

**EMOTIONAL INTELLIGENCE LEVELS AND 21ST CENTURY SKILLS IN
EDUCATIONAL SCIENCES: A REVIEW OF THE LITERATURE**

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ABSTRACT

In the century we live in, technology is always getting better and changing along with people's interests, wants, and needs. Because of these changes, people had to make changes in their economic, social, and everyday lives. This fastpaced change in technology makes it possible for information to quickly reach every part of society. It also creates new social networks and business areas and affects other important parts of society, such as business and education. Because of this, teachers and school leaders have a lot of responsibilities to keep up with changes in the education system, make the necessary changes, and teach these skills to students. The goal of this study is to look at the relationship between emotional intelligence and 21st century skills in the field of educational sciences, as well as to look at the studies that have been done in this area. In this context, the results of the studies that looked at the links between teachers' emotional intelligence and their ability to teach 21st century skills were talked about in the educational sciences literature. In similar studies that need to be done, both qualitative and quantitative studies can be done to find out what teachers and administrators think in order to fill the gap in the relevant literature.

Keywords: Emotional Intelligence, 21st Century Skills, Literature Review

**EĐİTİM BİLİMLERİNDE DUYGUSAL ZEKA DÜZEYLERİ İLE 21.YÜZYIL
BECERİLERİ ARASINDAKİ İLİŐKİNİN İNCELENMESİ: LİTERATÜR TARAMASI**

ÖZET

İçinde bulunduđumuz yüzyılda teknolojiye yařanan gelişmeler sürekli bir şekilde ilerlemekte ve toplumun ilgi, istek ve ihtiyaçlarını yenilemektedir. Bu gelişmeler toplumu oluřturan bireyleri ekonomik, sosyal ve günlük hayatta yařanan deđişime mecbur bırakmıřtır. Teknolojik anlamda yařanan bu hızlı gelişim, bilginin toplumun her kesimine hızlı bir şekilde ulaşmasına, yeni sosyal ağların ve iş alanlarının oluřmasına neden olmakta, iş hayatından eğitim hayatına kadar toplumu ilgilendiren diđer alanları da etkilemektedir. Bu nedenle eğitim sisteminde gelişmeleri takip edebilmek, gerekli iyileşmeleri yapabilmek, bu becerilere sahip öğrenciler yetiřtirebilmek açısından öğretmenlere ve okul yöneticilerine büyük sorumluluklar düşmektedir. Bu arařtırmanın amacı, eğitim bilimlerinde duygusal zeka düzeyleri ile 21.yüzyıl becerileri arasındaki ilişkinin incelenmesi ilgili literatürdeki çalışmaların incelenmesidir. Bu kapsamdan yola çıkılarak arařtırmada eğitim bilimlerine yönelik ilgili literatürde yapılmıř arařtırmalarda öğretmenlerin duygusal zekâ düzeyleri ile 21. Yüzyıl becerileri arasındaki ilişkilerin ele alındığı arařtırmaların sonuçları ele alınmıřtır. Yapılacak benzer arařtırmalarda ilgili literatürde boşluđu dolduracak şekilde öğretmen ve yönetici algılarının ele alındığı nitel ve nicel arařtırmalar yapılabilir.

Anahtar Kelimeler: Duygusal Zekâ, 21.Yüzyıl Becerileri, Literatür Taraması

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INTRODUCTION

In the current century, technological advancements are continually advancing and redefining the interests, desires, and demands of society. These advancements have compelled the members of society to alter their economic, social, and daily lives. This rapid advancement in technology causes knowledge to swiftly reach every section of society, develops new social networks and corporate sectors, and impacts other areas of societal concern, from business to education. Technology advancements have made it feasible to get information more quickly and have altered the requirements and techniques for accessing information. In the past, accessing information required the use of resource individuals, books, and encyclopedias; but, with the advent of internet technology, information can be accessed in only seconds. The impression that getting information is difficult and timeconsuming is shifting in today's technological age. To fast adapt to this technological advancement, an adequate education system is required. Therefore, education systems required renewal. As the demands of humans evolve with each new century, the education system must also adapt, making the restructuring process vital.

In today's society, the traits that persons should possess have evolved. Individuals of today are required to possess abilities such as the ability to swiftly adjust to changes and advancements, to transfer acquired information to daily life and to adapt to society by criticizing and questioning, to produce, and to have the concept of lifelong learning (Boyac and Ozer, 2019). It comprises the growth of an individual's talents such as questioning, thinking, comprehending, and problem solving, as well as the reflection of this development on the individual's academic and social performance (Onur & Kozikoğlu, 2020).

In the current environment, it is essential that every member of society be able to control their emotions and express themselves and their feelings freely when necessary. In the 21st century, it is essential for individuals to be able to comprehend, interpret, and respond to the emotions of others, as well as to control their own emotions. The overarching term for these emotional states is emotional intelligence. In daily life, individuals utilize both emotional intelligence and 21st century talents. Individuals with developed emotional intelligence share the characteristics of being able to assume responsibility, being receptive to criticism, saying "no" when appropriate, and effortlessly accepting and expressing their feelings. Emotional intelligence plays an essential role in interpersonal relationships and communication.

In the coming years, it is anticipated that standard and even some daily tasks will be performed by robots using artificial intelligence. Institutions in the public and private sectors will no longer be able to employ people, and machines will replace the labor force. Young people should therefore have the potential to build new business areas through synthesis. In today's environment, where terminology such as data mining have become indispensable, the amount of data for access and detection that is worthwhile for every profession is rapidly increasing. Critical thinking abilities are the most fundamental trait that persons must possess if they are to find the proper and dependable information among such voluminous data. Cooperation is necessary for the successful completion of work in the current era, in which the degree of expertise among all occupational groups is increasing fast.

Therefore, the ability to collaborate and organize collaboration are crucial talents in this century. Taking action when an issue arises and resolving it is the most essential ability of the twentyfirst century. This talent, which is also known as collaborative work, is extremely valuable nowadays. Define and analyze the problem, generate alternative ideas, plan, implement, and evaluate the best solution (Akgündüz et al., 2015). It is clear that education managers and teachers must include 21st century skills into their educational curricula. It is believed that there is no research in the field of educational sciences that examines the association between emotional intelligence levels and 21st century competencies.

Teachers and school officials have significant obligations to monitor changes in the education system, make the required modifications, and instill these abilities in their students. This study was conducted to determine the association between teachers' emotional intelligence and the 21st century competencies of education administrators.

GENERAL INFORMATION

Framework for the Education of the 21st Century

P21 is an organization that evaluates the preparation needs of all children in the world for the 21st century and identifies the skills they require in education, civics, and professional domains. Core courses and 21st century subjects are crucial to the success of student development. The themes of basic courses in Turkish literacy, foreign language, mathematics, science, social sciences, economics, arts and physical education, economics, business and entrepreneurship, civic, environmental, and health awareness are associated with 21st century skills.

Creative Thinking and Innovation Application Skills: Creativity is the ability to look differently. Creative thinking can be defined as generating actionable ideas by giving individuals a unique perspective. Creative thinking also includes flexibility, originality, fluency, that is, producing original ideas, imagination, metaphorical and associative thinking skills. Individuals with creative thinking skills are those who like to exhibit originality in their business life, develop and implement new ideas that will be useful to their colleagues, and follow innovation. Creative thinking; it is to use thinking techniques such as brainstorming, six hats and marketplace in accordance with logic, and to analyze and evaluate one's own thoughts in order to increase creativity. In addition, being able to do interpersonal work; It is the ability to monitor input and feedback with sensitivity to original ideas.

Critical Thinking and Problem Solving Skills: People who can easily understand intersystem relations, reach information in a short time in order to find solutions to existing problems and analyze information by limiting it have critical thinking and problem solving skills. Problem solving skill can be defined as developing strategies against the difficulties encountered by finding effective solutions to the problems encountered in daily life. We can encounter many problems in all areas of life. Therefore, every individual should have problem solving skills. In this changing and developing age, it is necessary to raise individuals who can think critically and solve their own problems with their own unique strategies (Kaya, 2020).

Effective reasoning; It is the ability to use many reasoning methods such as induction and deduction in a way that is compatible with the current situation. Systematic thinking; analyzing how the elements interact with each other and getting results. To decide; to relate to knowledge and opinion, to evaluate and interpret various perspectives. The skill that can solve the problems encountered with classical and new methods, produce various perspectives and thus adopts reaching the result as a principle is the problemsolving skill (Battelle for Kids, 2020).

Communication and Cooperation Skills: Communication and cooperation are the types of skills that are at the forefront of basic skills from education life to business life, from social life to various organizations. In order to achieve the determined common goal, individuals must communicate constantly, be prone to teamwork and prefer a clear and effective language (Partnership for 21st Century Learning, 2015). Communication is the transfer of individuals' lifelong learning, feelings, thoughts and knowledge to other people through communication tools. The most important factor that forms the basis of education is communication. All activities for learning and teaching are possible with communication, that is, communication and learning are intertwined (Murat, 2018). Ability to communicate clearly; It is the ability to convey ideas with verbal or written communication skills and to communicate effectively in various fields. In this direction, it is necessary to have various goals such as providing motivation and giving information while communicating (Battelle for Kids, 2020). The working partnership created by people gathered around similar goals for similar purposes is defined as cooperation. Collaboration skill, which has an important place in the field of education, similar to all fields, is a form of learning and allows people to work in harmony (Çolak, 2018). Ability to collaborate with others; It is the ability to create an effective working network with different individuals in different environments. In this context, it was stated that the individual should show flexibility in order to realize common goals. Collaboration includes taking responsibility for working together and valuing the contributions of individuals in the team to the work (Battelle for Kids, 2020). Collaboration has an important place in our lives. When a job is done by a single person, the jobs both decrease and the workload increases. In this case, it can be said that it is necessary to cooperate with others. Taking responsibility, making joint decisions, learning from each other can be achieved through cooperation. Collaboration is inevitable when discussing a potential problem, solving a problem, or creating a product. As in every field, cooperation in educational institutions is important both between teachers and administrators and between students.

Information, Media and Technology Skills: Having mother tongue literacy or four processing skills in 21st century conditions; It is also necessary to have proficiency in many fields such as science, science, art and English. However, in order not to be inadequate in the face of rapidly growing knowledge, skills such as accessing information, evaluating information, directing and evaluating skills are now included in the scope of many courses. Accessing information quickly and reliably, rapid and continuous developments in technology are among the competencies that every individual should have in our age. Therefore, individuals of the 21st century must be people who can produce, evaluate and evaluate information, media and technology efficiently.

These skills, which are thought to be required by every person in this century we live in, are called information, media and technology skills according to P21 (Kaya, 2020).

Information Literacy Skills: Information literacy refers to being able to access information from different information sources, to use information effectively, to organize and evaluate it, and to reveal a basic understanding about the application of ethical issues in information use (Aydın, 2021). Information literacy forms the basis of lifelong learning. The common skill in all courses, education fields and education levels is information literacy. This skill contributes to the development of research and selfmanagement of individuals as well as having a good command of the content (Güler,2019).

Media Literacy Skills: Media literacy is a process that deals with reaching messages in different ways, analyzing, evaluating and sending messages, and how people interpret these messages (Altun, 2008). Media literacy skills consist of two subdimensions. The first of these is media analysis; It is known as the ability to understand the use of media communication tools and the reasons for their emergence, the ability of individuals to interpret media messages in various ways, the changes in their perspectives, the effects of the media on behaviors and beliefs. The second subdimension, creating media products; It is the ability to understand all its terms by choosing the appropriate media creation tools (Battelle for Kids, 2020).

Technology Literacy Skills: Today, the importance of technology is increasing. Considering the needs of society, emerging technology should be understood by individuals. People who can easily understand their relations in society have technology literacy skills (Bacanak, Karamustafaoğlu, & Köse, 2003). With the development of technology in the current century, the language of communication has become digital and as a result, the importance of technology literacy has increased. This skill is the ability to use digital tools while accessing information. Using technology effectively is included in the technology literacy skill. It is the ability to use technology effectively, to search whether the information is correct, to use technology as a tool to update, evaluate and send information, to use technology and social networks effectively while accessing and managing information (Battelle for Kids, 2020).

Life and professional skills: While these skills make it easier for individuals to live together, they enable them to exist in this competitive environment. These skills are those that provide the strength to adapt to constantly changing life conditions. These skills generally enable the individual to discover himself. Individuals who have life and professional skills are individuals who can easily adapt to change, have a structure of resistance against difficulties, produce original projects and achieve results in the direction they want (Murat, 2018). In today's conditions, it is not enough just to have thinking skills and content knowledge. In this age we live in, the ability to navigate in difficult life conditions, which pushes the individual to compete, necessitates the development of individuals' life and professional skills (Kozluk, 2021). Life and professional skills are grouped under five subthemes with their own components. These are: flexibility and adaptability, productivity and accountability, leadership and responsibility, selfmanagement and initiative, and social intercultural skills.

Flexibility and Adaptability: Flexibility and adaptability is the ability to adapt effectively to a new situation when work environments or responsibilities change. These individuals can easily adapt to different roles and responsibilities and can work effectively in complex environments. Components of this skill are the ability to adapt and be flexible. Adaptability to changes is known as the ability to adapt to various programs and professional programs and to work effectively in uncertain situations. Flexibility is the ability to understand different views in order to reach applicable solutions in multicultural areas (Battelle for Kids, 2020).

Productivity and Accountability Skills: It is called productivity skill to create a product by identifying basic needs, using time effectively, respecting ethical values, working and cooperation skills in order to achieve the determined common goals. Productivity and accountability are not independent of each other. Accountability is taking part in the creation of the product and taking responsibility for the performance of the product (21st Century Skills, 2013). These two skills are interrelated. While productivity means identifying needs and managing time effectively while creating a product; accountability means being responsible for the effectiveness of the product (Çolak, 2018). Project and producing results are within the scope of this skill. While producing a project means being able to manage the situation in order to achieve the targeted goal even under difficult conditions; producing results means making more efforts to produce quality products, exhibiting an honest and objective attitude in studies, working in a versatile and collaborative manner, managing time effectively and being responsible for the result (Battelle for Kids, 2020).

Leadership and Responsibility Skills: Individuals with interpersonal problemsolving skills to achieve a set goal. It can be expressed as exhibiting responsible behavior for the benefit of society. Leaders are people who can take responsibility, work in a team, cope with the team's feelings such as loss of motivation and stress, and manage the situation (Çolak, 2018). Being able to guide and lead and being responsible to others are components of this skill. It is the ability to make an effort to guide and lead others, to benefit from the strengths of others in line with the same goal, to set an example, and to share work. Being responsible to others is acting in line with the interests of society (Battelle for Kids, 2020).

SelfManagement and Initiative Skills: People with this skill can set short and longterm goals, use the day effectively, make selfregulation, and know that learning is continuous and act accordingly (Partnership for 21st Century Skills, 2019).

Social and Intercultural Skills: These skills are the skills that emphasize being able to work effectively in various environments, respecting cultural differences, different opinions, listening and speaking, and one of the most important skills that individuals should have in this age we live in (21st Century Learning, 2019). Components of this skill are the ability to communicate effectively with others and to work effectively in diverse teams. Effective communication is the ability to determine the time for appropriate speaking and listening and to express oneself in the most effective way. Being able to work effectively is the ability to work effectively with these individuals while respecting cultural diversity, to be open and respectful to different ideas, and to benefit from cultural differences for innovation (Battelle for Kids, 2020).

Emotional Intelligence

Concept of Emotional Intelligence

Although scientists on the concept of emotional intelligence date back to the 19th century, it has also been studied for most of the 20th century. The concept of emotional intelligence attracts attention in the explanation of human behavior. The individual's selfawareness, selfmanagement, and social skills show the individual's emotional intelligence.

According to Baltaş (2006, p. 7), emotional intelligence is; It makes it easier for the person to cope with the people around him. The individual recognizes, understands and can use their emotions efficiently. The individual can cope with stress by evaluating what the other party wants and needs.

Israeli researcher Dr. Reuven BarOn (2006) defines emotional intelligence as all of the emotional and social abilities that enable a person to understand himself and others, to convey himself in an understandable way, to adapt to the environment, and to cope with the problems experienced (Cumming, 2005, p.3).

According to Davies, emotional intelligence has four dimensions. The first of these is the understanding of the emotion and the successful transfer of the emotion to the other party. The second dimension includes understanding and recognizing the emotions of others. The third dimension is the individual's ability to selfregulate their emotions and the last dimension is the individual's ability to use their emotions (Yüksel, 2006, p. 13).

Peter Salovey and John Mayer defined emotional intelligence as being aware of one's own and others' emotions, being able to distinguish emotions, and using this information in one's actions.

Daniel Goleman, on the other hand, defined emotional intelligence in 1995 as the ability of an individual to understand his own emotions, to think by putting himself in the place of others, and to regulate his emotions in a way that can improve his life. Goleman has gathered emotional intelligence under the title of five abilities (Goleman, 2001).

SelfAwareness: Selfawareness, that is, emotional awareness, is knowing what an individual is feeling. Individuals with selfconsciousness recognize the emotions they experience, reflect them on their behaviors, and are successful in expressing themselves.

Directing Emotions: It is the ability of an individual to cope with the emotions he feels and manage them. Manipulating your emotions is associated with selfcontrol, selfconfidence, and resilience. The individual should be able to cope with the situations that cause him pain and stress and return to his old healthy feelings. Individuals who confront their emotions rather than suppress them are emotionally strong.

Empathy: Empathy is the ability to put oneself in the other person's shoes. People who can empathize are successful in their social relationships. They can accurately understand the feelings and thoughts of the other person.

Managing Relationships: Individuals who can manage relationships are those who are successful in managing their relationships well, maintaining balance, and bringing out the best in others. People with this ability gain popularity in the community, have influence over individuals, and lead groups.

Selfactivation: An individual's ability to activate himself can be defined as the ability to provide motivation. In order to provide motivation, the individual must clearly define his goals. Individuals with this skill can work more efficiently and be productive by providing high performance.

Emotional Intelligence Models

The subdimensions of emotional intelligence are handled in different ways by researchers. Mayer and Salovey, BarOn, Cooper and Goleman stood out among these intelligence models. Emotional intelligence consists of two basic approaches and these approaches are mentioned below.

Talent Model: The ability model of emotional intelligence focuses on the importance of emotional intelligence and on reasoning by making use of emotions (Ören, 2011).

Mixed Model: The mixed model is more popular compared to the talent model. It is a model that blends emotional intelligence with social skills, features and behaviors (Çakar & Arbak, 2004).

John D. Mayer and Peter Salovey Model: Model emotions of MayerSalovey; It consists of four dimensions: perception, evaluation and transfer, use, understanding emotions, judgment and regulation of emotions.

Reuven BarOn Model: According to BarOn, intelligent people can use their cognitive intelligence and emotional intelligence successfully. According to the Baron model, emotional intelligence consists of five parts: personal skills, social dimension, adaptation, stress management and mood.

Robert Cooper and the Ayman Sawaf Model: According to Cooper and Sawaf, emotional intelligence; It can be defined as the ability to understand the power of emotions and use them effectively.

Daniel Goleman Model: According to Goleman, emotional intelligence is the ability to activate oneself, to keep going despite setbacks, to delay gratification by controlling impulses, to regulate mood, not to let troubles interfere with thinking, to put oneself in others' shoes and to have hope.

A REVIEW OF THE LITERATURE

In the relevant research section of the study, the results obtained from the studies conducted in Turkey and abroad are included. First, the results of the research on 21st century skills are included. Afterwards, the results of emotional intelligence researches are given.

Related National Studies

National Studies on the Skills of the 21st Century

In the study titled “Examination of Secondary School Teachers' Participation in Professional Development Activities Related to Curriculum Knowledge Based on 21st Century Skills: Evidence from Talis 2018” by Ak Gürduk (2021), the opinions of secondary school teachers working in different countries on the implementation of education programs and their levels of technology use in educational environments. examined. 144675 secondary school teachers from 48 different countries participated in the research. The author found that teachers participating in the TALIS 2018 research in different countries have high and positive levels of technology use in education and educational attainment in a multicultural environment.

In the master's thesis made by Aydın (2021), the Relationships between 21st Century Skills, SuccessOriented Motivation and Motivation for Learning English of Foreign Language Preparatory Class Students were examined. Aydın reached the conclusion that the 21st century skill levels of foreign language students are high. In addition, there is a moderate, positive and significant correlation between students' 21st century skills and achievementoriented motivation and motivation for learning English. It was concluded that there is a relationship.

In the study of Erbek (2021), General Competencies in Teaching Profession and SelfEfficacy of 21st Century Skills were examined. With this research, it was aimed to determine the general competencies of the teaching profession and the selfefficacy perception levels of 21st century skills and the relationship between the prospective teachers continuing their education at Siirt University and the prospective teachers working in public schools in Siirt. 325 preservice teachers selected through stratified sampling from the population and 300 preservice teachers selected through simple random sampling constituted the sample of the research. In the study, teacher candidates and prospective teachers found themselves very competent in the fields of professional skills, attitudes and values in the sum of the general proficiency scale of the teaching profession; In the field of professional knowledge proficiency, it was found to be sufficient. Teacher candidates' perceptions of general proficiency in the teaching profession differ according to the variables of department, time spent on reading, time spent on the internet, time spent on watching television, and participation in scientific, social and artistic activities. According to the variables of participation in scientific, social and artistic activities, the general competence perceptions of teacher candidates differ. Preservice teachers and prospective teachers are of the opinion that they have a very high level of 21st century skills selfefficacy in the sum and subdimensions of the 21st century skills selfefficacy scale. Teacher candidates' selfefficacy levels for 21st century skills differ according to the variables of time spent on reading, time spent on the internet and grade point average. Selfefficacy levels of candidate teachers differ according to gender and participation in scientific, social and artistic activities. According to the perceptions of the preservice teachers, there is a highly significant positive correlation between the general proficiency levels of the teaching profession and the selfefficacy levels of 21st century skills. It has been seen that the general competencies of the teacher candidates and novice teachers in the teaching profession are a significant predictor of their 21st century skills selfefficacy.

In the master's thesis made by Balkaş Yaşar (2021), it was studied to examine the 21st Century Skills SelfEfficacy Perceptions and Stem Attitudes of Science Teachers. According to the results of the study, it was determined that the selfefficacy perceptions of 21st century skills of science teachers were high and there was no significant difference according to gender and professional seniority. Similarly, it was determined that teachers' STEM attitudes were high, STEM attitudes differed in favor of female teachers, and there was no significant difference in professional seniority. It was seen that the teachers' opinions obtained with the semistructured interview form supported the quantitative data, and that the 21st century skills and STEM attitudes of the teachers were high and applicable for science teachers.

In the master's thesis made by Çiner (2021), the Relationship between the 21st Century Skills of Vocational and Technical Anatolian High School Administrators and the School Climate was examined and it was concluded that vocational high school education administrators have 21st century skills according to the teachers. It was found that there is a positive relationship between school principals' 21st century skills and school climate levels, and school climate is a significant predictor of education administrators' 21st century skills.

In the master's thesis made by Elçi (2021), it was aimed to examine the relationship between Preschool Children's 21st Century Skills and Competitive Styles. The sample of the study consists of 173 girls and 185 boys from preschool from eight official independent kindergartens. According to the research findings, children with low family income have lower 21st century skills scores than children with medium and good family income. The 21st century skills and competitive style scores of the children who are in the second or higher years of preschool education are higher than the scores of the children who are in the first year of preschool education. The 21st century skills scores of children whose mothers are working are higher than those of children whose mothers are not working. Children whose fathers are civil servants have higher 21st century skills scores than children whose fathers are not civil servants. As the competitive style score for the task increases, the scores for learning and innovation skills, life and career skills, knowledge, media and technology skills also increase. Twentyfirst century skills and competitive styles predict each other. As the 21st century skills total score increases, the competitive total score increases; As the total score of competition increases, the total score of 21st century skills increases.

In the master's thesis made by Kozluk (2021), Information and Communication Technologies Competencies of Physical Education and Sports Teacher Candidates in the Scope of 21st Century Skills were studied. It has been found that preservice teachers consider themselves partially sufficient in the acquisition of maintaining tools such as computers, projectors, overhead projectors, and smart boards. In addition, it has been observed that preservice teachers have knowledge about 21st century skills and include technology in their education and training processes.

In the master's thesis made by Toptal (2021), it was aimed to examine the 21st Century Skills SelfEfficacy Perceptions of Turkish Teacher Candidates in Terms of Various Variables. The data in the research; The data were collected from 1,2,3 and 4th grade students studying Turkish Language Education at state universities and participating in the research voluntarily. A total of 277 Turkish teacher candidates were reached. In the study, Turkish teacher candidates

While 21st century skills selfefficacy perceptions differ in some subdimensions according to gender, place of residence, mother's education level and class level; It has been concluded that there is no difference in terms of the geographical region of residence, father's education level, family income level, and the type of high school graduated from.

In the master's thesis made by Yılmaz (2021), 21st Century Skills of School Principals were examined according to Teachers' Opinions. 373 teachers participated in the research. In the research, it was concluded that the 21st century skills of the administrators were at the level of agree according to the perceptions of the teachers, and the skills differ according to the gender of the administrator, the type and level of the school, the education level, seniority and age of the teacher who made the assessment.

In the master's thesis made by Kaya (2020), it was studied to examine the Entrepreneurship Skills of the Classroom Teacher Candidates in the Scope of 21st Century Skills. In the research, mixed design was preferred in order to collect descriptive data. The sample of the study consisted of 275 primary school teacher candidates. In the study, the 21st century skills and entrepreneurship levels of the preservice teachers were above the medium values, the entrepreneurship variable differed between the preservice teachers with work experience and the inexperienced, and the risktaking dimension, which is the subdimension of entrepreneurship, showed a difference in favor of women. It was concluded that the tendency to be innovative is high. In addition, it was found that there is a positive relationship between 21st century skills and entrepreneurship skills, and that entrepreneurship is a significant predictor of 21st century skills. Finally, the qualitative result reached in the research is that the 21st century and entrepreneurship variables support each other.

Varki (2020) has worked on Investigation of multidimensional 21st Century Skills and Creative Thinking Tendencies of preservice teachers. 510 teacher candidates participated in the study. The research is based on the relational screening model. The results obtained from the study show that preservice teachers' multidimensional 21st century skills are lower than average and their creative thinking tendencies are high.

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In the master's thesis made by Erdoğan (2020), the Relationship Between 21st Century Skills and Lifelong Learning Tendencies of Turkish Lesson Teacher Candidates was studied. The sample of the research consists of 200 Turkish teacher candidates. In the research, descriptive relational scanning and causal comparison methods were used and the 21st century skills and lifelong learning tendencies of Turkish language teacher candidates were examined in terms of various variables. According to the findings of the study, the 21st century skills and lifelong learning tendencies of teacher candidates are relatively high, lifelong learning tendencies differ according to gender, desire to start graduate education and reading habits, and there is a positive relationship between teacher candidates' 21st century skills and lifelong learning tendencies. It was concluded that there was a significant relationship and that the variables in the study were significant predictors of teacher candidates' lifelong learning.

In the master's thesis made by Akçay (2019), the Analysis of English Language Teaching Textbooks in Terms of 21st Century Skills: Communication, Collaboration, Critical Thinking, and Creativity were studied. Four primary school books were analyzed in this study. The results of the research were analyzed as descriptive statistics, frequency, average and percentage, and it was concluded that the books included 21st century skills.

In the master's thesis made by Özgün (2019), the Effect of Creative Drama Supported Processing of the Human and Environment Unit on the 21st Century Skills of Fifth Grade Students was studied. 32 students from two secondary schools in Muğla province participated in the research. A pretestposttest study was conducted in the research. As a result of the research, there was no difference in the pretest and posttest scores of the 21st century learning skills level inventory.

Yeniay Skopje (2019) worked on the 21st Century Skills in terms of Educational Sociology Model of Children's Universities in Turkey in her doctoral thesis. This study is a qualitative research. In the research, representatives of 10 children's universities were interviewed. In the research, information about children's universities was collected. In the research, it has been seen that the need for 21st century skills is based on employment, and in our country, besides being employmentbased, it also includes national consciousness.

Güler (2019) studied 21st Century Skills SelfEfficacy Perceptions of Physical Education and Sports Teaching Department Students in her master's thesis. The research is in relational screening model. In the study, data were collected from 141 students studying in the Department of Physical Education. It has been concluded that the selfefficacy perceptions of these students are guiding on professional competence.

Gültekin (2019) worked on Examining Turkish Course Student Workbooks in Terms of 21st Century Skills in her master's thesis. In this study, the activities in the Turkish books used at the 5th grade level were analyzed. The research has a qualitative structure and the data were analyzed by descriptive analysis method. In the study, it was concluded that the activities in the Turkish book focused on the cognitive domain.

Sarıtaş (2019) worked on the Analysis of Secondary Education Turkish Language and Literature Course in Terms of 21st Century Skills in her master's thesis. In the study, Turkish Language and Literature course achievements were examined in terms of 21st century skills. The research is qualitative in nature and the case study method was used. The study was carried out with 12 secondary school 9th grade Turkish Language and Literature teachers and 72 students from the same level. As a result of the research, it was seen that the skills were not evenly distributed in the texts, the knowledge of the teachers about the program was insufficient, and as a result, they could not blend these skills with education.

Erdoğan (2019) studied the Effects of Robotic Lego Applications on Science Teacher Candidates' 21st Century Skills in his master's thesis. In the study, the science course was evaluated in terms of lego education. The research was carried out with 6 preservice teachers studying in this field. In the study, it was seen that robotic lego activities were effective in the subdimensions of 21st century skills.

In the master's thesis made by Yeni (2018), the Effect of 21st Century Skills Education on Foreign Language Teachers' Perceptions of Educational Technology and Material Development Competencies was studied. In this study, the effect of 21st Century Skills Material Design education on the technological material development skills of foreign language teachers was investigated. 33 foreign language teachers who participated in the research were subjected to 8week training. Qualitative and quantitative data results in line with the analyzes and attitudes of teachers show that teacher training programs in Turkey focus more on theory. The teachers who marked the option "I do not have" before the training, marked the options "I have it" or "I definitely have" after the training. This proves that there is a need for teacher training for teachers in Turkey. In the research, it was concluded that strategy education has an effect on technological material development.

Murat (2018) studied Science Teacher Candidates' Perceptions of 21st Century Skills Competence and Attitudes towards STEM. The data in the study were collected with the relational survey model. The study was carried out with the final year students of Science Education. In the study, the level of 21st century skills of the teacher candidates showed high participation in the dimensions of learning and renewal skills, life and career skills and knowledge, media and technology skills, the skills showed a significant difference for female teachers, the scale was on Erciyes University in the subdimension of knowledge, media and technology skills. It was concluded that there was a significant difference.

Murat (2018) studied the Effect of the Flipped Classroom Model on the 21st Century Skills and Scientific Epistemological Beliefs of Fifth Grade Students in his master's thesis. The aim of the study is to examine the effect of the Flipped Classroom model on scientific epistemological beliefs and 21st century skills. The universe of the research consists of 5th grade secondary school students working in a district of Muğla province in the 20172018 academic year. The Scientific Epistemological Beliefs Scale and the Level of Use of 21st Century Learning Skills Inventory were used in the study. In the study, it was concluded that scientific epistemological levels and 21st century skill levels did not differ between pretest and posttest.

International Studies on the Skills of the 21st Century

In this section, studies conducted abroad on 21st century skills are included. The information obtained is as follows.

The 21st Century Skills in Primary Education study in Chalkiadaki (2018) examined 21st century skills and competencies at primary education level. The research method chosen to investigate the research questions is the systematic literature review. According to the research findings, the authors concluded that the 21st century is largely characterized by the need for technology, globalization and innovation, and as a result, these skills of students need to be developed.

Qian and Clark (2016) analyzed 29 studies on gamebased education and 21st century skills in their GameBased Learning and 21st Century Skills study. The diversity of game types and game design elements, as well as the learning theories used in these studies, are discussed along with indicators, measures and results for their impact on 21st century skills. According to the findings of the study, it was seen that the gamebased approach could be effective on the development of 21st century skills of students.

The aim of Bogler, David, Inbar, Nir, and Zohar (2016) in their study School Autonomy and 21st Century Skills in the Israeli Education System is to analyze two parallel processes in the Israeli education system: first, to explore the idea of school autonomy, its origins and pedagogical implications and effectiveness; Second, the development of progressive education focuses mainly on the cognitive domain of twentyfirst century skills, “deep knowledge” and developing children's thinking skills. Based on a historical perspective, the article chronologically describes the main developments regarding school autonomy and 21st century policy initiatives, based on a literature review and analysis of policy documents. According to the results of the research; It shows that the Israeli education system is still caught in the trap of centralization, hindering major changes in the degrees of centralized control and freedom given to schoollevel educators. As for school pedagogy, it is clear that many of the changes in pedagogy that numerous policy documents have proposed over the years have not resulted in sustainable, systemwide change. In both issues, there is a large disparity between statements about innovative pedagogies and school autonomy and their actual implementation.

In Fox (2011) research, it was aimed to determine the 21st Century Skills Levels of High School Teachers and Students. In this study, the dimensions of critical thinking, creative thinking and collaboration skills were examined. According to the results of the research, it was concluded that teachers and students have insufficient knowledge on 21st century skills and they believe that 21st century skills are not suitable for application in existing schools.

King (2012) investigated High School Teachers' Awareness Levels of 21st Century Skills and the effect of Teacher Training Programs on These Skills. In the research, it was seen that teachers with work experience were successful in using 21st century skills in the education process, while these teachers focused on communication and cooperation dimensions, while inexperienced teachers focused on critical thinking and problem solving skills.

Boe (2013) evaluated 21st century skills according to 3 different universities in his research. The research was continued with the opinions of academicians and graduate students, and it was seen that the most used skill in the program was technology and the least used one was global awareness skills.

Aguila (2015) aimed to determine the Correlation between 21st Century Skills Levels and 21st Century Skill Dimensions of English Language and Literature Students. According to the findings of the study, it was concluded that the students' level of possession of 21st century skills was at a very high level in life and career skills, and the correlation relationship was quite high.

Drysielski (2015) worked on the Evaluation of Finland and USA Curriculum According to 21st Century Skills in his research. The study found that Finland supports the use of 21st century skills in its education system and encourages vocational schools.

National Studies on Emotional Intelligence

In this part of the study, studies conducted in Turkey on Emotional Intelligence are included.

Manafzadehtabriz (2020) worked on the Investigation of the Relationship Between Spiritual Intelligence and Emotional Intelligence and Transformational Leadership Behaviors of University Administrators in his doctoral thesis. The study was carried out with 219 administrators working at Atatürk University in 2015-2016. As a result of the research, it was determined that there is a relationship between the managers' perceptions of transformational leadership and their perceptions of spiritual intelligence. It has been determined that managers with emotional and spiritual intelligence show more transformational leadership characteristics.

Yılmaz (2019) studied the Relationship between School Administrators' Crisis Management Attitudes and Emotional Intelligence in his master's thesis. The research was conducted with 539 school administrators. Personal Information Form, Crisis Management Scale and Emotional Intelligence Scale were used in the study. In the study, it was observed that the emotional intelligence levels of the administrators differed according to the age and gender variables. Another result of the study is that the variables of gender, managerial position, age and school type differ on crisis management. A significant relationship was found between managers' emotional intelligence and crisis management levels.

Arıcı (2019) worked on Examining Personality Traits of School Administrators in Terms of Emotional Intelligence and SelfEfficacy in his master's thesis. The study was conducted with 384 school administrators. In the study, a positive relationship was found between the personality traits and emotional intelligence levels of school administrators.

Erkoç (2019) studied the Relationship Between Resilience, Emotional Intelligence and Managerial Effectiveness Levels of Primary School Administrators in his master's thesis. Relational screening model was used in the research and collected with Resilience Scale, Emotional Intelligence Scale and Managerial Effectiveness Scale. The research was conducted with 66 primary school education administrators and 361 classroom teachers.

In the study, it was observed that the resilience perceptions of the education administrators were at a moderate level, their perceptions of managerial effectiveness were at a very high level, and their emotional intelligence levels were at a high level. In addition, it was observed that there was a positive and low correlation between the emotional intelligence variable and the level of managerial effectiveness.

Türker (2019) studied the Effect of School Principals' Leadership Styles on Teachers' Social and Emotional Intelligence in his doctoral thesis. In this study, the relationship between the leadership styles of educational administrators and the emotional intelligence levels of teachers was examined. Participants participating in the research work in public schools in Antalya. Tromso Social Intelligence Scale and Rotterdam Emotional Intelligence Scale were used in this research. While it was seen in the research that emotional intelligence was not affected by leadership styles, it was seen that leadership types such as human resource leadership, political leadership and symbolic leadership were effective on emotional intelligence.

Kandaz (2018) studied the Relationship Between Leadership Traits and Emotional Intelligence of Managers Working in Educational Institutions in his master's thesis. In the study, it was aimed to examine the relationship between the leadership characteristics of managers and emotional intelligence and to interpret them according to various demographic variables. The research was carried out with 200 school principals and their assistants working in kindergarten, primary and secondary education. In the study, it was concluded that there was a low relationship between emotional intelligence and leadership and no significant difference was observed.

Uçar (2017) worked on "Examination of Emotional Intelligence and Strategic Leadership Behaviors of School Principals According to Teacher Perceptions" in her master's thesis. In the study, the emotional intelligence and strategic leadership levels of educational administrators were evaluated according to the opinions of 450 teachers. In the study, it was concluded that these two variables have a high level of relationship on each other.

Uçar (2017) studied the Emotional Intelligence and Strategic Leadership Behaviors of School Principals According to Teacher Perceptions in her master's thesis. In this study, it is aimed to examine the strategic behaviors of educational administrators based on teacher perceptions. It is a descriptive study. The sample of the study consisted of 450 teachers. According to the findings of the study, the emotional intelligence levels of education administrators on their educational status and fields; It was also found that strategic leadership skills differed significantly over age and educational status.

Şayir (2015) studied the Emotional Intelligence Levels of School Principals According to Teacher Perceptions and the Effect of School Culture on Organizational Citizenship Behavior in her master's thesis. In the study, the emotional intelligence levels of educational administrators and the effect of school culture on teachers' organizational citizenship behavior were examined. The research was conducted with 422 teachers. In the study, a positive and moderate relationship was observed between the emotional intelligence levels and organizational citizenship behaviors of the administrators, and the school culture created in secondary schools and organizational citizenship.

Büyüktatlı (2015) studied the Relationship between School Administrators' Emotional Intelligence Levels and Servant Leadership Behaviors in his master's thesis. The research was carried out with the education administrators of all school types in the center of Mersin. It was concluded that the emotional intelligence of the managers was the predictor of the servant leadership behaviors and the relationship between these two variables was positive, moderate and significant.

Adıyaman (2015) studied the Relationship Between Leadership Styles and Emotional Intelligence of Secondary School Administrators on Batman Province Example in his master's thesis. The research was carried out with 116 randomly selected administrators working in secondary schools. Two scales, namely Leadership style and Emotional Intelligence questionnaire, were used as data collection tools. In the research, the humanoriented type in the leadership style of the administrators was found at a higher level than the others. In addition, it was found that administrators did not show a significant difference according to demographic variables.

Amer (2015) studied the Relationship Between Emotional Intelligence and Job Satisfaction of School Administrators in his master's thesis. The aim of the study is to examine the effect of school administrators' emotional intelligence on their job satisfaction. This study consists of 150 administrators working in public schools. Data were collected with Emotional Intelligence Scale, Job Satisfaction Scale and Personal Information Form. In the study, it was concluded that the job satisfaction and emotional intelligence of the administrators were high. In addition, it was observed that while the emotional intelligence variable showed a significant difference according to gender, branch and seniority, the variable of job satisfaction did not differ according to gender, branch, duty, age, educational status and seniority. It was seen that there was a positive and significant relationship between the research variables and the emotional intelligence variable was a significant predictor of job satisfaction.

Avcı (2014) studied the Emotion Management Competencies of School Principals with Various Variables and their Relationship with Personality Traits in his master's thesis. The research was carried out with 296 teachers. In order to collect the data, the researcher created a threepart scale. According to the results of the research, it has been reached that the emotion management of high school education administrators is sufficient. In this study, educational administrators were evaluated according to A and B type characters, and while the emotion management level of the type A administrators was low, the emotion management level of the B type administrators was high. In addition, among the research variables, a moderate and significant relationship was found between character types and emotion management.

Güven (2014) worked on the Investigation of the Relationship between Primary School Teachers' Perceptions of the Emotional Intelligence Levels of Principals and the Organizational Identity of Teachers in his master's thesis (The Example of Karşıyaka District of İzmir Province). The model of the research is relational screening.

The research was carried out with 466 teachers working in primary schools. In the research, the emotional intelligence skills of school principals and organizational identification; It was seen that there was a significant relationship in the subdimensions, the emotional intelligence of the administrators showed a significant difference in the variables of gender, age and professional seniority, and there was no difference according to the working time and branch in the same school. On the other hand, there is a significant difference in the organizational identification levels of teachers according to gender, seniority, branch and age.

Güven (2014) worked on the Investigation of the Relationship between Primary School Teachers' Perceptions of the Emotional Intelligence Levels of Principals and the Organizational Identity of Teachers in his master's thesis (The Example of Karşıyaka District of İzmir Province). The model of the research is relational screening. The research was carried out with 466 teachers working in primary schools. In the research, the emotional intelligence skills of school principals and organizational identification; It was seen that there was a significant relationship in the subdimensions, the emotional intelligence of the administrators showed a significant difference in the variables of gender, age and professional seniority, and there was no difference according to the working time and branch in the same school. On the other hand, significant differences were found in the organizational identification levels of teachers according to gender, professional seniority, branch and age, but no significant difference was found according to working time in the same school.

In his doctoral thesis, Karadavut (2014) studied the Emotional Intelligence Competencies of Primary and Secondary School Administrators and the Relationship between Stress Coping Methods and Leadership Styles. The study was carried out with 303 administrators working in public primary and secondary schools in Kocaeli. In the study, it was seen that the emotional intelligence level of the administrators was above the medium level, when emotional intelligence was examined by gender, it was in favor of women, seniority and emotional intelligence were directly proportional, and the leadership behaviors of the administrators were at a medium level and they showed transformational leadership.

Doğan (2014) studied the Effect of School Administrators' Emotional Intelligence Skills on Transformational and Sustainable Leadership Behavior in his master's thesis. The research was conducted with 240 primary school administrators. According to the findings of the study, it was found that when the emotional intelligence levels of the administrators increased, the transformational leadership behaviors also increased and emotional intelligence had no effect on the continuity leadership.

Eroğlu (2012) studied the Relationships Between Leadership Styles and Emotional Intelligence of Principals in Primary Schools in his master's thesis. The research was conducted with 89 school principals. In the study, it was seen that the leadership styles of the administrators did not differ according to the variables, and their emotional intelligence did not differ according to age and branch.

However, it was seen that there was a significant difference between the subdimensions of the Baron emotional intelligence scale and gender, seniority, education level and branch, and there was a positive and significant relationship between the transformational and transactional leadership and the subdimensions of the Baron emotional intelligence scale.

Demirdiř (2009) conducted a study on the Relationship Between Emotional Intelligence Levels and Burnout Levels of Primary School Administrators in his master's thesis (řanlıurfa Province Example). In this study, it was aimed to collect information about emotional intelligence and burnout. It has been observed that primary school administrators have an opposite but significant relationship with the research variables. This result can be interpreted as there is an inverse proportion between the research variables of primary school administrators.

Öztekin (2006) worked on the Evaluation of the Levels of Use of Emotional Intelligence Skills in School Administration of Administrators Working in Secondary Education Institutions in his master's thesis. The research was carried out with 23 administrators, 63 assistant administrators and 718 teachers working at 23 secondary education levels. In the research, the level of using emotional intelligence of assistant principals and teachers in management is the same as that of administrators. Deputy principals and teachers stated that the emotional intelligence of administrators is insufficient in management and differs according to gender.

International Studies on Emotional Intelligence

Massey (1998), in his study, aimed to examine the process of emotional intelligence, leadership and dialogue. According to the findings of the research, it was seen that the emotional intelligence levels of the group members participating in the dialogue were high and it was possible to be qualified as a leader, and that emotional intelligence perfectly met the dimension of harmony in leadership.

Mayer, Caruso & Salovey (1999) evaluated emotional intelligence according to personal abilities and cognitive intelligence in a study called Emotional Intelligence Confrontation with Traditional Intelligence Standards. There were 503 participants in the study, and it was found that a new type of intelligence was associated with emotional intelligence, and the emotional intelligence level of adults was higher than other age groups.

Caputi, Chan & Ciarrochi, (2000) has a research called A Critical Evaluation of Emotional Intelligence Structure. This study was carried out on 120 university students. In the research, it was revealed that emotional intelligence showed a difference in favor of women and the reason for this was biological characteristics.

In Baron et al. (2000) Emotional Expression and Inferences for Occupational Stress: Emotional Quotient Inventory (EQI) Application, it was observed that emotional intelligence did not differ according to gender, but differed in subdimensions.

Anand (2010) studied Emotional Intelligence and its Relationship with Leadership Practices. In the study, it was observed that there was a positive and significant relationship between emotional intelligence and leadership practices, and that emotional intelligence was a significant predictor of dimensions such as job satisfaction, motivation, and social relations.

Modassir & Singh (2008) studied the relationship between Emotional Intelligence and Transformational Leadership and Organizational Citizenship Behavior. The research was conducted with 114 participants, and it was seen that the research variables had a positive and significant relationship.

Ramchunder's (2012) research titled SelfEfficacy, Emotional Intelligence and the Role of Leadership Style as Qualities of Leadership Efficiency consisted of 107 participants, and it was concluded that the research variables had a positive and significant effect on effective leadership styles, and that there was also a significant relationship between them.

Batool (2013) prepared a study called Emotional Intelligence and Effective Leadership. The aim of the research is to determine the relationship between emotional intelligence and effective leadership. The leader's use of emotional intelligence in the research; It has been concluded that the leader has a strong effect on effective leadership and realization of organizational goals, and the leader contributes to increasing the performance of his followers, relieving their stress, focusing on success and being happy in their daily lives as well as in their organizational lives.

DISCUSSION, CONCLUSION AND SUGGESTIONS

In the present chapter, conclusions, discussions, comparisons, suggestions and management applications and then suggestions are provided for future researchers.

Çevik and Demirtaş (2021), in their study, aimed to determine the 21st century skill levels of school principals according to the opinions of teachers and school principals. In the study conducted with 18 teachers and 11 school principals in 20202021, it was concluded that the problemsolving skills of the school principals were high and their selfdevelopment skills were low. In addition, it has been observed that school principals can communicate effectively, but they cannot use these communication skills in line with teamwork that guides teachers to cooperation. Yılmaz (2021), in his research, aimed to determine the 21st century skill levels of school principals according to the opinions of teachers. According to the results of the research, it was determined that teachers' perceptions of school principals' 21st century skills were at the level of agree. The result obtained is similar to this study. In addition, teachers' views on school principals' 21st century skill levels; While it did not show a significant difference according to the age variable of the teacher, it showed a significant difference according to the gender of the school principal, school type, school level, teacher education status, teacher seniority and teacherteacher age variables. Ünlü, Ezberci Çevik, and Kurnaz (2016) investigated the effect of emotional intelligence scores, which are effective on the professional development of preschool teacher candidates, on the type of education and grade level, and found that emotional intelligence scores had no effect on the variables of education type and grade level.

Stottlemeyer (2002) found a significant relationship between academic achievement and emotional intelligence in his study named "Examination of Emotional Intelligence: The Relationship of Emotional Intelligence to Success and Its Contribution to Teaching". In his study, Ünlü (2017) examined the relationship between preservice science teachers' emotional intelligence and learning approaches, in comparison with preservice teachers in some programs. When the 21st century skills of the education administrators are examined according to the emotional intelligence levels of the teachers, it is seen that the school principals follow the studies they started and they want to see the result, that the school principals know the importance of technology in education and that they support the use of technological tools in education in this direction, that the school principals have various ways to follow the current news. It was concluded that they mostly participated in the items as they used media tools. Ak Gürduk (2021) found that teachers participating in the TALIS 2018 research in different countries have high and positive levels of technology use in education and education in a multicultural environment. Atasoy (2021) concluded that the use of real-life images and objects rather than traditional methods in the teaching of Turkish lessons, word studies such as sampling and encryption, and the presentation of a collaborative and peer-based education environment affect education positively. Aydın (2021) concluded in his research that the 21st century skill levels of foreign language students are high. According to Erbek (2021) preservice teachers' perceptions, there is a highly significant positive correlation between the general proficiency levels of the teaching profession and the self-efficacy levels of 21st century skills. Balkaş Yaşar (2021) It has been seen that science teachers have high self-efficacy perceptions of 21st century skills, high level 21st century skills and STEM attitudes, and are applicable for science teachers. The authors in Chalkiadaki (2018) reached that the 21st century is largely characterized by the need for technology, globalization and innovation, and as a result, these skills of students need to be developed. Fox (2011) concluded that teachers and students have insufficient knowledge on 21st century skills and they believe that 21st century skills are not suitable for application in existing schools. Şimşek (2003) concluded in his research that educational administrators have effective communication skills that need to be developed. In the study conducted by Çelikten (2004), it was concluded that the personal development efforts of education administrators are among the activities they spend the least time on. As a result of the research prepared by Ak (2006), it was seen that the skills of managing change of education administrators are at a moderate level. It can be said that educational administrators do not try many new methods in problem solving or management-related transactions. Taş (2009) conducted a study on the change management skills of educational administrators. As a result of the research, it was seen that the behaviors of secondary education administrators to manage change according to teacher perceptions mostly coincided with their level. In the research conducted by Banoğlu (2011) on technology leadership of education administrators, it was concluded that education administrators saw their technology skills at a sufficient level. In the study conducted by Bülbül and Çuhadar (2012), it was concluded that school principals have high levels of digital citizenship and technology leadership.

In the study conducted by Ađaođlu, Altinkurt, Yılmaz and Karaköse (2012), it was concluded that school principals have a high level of following the legislation and a moderate level of following scientific developments. According to Fisher and Waller's (2013) research results, it was concluded that technology use skills of teachers in education and professional development are also positively affected by the fact that education administrators have 21st century skills. In this context, the high 21st century skills of school principals can also be interpreted as improving the 21st century skills of teachers and therefore students. Arıcı (2019) found a positive relationship between school administrators' personality traits and emotional intelligence levels. Türker (2019) found that emotional intelligence was not affected by leadership styles, while leadership styles such as human resource leadership, political leadership and symbolic leadership were found to be effective on emotional intelligence. Uçar (2017) concluded that school principals' emotional intelligence and strategic leadership behaviors are highly correlated with each other. Şayir (2015) found a positive and moderate relationship between the emotional intelligence levels and organizational citizenship behaviors of administrators, and the school culture created in secondary schools and organizational citizenship. Büyüktatlı (2015) It was concluded that the emotional intelligence of the managers was the predictor of the servant leadership behaviors and the relationship between these two variables was positive, moderate and significant. Amer (2015) found that there is a positive and significant relationship between their emotional intelligence and their job satisfaction, and that the emotional intelligence variable is a significant predictor of job satisfaction. Anand (2010) found that there is a positive and significant relationship between emotional intelligence and leadership practices, and that emotional intelligence is a significant predictor of dimensions such as job satisfaction, motivation, and social relations. In the study conducted by Feyziođlu (2016), it was concluded that the educational administrators' use of social media and their level of informing through social media correspond to the level of agree. In the study by Uzun and Ayık (2016) on the effect of education administrators' communication skills on teachers' organizational cynicism levels, it was concluded that education administrators are open to criticism according to their teacher perceptions, and teachers' perceptions of social comfort are high at this point. Göksün and Kurt (2017) conducted a study with preservice teachers and it was found that the skills explaining 21st century learner skills and subdimensions were used by preservice teachers at a moderate level.

In this study, the results of the researches in the related literature on educational sciences, in which the relationships between teachers' emotional intelligence levels and 21st century skills were discussed. In similar studies to be conducted, qualitative and quantitative studies can be conducted to address the perceptions of teachers and administrators to fill the gap in the relevant literature.

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