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Examination of the Relationship Between Academicians' Life Long Learning Tendencies and Thinking Styles [1]

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ABSTRACT

The purpose of this research is to examine the relationship between academicians' lifelong learning tendencies and their thinking styles. Relational survey model was used in the research. All academicians working in higher education institutions in the 2022-2023 academic year were determined as the population of the research. After obtaining the necessary permissions, the scale was applied to a sample group of 1554 people by reaching all universities via official letters and e-mails to the institutional e-mail addresses of the individuals. Personal Information Form, "Lifelong Learning Tendency Scale" and "Rational-Experiential Thinking Styles Scale" were used as data collection tools. The obtained data were transferred to the statistical package program. In the light of the sub-problems, it was examined whether the scale scores differed in terms of various variables (education level, academic title, field of science). The results were classified according to sociodemographic variables and presented in frequency tables. In accordance with the results obtained from the variables, Kruskal Wallis H test and Spearman-Brown Correlation Analysis were performed, and Mann Whitney U test was applied to determine the direction of the differences. Based on the findings, it was concluded that academicians have a high level of lifelong learning tendencies. While the lifelong learning tendencies of academicians differ according to the variables of educational status and field of science; they did not differ according to academic title variables. It was concluded that the academicians' thinking style levels were at a moderate level. The thinking styles of the academicians differed in terms of educational status, academic title and field of science variables. It has been concluded that the relationship between academicians' lifelong learning tendencies and thinking styles is at a significant level in terms of total and sub-dimension scores, which are generally below the medium level and in a positive direction.

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INTRODUCTION

Humanity has changed economically, socially, culturally, scientifically and artistically throughout history. Change is always moving with an increasing momentum. This rapid rise in change greatly affects the way of life in the world. Increasing world population, the aim of globalization of societies, developments in industry and technology make people constantly strive to renew and develop themselves in the 21st century. Social life, professional needs, the widespread use of technological tools and equipment and their settlement in almost every stage of life create the need for people to constantly renew and develop their existing knowledge and skills. This need is tried to be met by learning up-to-date knowledge and skills.

Lifelong Learning

Lifelong learning covers the process that starts from the moment an individual is born and continues until his or her last breath. This means that the individual's entire life is spent by learning. Even though the things individuals learn throughout their lives are different, it is a common point for each individual to learn throughout their lives. Lifelong learning has been going on from ancient times to the age of artificial intelligence. In the age of artificial intelligence, learning has evolved into a different process with the opportunities provided by technology and the capacity of human beings (Poquet, & De Laat, 2021). It is predicted that differences in learning processes will be inevitable in the future depending on the conditions brought by technology (Benavot et al., 2022).

Formal education is constantly updating itself to raise individuals who keep up with the developments in the changing world. In addition to the continuous updating of formal education, the increase in non-formal education practices and the continuous expansion of individual learning have become an inevitable situation. From the moment he is born until his death, every individual constantly encounters new stimuli and each stimulus creates a new learning (Tudor, 2013). In order to solve the problems they encounter in their daily lives, people both need to learn new information and benefit from the experiences they have gained through their lives. This is permanent due to the fact that life has a dynamic structure. The concept of lifelong learning includes the knowledge, skills and behaviors that are learned not only in the school environment but throughout life (Samancı & Ocakçı, 2017). Candy, Crebert, and O'leary (1994) state that all formal and non-formal learning environments are important in lifelong learning. In the study conducted by Ilgaz and Eskici (2019), it is stated that the basis of the concept of lifelong learning is a sustainable process since learning never stops for individuals. This dynamic and sustainable structure ensures that lifelong learning starts from early ages and continues until adulthood; it shows that it is a comprehensive concept extending to in-service training, adult education and public education (Schuetze & Casey, 2006). In addition, Ohidy (2008) stated that the formation of individuals who are lifelong learners has an important role in the development of society.

The concept of lifelong learning has been tried to be defined by many researchers and institutions since the day it started to take place in the literature due to its importance. Sarıgöz (2020) defines lifelong learning as a concept that aims at the development of individuals both in their socio-cultural and professional lives, and with the principle of continuity. Likewise, the European Commission (2002) defines lifelong learning as the activities that will occur in the process of the development of individuals' knowledge and skills from birth to death. Miser (2020) stated that lifelong learning does not only remain at school age but continues at all stages of life and it is a process. Gouthro (2017) states that lifelong learning provides information about how to live a more meaningful and rich life; she also states that lifelong learners will develop their abilities and gain insight. In a way, the concept of lifelong learning is a very broad structure in terms of acquiring the ability of individuals to take on their learning responsibilities, self-assessment, making plans and programs, and choosing the ways to reach information (Boztepe & Demirtaş, 2018). Similarly, Lamb and Brady (2005) emphasizes that the decisions individuals make in situations, their professional lives, and the skills they acquire affect their

lifelong learning tendencies. At the same time, it is very important for lifelong learners to be able to engage in social interaction as well as managing their learning processes themselves.

In the first quarter of the 21st century, it is seen that the European Union is trying to be placed on the basis of the education policies created due to the international norms of lifelong learning. It is seen that the process that started with adult education in the 1920s turned into an idea that the individual should experience learning throughout his life in the 1980s (Volles, 2016). The fact that formal or informal learning, in which individuals will learn from the cradle to the grave, is one of the dynamics of the developing society constitutes an important dimension in the education strategies of the EU. Policies that form the basis of lifelong learning in the EU as well as in global organizations such as OECD and UNESCO are reflected in the international exchanges made after the 1960s (Lee, Thayer & Madyun, 2008). Lifelong learning (Urhan, 2020), which was mentioned at the UNESCO meeting in 1960, took its place in the European Council "Permanent Education" and OECD "Continuing Education: A Strategy for Lifelong Learning" reports in the early 1970s (Demirkıran & Yılmaz, 2022). While the European Union started to devote more space to lifelong learning in its education policies in the 1990s, it published a study called "Towards a Learning Society" in 1995 and then declared 1996 as the "European Year of Lifelong Learning" (Akbaş & Özdemir, 2002). With the "Lifelong Learning Memorandum" published by the European Commission in 2000, it was emphasized that the concept of lifelong learning is the umbrella of all education and training activities (Samancı & Ocakçı, 2017).

It is known that there have been movements of innovation and change in many areas in the State of Turkey, which was established after the tough years of war with the proclamation of the republic on October 29, 1923. Education policies have also formed an important phase of these areas that require innovation. It is seen that many educational programs, laws, regulations and council decisions were taken in the process that started with the Law of Unification of Education enacted in 1924 (Hesapçıoğlu, 2013). In the Basic Law of National Education, which is still in force and came into force in 1973, the Turkish national education system consists of two parts as formal and non-formal education (MEB, 1973). While it is seen that international organizations such as the European Union, OECD and UNESCO discovered lifelong learning and started to place it at the center of their education policies in the 1990s; it is seen that it was first included in the Basic Law of National Education in Turkey (Ersoy & Yılmaz, 2009). When we look at the historical process, despite not being used as a concept, people's classrooms, public houses and village institutes seen in the republic period appear as institutions that work in the light of lifelong learning (Kavtelek, 2014).

Thinking Styles

Scientists have struggled to understand and explain human beings for centuries. Philosophers and psychologists based on social sciences have focused on the concept of thinking that distinguishes human beings from other living things and tried to define it (Karagülle, 2021). Güven and Kürüm (2006) state that knowing how human thoughts are formed and what the affecting factors are will contribute to the formation of an effective thinking and learning process. It can be said that this definition request is based on the idea that getting to know people starts with understanding their intellectual processes. Kurzweil (2021) sees intelligence, which affects human thinking, as the most important concept and talks about the difficulty of estimating its limits. Therefore, the understanding of human becomes more complicated.

While the dictionary of the Turkish Language Association defines thinking, it emphasizes that perceptions are the individual's own interpretation action (TDK, 2022). Başerer (2021) defines thinking as the ability of the human mind to comprehend, distinguish and compare information independently of everything else. It can be said that the ability to think, which the mind can do independently of other factors, also includes many skills.

While thinking is an important mental process that helps people to fulfill their daily life activities;

it also reflects the components that make up the personality structure (Algani & Haj, 2020). Individuals' thinking styles form their lifestyles (Ciarrochi, Heaven & Davies, 2007). It can be concluded that the thinking ability that individuals use to solve the problems they encounter is related to their lifestyle. While expressing thinking as a skill, Çubukçu (2004) emphasizes that it is unique to the individual. Güneş (2012) states that thinking is a natural process of the human mind, and underlines that it is a fundamental part of understanding and learning. From this point of view, it can be said that thinking is an action that affects and even manages personal and cognitive processes. Vance et al. (2007) say that the way of thinking can increase people's consciousness and awareness; he emphasizes that it contributes to the positive development of behaviors.

People engage in the act of thinking about how to find a way to solve the problems they encounter before they move on to a behavioral activity. Each individual thinks differently and applies different solutions. This shows that everyone has individual differences in the information processing process (Çatalbaş, 2006). Sünbül (2004) states that individuals can develop different styles for different situations and problems, not sticking to the same style in every situation. Differentiation can be seen in the thinking styles that individuals form against the same events and phenomena at different times. This is an indication that thinking styles are not static and they are open to change. The concept of thinking styles first found its place in the late 1900s (Berkant & Tüzer, 2018). Thinking styles, which form the basis of Sternberg's Theory of Mental Self-Management, is a concept based on how people prefer to think about the subject during or after learning (Fer, 2005).

Mental self-management theory, while trying to explain what people's thinking styles are, expresses the preferred way while exhibiting a new behavior or learning something. The main idea of this theory is that people have many ways to manage their daily lives (Zhang & Sternberg, 2002). At the core of the theory is the idea of how people's minds appear from outside, which helps the formation of thinking activities (Tüzer, 2016). In his mental self-management theory, Sternberg emphasizes that people manage themselves and organize their lives by making an analogy with how societies govern themselves (Buluş, 2005). Fer (2005) states that Sternberg, who put forward that thinking styles and management styles of states overlap with each other, states that people need to manage their mental activities. The fact that the reactions of individuals to the problems are different means that everyone organizes their own mental management style in a way that they feel comfortable and free.

Thinking styles are very important concepts in terms of lifelong learning. As stated in the study conducted by Sarıtepeci and Orak (2019), individuals' ability to achieve success in the learning process is related to their thinking styles and knowing how to think about problems. It is seen that academicians have an influence on students studying at universities in knowing how to think, which will affect the learning processes they will experience both in school life and when they enter business life; in other words, their lifelong learning. First of all, academics who have developed their own thinking skills contribute to the development of students' thinking styles by providing a learning environment suitable for life conditions, which are becoming an increasingly complex and difficult process (Baysal, Çarıkçı, & Yaşar, 2018). In this way, lifelong learning skills will be gained and these skills will be used in the right direction.

Continuous research and learning are part of the lives of academicians, who have an important role in the development of society, in order to improve themselves. For this reason, it can be thought that one of the professional groups that most embrace lifelong learning should be academics. Considering that the tendency for lifelong learning affects many characteristics of individuals, it will also be directly and indirectly reflected in cognitive skills. One of the cognitive skills is the ability to think. Thinking skills can be developed like other skills. In this development process, individuals' lives are at the forefront. Changes in behavior as a result of experiences and learning keep thinking processes alive. In this dynamic interaction, learning and thinking affect each other and develop the individual. Therefore, there is a close relationship between continuous learning and thinking styles. Revealing the

relationship between the concepts of lifelong learning and thinking styles is important in terms of shedding light on the nature of learning and thinking.

For researchers, the way cognitive processes such as learning and thinking take place is always an intriguing subject. It is a known fact that human beings continue to learn from birth to death. Considering that cognitive processes in learning also trigger thinking. It can be said that individuals think throughout their lives and direct their thinking processes consciously or unconsciously. Directing individuals' thinking creates their thinking styles. The fact that learning and thinking continue throughout life by influencing each other reveals the importance of studies investigating the interaction of these two concepts.

Determining the relationship between academicians' lifelong learning tendencies and thinking styles enables the cognitive and behavioral characteristics of individuals who produce science to be revealed. Social, technological and cultural developments occur with the presentation of scientific works and products. It is thought that the cognitive structures of academicians who are the architects of these developments, especially the concepts such as lifelong learning and thinking styles, which are closely related to each other and have a great impact on the production of science, should be examined together. Scientific research will contribute to the literature.

The aim of this study was to examine the relationship between academicians' lifelong learning tendencies and their levels of thinking styles. For this purpose, answers were sought for the following sub-problems:

1. What are the academics' lifelong learning tendencies and thinking styles?
2. Do the academicians' lifelong learning tendencies and thinking styles differ significantly according to their educational background?
3. Do academics' lifelong learning tendencies and thinking styles differ significantly according to their academic titles?
4. Do academics' lifelong learning tendencies and thinking styles differ significantly according to their fields of science?
5. Is there a statistically significant relationship between academicians' lifelong learning tendencies and their thinking styles?

METHOD

Research Design

The research was prepared with quantitative research methods and techniques. Relational survey model was used to determine the relationship between academicians' lifelong learning tendencies and thinking styles. The screening model is the ability to quantitatively describe the dimensions of attitude and tendency for the whole population as a result of the study with the sample group (Creswell, 2017). A cause-effect relationship was not sought within the scope of the study. The relationship between the two concepts has been examined. The relational screening model is a model that aims to describe the state of change that exists between two or more variables (Karasar, 2020).

Research Sample

The population of the research consists of 183560 academicians who are actively working in Higher Education Institutions in the 2022-2023 academic year (obtained from CHE (Council of Higher Education) as of 18 January 2023). A sample group was not determined within the scope of this study. It is aimed to reach the whole population. In line with this goal, academics working in all universities in Turkey were reached with the distributed article written by Kırklareli University. In addition, a link containing the measurement tools of the research was sent to the institutional e-mails of the faculty

members by the researcher. In this direction, the feedbacks from the instructors who voluntarily filled the data collection tools were evaluated as data. When the data were examined, all the data were used as no inaccuracies were detected. The demographic characteristics of the participants are given in Table 1.

Table 1: *Demographic characteristics of academics*

Variable	Groups	f	%
Educational Status	1.Licence	32	2.1
	2.Master	366	23.5
	3.PhD	1157	74.4
Total		**1554**	**100**
Academic Title	1.Instructor	441	28.4
	2.Assistant	307	19.7
	3.Assistant Professor	381	24.5
	4.Associate Professor	225	14.5
	5.Professor	201	12.9
Total		**1554**	**100**
Science Area	1.Educational Sciences	227	14.4
	2.Philology	56	3.6
	3.Law	42	2.7
	4.Architecture, Planning and Design	53	3.4
	5.Health Sciences	224	14.2
	6.Agriculture, Forestry and Aquaculture	72	4.6
	7.Science and Mathematics	103	6.5
	8.Fine Arts	71	4.5
	9.Theology	78	5
	10.Engineering	184	11.7
	11.Social, Humanities and Administrative Sciences	413	26.2
	12.Sports Sciences	51	3.2
Total		**1554**	**100**

When the education levels of the academicians in Table 1 are examined, it is seen that 32 (2.1%) completed their undergraduate education, 366 (23.5%) master's education, 1157 (74.4%) doctoral education. It is seen that the majority of the academicians participating in the research (74.4%) have completed their doctorate education. It is seen that those who participated at least have a bachelor's degree (2.1%).

Considering that the participants work at universities, when the data in Table 4 is examined in terms of their academic titles, 441 (28.4%) are lecturers, 307 (19.7%) are research assistants, 381 (24%, 5) are doctoral faculty members, 225 (14.5%) are associate professors and 201 (12.9%) are professors. When we look at the academicians participating in the research in terms of academic title, it is seen that the participation is mostly in the title of lecturer (28.4%). The least participation is the title of professor (12.9%).

Based on the fact that the participants were scientists, 227 (14.4%) of them were Educational Sciences, 56 (3.6%) were Philology, 42 (2.7%) were Law, 53 were It is seen that (3.4%) they work on Architecture, Planning and Design. 224 (14.2%) Health Sciences, 72 (4.6%) Agriculture, Forestry and Fisheries, 103 (6.5%) Science and Mathematics, 71 (4.5%) Fine Arts, 78 (5%) Theology, 184 (11.7%) Engineering, 413 (26.2%) Social Humanities and Administrative Sciences and 51 (3.2%) Sports. It is seen that they do scientific studies in their fields of science. Among the academic research fields determined by the Interuniversity Institution, it is seen that Social, Humanities and Administrative Sciences (26.2%) participated in the study the most, and Law (2.7%) was the least participated.

Research Instruments and Processes

In this study, which aimed to examine the relationship between academicians' lifelong learning

tendencies and thinking styles, three different scales were used. These scales were used as “Personal Information Form” developed by the researcher, “Lifelong Learning Tendency Scale” developed by Gür Erdoğan and Arsal (2016), and “Rational-Experiential Thinking Styles Scale” adapted into Turkish by invention (2003). Necessary permissions were obtained for the use of both scales. The online form prepared by the researcher included the personal information form in the first, the lifelong learning tendencies scale in the second, and the thinking styles scale in the last section. Information about the scales is discussed in detail in this section.

In order to collect the research data, firstly, the necessary permission was obtained from Kırklareli University Institute of Social Sciences and the approval of the Scientific Research and Publication Ethics Board was obtained for the application of the scale. The data collection tools were designed as an online form due to the impossibility of reaching all academicians personally considering the size of the population. Kırklareli University notified all state and foundation universities affiliated to the Higher Education Institution of the link address of the form created for data collection tools. The data collection process started as of December 2022. In addition, all academics who could be reached by the researcher were sent a link to the scales via e-mail. The prepared scale form was delivered to all universities and 1554 academics responded and gave feedback. All 1554 scales answered by academics were used in the data analysis. The researcher included information about the purpose and importance of the research on the online form containing the scales.

Personal Information Form

In the personal information form prepared by the researcher, there were questions for the personal information of the academicians participating in the research to be used in the analysis of the data. These questions are about gender, age, education level, academic title, place of residence and academic research area. It is aimed to examine the answers given to these questions by associating the sub-dimensions of the scales.

Lifelong Learning Tendency Scale

“Lifelong Learning Tendency Scale” developed by Gür Erdoğan and Arsal (2016) was used. The scale consists of two five-point Likert-type (1- Strongly Agree, 2- Agree, 3- Undecided, 4- Disagree, 5- Strongly Disagree) sub-dimensions and 17 items. The scale does not contain any negative items. The first eleven questions in the scale seek answers to the dimensions of "Willingness to Learn", and the following six questions to the dimensions of "Openness to Development". Gür Erdoğan and Arsal (2016) calculated the criterion validity of the scale they developed as .71. The Cronbach Alpha internal consistency coefficient of the scale was .86, the Mayer-Olkin value was .89, and the test-retest reliability coefficient was .76. Cronbach Alpha coefficients were determined as .87 for Willingness to Learn factor, .79 for Openness to Development factor and .87 for the whole scale.

The Cronbach Alpha internal consistency coefficient for the willingness to learn sub-dimension of the Lifelong Learning Tendency Scale applied to the participants within the scope of the research was determined as .89, and the Cronbach Alpha internal consistency coefficient for the openness to development sub-dimension was determined as .84.

Rational-Experiential Thinking Styles Scale

Another scale used in the study was Epstein et al. (1996) to measure the differences between intuitive-experiential and analytical-rational styles in individuals, and it was adapted into Turkish by Invention (2003), the "Rational-Experiential Thinking Styles Scale". The scale consists of two subscales named “Need for Cognition” and “Faith in Intuition” and 29 items. In order to measure rational thinking, 19 items of 45 items developed by Cacioppa and Petty (1982) were combined with the Cognition Needs scale and the 12-item Intuitive Belief scale, which measures individuals' confidence in their emotions, and a 31-item version was formed. With subsequent studies, the 29-item scale became

ready for use. The scale was prepared using a five-point scale from Completely False to Completely True. When the criterion reliability of the scale was calculated, the Cronbach Alpha coefficient of the "Need for Cognition" subscale was .87; The Cronbach Alpha coefficient for the “Intuitive Belief” subscale was .82 and .85 for the whole scale.

The Cronbach Alpha internal consistency coefficient for the cognitive need sub-dimension of the Rational-Experiential Thinking Styles Scale applied to the participants within the scope of the research was determined as .64, and the Cronbach Alpha internal consistency coefficient for the intuitive belief sub-dimension was determined as .86.

Data Analysis

The data obtained in the research were analyzed using a statistical program. In order to determine the statistical methods to be used to examine the lifelong learning tendencies and thinking styles scores of academicians, first of all, the normality test values of the scales were examined in order to understand how the distribution was. Normality test results are shown in Table 2.

Table 2: *Normality test results of lifelong learning tendency and rational-experiential thinking styles scales*

Scale	Lower dimension	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistics	df	p	Statistics	df	p
Lifelong Learning Tendency	Willingness to Learn	.119	1554	.000	.119	1554	.000
	Openness to Development	.135	1554	.000	.135	1554	.000
	Total	.115	1554	.000	.115	1554	.000
Rational-Experiential Thinking Styles	Cognition Requirement	.061	1554	.000	.061	1554	.000
	Intuitive Faith	.051	1554	.000	.051	1554	.000
	Total	.031	1554	.001	.031	1554	.001

Büyüköztürk (2007) states that if the participation in the research is more than 50, the Kolmogorov-Smirnov test p values should be checked. When the values in Table 2 were examined, it was understood that the p values did not show a normal distribution in terms of $p=.000$ ($p<.05$) sub-dimensions and the sum of the scales. Non-parametric analyzes (Kruskal Wallis H, Mann Whitney U) were applied on the data in which the distribution did not show normality (Kul, 2014). Spearman-Brown Correlation Analysis was applied to determine the relationship between academicians' lifelong learning tendencies and thinking styles.

Ethics

This study has ethical approval from Kirklareli University under the protocol number E-35523585-199-65892 on 31/10/2022.

FINDINGS

Lifelong Learning Tendency and Thinking Style Levels of Academicians

In the first sub-problem of the study, the arithmetic mean and standard deviation analyzes of the Lifelong Learning Tendency Scale applied to determine the level of academicians' lifelong learning tendencies and the Rational-Experiential Thinking Styles Scale was applied to determine their thinking style levels shown in Table 3.

Table 3: *Arithmetic mean and standard deviation values*

Scale	Number of Items	min	max	$\bar{x}$	SS	Item Averages ($\bar{x}$/ number of items)
Lifelong Learning Tendency Scale	17	1	5	72.81	8.89	4.28

Rational-Experiential Thinking Styles Scale	29	2.17	4.72	103.77	10.51	3.57

When Table 3 is examined, it has been determined that the lifelong learning tendencies of academicians are at a high level ($\bar{x}$: 4.28). However, it was observed that the thinking styles of the academicians were at a moderate ($\bar{x}$: 3.57) level.

When the level of lifelong learning tendencies of academicians was examined in the light of the data in Table 3, and the arithmetic averages of the scale items applied to the participants were examined, it was seen that the values were ($\bar{x}$: 4.28). Based on this, it can be concluded that academicians have a high tendency towards lifelong learning, are open and willing to learning new things, and activities necessary for personal and professional development.

In the light of the data in Table 3, when the level of thinking styles of academicians was examined, and the arithmetic averages of the scale items applied to the participants were examined, it was seen that the values were ($\bar{x}$: 3.57). Based on this, it can be concluded that academicians' thinking styles levels are at a medium level and they are indecisive in acting according to both their cognitive levels and intuitive beliefs.

Lifelong Learning Tendency and Thinking Style Levels of Academicians by Educational Status

In the second sub-problem of the study, an answer has been sought for the following question. "Do academics' lifelong learning tendencies and thinking styles differ significantly with their educational status?" The findings obtained by performing the Kruskal Wallis H and Mann Whitney U tests for the Lifelong Learning Tendency Scale and the Rational-Experiential Thinking Styles Scale are presented in Table 4.

Table 4: *Kruskal Wallis H test values in terms of educational status variable*

Scale	Educational Status	N	Rank Average	x^2	Df	p	Difference
Lifelong Learning Tendency Scale	1.Licence	32	740.11	16.25	2	.000	3>2
	2.Master	366	696.53				
	3.PhD	1156	804.17				
Rational-Experiential Thinking Styles Scale	1.Licence	32	657.03	12.48	2	.002	3>2
	2.Master	366	715.02				
	3.PhD	1156	800.62				

According to Table 4, a significant difference was found when the levels of lifelong learning tendencies and thinking styles of academicians were examined in terms of educational status ($p<.05$).

According to the Mann Whitney U test results, when the total scores of the Lifelong Learning Tendency Scale and the Rational-Experiential Thinking Styles Scale were examined, the scores of academics who completed their doctoral education were found to be significantly higher than the scores of those who completed their master's degree. In line with the results, it can be said that academics with a doctorate degree are more willing to learn, have a higher tendency towards lifelong learning, and can use their thinking styles more effectively than others.

Lifelong Learning Tendency and Thinking Style Levels of Academicians by Academic Titles

In the third sub-problem of the study, an answer has been sought for the following question. "Do academics' lifelong learning tendencies and thinking styles differ significantly with their academic titles?" The findings obtained by performing the Kruskal Wallis H and Mann Whitney U tests for the Lifelong Learning Tendency Scale and the Rational-Experiential Thinking Styles Scale are presented in Table 5.

Table 5: *Kruskal Wallis H test values in terms of academic title variable*

Scale	Academic Title	N	Rank Average	x²	df	p	Difference
Lifelong Learning Tendency Scale	1.Instructor	307	724.84	6.87	4	.142	
	2.Assistant	440	801.42				
	3.Assistant Professor	381	768.03				
	4.Associate Professor	225	808.81				
	5.Professor	201	788.46				
Rational-Experiential Thinking Styles Scale	1.Instructor	307	735.09	11.7	4	.020	4>1,3
	2.Assistant	440	795.03				
	3.Assistant Professor	381	744.66				
	4.Associate Professor	225	852.10				
	5.Professor	201	782.66				

According to Table 5, when the lifelong learning tendencies of academicians are examined in terms of their academic titles, no significant difference was found (p>.05). However, the levels of thinking styles of academicians differ significantly in terms of their academic titles (p<.05).

When the average scores are examined in the light of the data in Table 5, it can be said that the increase in the education level ensures that academicians have a high level of lifelong learning tendencies.

According to the Mann Whitney U test results, the academician scores of associate professors were found to be significantly higher than the academician scores of research assistants and doctor faculty members. It has been observed that academicians with the title of associate professor can use their thinking styles more actively than other academicians as a result of their career progress and experience.

Lifelong Learning Tendency and Thinking Style Levels of Academicians by Field of Science

In the fourth sub-problem of the study, an answer has been sought for the following question. "Do academics' lifelong learning tendencies and thinking styles differ significantly with their fields of science?" The findings obtained by performing the Kruskal Wallis H and Mann Whitney U tests for the Lifelong Learning Tendency Scale and the Rational-Experiential Thinking Styles Scale are presented in Table 6.

Table 6: *Kruskal Wallis H test values in terms of science fields variable*

Scale	Science Area	N	Rank Average	x²	df	p	Difference
Lifelong Learning Tendency Scale	1.Educational Sciences	180	674.72	49.15	11	.000	4 >1 3>2 2,6>4 6,8,9,11>3 2,6,8,9,11>1,7,10 1,6,9,11>12
	2.Philology	224	857.71				
	3.Law	71	692.04				
	4.Architecture, Planning and Design	404	748.17				
	5.Health Sciences	42	775.62				
	6.Agriculture, Forestry and Aquaculture	227	857.02				
	7.Science and Mathematics	102	704.17				
	8.Fine Arts	68	843.99				
	9.Theology	56	882.47				
	10.Engineering	77	682.81				
	11.Social, Humanities and Administrative Sciences	50	962.54				
	12.Sports Sciences	53	694.47				
Rational-Experiential Thinking Styles	1.Educational Sciences	180	708.33	26.7	11	.006	9>1 8>5 8,11>1,2,3,4, 6,7,10,12
	2.Philology	224	782.19				

Scale	3.Law	71	697.11
	4.Architecture, Planning and Design	404	771.04
	5.Health Sciences	42	750.23
	6.Agriculture, Forestry and Aquaculture	227	781.14
	7.Science and Mathematics	102	751.76
	8.Fine Arts	68	961.82
	9.Theology	56	846.92
	10.Engineering	77	759.08
	11.Social, Humanities and Administrative Sciences	50	932.12
	12.Sports Sciences	53	776.15

According to Table 6, when the lifelong learning tendencies and thinking styles of academicians are examined in terms of science fields, significant differences were found ($p<.05$).

According to the Mann Whitney U test results, the scores of academics working in the field of Social, Human and Administrative Sciences in the Lifelong Learning Tendencies Scale were found to be significantly higher than the scores of academics working in the field of Engineering. The scores of academicians working in the field of Agriculture, Forestry and Fisheries were found to be significantly higher than the scores of academicians working in the field of Health Sciences. The scores of those working in the fields of Health Sciences and Educational Sciences were found to be significantly higher than the scores of academics working in the fields of Social, Human and Administrative Sciences. It was observed that the scores of academicians working in the fields of Educational Sciences, Fine Arts, Philology and Sports Sciences were significantly higher than the scores of academicians working in the fields of Agriculture, Forestry and Fisheries. In addition, it was observed that the scores of academicians working in the fields of Health Sciences and Educational Sciences, Fine Arts, Philology and Sports Sciences were significantly higher than the scores of academicians working in the fields of Engineering, Science and Mathematics and Theology. Finally, the scores of academics working in the fields of Engineering, Educational Sciences, Philology and Sports Sciences showed a significant difference compared to the scores of academics working in the fields of Architecture, Planning and Design.

According to the Mann Whitney U test results, the scores of academics working in the field of philology and engineering on the Rational-Experiential Thinking Styles Scale and the scores of academics working in the field of fine arts and science were found to be significantly higher than the scores of academics working in the field of law. In addition, the scores of academicians working in the fields of fine arts and sports sciences are significantly higher than the scores of academicians working in the fields of engineering, health, agriculture, forestry and aquaculture, social, human and administrative sciences, education, science and mathematics, theology and architecture, planning and design sciences.

The Relationship Between Lifelong Learning Tendencies and Thinking Styles of Academicians

The fifth sub-problem of the research is "Is there a statistically significant relationship between academicians' lifelong learning tendencies and their thinking styles?" Spearman-Brown Correlation Analysis was performed with the data obtained in order to search for an answer to the problem. The results are listed in Table 7.

Table 7: *Spearman-Brown Test values of the relationship between lifelong learning dispositions and thinking styles*

	Willingness to	**Openness to**	**Lifelong Learning**

		Learn	Development	Trends (Total)
Cognition Requirement	r	.260**	.181**	.245**
	p	.000	.000	.000
	n	1554	1554	1554
Intuitive Faith	r	.131**	.128**	.138**
	p	.000	.000	.000
	n	1554	1554	1554
Rational-Experiential Thinking Styles (Total)	r	.268**	.212**	.262**
	p	.000	.000	.000
	n	1554	1554	1554

When Table 7 is examined, it is concluded that there is a significant relationship between academicians' lifelong learning tendencies and thinking styles in terms of total scores and sub-dimension scores, generally below the medium level and in a positive direction ($p<.05$). However, the relationship between willingness to learn-intuitive belief, openness to development-cognition need, openness to development-intuitive belief, lifelong learning tendencies total score and intuitive belief is at a low level.

DISCUSSION AND CONCLUSION

In this section, the results of the research conducted to examine the relationship between academicians' lifelong learning tendencies and thinking styles are given. In addition, suggestions were made to contribute to the literature and researchers related to future studies.

Lifelong Learning Tendency and Thinking Style Levels of Academicians

While high arithmetic averages were encountered in the analyzes made as a result of the application made to measure the lifelong learning tendencies of academicians, it is revealed that the thinking styles of academicians are at a moderate level. In the light of this result, it can be concluded that academicians have high lifelong learning tendencies, are willing to learn new things, and are open to learning activities necessary for personal and professional development.

When the literature is analysed, it is seen that similar results are obtained in studies on lifelong learning. The fact that the students of the Faculty of Education continue their education in order to prepare for the teaching profession, that they live in similar conditions with academicians in terms of being located on the university campus, and that they are in the same age group as the students are the results of studies conducted with research assistants and university students who are prospective teachers within the scope of the research. can be considered to be similar to the findings. Oral and Yazar (2015) determined that pre-service teachers' perceptions of lifelong learning were high as a result of their research with students studying at the faculty of education. In Akçaalan's (2016) study examining the relationship between lifelong learning and social emotional learning of university students, it was determined that students' lifelong learning levels were generally high, including gender, academic achievement and class variables. Similarly, the results obtained in the research conducted by Law, Lee, and Yen (2009), Demiröz (2022) and Settaşı (2022) with teachers; Gültepe (2022) and Topal Kaya (2021) with prospective teacher university students are similar to the results of this study. However, there are also studies in the literature that conclude that lifelong learning tendencies are not at a high level. Tunca, Şahin, and Aydın (2015) "Lifelong Learning Dispositions of Prospective Teachers"

It can be concluded that the academicians have a moderate level of thinking styles, and they prefer to behave according to their cognitive levels and intuitive beliefs against the problems encountered. It arouses curiosity in what kind of context academicians are in terms of both lifelong learning tendencies and thinking styles, and what is the the relationship between them. In this context, studies with academicians that measure the relationship between the two concepts have not been found. However, studies that are similar to the results of the study and that are close to academics in terms of the study group have been examined within the scope of the discussion. Coşkuner, Gacar, and Yanlıç

(2012), in their study titled "Evaluation of the Thinking Styles of Physical Education and Sports Teacher Candidates", concluded that the thinking styles of the prospective teachers participating in the research were at a moderate level. This result contains similarity within the scope of the study.

Based on these results, it can be said that academicians are generally open and willing to learn and improve their deficiencies. In addition, it can be interpreted that lifelong learning tendencies are high. It is an important point that academicians have a high level of awareness about the practices they will do in order for students who have reached a certain level of cognitive level to become lifelong learners. It can be expected that academics (Toygar, Kıroğlu, & Kara, 2020), who are intellectual pioneers in the development of the scientific and cultural level of the society, are open and inclined towards lifelong learning, and that they can keep up with and adapt to the changing and developing living conditions of the society in every aspect. In this case, it can be thought that the effect of academics having a role model structure under the cultural and scientific leadership of the individual and society is great. In the 21st century, when existing knowledge is constantly changing, it is expected that academics will have a tendency to lifelong learning, and it will be very important in terms of ensuring that every individual forming the society becomes a lifelong learner and thus this culture is formed in the society in general.

As a result of the research, it was concluded that the level of preference and use of the thinking styles of the academicians remained at moderate levels. It is thought that the reactions of the academicians to the events they encounter may differ according to the shape and characteristics of the situation, both rationally and intuitively. This result may reveal that academics can approach events more emotionally and self-centered than the effect of the current emotional period, or on the contrary, they can display realistic and logical behavior. It can be predicted that this choice of academics will be determined by their approach to the events in their lives. It can be interpreted that academicians do not clearly define emotional or rational personality but prefer a style according to their living conditions.

Lifelong Learning Tendency and Thinking Style Levels of Academicians by Educational Status

When the levels of lifelong learning tendencies and thinking styles of academicians were examined in terms of educational status variable, a significant difference emerged. It was concluded that the level of lifelong learning tendencies and thinking styles of doctoral graduate academicians is significantly higher than that of graduate academicians. It can be said that academicians with doctorate degrees are more willing to learn than others and have a higher life-long learning tendency. It can be said that there is a significant and positive relationship between the progress achieved at the education level and the behavior preferences shown against the events.

No study has been found in the literature on whether lifelong learning tendencies differ in terms of the variable of educational status. There are studies mostly on teachers. It is important for teachers to have similar educational backgrounds with academicians in terms of similarity with the research results of the studies in the literature. In the study they conducted with the teachers working in Anatolian High Schools in Diyarbakir, Yaman and Yazar (2015) concluded that the educational status of the graduate showed a significant difference on lifelong learning tendencies. The result of a significant increase in lifelong learning tendencies with the increase in education level is similar to the research findings. As a result of the study conducted by Sevinç and Çelebi (2020) with teachers, a significantly high difference was found between educational status and lifelong learning tendencies. The result of the increase in the level of education shows an increase in the tendencies of lifelong learning, which is similar to the results of the research. Yılmaz and Beşkaya (2018), in their study titled “Examination of Education Administrators' Lifelong Learning Tendencies and Individual Innovation Levels”, concluded that the increase in education level also leads to an increase in the level of lifelong learning. Studies with teachers by Ekici (2022), Yüksel (2020), Şen (2021) are similar to the research findings. However, there

are also studies in the literature that do not coincide with the results of the research. Gökbulut (2021), Yıldız Durak and Tekin (2020), Bilen (2022) did not find a significant difference between teachers' educational status and lifelong learning tendencies in their studies with teachers.

In the literature, no study has been found about the thinking styles of academicians. The similarities of teachers to academicians in terms of certain variables were discussed in relation to the research results. Uğurlu (2012), in his study examining the thinking styles of teachers working in secondary education institutions, stated that the educational status of the teachers caused a difference in their thinking styles. He concluded that teachers who have master's and doctorate degrees have a judgmental thinking style, and stated that they use the features of evaluation, judgment and criticism more. This result is similar to the results of research conducted with academics who have higher levels of analytical and logical thinking. Bilgiç (2010) in his study with primary school administrators and classroom teachers concluded that educational status affects thinking style preferences and as the level of education increases, style choices become more creative, critical, judgmental and rational. However, as stated in the results of the research, there were also studies that concluded that the educational status did not cause the thinking style to differ. Adak (2006), in his study examining the thinking styles of preschool teachers, divided the education levels of teachers as associate, undergraduate and graduate, but could not detect any difference with their thinking styles.

Within the scope of the study, it was concluded that the lifelong learning tendencies of academicians increased according to their educational status. Considering that people with higher graduations have a longer educational life, we can say that these people spend more time in learning environments. It is an expected result that this time will support individuals to have the ability to learn. It causes academicians who have the academic titles of doctoral lecturer, associate professor and professor to pass these learning processes successfully and to have more lifelong learning tendencies. In addition, academicians' scientific studies ensure that they are in continuous learning and research environments. In addition, it can be said that the degree of graduation obtained at the end of the successfully completed education process is also very important in terms of emotional satisfaction and motivation. For all these reasons, the lifelong learning tendencies of academics who have just started their profession and have low educational status are lower than those with higher education levels. It can be concluded that academicians with doctoral degrees do not adopt lifelong learning in all areas of their lives.

According to the results of the research, the level of using thinking styles of doctoral graduate academicians was higher than that of undergraduate and graduate academicians. In this case, it can be said that the increase in education level brings a higher level of style preference in terms of cognition needs. In other words, the progress of the educational situation may affect the style choices to be used in the behaviors to be shown against the events. According to the results of the research, it was determined that the doctoral graduates approached the events from a more logical and rational perspective as a result of the research. The reason for this situation may be the similar behaviours of doctoral graduates in the educational processes and their academic studies on the results based on the findings and their use of analysis and decision-making skills in the light of rational data.It can be said that the critical perspectives of academicians with a doctorate degree will be more developed than academics with a master's or bachelor's degree.

Lifelong Learning Tendency and Thinking Style Levels of Academicians by Academic Titles

When the lifelong learning tendencies of academicians were examined in terms of academic title variable, it was seen that there was no significant difference. When the average scores were examined, it was concluded that the lifelong learning levels of the academicians with the academic title of lecturer, doctoral faculty member, associate professor and professor were significantly higher than the academicians with the academic title of research assistant. When we look at the scale in general, it has

been seen that the lifelong learning tendencies of associate professors are higher than other titles. When the thinking styles of the academicians were examined in terms of the academic title variable, it was seen that there was a significant difference. It has been concluded that the thinking styles of the academicians with the academic title of associate professor are significantly higher than those of the academicians with the academic title of research assistant and doctoral faculty member.

When the literature was examined, studies similar to the results of the research were found. Kör, Aksoy and Erbay (2017) found a significant relationship between the titles of academicians and their lifelong learning attitudes in their study titled "Examination of University Academic Staff's Attitudes to Lifelong Learning". They found a high level of lifelong learning attitudes of professors and associate professors similar to the research data. Haseski and Odabaşı (2016), in their study to determine the factors affecting lifelong learning according to faculty members, determined that the academic titles of the academicians participating in the research increased in the scores obtained from the lifelong learning questionnaire as they progressed. It has also been found that there are studies in the literature that do not differ by researchers. Yavuz Konokman and Yanpar Yelken (2014) examined the perceptions of instructors on lifelong learning competencies; Ayçiçek and Yanpar Yelken (2016), on the other hand, did not find a significant difference between the academic titles of academicians and their lifelong learning levels in their study in which they examined the lifelong learning competencies and lifelong learning habits of the instructors.

As a result of the research, it was concluded that as the academic titles of academicians increased, their lifelong learning tendencies increased. It can be said that the main reason for this situation is that the progress in terms of title in academics can be achieved with the studies and the time spent in learning environments. Günüç, Odabaşı and Kuzu (2012) similarly emphasize the importance of one's experience, which is similar to the research data. In addition, it can be said that professorship and associate professorship in universities, contracted employment of research assistants, lecturers and doctoral faculty members in universities affect the lifelong learning levels of academics in sub-headings due to job security concerns. The fact that associate professors have higher lifelong learning tendencies than professors can be expressed by the belief that professors are now at the top of the profession, and the conditions for obtaining the title of associate professor are considerably aggravated.

Studies on thinking styles about academics have not been found in the literature review. In the existing studies, demographic information about the academic titles of the academicians was not reached. In the results obtained, it was found that the academicians with the title of associate professor and lecturer showed a significant difference in the intuitive belief sub-dimension compared to the academicians with other titles. In the total of the scale, it was seen that the thinking style levels of the academicians with the title of associate professor were higher than those of the academicians with the title of research assistant and doctoral faculty member. It is clear that research assistants and doctoral faculty members need more cognitive and rational knowledge in their studies to progress in their educational status and to complete the necessary criteria for obtaining the title of associate professor. The academicians who have completed the necessary studies and have the title of associate professor have revealed that they prefer emotional and intuitive styles as well as rational knowledge preferences compared to other academicians as a result of their career progress and experience. It was concluded that this situation affected the research results.

Lifelong Learning Tendency and Thinking Style Levels of Academicians by Field of Science

When the lifelong learning tendencies of the academicians were examined in terms of the variable of the fields of science they worked on, a significant difference was found. It has been observed that academicians working in the fields of Health Sciences, Educational Sciences, Fine Arts and Philology have a higher level of lifelong learning tendencies than others. It has been observed that academicians working in the fields of Engineering, Agriculture, Forestry and Fisheries, Science and Mathematics,

Theology and Architecture, Planning and Design have low lifelong learning tendencies both in the sub-dimensions and in the overall scale.

When the thinking styles of the academicians were examined in terms of the field of science they worked on, a significant difference was found. It has been observed that the thinking styles of the academicians working in the fields of Fine Arts and Sports Sciences are at a higher level than the others.

It is foreseen that the establishment of different units within the university due to their autonomous structure and the different naming of the units created for the same purpose will create difficulties in terms of determining the working areas of academics. The Science Field section in the Personal Information Form applied to the participants within the scope of the research was arranged as stated in the 2022 March Term Associate Professorship Application Conditions of the Interuniversity Board Presidency (ÜAK). Thus, it is aimed that the differentiation between the fields in which the academicians do scientific studies and specialize and the units they currently work in their universities do not have a negative impact on the research findings.

In the literature review, it has been found that there are few studies on lifelong learning about academics and that there is no demographic information about the fields of science in which academics work. Similar to the results of the research, Ayçiçek and Yanpar Yelken (2016) found that the lifelong learning competencies of academics working in the field of educational sciences were found to be at a high level within the scope of the study conducted to examine the lifelong learning competencies of academicians working in the faculty of education. The reason why academicians working in the fields of health sciences, educational sciences, fine arts and philology have higher lifelong learning tendencies than academics working in the fields of engineering, agriculture, forestry and fisheries, science and mathematics, theology and architecture, planning and design. It can be said that having social areas and interacting with people are effective. Demirel (2012) emphasises that lifelong learning supports individuals' socialisation and active citizenship in addition to its effect on personal development. The fact that academics who mostly work on mathematical calculations and technological tools, planning, project design and experimental studies in laboratory environment have less social interaction and communication may have caused their lifelong learning tendencies to remain at a low level. On the contrary, academicians working in the fields of Educational Sciences where interaction at the highest level will be most necessary. There are academicians working in the fields of Educational Sciences where interaction will be at a high level, Philology where speaking and sharing will be used the most, Fine Arts and Health Sciences where creativity and cultural interaction will be used the most. It can be interpreted that social dialogues in terms of diagnosis and treatment methods will be one of the effects of high lifelong learning levels.

No studies have been found in the literature investigating the thinking styles of academics. It was understood that the results of the study conducted with teachers and prospective teachers were similar to the research findings. These results can be used in terms of discussion data, since the differences in the education and specialization fields of the teacher or teacher candidate university students are similar to the academicians. Duru (2002) examined the thinking styles of pre-service teachers and concluded that the students studying in the department of fine arts preferred intuitive thinking styles more than the students studying in the departments of social sciences, science, foreign languages and educational sciences. Uğurlu (2012) concluded that physical education, visual arts and music teachers differ in style preferences compared to other branches and they prefer conservative style in the study conducted with teachers working in secondary education institutions, similar to the research findings. Çınar (2016) in her study titled "The Relationship Between Pre-service Teachers' Thinking Styles and Reflective Thinking Tendencies" concluded that there are significant differences in executive, polyarchic, anarchic, granular, introverted and innovative styles in favor of students studying in the painting department. It is seen that similar results have been obtained in studies conducted abroad. In the study

conducted by Zhang and Sachs (1997) with high school graduate students, it was concluded that students who graduated from social sciences and humanities use the global style more. These results are similar to the research data.

It has been observed that academicians specializing in Fine Arts and Sports Sciences are more effective in using intuitive styles than academics working in other fields of science. The main reason for this situation is thought to be that art and sports activities contain a lot of emotion. These fields of science, which include activities such as music, painting, dance, etc., may require the use of emotional and intuitive styles rather than conceptual and cognitive knowledge. For this reason, the intuitive thinking styles of academicians specializing in Fine Arts and Sports Sciences may have been higher than other academicians.

The Relationship Between Lifelong Learning Tendencies and Thinking Styles of Academicians

In order to measure the relationship between academicians' lifelong learning tendencies and thinking styles, the Lifelong Learning Tendency Scale and Rational-Experiential Thinking Styles scale were applied within the scope of the study. As a result of the analyzes made, it was found that there was a positive relationship below the medium level in both the sub-dimensions and the overall total of the scale.

Thinking style refers to the ways and methods that individuals use voluntarily or involuntarily in order to progress in the process of solving the problems they encounter throughout their lives or in line with their goals. These preferences represent the emotional or rational behavior of people. While rational-analytical styles are more realistic, logical and evidence-based based on cognition, experiential-intuitive styles, on the other hand, include behaviors that are emotional, self-centered and based on past experiences. Teglasi and Epstein (1998) state that behavior is the common product of rational and experiential styles, which are very different from each other. Knowing which individuals are preferred more in style preferences and making the unused ones more active over time is very important for individuals to exhibit efficient and harmonious decision-making behavior in the following processes (Palut, 2003). In addition, whether the preferred styles will be liked by individuals will be in the light of individual differences.

The basis of lifelong learning is the idea that individuals can be in learning from their birth to the end of their lives. Walking, talking, riding a bicycle, learning to read and write, etc. are all behaviours that take place in learning.However, it is impossible to express learning in a separate way without thinking. It is an undeniable fact that thinking will form the basis of learning. For this reason, the conclusion that the thinking style will affect the learning of individuals is revealed by the research findings.

In the literature review, no studies were found examining the relationship between lifelong learning and thinking styles. However, there are some studies in the literature based on the conclusion that learning and thinking are parallel in human life. In their study, Cano and Hewitt Hughes (2000) examined the relationship between university students' learning styles and thinking styles and found that their students' academic success was related to their thinking styles. In his research, Sharma (2011) examined the relationship between secondary school students' thinking styles and academic success. As a result of the study, it was found that there was a positive and significant relationship between the academic achievements of secondary school students and their thinking styles. Huincahue et al. (2021) examined the relationship between mathematical thinking styles and mathematical performance in their study. It was concluded that there is a positive correlation between mathematical performance and analytical thinking style. Özbaş and Uluçınar Sağır (2014) in their study examining the relationship between classroom teachers' thinking styles and the measurement-assessment methods they use and Yaşar and Erol (2015) in their study examining the relationship between preschool teachers' thinking

styles and empathic tendency levels concluded that differences in individuals' thinking may cause differences in their learning. These results are similar to the research findings.

In order to determine the relationship between academicians' lifelong learning tendencies and thinking styles, as a result of the comparison of the scores of the academicians from the "Lifelong Learning Dispositions Scale" and the "Rational-Experiential Thinking Styles Scale", the relationship between academicians' lifelong learning tendencies and thinking styles was below the medium level and in a positive direction relationship has been found. According to this result, lifelong learning tendencies and thinking styles of academicians are concepts that affect each other positively but below the medium level. It was concluded that the preferences in thinking styles affected the lifelong learning tendencies to a small extent.

RECOMMENDATIONS

Recommendations for Practitioners

Based on the decrease in the tendency of lifelong learning with the advancement of the age of the academicians, it can be ensured that young academics and academics in the older age group can be in social interaction at universities. In addition, it may be recommended to organize activities that support and encourage lifelong learning.

Based on the effect of gender difference on lifelong learning tendencies of academicians, male academicians should be more involved in lifelong learning activities.

Based on the finding that the lifelong learning levels of academicians increase as they progress in their educational status, it can be ensured that the processes of promotion in career ladders are supported by the administrators, and especially academicians other than associate professors and professors can be supported by university administrations in order to ensure their career development.

Based on the results of the academics' fields of specialization, academicians working in the fields of engineering, agriculture, forestry and fisheries, science and mathematics, and architecture, planning and design, who spend most of their time doing scientific studies in laboratory environments, have social activities within or outside the university or arrangements that will enable them to be in the projects can be suggested.

Based on the conclusion that academics' thinking styles are at a moderate level, it can be suggested to re-plan the education-training processes with this awareness by organizing activities that will enable them to realize the thinking styles they have or prefer in the face of events.

Suggestions for Researchers

Since there are very few studies on lifelong learning or thinking styles in the literature on academics, more studies can be conducted on these concepts.

Since the research is limited to academicians, students, teachers, educational administrators, etc., it may be recommended that such studies be conducted for all employees in the field of education.

This research is a study conducted in the light of quantitative data. It may be recommended to conduct qualitative or mixed studies that will examine the results of this research.

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