Erciyes İletişim Dergisi / Journal of Erciyes Communication
e-ISSN: 2667-5811 | ISSN: 1308-3198

Araştırma Makalesi | Research Article

Investigation of Communication Faculty Students' Use of Technology and Attitudes to Digital Technologies
İletişim Fakültesi Öğrencilerinin Teknoloji Kullanımları ve Dijital Teknolojilere Yönelik Tutumlarının İncelenmesi

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Başvuru Tarihi | Date Received: 20.12.2021
Yayına Kabul Tarihi | Date Accepted: 20.01.2022
Yayınlanma Tarihi | Date Published: 31.01.2022
https://doi.org/10.17680/erciyesiletisim.1038512

Abstract

The extent to which the benefits of digital technologies can be utilized in the faculty of communication depends on certain variables having an impact on the quality of technology-based learning. In this context, one of the variables affecting the quality is the students' use of technology, their competence concerning digital technologies and their attitudes towards them. As such, the technology use and the attitudes of the students at the faculty of communication towards digital technologies were compared according to the variables of gender and grade levels and examined with a relational approach based on the causal-comparative model. The research was conducted with the participation of 262 students studying at the faculty of communication in different universities located in Konya, Isparta and Kayseri. In the study, "Technology Usage" and "Attitude towards Digital Technologies" scales were used as data collection tools. As a result of the analysis of the research data, it was found that the technology use of the students at the communication faculty was at a moderate level, while their attitudes towards digital technologies indicated a high and positive tendency. Furthermore, the technology use and the attitudes towards digital technologies differ according to gender and grade levels of the students studying at the faculty of communication.

Keywords: Faculty of Communication, University Student, Use of Technology, Attitude, Youth.

Öz

İçinde bulunduğumuz dönem ve özellikle Korona salgın hastalığının yoğun olarak varlığını gösterdiği zamanlar dijital teknolojilerin kullanımını artırmıştır. Dijitalleşme iletişim imkanlarını geliştirmiştir. Bu imkanları almış oldukları eğitimle orantılı bir şekilde en iyi İletişim Fakültesi öğrencilerinin kullanabilmesi gerekir. İletişim Fakültelerinde dijital teknolojilerin avantajlarından ne ölçüde yararlanılabileceği, teknoloji temelli öğrenmenin kalitesini etkileyen belirli değişkenlere bağlıdır. Bu bağlamda kaliteyi etkileyen değişkenlerden biri, öğrencilerin teknoloji kullanımı, dijital teknolojilerdeki yeterlik ve tutumlarıdır. Bu kapsamda çalışmada nedensel karşılaştırma modeli temelinde İletişim Fakültesi öğrencilerinin teknoloji kullanımları ve dijital teknolojilere yönelik tutumları, cinsiyet ve sınıf değişkenlerine göre karşılaştırılarak ilişkisel bir yaklaşımla incelenmiştir. Araştırma Konya, Isparta ve Kayseri'de farklı üniversitelerde öğrenim gören 262 İletişim Fakültesi öğrencisi üzerinde yürütülmüştür. Çalışmada veri toplama aracı olarak "Teknoloji Kullanım" ve "Dijital Teknolojilere Yönelik Tutum" ölçekleri kullanılmıştır. Araştırma verilerinin analizi sonucu İletişim Fakültesi öğrencilerinin teknoloji kullanımlarının orta düzeyde olduğu; buna karşın dijital teknolojilere yönelik tutumlarının ise yüksek ve olumlu bir eğilim gösterdikleri bulunmuştur. Ayrıca İletişim Fakültesi öğrencilerinin cinsiyet ve sınıf düzeylerine göre teknoloji kullanımları ve dijital teknolojilere yönelik tutumları farklılıklar göstermektedir.

Anahtar Kelimeler: İletişim Fakültesi, Üniversite öğrencisi, Teknoloji kullanımı, Tutum, Gençlik.

Introduction

Every passing day a new achievement in technology is announced as a better way of communication, a faster production method, smaller portable devices and new software that challenges human renovation are introduced. Informatics, information-communication emerges as a dynamic field enabling the regular and rational storage, access, processing, and analysis, especially through the electronic products by considering the benefit of society and the individual, of the information constituting the basis of science that is used for communication in technological, economic, and social fields by people. In this context, there are many studies in the literature on the use of technology, attitudes, and proficiency, conducted on different fields, age groups and samples (Aksoy, 2018, p. 1112; Zincirkiran & Tiftik, 2014, p. 321; Seyitoğullari & Yalçınsoy, 2016, p. 14). Although the results of the studies differ, in general, it has been observed that the technology usage tendencies and attitudes of young people are shaped according to today's conditions. Research reveals that young people cannot imagine a life without technology and are engaged in unlimited and versatile technological tools (Aksoy, 2018, p. 1112).

Communication and public relations are at the forefront of the fields where technology is used most actively in today's world. Therefore, the debates on to which extent the technology should be included in the education of this field fall even further behind, and instead the studies on how it should be included in the education of the said field in the most functional, most effective, and most beneficial way are conducted. Some studies have addressed the use of the internet, digital technologies, and social media platforms to better engage stakeholders in the field of public relations (Dozier, Shen, Sweetser, & Barker, 2016, pp. 142-143). However, there is a lack of research on the competence and potential of individuals in the public relations field to use digital technologies. In general, public relations is defined as the function of establishing and maintaining relationships between an organization and its relevant target markets on a mutually beneficial basis (Amodu, Odiboh, Usaini, Yartey, & Ekanem, 2019, p. 7570). Information exchange is essential to establish these relationships (Usaini, et al., 2019, p. 1651).

Digital technologies have improved the integration between social media, communication, and public relations in many aspects. Therefore, the professionals in the field of public relations must adapt and improve their knowledge and skills in parallel with the development of digital technologies (Gesualdi, 2019, p. 383). One of the developing areas of focus for public relations professionals has been online digital skills. However, this issue has not been given much attention in the field of public relations. The digital competencies that the professionals of public relations should exhibit have increased and diversified significantly, especially in recent years (Freberg & Kim, 2018, p. 380). The digital technologies are among the main competencies of such field according to the 2018 report of The Commission on Public Relations Education in the USA (The Commission on Public Relations Education, 2018, p. 20). The increasing requirement for digital technologies in the field of public relations is not only discussed in the industry, but also considered as a rising skill to have in the workplace and is increasingly solidifying its position (Brunner, Zarkin, & Yates, 2018, p. 23). In the report of The Commission on Public Relations Education 2018 it is recommended that the students of in the field of public relations should master more than just digital skills. In this context, for a competent expertise in the field of public relations, students are required to acquire competencies in using digital technology tools effectively (The Commission on Public Relations Education, 2018, pp. 20-21). According to Kiesenbauer and Zerfass (2015), the

students at the undergraduate level studying public relations are required to link their competencies in digital technologies with the applications in the field to be successful in their fields. Moreover, many studies focusing on public relations argue that digital technology competencies should be included more in academic programs in this field (Daugherty, 2011, p. 471; Swart, 2014, p. 387).

Since the learners are no longer perceived as passive recipients of information in the current knowledge era, they are more inclined to question what they have been taught compared to the past (Cuccio-Schirripa & Steiner, 2000, p. 2010). Therefore, the manner knowledge is disseminated should be effective for students to comprehend why they require certain skills (Fredericks & Alexander, 2021, pp. 1-2). Teaching is a communicative activity in which knowledge or knowledge transfer takes place. The manner of delivering the messages determines the success or failure of an educational activity (Osakwe, 2009, p. 58). Communication forms an integral part of the learning experience that can increase learner success. However, due to the lack of technological competencies, a communication gap may arise between learners and educators in contemporary classroom spaces (Asrar, Tariq, & Rashid, 2018, p. 1857).

The universities across the world are actively trying to implement computer-based technologies such as multimedia classrooms, online learning formats and social media internet applications to improve the quality of their education programs (Tang & Austin, 2009, p. 1241; US Department of Education, 2017, pp. 12-13). However, there seem to be several factors that prevent the effective integration of technology into teaching (Surry, Ensminger, & Jones, 2002, p. 327). Among these factors, lack of institutional and technical support, lack of time, technical competencies of users and negative attitudes towards technology come to the fore (Brown, 2016, pp. 1-2; Dempsey, Fisher, Wright, D. E, & Anderton, 2008, p. 630; Kaminski & Bolliger, 2012, pp. 13-14). The researchers have also argued that the lack of training and professional development in using technologies negatively affects the technology integration process in education (Martirosyan, Kennon , Saxon, Edmonson, & Skidmore, 2017, pp. 3-5; Rogers, 2000, p. 19). Especially, some researchers have suggested that the attitudes and behaviors of faculty and students towards technology can significantly affect the integration of technology into education (Brill & Galloway, 2007, p. 95; Brown, 2016, pp. 3-4; Wickersham & McElhany, 2010, pp. 1-2). The research also reveals that institutional and technical support is required for students and faculty to accept technological innovations and use them effectively in their classrooms (Brill & Galloway, 2007, pp. 99-100; Tabata & Johnsrud, 2008, p. 625).

The significant impacts of information and communication technologies (ICT) on life, communication and business world require individuals, institutions, and governments to use these technologies (Ilomäki & Lakkala, 2018, p. 25). Similarly, ICT offers a range of possibilities for different learning environments and creates alternative learning experiences that can be used to make learning more dynamic and effective (Hakkarainen, Muukonen, Lipponen, Ilomäki, & Rahikain, 2001, p. 181). Increasing investments in ICT in every field and the integration process of new information systems into education required education stakeholders to interact with ICT at different levels. However, not all user groups have the same level of knowledge and experience with ICT technologies. This may affect users' acceptance of the technology. Therefore, it is critical to research to what extent all stakeholders in the education environment are willing to use the new technologies offered (Ilomäki & Lakkala, 2018, pp. 25-26).

One of the significant factors of technology use is the digital competence of individuals. Until recently, there was no common perception of what digital competences are and which ones are necessary for learners (Ala-Mutka, 2011, s. 70-72). The digital competence is a broad term that encompasses not only skills but also knowledge and attitudes towards technology. In this context, "digital competence" includes "Information Society Technologies", multifaceted uses in the fields of business, entertainment, and communication. In this respect, competence in digital technologies includes the effective use of computers to collect, evaluate, store data and produce, present, exchange information, communicate via the internet and participate in collaborative networks (European Parliament and the Council, 2006). In the literature, concepts such as "Computer literacy", "Internet literacy", "Information literacy", "ICT literacy" and "Digital fluency" are discussed under the title of competences in digital technologies. Ala-Mutka (2011) classified digital competence in 5 competence areas. These are (1) information and data literacy, (2) communication and collaboration, (3) digital content creation, (4) security, and (5) problem solving.

The Job Outlook research of National Association of Colleges and Employers (NACE) 2019 has determined the use of information and digital technologies effectively as the basic prerequisite for the students of the faculty of communication (Doyle, 2019, pp. 1-2). Many studies in the field of communication and public relations have revealed that processes based on new technological-technical skills rather than the more traditional public relations approach come to the forefront for success in this field (Barber, Couch, Darnowski, Johnson, & Kazolea, 2012, p. 24; The Commission on Public Relations Education, 2018, p. 63; Paskin, 2013, p. 251; Sha, 2011, p. 187). A study conducted among undergraduate public relations departments of nine universities revealed that students feel more powerful in the subjects related to their fields, while they feel less ready for integrating new technologies and digital technologies into their fields (Sha, 2011, p. 188). The developments in information and communication technologies have led to widespread and frequent use of technological devices such as smart phones, computers and tablets by the university students as the means of accessing the internet and social media. In this context, studies aiming to measure attitudes towards the use of technological tools and equipment have gained importance today.

The technological knowledge that individuals acquire during their education prepares them for their professional life. The most significant ones among such technological developments is information and communication technologies. Information and communication technologies should be integrated into the curriculum of students, especially those studying at communication faculties. In this context, it will be useful to first determine the technology use and skill levels of students to have them acquire such skills (Liu, 2009). Therefore, the technology uses and attitudes of the students studying at the faculty of communication towards digital technologies were examined based on certain variables. The answers to the following questions were sought regarding the aim of the study:

- What is the level of use of technology and the attitudes towards digital technologies among the students of the faculty of communication?
- Does the technology use and the attitudes towards digital technologies differ according to the gender variable among the students of the faculty of communication?

- Does the technology use and the attitudes towards digital technologies differ according to the grade level variable among the students of the faculty of communication?
- What is the level of relationship between use of technology and the attitudes towards digital technologies among the students of the faculty of communication?

Method

In this study, it is aimed to examine the use of technology and the attitudes of the students at the faculty of communication towards digital technologies based on certain variables. In the research, the use of technology and the attitudes of the students at the faculty of communication towards digital technologies were compared based on the variables of gender and grade level, by means of the causal-comparative method. In addition, the relationships between technology use and attitudes towards digital technologies of communication faculty students were examined using the correlational survey model.

Ethics Committee Permission

The study is not ethically objectionable within the framework of the written decision of Selcuk University Faculty of Communication Scientific Ethics Evaluation Committee dated 24/11/2021 and numbered E.178571.

Study Group

The students studying at the Faculty of Communication at Selcuk University, Isparta Süleyman Demirel University and Erciyes Universities constitute the target population of this study. Reaching all students in the target population requires serious economical contribution, time, and teamwork. Therefore, the convenience sampling method was preferred in the study. Accordingly, 262 communication faculty students studying at the communication faculties of the said universities were ensured to participate in the research on a voluntary basis. The demographic variables and the distribution of participants based on such variables are shown in Table 1.

Table 1. *Distribution of Communication Faculty Students by Demographic Characteristics*

		F	%
Gender	Female	130	49,62
	Male	132	50,38
Grade Level	1,0	41	15,65
	2,0	62	23,66
	3,0	66	25,19
	4,0	93	35,50
Time spent on the computer	Less than1	115	43,9
	1-3	79	30,2
	3-5	40	15,3
	5-7	14	5,3
	More than 7	14	5,3

When Table 1 is examined, it is seen that female students constitute 49.62% and the male students form 50.30% of the participants. 15.69% of the students are in the first grade, 23.66% of the students are in the second grade, 25.19% of the students are in the third grade and 35.50% of the students are in the fourth grade. Again, 43.9% of the communication faculty students spend less than 1 hour on the computer, 30.2% spend between 1-2 hours on the computer, 15.3% spend between 3-5 hours on the computer,

5.3% spend between 5-7 hours on the computer and as a result, 5.3% spend more than 7 hours on the computer.

Data Collection Tools

The use of technology scale and the attitude scale towards the developed digital technologies were used to collect the research data. The attitude scale towards Digital Technologies was developed to measure the affective characteristics of students towards digital technologies and related factors. Content validity, construct validity, adjusted total item correlations, Cronbach's Alpha coefficient and two split half correlation tests were performed by Cabi (2016) for reliability and validity analysis during the development of the Attitude Towards Digital Technology scale. In addition, the scale was tested with confirmatory factor analysis, and it was confirmed that the model had a good fit index. As a result of the analysis, it was determined that the scale had an eight-factor structure consisting of 39 items. In the analysis performed on the sample of this study, it was observed that the reliability coefficients of the sub-dimensions of the scale ranged from .74 to .91.

On the other hand, a scale developed by and adapted for university students by (Aksoy, 2018) was used to measure the technology use levels of communication faculty students. The validity and reliability of the technology use scale for university students was tested and the factor structure was verified. The scale in the Likert form consists of 13 items in total. The application data carried out on the communication faculty students supported the one-dimensional structure of the scale. As a result of the Cronbach Alpha reliability analyzes performed in the same sample, the coefficient of .84 was reached. In this respect, both the attitude scale towards digital technologies and the technology usage scale has high reliability and validity in terms of application to communication faculty students.

Analysis of Data

Parametric statistical techniques were used in the study because the scores obtained from the scale of technology use and attitude towards digital technologies of communication faculty students in the research sample met the assumptions of skewness, kurtosis, and Shapiro Wilk values of normal distribution (Yurt & Sunbul, 2012, p. 1985). In this context, descriptive analysis of communication faculty students' attitudes towards technology use and digital technologies, arithmetic mean and standard deviation, Unrelated Sample t-Test for comparison of dependent variables according to gender variable, and One-Way Analysis of Variance Techniques were used for comparisons according to grade level variable.

Findings

Table 2. *Descriptive statistics on the use of technology and attitudes towards digital technologies of the Students of the Faculty of Communication*

	N	Minimum	Maximum	Mean	Std. Deviation
Technology Usage	262	1,23	5,00	2,74	0,61
Competence	262	1,00	5,00	3,65	0,63
Social Networks	262	1,00	5,00	3,48	0,83
Use of Technology in the Class	262	1,00	5,00	3,86	0,82
Interest in Technology	262	1,00	5,00	3,91	0,73
Technology for me	261	1,00	5,00	3,98	0,63

	N	Minimum	Maximum	Mean	Std. Deviation
Negative Aspects	262	1,00	5,00	2,58	0,82
Recreational Use	262	1,00	5,00	2,71	0,95
Conscious Use	262	1,00	5,00	4,11	0,69

Table 2 shows the descriptive statistics values related to the scores obtained by the communication faculty students from the technology usage and attitude scales towards digital technologies. According to the analysis, the technology usage scale mean score of the communication faculty students was 2.74±0.61. The mean scores of the participants in the 8 sub-dimensions of the scale of attitude towards digital technology were calculated as follows respectively; 3.65±0.63 for competence, 3.48±0.63 in attitudes towards social networks, 3.86±0.82 in attitudes towards the use of technology in the class, 3.91±0.73 in interest in technology, 3.98±0.63 in technology dimension for me, 2.58±0.82 in the dimension of negative aspects related to technology, 2.71±0.95 for recreational technology use and 4.11±0.69 for conscious use. According to the mean score, the technology usage level of the communication faculty students is at a moderate level. When the averages in terms of attitudes towards digital technologies, were examined, it is found that the attitudes in the dimensions of conscious use, technology for me, competence, interest in technology and technology use in the class are positive and high. On the other hand, it was found that they achieved a moderate average in the dimensions of social networks and recreational use, and a low level in the dimension of negative aspects.

Table 3. *Comparison of Communication Faculty Students' attitudes towards technology use and digital technologies by Gender*

Gender		N	Mean	Std. Deviation	t	p
Technology Usage	Female	130	2,68	0,63	-1,53	0,13
	Male	132	2,80	0,58		
Competence	Female	130	3,50	0,62	-4,01	0,00
	Male	132	3,80	0,62		
Social Networks	Female	130	3,50	0,82	0,31	0,76
	Male	132	3,46	0,84		
Use of Technology in the Class	Female	130	3,78	0,81	-1,66	0,10
	Male	132	3,94	0,84		
Interest in Technology	Female	130	3,82	0,75	-2,04	0,04
	Male	132	4,00	0,70		
Technology for me	Female	129	3,89	0,63	-2,20	0,03
	Male	132	4,06	0,63		
Negative aspects	Female	130	2,61	0,73	0,58	0,56
	Male	132	2,55	0,90		
Recreational Use	Female	130	2,55	0,90	-2,76	0,01
	Male	132	2,87	0,98		
Conscious Use	Female	130	4,05	0,71	-1,27	0,21
	Male	132	4,16	0,67		

Table 3 shows the comparison results of the communication faculty students' scores acquired from the technology use and attitude scales towards digital technologies by gender. According to the analysis, no significant gender-related difference was observed

in the mean scores of the communication faculty students on the technology use scale ($p>0.05$). However, a significant gender-related difference was observed in the mean scores of the attitude scale towards digital technologies ($p<0.05$). There are significant differences in the dimensions of competence, interest in technology, technology for me, and educational use of this scale, according to the gender variable. In all these dimensions, it was observed that male students achieved significantly higher mean scores compared to their female friends.

Table 4. *Comparison of Communication Faculty Students' attitudes towards technology use and digital technologies according to Grade Levels*

		N	Mean	Std. Deviation	F	P
Technology Usage	1,0	93	2,79	0,61	2,60	0,048
	2,0	66	2,59	0,53		
	3,0	41	2,65	0,54		
	4,0	62	2,89	0,70		
Competence	1,0	93	3,65	0,53	0,44	0,72
	2,0	66	3,72	0,64		
	3,0	41	3,60	0,61		
	4,0	62	3,62	0,78		
Social Networks	1,0	93	3,62	0,81	2,18	0,09
	2,0	66	3,50	0,81		
	3,0	41	3,44	0,77		
	4,0	62	3,27	0,88		
Use of Technology in the Class	1,0	93	3,94	0,80	0,62	0,60
	2,0	66	3,84	0,78		
	3,0	41	3,74	0,83		
	4,0	62	3,84	0,92		
Interest in Technology	1,0	93	4,11	0,64	3,66	0,01
	2,0	66	3,98	0,71		
	3,0	41	3,66	0,85		
	4,0	62	3,70	0,76		
Technology for me	1,0	93	4,02	0,60	0,61	0,61
	2,0	65	4,03	0,59		
	3,0	41	3,91	0,64		
	4,0	62	3,91	0,71		
Negative aspects	1,0	93	2,50	0,79	1,27	0,28
	2,0	66	2,53	0,75		
	3,0	41	2,60	0,89		
	4,0	62	2,75	0,87		
Recreational Use	1,0	93	2,87	0,98	1,88	0,13
	2,0	66	2,74	0,83		
	3,0	41	2,63	1,09		
	4,0	62	2,51	0,91		
Conscious Use	1,0	93	4,17	0,61	1,07	0,36
	2,0	66	4,13	0,73		
	3,0	41	3,94	0,79		
	4,0	62	4,10	0,69		

Table 4 shows the comparison results of the communication faculty students' scores obtained from the technology use and attitude scales towards digital technologies by grade level. According to the analysis, a significant difference was found in the mean scores of the communication faculty students on the technology use scale depending on the grade level ($p<0.05$). According to further analysis, Grade 4 students use technology at a higher level compared to their peers in lower grades. However, a significant difference was found only in the interest in technology dimension of the attitude scale towards digital technologies depending on the grade level ($p<0.05$). According to the Tukey test analysis, "1st and 2nd grade students" show a significantly high level of interest in technology compared to "3rd and 4th" grade students.

Table 5. *Results of Regression Analysis Performed to Determine the Effect of Attitudes towards digital technologies on technology usage*

Dependent Variable	Independent variable	Beta (β)	Standard Error	Standardized Beta (β)	t	p
Technology Usage	(Constant)	1,613	,310		5,199	,000
	Competence	,099	,081	,103	1,210	,228
	Social Networks	,144	,048	,196	3,007	,003
	Use of Technology in the Class	,172	,063	,234	2,746	,006
	Interest in Technology	,016	,079	,020	,209	,835
	Technology for me	-,174	,091	-,181	-1,906	,058
	Negative Aspects	-,009	,044	-,012	-,207	,836
	Recreational Use	,095	,042	,148	2,251	,025
	Conscious Use	,001	,065	,001	,015	,988
R= 0,42; R2= 0,17; F= 6,38; p= 0,000						

When Table 5 is examined, it is figured out that the regression model developed to test the effect of communication faculty students' attitudes towards digital technologies on technology usage scores is statistically significant R=0,42; R^2=0,17; p<0,001. Participants' attitudes towards digital technologies explain approximately 17% of the total variance in technology usage scores. When the significance values of the calculated standardized path coefficients are examined, it is comprehended that the dimensions of attitudes towards social networks, technology use in the class and digital technology use for recreational purposes are significant precursor of technology usage ($p<0,005$).

Discussion Conclusion and Recommendations

In the study, which examined the technology usage and attitudes of the students at the faculty of communication towards digital technologies, significant results were obtained in terms of the focus variables of the research. In general, it has been observed that the participant students from the faculty of communication have a moderate level of technology usage, but predominantly have attitudes towards high-level digital technologies. In terms of attitudes, it was observed that the attitudes of students were positive, especially in the dimensions of conscious use, the meaning of technology, competence, interest in technology and use of technology in the class. These findings are similar to the findings of studies conducted by (Goodwin, Low, Ng , Yeung, & Cai, 2015; Koyuncuoglu D. , 2021; Nsouli & Vlachopoulos, 2021). According to (Goodwin, Low, Ng , Yeung, & Cai, 2015), he has been more interested in the use of technology especially among university students in recent years and reflects this in his studies. According to (Goodwin, Low, Ng , Yeung, & Cai, 2015) especially university students have been more interested in the use of technology in recent years, and they have reflected this in their

studies. In this manner, they benefit from the advantages of digital technologies at a high level, enrich their individual learning and satisfy their educational requirements at the maximum level. According to (Nsouli & Vlachopoulos, 2021), digital technologies are used for multiple purposes among students in non- formal communication, academic and similar subjects. This situation improves their technological competencies on the one hand, and on the other hand increases their academic interaction, impressions, and experiences.

Another finding of the research is the comparison of communication faculty students' technology use and attitudes towards digital technologies based on gender. According to the findings, technology use of communication faculty students did not differ according to the gender variable. However, there were differences in attitudes in terms of competence in digital technologies, interest in technology, the meaning of technology and educational use, according to the gender variable. In all these dimensions, male students exhibited significantly higher and positive attitudes. In this regard, Doğru (2020), (Kaleli Y. S., 2020) (Kara, An Investigation of Technological Pedagogical and Content Knowledge (TPACK) Competencies of Pre-Service Visual Arts Teachers, 2021) Koh and Chai (2011), Kılıçarslan (2021), (Kibici & Sarikaya, 2021) and (Koyuncuoglu Ö. , 2021) have similar research findings in the literature. In a study conducted by Doğru (2020), male university students spend more time on digital technologies and show a high level of interest in such applications. Male students who spend more time on technology and engage in activities gain higher competencies and transfer this situation to their fields.

Another finding of the research is the comparison of the communication faculty students' technology use and their attitudes towards digital technologies based on their grade level. According to the findings, technology use and attitudes of communication faculty students towards digital technologies differ according to grade level. In this regard, 4th grade students use technology at a higher level compared to their friends in lower grades, whereas 1st and 2nd grade students show a higher level of interest in digital technologies. These findings are similar to the findings of the studies conducted by Kara (2021) and (Reddy, Chaudhary, Sharma, & Chand, 2021) and Rojo-Ramos Mueller et al. (2021). According to (Koyuncuoglu Ö. , 2021), university students gain a higher level of competence as the grade level increases, especially in the purposeful use of technology. However, lower age group students in lower grades show more interest in new and current technologies, according to Kara (2021). According to (Mueller, Wood, Willoughby, Ross, & Specht, 2008) new university students are active technology users, despite the lack of formation in digital technologies. Over time, students develop their skills to integrate digital technologies into many areas of life, especially academic ones.

The last finding reached in the research is that there is a significant relationship between the communication faculty students' attitudes towards digital technologies and their use of technology. Students' attitudes towards digital technologies significantly affect their technology use scores. Especially, the attitudes towards social networks, the use of technology in the classroom and the use of digital technology for recreational purposes affect technology use positively and at a high level. According to (Zimmerman & Schunk, D, 2006), the development of individuals' cognitive, affective, and psychomotor competencies affects their technology-specific competencies and self-efficacy. According to (Goodwin, Low, Ng , Yeung, & Cai, 2015), situations such as social media, educational and recreational use of students affect their attitudes and technology use. However, according to (Ramírez-Montoya, Mena, & Rodríguez-Arroyo, 2017), being a

competent individual in digital technologies reflects students' technology acceptance and attitudes in one way.

As a result, digital technologies have improved the integration between social media and communication fields. Therefore, employees of the communication field must adapt and develop their knowledge and skills to stay up to date throughout the evolution of the digital environment. This necessity can be developed effectively in the education process of the faculty of communication. It is recommended that future studies focus on experimental and action research to develop communication faculty students' competencies in digital technologies.

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İletişim Fakültesi Öğrencilerinin Teknoloji Kullanımları ve Dijital Teknolojilere Yönelik Tutumlarının İncelenmesi

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Genişletilmiş Özet

Günümüz dünyasında teknolojinin en aktif kullanıldığı alanların başında iletişim ve halkla ilişkiler gelmektedir. Bu nedenle teknolojinin bu alanın eğitiminde ne kadar yer alması gerektiği tartışmaları geride kalmıştır ve artık alanın eğitiminde en işlevsel, en etkin ve en yararlı şekilde nasıl yer alması gerektiği üzerine çalışmalar yapılmaktadır. Bununla birlikte, halkla ilişkiler alanındaki bireylerin dijital teknolojileri kullanmalarındaki yetkinlikleri ve potansiyelleri üzerine araştırma eksikliği vardır.

Dijital teknolojiler, birçok yönüyle sosyal medya, iletişim ve halkla ilişkiler arasındaki entegrasyonu geliştirmiştir. Halkla ilişkiler profesyonellerinin sahip olmaları gereken dijital yeterlikler, özellikle son yıllarda önemli ölçüde büyümüş ve çeşitlilik göstermiştir. Halkla İlişkiler Eğitimi Komisyonu'nun 2018 raporu, halkla ilişkiler öğrencilerine dijital becerilerden daha fazlasına sahip olmalarını tavsiye etmektedir. Bu kapsamda, halkla ilişkilerde yetkin bir uzmanlık için öğrencilerin dijital teknoloji araçlarını etkili kullanma konusunda yeterlikler kazanması gerekmektedir. İletişim Fakültesi Halkla ilişkiler lisans öğrencileri ve fakültenin diğer bölüm öğrencilerinin alanlarında başarılı olmak için dijital teknolojiler konusundaki yeterlikleri ile alandaki uygulamalarını birbirine bağlamaları gerekmektedir.

Bu amaçla araştırmada, İletişim Fakültesi öğrencilerinin teknoloji kullanımları ve dijital teknolojilere yönelik tutumları bazı değişkenler açısından incelenmiştir. Bu amaçla ilişkili olarak İletişim Fakültesi öğrencileri ile ilgili aşağıdaki sorulara cevaplar aranmıştır:

- Teknoloji kullanımları ve dijital teknolojilere yönelik tutumları ne düzeydedir?
- Cinsiyet ve sınıf değişkenine göre farklılık göstermekte midir?
- Teknoloji kullanımları ve dijital teknolojilere yönelik tutumları arasında ne düzeyde bir ilişki vardır?

Selçuk Üniversitesi, Isparta Süleyman Demirel Üniversitesi ve Erciyes Üniversitelerinde öğrenim gören İletişim Fakültesi öğrencileri bu çalışmanın hedef evrenini oluşturmuştur

Araştırma verilerinin toplanmasında teknoloji kullanım ölçeği ve geliştirilen dijital teknolojilere yönelik tutum ölçeği kullanılmıştır. Analizler sonucunda ölçeğin 39 maddeden oluşan sekiz faktörlü bir yapıya sahip olduğu tespit edilmiştir. Bu araştırmanın örneklemi üzerinde gerçekleştirilen analizlerde, ölçeğin alt boyutlarının güvenirlik katsayılarının .74 ile .91 arasında değiştiği gözlenmiştir.

Diğer taraftan teknoloji kullanım ölçeğinin üniversite öğrencilerine yönelik geçerlik ve güvenirliği test edilmiş ve faktör yapısı doğrulanmıştır. Likert formundaki ölçek toplam 13 maddeden oluşmaktadır. İletişim Fakültesi öğrencileri üzerinde gerçekleştirilen uygulama verileri ölçeğin tek boyutlu yapısını desteklemiştir. Yine aynı örneklemde gerçekleştirilen Cronbach Alfa güvenirlik analizleri sonucu .84 katsayısına ulaşılmıştır. Bu yönüyle gerek dijital teknolojilere yönelik tutum ölçeği gerekse de teknoloji kullanım

ölçeği, İletişim Fakültesi öğrencilerine uygulanması açısından yüksek güvenirlik ve geçerliğe sahiptir.

İletişim Fakültesi öğrencilerinin teknoloji kullanım ve dijital teknolojilere yönelik tutumlarının betimsel analizi aritmetik ortalama ve standart sapma; cinsiyet değişkenine göre bağımlı değişkenlerin karşılaştırılmasında İlişkisiz Örneklem t Testi; sınıf değişkenine göre karşılaştırmalarda ise Tek Yönlü Varyans Analizi Teknikleri kullanılmıştır.

Analizlere göre, İletişim Fakültesi öğrencilerinin teknoloji kullanım ölçeği puan ortalaması 2,74±0,61 bulunmuştur. Dijital teknolojiye tutum ölçeğinin 8 alt boyutunda katılımcıların elde ettikleri puan ortalamaları sırasıyla; yetkinlik için 3,65±0,63, sosyal ağlara yönelik tutumlarda 3,48±0,63, derste teknoloji kullanımına yönelik tutumlarda 3,86±0,82, teknolojiye yönelik ilgide 3,91±0,73, benim için teknoloji boyutunda 3,98±0,63, teknolojiyle ilgili olumsuz yönler boyutunda 2,58±0,82, eğlence amaçlı teknoloji kullanımda 2,71±0,95 ve bilinçli kullanım boyutunda ise 4,11±0,69 olarak hesaplanmıştır. Puan ortalamalarına göre, İletişim Fakültesi öğrencilerinin teknoloji kullanım düzeyleri orta düzeydedir. Dijital teknolojilere yönelik tutumlar açısından ortalamalara bakıldığında bilinçli kullanım, benim için teknoloji, yetkinlik, teknolojiye yönelik ilgi ve derste teknoloji kullanımı boyutlarındaki tutumların olumlu ve yüksek düzeyde olduğu görülmüştür. Diğer taraftan sosyal ağlar ve eğlence amaçlı kullanım boyutlarında orta düzeyde, olumsuz yönler boyutunda ise düşük düzeyde bir ortalama elde ettikleri görülmüştür.

Analizlere göre İletişim Fakültesi öğrencilerinin teknoloji kullanımı ölçeği puan ortalamalarında cinsiyete bağlı anlamlı bir farklılık gözlenmemiştir ($p>0,05$). Buna karşın dijital teknolojilere yönelik tutum ölçeğinin puan ortalamalarında cinsiyete bağlı anlamlı bir farklılık gözlenmiştir ($p<0,05$). Bu ölçeğin yetkinlik, teknolojiye yönelik ilgi, benim için teknoloji ve eğitim amaçlı kullanım boyutlarında cinsiyet değişkenine göre anlamlı farklar söz konusudur. Tüm bu boyutlarda erkek öğrencilerin kız arkadaşlarına kıyasla anlamlı düzeyde yüksek puan ortalamaları elde ettikleri görülmüştür.

Analizlere göre İletişim Fakültesi öğrencilerinin teknoloji kullanımı ölçeği puan ortalamalarında sınıf düzeyine bağlı anlamlı bir farklılık bulunmuştur ($p<0,05$). İleri analizlere göre 4. sınıf öğrencileri alt sınıflardaki arkadaşlarına kıyasla yüksek düzeyde teknolojiyi kullanmaktadır. Buna karşın dijital teknolojilere yönelik tutum ölçeğinin sadece teknolojiye yönelik ilgi boyutunda, sınıf düzeyine bağlı anlamlı bir farklılık bulunmuştur ($p<0,05$). Tukey testi analizlerine göre "1. ve 2. Sınıf öğrencileri" "3. ve 4. Sınıf öğrencilerinden" anlamlı düzeyde yüksek düzeyde teknolojiye ilgi göstermektedir.

İletişim Fakültesi öğrencilerinin dijital teknolojilere yönelik tutumlarının teknoloji kullanım puanları üzerindeki etkisini test etmek için geliştirilen regresyon modelinin istatistiksel olarak anlamlı bulunduğu anlaşılmaktadır $R=0,42$; $R^2=0,17$; $p<0,001$. Katılımcıların dijital teknolojilere yönelik tutumları, teknoloji kullanımı puanlarındaki toplam varyansın yaklaşık %17'sini açıklamaktadır.

İletişim Fakültesi öğrencilerinin teknoloji kullanımları ve dijital teknolojilere yönelik tutumlarının incelendiği çalışmada araştırmanın odak değişkenleri açısından anlamlı sonuçlara ulaşılmıştır. Genel olarak katılımcı İletişim Fakültesi öğrencilerinin orta düzeyde teknoloji kullanımına; buna karşın ağırlıklı olarak yüksek düzeyde dijital teknolojilere yönelik tutumlara sahip oldukları görülmüştür. Tutumlar açısından özellikle öğrencilerin bilinçli kullanım, teknolojinin anlamı, yetkinlik, teknolojiye yönelik ilgi ve derste teknoloji

kullanımı boyutlarında tutumların olumlu yönde olduğu görülmüştür. Bu şekilde öğrenciler dijital teknolojilerin sağladığı avantajlardan yüksek düzeyde yararlanmakta, bireysel öğrenmelerini zenginleştirmekte ve eğitim ihtiyaçlarını maksimum düzeyde karşılamaktadır.

Araştırmanın bulgularına göre İletişim Fakültesi öğrencilerinin teknoloji kullanımları cinsiyet değişkenine göre farklılık göstermemiştir. Buna karşın dijital teknolojilerde yetkinlik, teknolojiye yönelik ilgi, teknolojinin anlamı ve eğitim amaçlı kullanım açısından tutumlarda cinsiyet değişkenine göre farklar bulunmuştur.

Araştırmada ulaşılan bulgulardan bir diğerine göre ise 4. sınıf öğrencileri alt sınıflardaki arkadaşlarına kıyasla yüksek düzeyde teknolojiyi kullanmakta; buna karşın 1. ve 2. sınıf öğrencileri dijital teknolojilere daha yüksek düzeyde ilgi göstermektedir.

Araştırmada ulaşılan son bulgu ise İletişim Fakültesi öğrencilerinin dijital teknolojilere yönelik tutumları ile teknoloji kullanımları arasında anlamlı ilişkilerin olmasıdır. Öğrencilerin dijital teknolojilere yönelik tutumları teknoloji kullanımı puanlarını anlamlı düzeyde etkilemektedir. Özellikle sosyal ağlara yönelik tutumlar, derste teknoloji kullanımı ve eğlence amaçlı dijital teknoloji kullanımına ilişkin tutumlar teknoloji kullanımını olumlu yönde ve yüksek düzeyde etkilemektedir.

Sonuç olarak dijital teknolojiler, sosyal medya ve iletişim alanları arasındaki entegrasyonu geliştirmiştir. Bu nedenle, iletişim alanının iş görenleri, dijital ortamın evrimi boyunca güncel kalmak için bilgi ve becerilerini uyarlamak ve geliştirmek zorundadır. Bu zorunluluk İletişim Fakültesi öğrencilerinin öğrenim sürecinde etkin olarak geliştirilebilir. Gelecek çalışmaların İletişim Fakültesi öğrencilerinin dijital teknolojilerdeki yetkinliklerini geliştirmek üzere deneysel araştırmalara ve eylem araştırmalarına odaklanması önerilmektedir.

Anahtar Kelimeler: İletişim Fakültesi, Üniversite öğrencisi, Teknoloji kullanımı, Tutum, Gençlik.

Bu makale **intihal tespit yazılımlarıyla** taranmıştır. İntihal tespit edilmemiştir.

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Bu çalışmada **"Yükseköğretim Kurumları Bilimsel Araştırma ve Yayın Etiği Yönergesi"** kapsamında uyulması belirtilen kurallara uyulmuştur.

In this study, the rules stated in the **"Higher Education Institutions Scientific Research and Publication Ethics Directive"** were followed.

Araştırma tek bir yazar tarafından yürütülmüştür.

The research was conducted by a single author.

Çalışma kapsamında herhangi bir kurum veya kişi ile **çıkar çatışması** bulunmamaktadır.

There is no **conflict of interest** with any institution or person within the scope of the study.

Etik Kurul İzni | Ethics Committee Permission

Selçuk Üniversitesi İletişim Fakültesi Etik Değerlendirme Kurulu'nun 25/11/2021 tarih ve 181127 sayılı kararı çerçevesinde çalışma etik açıdan bir sakınca içermemektedir.

The study is not ethically objectionable within the framework of the written decision of Selcuk University Faculty of Communication Scientific Ethics Evaluation Committee dated 24/11/2021 and numbered E.178571.