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Perceptions of School Managers Towards the Acceptance and Use of Technology: A Phenomenological Study

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Abstract

This study aims to bring out the perceptions of school principals about technology and its use in educational institutions. The research is important in terms of determining the perceptions of school administrators to accept and use technology in the context of the necessity of using technology in schools in the distance education process and today's rapid technological developments. The study group of the research consists of 20 school administrators (principal and assistant principal) working in primary, secondary, and high schools in in Istanbul. The data of the research were collected through semi-structured interviews. The collected data were analyzed by content analysis method. It is understood that the administrators who participated in the research have positive perceptions of technology acceptance and consider its use mandatory. According to the participants, it was obtained that with the technological competencies of school administrators, their perceptions of following and using technology were different. In the research, it was found that school administrators use technology more in compulsory situations and to provide benefits. When evaluated in terms of technology in management processes, it was concluded that the administrators participated in the study using technology but they differed according to the age, in-service training, desire, and need of other school administrators in accepting and using technology.

Keywords: Acceptance of Technology, Technology Leadership, Technological Competence, Technology Usage in Education

1. Introduction

Education is a crucial component for managing and predicting future technological innovations and changes (Bates, 2000). In schools where education shapes the future, information and communication technologies should be used effectively to transform education (Teo, 2011). Every new technology that brings its unique opportunities and features in the 21st century, is a tool with the potential to redefine and empower education leaders (Hamidi & Chavoshi, 2017; Golden, 2004). However, the technology is accepted by supporting it when the user wants to use this technology for the tasks for which it was designed. (Teo, 2011). Technology acceptance and use is the effort to use a specific technology within a user group (Dillon, 2001). The change that is created by technology in society necessitates the use of technology in many areas of life such as education (Turan & Haşit, 2014). School administrators are given important duties and responsibilities in the use of technology in education in schools. School management should demonstrate the need to create a culture of technology acceptance as part of the school management process (Mentz & Mentz, 2003). Due to the developing technology today, school administrators who

can supply complex requirements of the school model in the information society with technological resources, produce solutions to increase efficency and make decisions for the future of the instution are needed in order to initiate, realize and manage in schools (ISTE, 2001).

School administrators who develop 21st-century skills and can use technology well are the most important supporters of change and improvement in schools (Wilmore & Betz, 2000). School administrators have responsibility to realize technological developments in educational environments, to reflect technology to good practice and change process and to use effective technology in order to manage change in education (Liethwood & Riehl, 2003; Macaulay, 2009). School administrators who support or prevent the use of information technologies in schools show that the use of technology in school improves and facilitates the learning and management process (Macaulay, 2009; Schiller, 2003). Therefore, school administrators should be competent in the use of technology and lead in the adaptation of technology to education (Afshari, Bakar, Luan, Samah & Fooi, 2009). It is important for education administrators to use technology effectively in the education process and lessons. Because it is seen that school administrators who are open to innovations and with high technological competence are more successful (Bahçeci, 2019).

Due to the increasing influence of technology on school management, it has become important to adapt it to schools, to reach the information needed by the schools, and to use the information correctly. School administrators have an important role in understanding the acceptance and use of technology, and supporting the transition to technology in information systems research (Miltgen, Popovic & Oliveira, 2013; Venkatesh., Thong., & Xu, 2012). The technological competencies of school administrators and their acceptance of technology gain importance in the context of school administrators being effective in the quality of education in schools, benefiting from today's developing educational technologies and developing schools (Dinham, 2005). The importance of technology leadership competencies and school administrators' attitudes towards and use of technology in the literature (Can 2003, 2008; Cerit, 2004; Helvacı, 2008; Akbaba-Altun, 2002; Akbaba-Altun & Gürer, 2008; Karadağ, Sağlam & Baloğlu, 2008; Seferoğlu, 2009), school administrators' technological leadership behaviors (Cantürk, 2016), technology leadership self-efficacy and their level of realization of education and training (Hayytov, 2013; Ertuğrul, 2014; Ulukaya, 2015); no qualitative study was found on school administrators' perceptions of technology acceptance and use. Technology acceptance, use, and technological competence gain importance in the context of benefiting improving education technologies and their adaptation to schools. The aim of the research is to put forward the sense of school administrators' technology acceptance and use. For this purpose, sought an answer to the following questions;
1. School administrators' ability to accept technology and use technology tools,
2. Roles and responsibilities in the adaptation of technological developments to schools,
3. Levels of following, learning and using technological developments and innovations,
4. Determining and meeting the needs of teachers for technology use,
5. With the practices and measures to increase the use of technology at school,
6. Thoughts on technology leadership?

2. Method

In this section, explanations about the research model, study group, data collection technique, and data analysis are given.

2.1 The Research Model

The qualitative research method was preferred in research because it aimed to examine the perceptions and attitudes of school administrators regarding technology acceptance and use. In this qualitative research, it is aimed to interpret technology acceptance and use observations of school administrators and their experiences with their perceptions. The phenomenological pattern was preferred to reveal in-depth emotions, thoughts, and information about this phenomenon. Phenomenology is a research pattern that helps us to understand deeply the experiences of people who are involved in the event and experienced the facts one-to-one (Yin, 2016).

2.2 Study Group

In this research, the purposive sampling method was preferred in order to determine the perceptions of school administrators about the acceptance and use of technology. Participating managers were determined according to the criterion sampling from the purposive sampling types. In this context, the criterion suitable for the sampling technique is the selection of participants working in different kinds of schools, different branches, and have different lengths of services. The study group of the research consists of principal and vice principals working in schools in the Beylikdüzü, Büyükçekmece, and Silivri districts of Istanbul in the 2021-2022 academic year. The primary, secondary and high schools in which 15 male and 5 female administrators in the study group work, are located in the Beylikdüzü, Büyükçekmece, and Silivri districts of Istanbul.

Table 1: Demographic information on school administrators

Variables (N=20)	Subgroups	f	%
Gender	Female	5	25
	Male	15	75
	Total	20	100
Marital Status	Married	5	25
	Bachelor	15	75
	Total	20	100
Education	License	12	60
	Master Degree	7	35
	Doctorate	1	5
	Total	20	100
Age	21-30	1	5
	31-40	6	30
	41-50	12	60
	51 and above	1	5
	Total	20	100
Job	Principal	10	50
	Vice principal	10	50
	Total	20	100
School Type	Primary School	3	15
	Middle School	7	35
	High school	10	50
	Total	20	100
Branch	Social Studies	7	35
	Sciences	2	10
	Information Technologies	2	10
	Classroom Teaching	2	10
	Foreign Language	3	15
	Other	3	15
	Total	20	100
Management Seniority	1-5 years	7	35
	6-10 years	6	30
	11-15 years	4	20
	16 years and above	3	15
	Total	20	100
Professional Seniority	1-5 years	-	0
	6-10 years	6	30
	11-15 years	5	25
	16-20 years	2	10
	21-25 years	6	30

	26 years and above	1	5
	Total	20	100
Technology In-service Training	I got it	18	90
	I didn't get it	2	10
	Total	20	100
Management In-service Training	I got an education	19	95
	I didn't get an education	1	5
	Total	20	100
Technology (e-school, mebbis etc.) usage time (Weekly)	1 Hour	0	0
	2 Hour	6	30
	3 Hours and more	14	70
	Total	20	100
Internet (Research, publishing etc.) usage time (Weekly)	1 Hour	2	10
	2 Hour	6	30
	3 Hours and more	12	60
	Total	20	100

When the personal data of school administrators are examined, it is seen that it is male according to the gender variable, it is married according to the marital status variable; it is high school according to the school type variable, the majority of school administrators who worked at least 6 years according to the seniority variable. Besides, it is seen that a balanced distribution is followed between 1-15 years in terms of management period, and the ratio of managers and assistant managers to those who perform managerial duties is equal to each other according to the type of duty.

2.3 Data Collection and Analysis

A semi-structured interview form was used in order to determine perceptions of technology acceptance and use in line with the opinions of school administrators. The reason for using a semi-structured interview form is that it offers the interviewee the opportunity to express himself or herself and it provides in-depth information (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz & Demirel, 2014). Interview-standardized open-ended interview style was used to understand school administrators' experiences, attitudes, thoughts, and mental perceptions with the interview. Standardized open-ended interview style approach, "consists of a series of carefully written and ordered questions that are asked to each interviewee in the same style and order", thus reducing interviewer bias (Yıldırım & Şimşek, 2016).

Before the interview form is prepared, a literature review was conducted on the school technology acceptance and use of school administrators, and a pool of questions was created suitable for the purpose of the research. Opinions of Turkish language specialists were taken on whether the questions were understandable. The opinions of two specialists in educational sciences (a Doc. Lecturer and an Associate Professor in Educational Administration) were consulted. The linguist arranged the items in the form by examining them in terms of language and expression. There are five questions in the semi-structured interview form, which are finalized in line with expert opinions. To test the suitability of the interview form, a preliminary application was made by the researcher and the form was given its final shape. This made the external reliability of research.

In the research, data were obtained through interviews with 20 school administrators in order to determine their perceptions of technology acceptance and use in line with the opinions of school administrators. The interviews were conducted with each school administrator face-to-face for an average of 15-30 minutes. The managers' answers to the open-ended questions in the interviews were taken with a voice recording in order not to cause data loss. The data collected by the interview technique in the 2021-2022 academic year were analyzed by content analysis. The content analysis makes inferences about the message in the texts by identifying and analyzing the existence, meanings, and relationships of certain words or concepts in a text or a set of texts (Büyüköztürk, vd. 2014).

At the beginning of the research, by giving the information about the purpose and scope of the research to the participants, its credibility was ensured. The transmissibility of the study was ensured by explaining the research questions clearly. Besides, the opinions of the participants are given in the findings with direct quotations. In order to ensure the reliability of the research, the demographic information and characteristics of the participants are given in detail.

3. Findings

In this section, the findings obtained by analyzing the interviews of the participants are presented. The research was conducted in order to determine the observations about technology acceptance and use by school administrators. The participant school administrators state that they have difficulties in accepting and using technology that developing and renewed, but they consider obligatory using information communication technologies in education as a requirement of their profession. When evaluated in terms of using technology in management processes, it was concluded that the administrators participating in the study used technology effectively, but other school administrators differed in accepting and using technology.

In this study, as a result of the data obtained from the in-depth interviews to understand the attitudes and approaches of managers in the context of technology acceptance and following technological developments, 2 main themes, namely "Accepting Technology" and "Technological Developments and Attitudes of Managers" and sub-themes and codes for these themes were reached.

Table 2: Perceptions of School Administrators on the Acceptance and Use of Technology

Category	Subcategory	Codes
I. Accepting Technology	1. Technology Perception	1.1 Open to Innovation
		1.2 Biasness
		1.3. Diclamation
		1.4. Insufficiency
	2. Technology Use Intention	2.1. Necessities
		2.2. Request
		2.3. Requirement
		2.4. Benefit of Technology
	3. Technological Competencies	3.1 Technological Opportunities
		3.2 Competencies of Managers
		3.3 Inabilities of Managers
II. Technological Developments and Attitudes of Managers	1. Responsibilities of Managers	1.1.Bringing technology to school
		1.2.Technology Leadership
	2. Adopting Technology	2.1. Technology Adoption
		2.2. Necessities of Management
		2.3. Age of Manager
	3. Following Technological Developments	3.1. Internet
		3.2.In-service Training
		3.3. Friend/Fellow

3.1. Accepting Technology

As a result of the analysis of the interviews with the school administrators, two teams were revealed, "Accepting Technology and Attitudes of Managers in Technological Developments".

'Accepting Technology' theme, with the themes of "Technology Perception, Technology Usage Intention, and Technological Competencies", other codes were reached in some of these sub-themes.

- Codes for the Technology Perception sub-theme: Open to innovation, Biasness, Disclamation, Insufficiency.
- Codes for the Technology Use Intention sub-theme: Necessity, Request, Requirement, and Benefit of technology.

Codes for the Technological Competencies sub-theme: Technological opportunities, Competencies, and inabilities of managers.

3.1.1. Technology Perception

They defined the perceptions of school administrators about technology and technology innovations with the Technology Perception sub-theme with Open to innovation, Biasness, Disclamation, Insufficiency codes; Technology Use Intention sub-theme with Necessity, Request, Requirement codes and Benefit of technology expressions that from sub-theme.

Participant school administrators stated that the school administrators' being open to technological innovations and whether they are prejudiced or not related to technological innovations and developments depend on their perception of competence.

Some of the participants' views on the codes that determine school administrators' technology perception are;

3.1.1.1. Open to Innovation

According to the participants, the most important feature that determines the technology acceptance perceptions of school administrators is seen as being open to innovation. However, it is stated that the current managers' attitudes towards technological innovations differ according to variables such as age, interest, education, and competence. Some opinions of school administrators about being open to innovation are;

P1: "New managers care about technology and I think they are open to technology."
P 17: "Managers in our schools are not open to developments, and innovations in terms of technology."

3.1.1.2. Biasness

According to the participants, school administrators' biases about technology are seen as determiners of technology perceptions. Some opinions about school principals and vice principals being biased;

P 8: "It starts with a prejudgment against technological innovations, there is an unintentionally shield."
P 19: "In general, school administrators are a bit prejudiced and abstain from technology. I think it's because they don't know much about technology."

3.1.1.3. Disclamation

According to the participants, the majority of school administrators show resistance to technological innovations and developments. Some of the opinions of school principals and vice principals about their resistance to technological innovations and developments are;

P8: "In general, there is a resistance of education community against all innovations."
P9: "Although many managers resist this change today, i believe they try their best to adapt. I think that school administrators have a hard time in accepting technology."

3.1.1.4. Insufficiency

Perception as all kinds of concepts and phenomena that our minds learn by choosing determines the attitudes of school administrators toward technology. All kinds of thoughts, judgments, and perceptions about a person affect their behaviors. Participating school administrators also stated that the inadequacy perceptions of school principals

and vice principals regarding the acceptance and use of technology are very effective in accepting and using technology. Opinions of some participants on this subject:

P14: "There is a logic of 'Let nothing happen' in the area where the school principal himself is not sufficient in terms of hardware and software."

P9: "I think that there are deficiencies in my school in terms of teacher competencies in the use of technology."

3.1.2. Technology Use Intention

School administrators' designing, wanting, thinking, and deciding to use technology state their intention to use technology. Some of the opinions of participants stated that school administrators' necessary use of technology, their request, and need, and their expectation of the benefit of technology constitute their intention to use technology:

3.1.2.1. Necessity

Necessities in school administrators, especially principals technology use is seen as a determining factor by the participants. All of the participant school administrators think that school principals accept and use technology in cases of necessity.

P2: "School administrators see the adaptation of technology as a necessity and inevitable."

P12: "In school, teachers have to try, or they learn because they have to. Otherwise, they can not catch up with technological developments because of their age."

3.1.2.2. Request

All of the participant school administrators state that the willingness of school administrators, especially principals, is a significant factor in the adoption of technology. Besides, they think that the willingness of school principals to technological developments and innovations positively affects their technology acceptance and use. Some of the opinions on this subject are:

P 4: "Adaptation to technology is faster and easier for young teachers because they are newly appointed and young, their desire to learn is more unfinished and not exhausted."

P 15: "Administrators are good at approaching technology, and there is also a desire in teachers. It must be desire to use technology."

3.1.2.3. Requirement

The educator who notices the rapid changes and innovations in technology can learn. Because learning is a process that emerges as a result of perceived need. The fact that school principals feel the need to learn and apply technological developments and innovations positively affects their technology acceptance behavior. Some of the opinions of the participants on this subject are:

P 17: "In order to know that technology is a tool not a purpose, needs should be determined first of all."

P 7: "Determining the needs are easier than provide it, but we are having trouble meeting the needs."

3.1.2.4. Benefit of Technology

Technology provides benefits to teachers and students in education, as well as in all areas of life. The benefits of technology to schools, managers, teachers, students, and parents are also reflected in the quality of education. Participant school administrators state that the benefits of technology affect their perceptions positively in technology acceptance of principals and assistant principals in schools.

P3: "For a specific example, I use other programs not for my job, but to faciliate my works or for hobby, out of personal curiosity."

P15: "The more we are in technology, the easier our work becomes."

3.1.3. Technological Competencies

For the use of technology in education, administrators and teachers must have certain qualifications. According to the participant school administrators, the technological capabilities of the schools, the technological competencies, and the age of the administrators determine the technological competencies.

3.1.3.1. Technological Opportunities

Participant school administrators consider the technological opportunities of schools, the use of information and communication technologies by school administrators, and their attitudes towards technology as a variable depending on the opportunities offered by the government. Technological opportunities in schools are seen depending on the economic conditions of the schools, the opportunities offered by the ministry, and the opportunities provided by families to students are seen depending on the approaches of the administrators about technology. Some of the school administrators' opinions on technological opportunities are:

P9: "We should use the technology that developed and educational tools that emerged in the technological environment in our schools. These tools should be brought to our schools."

P19: "Although teachers' own possibilities are decisive in the use of technology and access to technology at school, I try to meet their needs as a school."

3.1.3.2. Competencies of Managers

Technological competence differs depending on the schools' technological opportunities and educators' technological competence. According to the participants, the competence of school administrators to learn technological developments and follow innovations determines the technological status of the school. Some participant manager opinions on the technological competencies of school administrators are:

P5: "I consider myself sufficient, but I give myself nine out of ten for following rapid developments."5

P11: "Technological proficiency levels of teachers vary from person to person. Age is a factor according to interest, and branch is definitely a factor."

3.1.3.3. Inabilities of Managers

According to the participant managers, the fact that school administrators are competent and sufficient in information communication technologies affects the active and effective use of technology. It is stated that most school administrators are insufficient in the technological context in the use of educational technologies, which are considered compulsory today. Some opinions of participant school administrators on this subject are:

P2: "I do not consider myself sufficient in technology use. I do not consider teachers enough in technology."

P17: "I think principals and vice principals are insufficient in technology use."

3.2. Technological Developments and Attitudes of Managers

As a result of the analysis of the interviews with school administrators, the theme of 'Attitude towards Technological Developments' was reached under 3 sub-themes as 'Responsibilities of Managers', 'Adopting Technology', and 'Following Technological Developments' and other codes in some of these sub-themes.

Responsibilities of Managers sub-theme
- Bringing technology to school
- Technology Leadership

Adopting Technology sub-theme
- Technology adoption
- Necessities of management
- Age of manager

Following Technological Developments sub-theme
- Internet
- In-service training
- Consists of Friend/fellow learning codes

3.2.1. Responsibilities of Managers

The majority of participant school administrators stated that school administrators have responsibilities and their roles are important regarding technological innovations and developments. It is thought that vice principals,

especially school principals follow, learn, and apply technological developments and education technologies are crucial especially for teachers. The opinions of participants on the responsibilities of managers sub-theme are:
The codes formed in line with the opinions of the participants belonging to the responsibilities of managers sub-theme are; Bringing technology to school ve Technology leadership.
P7: "The school administrator has a role and responsibilities in technology. The role and influence of the school principal is also important."
P17: "Principals and vice principals have quite big roles and responsibilities."

3.2.1.1. Bringing Technology to School

Participating school administrators attach great importance to the role of school principals in bringing technology to school and its adaptation. They stated that the school principals had a great impact on the introduction of technology to the school, but the support of the state was also obligatory. Opinions of participant school administrators on the introduction of technology to schools;
P1: "School administrators need to bring technology to school."
P18: "School administrators are the people who need to bring technology to school."

3.2.1.2. Technology Leadership

Participant school administrators state that school principals should be technology leaders, follow technological innovations and developments, and lead teachers in technology. Opinions of the participants about the technology leadership of school administrators;
P 6: "It is a necessity of the age for school administrators and principals to be technology leaders."
P9: "A school principal who mobilizes all opportunities is a good educational technology leader."

3.2.2. Adopting Technology

3.2.2.1. Technology Adoption

Codes formed in line with the opinions of participants that belonged to Adopting technology sub-theme; Necessities of Management and Age of Manager
Participant managers stated that while they find the approaches of the current school principals and vice principals to adopt technology mostly positive, managers may have a negative attitude towards innovations because they have difficulty in learning technology depending on age; the responsibility of teachers and students in adapting to technological innovations in schools belongs to school administrators.
Opinions of school administrators on technological developments and innovations are:
P 2: "I do not think that school administrators' approaches to technological developments are very positive."
P20: "I think that school administrators have the wrong attitude towards technology and developments."

3.2.2.2. Necessities of Management

Participant school administrators think that necessities have a great impact on the adoption of technology, and learning technology innovations however despite the necessities some school administrators can not adapt to technology, and do not learn or while adopting it through their assistants, teachers other administrators accept technology and developments due to the necessities.
Some opinions of school administrators about the adoption of technology, technological developments, and innovations are:
P9: "Everyone has difficulties in accepting technology, but I think they adapt it."
P17: "I think school administrators have a hard time accepting technology."

3.2.2.3. Age of Manager

Participant managers state the fact that school administrators are competent and adequate in information communication technologies depends on school administrators' age, and young managers are adequate in technological context compared to old managers.
Some opinions of participant school administrators are:
P2: "A certain generation of older ones are far from technology."
P3: "Technology adoption by administrators is going faster because of the generation gap."

3.2.3. Following Technological Developments

Participants state that they learn developments in technology from the internet, in-service training, and their friends. Some opinions of school administrators on using education technologies in education and following technological developments are:

3.2.3.1. Internet
School administrators state that the most effective tools for following and learning technological developments are the internet and social media:
P5: "We generally follow up on the internet, everything can be accessed on the internet."
P7: "I try to reach technological developments from various sources on the internet as much as possible and to train myself in this subject."

3.2.3.2. In-service Training
Participant school administrators state that the most effective tool for following and learning technological developments is in-service training. Some of the opinions of school administrators about the importance of in-service training that school administrators and teachers receive in using educational technologies and following technological developments are:
P1: "The manager must have a license and their technology license must be renewed annually."
P3: "Our in-service trainings against technological developments continue. We are now in the age of technology, I think everyone in the profession has more knowledge on the subject."

3.2.3.3. Friend/ Fellow Learning
According to some of the participants, school administrators and teachers benefit from their friends and forum sites to follow technological developments, learn about innovations, and eliminate their deficiencies. Some of the opinions of participants about friend/fellow learning, which is seen as an effective learning tool are:
P7: "I consult with my friends who know about the issues that I am lacking. I'm trying to learn, whatever it takes,and I do what I can."
P19: "I also learn from my friends and online digital platforms."

4. Discussion

This research was carried out to determine the perceptions of school administrators regarding technology acceptance and use. The aim of technology acceptance is to predict the attitudes of school administrators, teachers, and other shareholders towards technology and explain the common determinants of acceptance or rejection. In this research, the following findings were reached by analyzing thoroughly the opinions obtained through the interviews with participants. In the research, it was determined that the acceptance and use perceptions of school administrators were affected by their proficiency and intentions to use technology; their attitudes towards technological developments were affected by their necessities, request, and needs. It is assumed that intention in technology acceptance affects attitudes towards use as well as perceived usefulness and ease of use (Teo, 2011).

The majority of participant managers consider being open to innovations in acceptance of technology is important. School administrators should be able to follow and use technology sufficiently to fulfill the management duties expected from them nowadays (Topcu & Ersoy, 2020). In the research, according to the majority of participants, school administrators show resistance to innovations by being prejudiced in their attitudes towards technological innovations. People develop a reaction against innovations that they do not know how to use or think they cannot use, and they resist changing (Çelik ve Bindak, 2003). According to the participants, self-efficacy perceptions of school administrators are crucial in order to prevent resistance to accepting technology as an innovation. It is known that the intentions and attitudes of educators towards computers are directly affected by their perceptions of technology compatibility (Lee & Lee, 2014).

Participants state that requests and needs as well as professional obligations affect the intentions of technology use. Accepting the use of technology in education as a professional obligation affects positively the attitudes and behaviors toward innovations (Arslan & Şendurur, 2016). When the opinions of participants in the research, which all schools have equal opportunities for technological infrastructure, and equipment, are examined it is seen that the administrator and teacher competencies with technological opportunities of the schools are important for the technology usage in education. Technological competencies of school administrators are important in managing schools more effectively (Flanaganand Jacobsen, 2003; Seay, 2004; Erbakırcı, 2008; Bostancı, 2010; Banoğlu, 2011; Çalık, Çoban & Özdemir, 2019). The majority of the participants find that the competencies of other administrators other than themselves are deficient in the technological context at schools. It is difficult to adopt and follow by individuals since the development of technology progresses rapidly (Ekici & Gümüş 2016).

In the research, the perception that managers who received in-service training are more competent in the use of technology than the others shows similarity with the literature. Participants consider technology leadership crucial in following technological innovations and developments. In literature, interaction with socialization tools such as family, friend groups, and mass communication is seen as an important variable in the adaptation or acceptance of technological innovations (Tuna Uysal, 2020). As technology continues to affect teaching and learning, the expectations of benefiting from technological advantages from schools will increase and the pressures of the necessity to make a rapid transition between technology and teaching will be experienced (Pelgrum, 2001). Age can be an important consideration in technology acceptance (Venkatesh vd. 2012).

According to participants, young managers accept and learn innovations easier while experienced managers who are older, on the other hand, have difficulty with technology and become incompetent. Besides, it is seen that the internet, social media, in-service training, and learning from friends are the most effective learning tools in the following technology.

5. Results and Recommendations

Research results are compatible with literature in learning and following technological innovations. The aim of the research is to predict the acceptance and using technology, the attitudes of school administrators towards technology, and explain the common determinants of their acceptance or rejection. In this context, it is stated that school administrators have difficulty in accepting and use of the developing and renewed technology, but they consider the use of technology in education as a requirement of their profession. According to the participants, it was concluded that the technological competencies of school administrators differed in following and using technology. In the research, it was found that school administrators use technology mostly to facilitate their work and to provide benefits in compulsory situations. When evaluated in terms of using the technology in the management process, it was concluded that the administrators who participated in the study used technology, but other administrators differed in accepting and using technology. The findings of the study can be used by administrators to contribute to technology usage in schools and to improve themselves in this field.

In the light of the findings, the following recommendations can be made:
- School administrators should inform about the effective use of technology in the education processes in school.
- In-service training programs can be organized in order to use technology more effectively in education and training processes.
- The technological equipment that the school needs should be provided and technical infrastructure issues should be resolved.
- All schools should have equal opportunities in terms of technological infrastructure, equipment and equipment.
- The level of acceptance, following, and use of technology by school administrators in education processes can be investigated.
- Technological knowledge, abilities, and competencies of education administrators should be accepted as the criteria for manager appointment.

- Studies can be done on the technology leadership of school administrators.

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