiterate	2	23.50	.70	.83
	Literate	5	21.40	5.59	
	Elementary	35	21.77	4.47	
	Middle School	20	23.45	5.60	
	High school	26	23.07	4.57	

University	7	22.00	1.52	
Postgraduate	1	25.00	0	

Specifications	n	Mean	Std. Deviation	Median	IQR	P Value
Socio-Economic Status of Family						
Low	5	23.80	6.97	27.00	11.00	.55
Middle	88	22.46	4.53	23.00	5.00	
High	3	22.66	2.08	22.00	0.00	
Computer Competency						
Little	8	20.50	4.53	22.50	6.50	.28
Satisfactory	50	23.08	4.09	24.00	5.25	
Good	38	22.26	5.15	23.00	6.50	
Education Level of Father						
Illiterate	0	0	0	0	0	.77
Literate	2	25.00	2.82	25.00	0	
Elementary	25	22.76	3.86	23.00	4.50	
Middle School	24	21.20	4.95	23.50	7.75	
High school	24	22.00	5.04	23.00	4.75	
University	17	23.58	4.51	23.00	8.00	
Postgraduate	4	26.75	1.50	27.00	2.75	

When the relationship between the ages of the students and their positive attitudes towards Technology was examined, according to the results obtained, a low level of negative and statistically insignificant relationship was found between the ages of the students and their positive attitudes towards technology ($r=-.08$, $p>.05$).

When the relationship between students' daily internet usage time and their positive attitudes towards Technology was examined, according to the results obtained, a low level and statistically significant relationship was found between students' daily internet usage time and their positive attitudes towards technology ($r=.21$, $p<.05$) .

When the relationship between the students' academic averages and their positive attitudes towards Technology was examined, according to the results obtained, a low level and statistically insignificant relationship was found between the students' daily academic averages and their positive attitudes towards technology ($r=-.01$, $p>.05$).

Table 2. Anxiety about being without technology

Specifications		n	Mean	Std. Deviation	P Value
Gender					
	Female	69	9.37	3.20	.32
	Male	27	8.66	2.97	
Class					
	1	38	9.50	3.46	.71
	2	30	9.06	3.11	
	3	10	8.20	2.57	
	4	18	9.22	2.86	
Education Level of Mother					
	Illiterate	2	12.50	.70	.30
	Literate	5	11.20	2.28	
	Elementary	35	8.97	2.87	
	Middle School	20	8.10	3.29	
	High school	26	9.50	3.28	
	University	7	9.57	3.82	
	Postgraduate	1	10.	0	
Education Level of Father					
	Illiterate	0	0	0	.91
	Literate	2	10.50	.70	
	Elementary	25	9.24	2.97	
	Middle School	24	8.83	3.58	
	High school	24	8.91	2.88	
	University	17	9.82	3.41	
	Postgraduate	4	9.00	3.46	
Computer Competency					
	Little	8	9.50	3.02	.86
	Satisfactory	50	9.28	3.23	
	Good	38	8.97	3.11	

Specifications		n	Mean	Std. Deviation	Median	IQR	P Value
Socio-Economic Status of Family							
	Low	5	11.00	3.39	10.00	6.50	**.24**
	Middle	88	9.00	3.11	9.00	4.75	
	High	3	11.33	2.51	11.00		

When the relationship between the age of the students and the anxiety of being without technology was examined, according to the results obtained, a low level negative and statistically insignificant relationship was found between the ages of the students and the anxiety of being without technology (r=-.07, p>.05).

When the relationship between students' daily internet usage time and their anxiety about being without technology was examined, according to results obtained, a positive low level and statistically insignificant relationship was found between students' daily internet usage time and their anxiety about being without technology (r=.17, p>.05).

When the relationship between students' academic averages and their anxiety about being without technology was examined, according to the results obtained, a low level positive and statistically insignificant relationship was found between students' daily academic averages and their anxiety about being without technology (r=.03, p>.05).

Table 3. Negative attitude towards technology

Specifications		n	Mean	Std. Deviation	P Value
Gender					
	Female	69	9.62	2.96	.60
	Male	27	9.95	2.70	
Class					
	1	38	9.89	3.05	.99
	2	30	9.90	2.45	
	3	10	9.60	1.42	
	4	18	9.88	3.32	
Education Level of Mother					
	Illiterate	2	7.00	0	.30

	Literate	5	10.60	3.64	
	Elementary	35	10.08	2.71	
	Middle School	20	9.90	3.00	
	High school	26	9.80	2.57	
	University	7	10.00	2.23	
	Postgraduate	1	4.00		
Education Level of Father					
	Illiterate	0	0	0	.17
	Literate	2	7.50	3.53	
	Elementary	25	10.32	2.62	
	Middle School	24	10.37	2.56	
	High school	24	9.50	2.53	
	University	17	9.94	3.28	
	Postgraduate	4	7.00	2.44	
Computer Competency					
	Little	8	10.12	3.64	.17
	Satisfactory	50	10.32	2.39	
	Good	38	9.21	2.76	

Specifications	**n**	**Mean**	**Std. Deviation**	**Median**	**IQR**	**P Value**
Socio-Economic Status of Family						
Low	5	11.80	3.49	12.00	5.50	.22
Middle	88	9.72	2.73	10.00	4.00	
High	3	10.66	1.52	11.00		

When the relationship between the ages of the students and their negative attitudes towards Technology was examined, according to the results obtained, a low level of negative and statistically insignificant relationship was found between the ages of the students and their negative attitudes towards technology ($r=-.003$, $p>.05$).

When the relationship between students' daily internet usage time and their negative attitudes towards Technology was examined, according to the results obtained, a low

level positive and statistically insignificant relationship was found between students' daily internet usage time and negative attitudes towards technology (r=.14, p>.05).).

When the relationship between the students' academic averages and their negative attitudes towards Technology was examined, according to the results obtained, a low negative and statistically insignificant relationship was found between the students' daily academic averages and their negative attitudes towards technology (r=--.10, p>.05) .

Table 4. Task switching preferences

Specifications		**n**	**Mean**	**Std. Deviation**	**P Value**
Gender					
	Female	69	12.44	3.32	.40
	Male	27	13.04	3.13	
Class					
	1	38	13.05	3.63	.95
	2	30	12.80	2.96	
	3	10	12.40	1.83	
	4	18	12.88	3.26	
Education Level of Mother					
	Illiterate	2	16.00	2.82	.64
	Literate	5	13.40	4.15	
	Elementary	35	12.88	2.89	
	Middle School	20	12.55	3.57	
	High school	26	12.53	3.33	
	University	7	13.14	2.34	
	Postgraduate	1	17.00		
Education Level of Father					
	Illiterate	0		0	.82
	Literate	2	11.50	3.53	
	Elementary	25	13.32	2.62	
	Middle School	24	12.50	3.07	
	High school	24	12.45	3.52	
	University	17	13.47	3.79	
	Postgraduate	4	13.00	2.94	

Computer Competency					
	Little	8	14.00	3.96	.58
	Satisfactory	50	12.80	2.89	
	Good	38	12.73	3.40	
Socio-Economic Status of Family					
	Low	5	14.00	5.61	.50
	Middle	88	12.76	3.03	
	High	3	14.33	3.21	

When the relationship between the ages of the students and their task switching preferences was examined, according to the results obtained, a low level and statistically insignificant relationship was found between the ages of the students and the task switching preferences (r=-.06, p>.05).

When the relationship between students' daily internet usage time and task switching preferences was examined, according to the results obtained, a low level positive and statistically insignificant relationship was found between students' daily internet usage time and task switching preferences (r=.14, p>.05).).

When the relationship between students' academic averages and task switching preferences was examined, according to the results obtained, a low level positive and statistically insignificant relationship was found between students' daily academic averages and task switching preferences (r=-.11, p>.05).

4. Discussion, Conclusion and Recommendations

In the light of the results, we see that the increase in the daily internet usage time of the students makes them develop positive attitudes towards technology. The reason for this is that students using the internet more are more familiar with technology and use it more in daily life. More internet usage and a positive view of technology progress in direct proportion with students.

Students' anxiety about being without technology was examined in terms of their age, time spent daily on the internet, and their relationship with their academic averages. It has been determined that the relationship of this anxiety with age decreases in an inverse proportion with age. We can say that the reason for this is their belief that the anxiety of being without technology decreases as they get older, and their belief that the anxiety decreases as they mature and their dependence on technology decreases. When we look at the positive relationship between the anxiety of being without technology and the internet usage time in a day, it is that the longer one stays on the Internet, the more

addicted one becomes and anxiety also increases in technological deprivation. When we associate this anxiety of being without technology with the academic average, it has been determined that as success increases, anxiety also increases, and it is seen that successful individuals feel more obliged to technology.

Students' negative attitudes towards technology were also examined in terms of their ages, daily internet usage times and academic averages. The relationship between age and its negative attitude towards technology is negative, and it has been observed that technology is viewed more positively as one gets older. The reason for this is that individuals with higher technological literacy are older. In addition, a positive relationship was determined between negative attitudes towards technology and the duration of internet usage. The reason for this may arise from the possibility that the more time they spend on the Internet, the more negative attitudes they may develop, considering that their biggest technological tool is the Internet. In addition, it has been determined that the negative attitudes towards technology have a negative relationship with their academic averages. In other words, more academically successful students develop a more positive attitude towards the Internet.

The students' task switching preferences were examined in the context of their ages, daily internet usage time and academic averages. There is a negative relationship between the task switching preferences and their age, and it has been observed that as age increases, task switching preferences decrease. It can be said its reason is a state of developing an indifferent attitude to change as one matures. When the task switching preferences and daily internet usage time are compared, the positive relationship between them shows that individuals using the internet more are more open to change and an increase in task switching preferences has been observed. If we look at the relationship between the task switching preferences and their academic averages, we encounter a positive relationship. This shows us the student's not being afraid of the developing change with the developing vision as the task switching preferences increase as well as the academic average, an indicator of academic knowledge, increase.

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Appendix A. An example appendix

Authors including an appendix section should do so after References section. Multiple appendices should all have headings in the style used above. They will automatically be ordered A, B, C etc.

A.1. Example of a sub-heading within an appendix

There is also the option to include a subheading within the Appendix if you wish.