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Investigation of The Relationship Between Teachers' Individual Creativity and Self-Efficacy Beliefs for Applying Constructivist Approach*

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Abstract

The aim of this research is to examine the relationship between teachers' individual creativity and self-efficacy beliefs in applying constructivist approach. A correlational study was used in the research. As data collection tools, the Personal Information Form, the "Organizational Creativity Scale" and the "Teachers' Self-Efficacy Belief Scale for Applying a Constructivist Approach" were used. In light of the sub-problems, it was examined whether the scale scores were differentiated in terms of various variables (age, seniority year, type of school). The results were classified according to sociodemographic variables. Based on the findings obtained, it was concluded that the teachers' individual creativity and self-efficacy beliefs in applying the constructivist approach were at a high level. The individual creativity of the teachers did not differ according to age, seniority year, and the type of school where they were working at. It was concluded that the teachers' self-efficacy beliefs towards applying the constructivist approach were at a high level. While teachers' self-efficacy beliefs in applying the constructivist approach did not differ in terms of age, type of school, seniority year variable. It was concluded that the relationship between teachers' individual creativity and self-efficacy beliefs for applying constructivist approach was at a significant level in terms of total score and sub-dimension scores, at a high level and in a positive direction in general.

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Introduction

The developments that are experienced day by day have also created expectations in the qualities of the individual. These qualities include skills specific to the individual, such as creativity, learning to learn, critical thinking, empathy, and self-actualization. The way to develop these desired skills in individuals is also related to the way education is provided (Jia, 2010). Therefore, how education is provided and what needs to change has become a point of discussion. The education process has evolved away from the traditional approach where information is directly transferred, the student is only a listener, the application process of the students is neglected and after a while they refuse to think on their own, and towards a contemporary approach where the student is active and learns by doing and experiencing. With this approach, it has become almost impossible for the individual to remain static and has created the need to act in a certain dynamism. This rapid movement has revealed the need to leave traditional approaches behind in education and prefer new approaches (Erdamar Koç & Demirel, 2008).

The primary goal of education is to train the learner in the most equipped way in the education system (Berner, 2013). With this goal, the subject to be covered is determined and the scope of the course is drawn accordingly. After the scope of the course is drawn, the learning and teaching process is planned. After all these processes are completed, evaluation processes are designed to determine how and how effective education is, thus an education program is developed. The education programs of countries are updated according to the characteristics that the individual is expected to be trained. Before 2005, the behaviorist approach was the effective approach in the education system in Türkiye. In line with this approach, the student was in a passive position, the teacher was in a position to explain the lesson, and the student was in a position to listen to the lesson. With the constructivist approach, students' higher-order thinking skills, such as critical, creative thinking and empathy began to be given importance (Özden, 2013).

In an education system where the behaviorist approach was adopted, the learner was learning with a system of repeating the given information and memorizing it. Individuals who learned and were trained with the education programs prepared in line with this approach could not be competent and active in every aspect (Gökçe, 2009). The behaviorist approach, which could not contribute sufficiently to the needs and demands of the modern era, was abandoned by many countries and the constructivist approach was adopted in education (Bayraktar, 2015). In Turkey, since 2005, the approach on which education programs are based has been adopted as the constructivist approach (Güneş, 2010). The constructivist approach, which is the basis of education programs, aims to turn individuals into creative thinkers who can keep up with the period they are in. The approach on which education programs are based is not the behaviorist approach, where the learner repeats the information from the teacher and the student is not active, which is based on the rote method, but the constructivist approach, which aims for the individual to learn how to learn and foresees the interpretation and functional use of the learned information (Çubukçu, 2010).

Constructivist learning theory is no exception, its roots mainly include philosophy and psychology (Aydın, 2020). Constructivism, as a thought, is a new philosophy of learning (Yurdakul, 2010). The philosophical roots of constructivism can be traced back to ancient thinkers. It is assumed that Socrates, one of the important philosophers of the ancient age, is

a representative of the constructivist approach based on the idea that "knowledge is only perception", and this idea is seen as a successful model for teaching constructivism (Akpınar, 2010). Kant's studies on the integration of rationalism and empiricism also point to constructivism (Bayraktar, 2015). According to him, the subject cannot open up directly to the outside world. The subject can only organize experiences and develop knowledge with internally formed basic cognitive rules (Şişman, 2010). Later, with the transfer of the structuralist methodology to poststructuralism, the absolute status of rationalism is further deteriorated. Constructivism learning theory emerges from the development of cognitivism and develops into a new learning theory (Jia, 2010).

From a psychological perspective, the first scientists who contributed a lot to the development of constructivism and applied it to the classroom and to students' learning and development were Dewey, Piaget and Vygotsky (Delacampagne, 2010). Dewey advanced the theory of experiential learning by emphasizing the production and reform of experiences. Piaget is considered the pioneer of modern constructivism (Yurdakul, 2010). Based on psychological ideas, Piaget thinks that all knowledge has an external origin and that the cognitive development of students occurs naturally in the process of receiving information; that is, the process of learning information is also the process of constructing information (Özel & Bayındır, 2010).

In the 20th century, Vygotsky laid the foundations for the formation of modern constructivism. Individual learning is under a certain historical and social background (Jia, 2010). What is learned is not taken as in the constructivist approach, but is done by the learner interpreting the newly encountered information (Özden, 2013). The learner's previous experiences form the structure of the newly learned things (Fosnot & Perry, 2005). Information does not emerge on a subject but in the form that the learner designs in his mind (Kaptan & Korkmaz, 2001). The basic idea in the constructivist approach is that the learner self-regulates and develops his schemas in this process. Therefore, the learner is expected to be active (Bada & Olusegun, 2015). In this approach, students reach information themselves, learn to research and transfer it to their lives (Rousseau, 2011). The individual actively participates in the learning process and develops his skills according to his learning style. In school life, he/she actively gets to know himself/herself, discovers his/her pros and cons, and makes his/her own self-regulation in his/her own learning process (Erdem & Demirel, 2002).

Constructivism accepts that knowledge is a social construction of individuals and others through negotiation (Holloway, 1999). Therefore, learners should cooperate and communicate with others in the process of knowledge creation. In a collaborative and communicative environment, students can broaden their views instead of passively receiving information (Senemoğlu, 2003). In order to ensure these, learning environments should also help learners establish their knowledge systems, develop their innovative spirit and problem-solving skills (Turaşlı, 2012). In order for students to cooperate and reveal their skills, the educational environment they are in, the activities and opportunities provided are very important (Liu & Chen, 2010). The educational environment should be organized in a way that allows students to become aware of the problem, understand it, set limits, create experiments, and work with their peers, and students should feel curious and free in this environment, not bored and afraid (Bingham, 2004). Situations that will undermine the student's freedom of expression, independence, curiosity, inquisitiveness, creativity and self-confidence should be prevented (Çetin, 2012). When faced with such a situation, the student's self-confidence decreases and

their creativity cannot be expected to develop, therefore the classroom environment and activities should be organized in a way that is attractive and encourages the desire to learn new things, and that includes students with individual differences and different skills (Bada & Olusegun, 2015).

In a constructivist learning environment and in a class that is organized in accordance with its activities, no direct explanation is given, therefore, students can construct their own knowledge (Kırışoğlu, 2009). In this environment, skills such as research-investigation, criticism and creativity are given importance. It is desired that learners are individuals who produce, have the ability to express themselves, are active in communicating, have a questioning eye, make drafts and preliminary studies, transfer what they learn to their own lives and think creatively, and efforts are made for this (Akbaba & Kaya, 2015). The classroom environment where the constructivist approach is applied aims to direct students from passivity to activity in the learning environment, instill free and innovative thinking, and provide them with the ability to produce solutions by bringing an innovative perspective to problems (Fox & Schirrmacher, 2014). Instead of information directed to them without researching and questioning, learners tend to emphasize their own self-regulation and personal skills in this process and develop their cognitive skills; thus, learners aim to see this process as innovations to be discovered rather than a difficult and laborious job as they imagine in their minds (Elibol, 2012). In line with this goal, motivation towards learning is provided and orientation towards original and creative learning activities is provided (Şaşan, 2002).

In classroom environments where constructivist education is applied, methods such as cooperative learning and problem solving, which allow students to interact more with their peers, are used (Öztürk Aynal, 2010). Thus, learners are expected to develop their problem-solving skills and creativity. The level of individual creativity is also very important for the teacher who has the task of organizing a constructivist approach environment and activities for students to implement this (Turaşlı, 2012). In order for an educational program targeting learning in the constructivist approach to achieve successful results, teachers who carry out the approach and activities must also have mastered certain characteristics (Liu & Chen, 2010).

In the constructivist approach, teachers are important in organizing creative activities and the mentioned classroom environment (Cheung, 2012; Güven & Genç, 2024). In this approach, the role of the teacher is to create an interactive, simulative, guiding learning environment with the student (Cobb & Steffe, 2011; Pınar & Kaya, 2025). In the constructivist approach, the teacher envisaged should be a free thinker, keep up with the modern world, renew himself, care about individual characteristics, be proficient in field knowledge, but be open to learning together with the learners, not presenting the information without the effort of the learners (Lemke, 2014). In addition, in the constructivist approach, the teacher should have the following qualities: creating activities suitable for individual differences, encouraging learners, encouraging cooperation between peers and teacher-student, creating environments where students can express their ideas openly and express their questions freely, and informing that more than one perspective can be discovered and that reality is a matter of interpretation for individuals (Brooks & Brooks, 1999). By presenting distracting and thought-provoking problems, the teacher directs learners to think creatively and solve problems. Although the teacher asks questions to the learner, he/she does not give clues about what and how to think (Cleaver & Ballantyne, 2014). The teacher is like a north star; he/she does not tell the learner where to go, he/she helps him/her find his/her own way (Orlich et al., 2012). In addition to all

the teacher characteristics mentioned, self-efficacy beliefs are also one of the most important qualities because in the implementation of the programs, the self-efficacy belief of the individual is an important feeling that determines how he/she will do a job and how competent he/she feels towards it. The more competent the individual feels, the more successful he/she will be in that job.

This research, which aims to determine the self-efficacy beliefs and individual creativity levels of teachers against the approach on which the curriculum is based, is important because it will reveal how effective teachers are in the system in which they are and whether they consciously apply the constructivist approach. In addition to the concepts of creativity, constructivist approach, and self-efficacy, which are the subjects of research, examining some demographic characteristics (age, years of seniority) is a great richness for the literature. In this context, it is thought that a comprehensive research will contribute to literature by considering these demographic characteristics in the process of determining the relationships between teachers' individual creativity and self-efficacy beliefs while applying the constructivist approach.

The mission that the constructivist approach concept has assigned to the teacher has changed with the 21st-century education system and has directed teachers to develop their creativity, keep up with the times, plan original activities, and in short, organize their self-efficacy. Since memorization and transfer of knowledge are rejected in the approach that makes the student active, the teacher needs to use the skill of structuring this process. Within this approach, the individual creativity of teachers has gained an important dimension. For an educational program that adopts the constructivist approach to be successful, how the implementing teachers apply this approach using their individual creativity and their self-efficacy beliefs towards this program are two concepts that are very closely related to each other, so they were chosen as the subject of this research.

The problem statement of the research is "Is there a relationship between teachers' individual creativity and their self-efficacy beliefs regarding the implementation of the constructivist approach?" In line with this problem, the following questions were sought in the research.

1- What are the teachers' individual creativity levels and self-efficacy levels towards implementing the constructivist approach?
2- Do the teachers' individual creativity levels and self-efficacy levels towards implementing the constructivist approach differ significantly according to their age?
3- Do the teachers' individual creativity levels and self-efficacy levels towards implementing the constructivist approach differ significantly according to their year of seniority?
4- Do the teachers' individual creativity levels and self-efficacy levels towards implementing the constructivist approach differ significantly according to the type of school they work at?
5- Is there a statistically significant relationship between teachers' individual creativity levels and self-efficacy levels towards implementing the constructivist approach?

Method

In this study, the self-efficacy beliefs of primary school, secondary school and high school teachers towards the curriculum they implement using their individual creativity and the constructivist approach on which this curriculum is based were determined. The relationship between the two concepts was examined. It was examined whether the teachers' individual creativity and self-efficacy beliefs towards implementing the constructivist approach changed according to the variables of age, seniority year and the type of school they worked at.

Research Design

The research was prepared using quantitative research method. The correlational survey model was used in this research. The correlational survey model aims to describe a past or present situation as it is (Karasar, 2007). In this research, the correlational survey model was preferred because the existence of a relationship between two variables was investigated.

Sample

The population of the research consists of 3100 teachers (obtained by Kırklareli National Education Directorate as of November 23, 2023) working in 2436 educational institutions in Kırklareli province and all state schools affiliated to it in the 2023-2024 academic Year. A sample group was not determined within the scope of this research. The aim was to reach the entire universe. In line with this goal, teachers working in all schools in Kırklareli were reached via a link with the distributed letter written by Kırklareli National Education Directorate. In addition, a link containing the measurement tools of the research was sent by the researcher to the teachers who worked in Kırklareli province and district and could be reached. In this direction, the feedback from the teachers who voluntarily filled in the data collection tools were evaluated as data. When the data obtained in the research was examined, it was seen that data from 401 participants were collected.

In the study on the adequacy of the sample size specified by Krejcie and Morgan (1970) to represent the universe, it is accepted that the data of 346 people for 3500 people is the appropriate majority to represent the population. Based on this, it can be said that 401 participants have the competence to represent a population of 3100 people. Since no errors were detected when the data were examined, all the data were used. The demographic characteristics of the participants are given in Table 1.

Table 1

Demographic Characteristics of Teachers

Variable	*Gourps*	*f*	*%*
		113	28,2
Age	20-30	155	38,7
	31-40	94	23,4
	41-50	39	9,7
Total	51 +	401	100

Year of seniority	1-5	105	26,2
	6-10	87	21,2
	11-15	81	20,2
	15 +	128	31,9
Total		401	100
Type of school they work at	Primary school	146	36,4
	Secondary school	142	35,4
	High school	113	28,2
Total		401	100

When Table 1 is examined, it is seen that 113 of the teachers are between 20-30 (%28.2), 155 are between 31-40 (38.7%), 94 are between 41-50 (23.4%) and 39 are 51 years of age or older (9.7%). When the years of seniority of the teachers are examined, it is seen that 105 have 1-5 years (26.2%), 87 have 6-10 years (21.2%), 81 have 11-15 years (20.2%), 128 have 15 years and over and 128 have 128 (31.9%) years of seniority. When the types of schools the teachers work in are examined, it is seen that 146 (36.4%) are working in primary schools, 142 are working in secondary schools (35.4%), and 113 are working in high schools (28.2%).

Data Collection

Quantitative data collection tools were used in the study. Data were collected via a link sent to teachers. Data collection was carried out between October 2023 and March 2024.

Data Collection Instruments

In this study, which aimed to examine the relationship between teachers' individual creativity and their self-efficacy beliefs towards implementing the constructivist approach, 3 different measurement tools were used. These scales were the "Personal Information Form" developed by the researc5her, the "Organizational Creativity Scale" developed by Balay (2010) and the "Self-Efficacy Belief Scale for Implementing the Constructivist Approach" developed by Eskici & Özen (2013). Necessary permissions were obtained for the use of both scales. In this study, the "Personal Information Form" consisting of questions to determine the demographic status of the teachers participating in the study was used. Quantitative data was collected by the researcher using quantitative data tools. Detailed information about the scales used in this research is provided below.

Personal Information Form.

The personal information form prepared by the researcher included questions for the personal information of the teachers participating in the study to be used in the analysis of the data. These questions were: gender, age, graduation status, seniority year, and the type of school they worked at. The aim was to correlate and examine the answers given to these questions with the sub-dimensions of the scales.

Organizational Creativity Scale.

The organizational creativity scale was developed by Balay (2010). There are 3 sub-dimensions and 38 items in the scale. Items 1-16 measure the individual dimension, items 17-27 measure the administrative dimension, and items 28-38 measure the social dimension. In this study, 16 items belonging to the 16-item ''Individual Creativity'' dimension, which is a sub-dimension of the organizational creativity scale, were used. Other items were excluded from

the scope of the study. The scale is a 5-point Likert type. In the scoring of the scale, it was calculated as 1 point for strongly disagree, 2 points for strongly disagree, 3 points for disagree, 4 points for undecided, 5 for agree, and 5 for strongly agree. The lowest score that can be obtained from the scale is 38 and the highest score is 190.

Self-Efficacy Belief Scale for Implementing Constructivist Approach

The "Self-Efficacy Belief Scale for Implementing the Constructivist Approach" developed by Eskici & Özen (2013) in a five-point Likert form was used. As a result of the exploratory factor analysis conducted to determine the construct validity, it was determined that the scale consisted of four factors and 29 items; the four-factor structure was confirmed as a model with confirmatory factor analysis. The highest score that can be obtained from the scale is 145 and the lowest score is 29. The scale is a 5-point Likert-type.

Data Analysis

The data obtained in the study were analyzed using a statistical program. In order to determine the statistical methods to be used to examine the individual creativity and self-efficacy belief scores of the teachers, the normality test values of the scales were first examined to understand how the distribution was. It was understood that the variables did not show a normal distribution. The data obtained from the scales used in the research were analyzed on the computer using the Statistical Package Program. Arithmetic Mean, Standard Deviation, Kruskhal Wallis H, Correlation statistical techniques were used to analyze the data.

Ethics Board Approval

This study has ethical approval from Kırklareli University under the protocol number E-35523585-302.99-94006 on 23/08/2023.

Results

Individual Creativity and Self-Efficacy Towards Implementing the Constructivist Approach Levels of Teachers

The first sub-problem of the research was expressed as "What are the teachers' individual creativity levels and self-efficacy levels of teachers towards implementing the constructivist approach?" In order to find an answer to this problem, arithmetic mean and standard deviation analyses of the Individual Creativity and Teachers' Self-Efficacy Towards Implementing the Constructivist Approach Scales answered by the participants were conducted. The analysis results are shown in Table 2.

Table 2
Arithmetic Mean and Standard Deviation Values

Scale	*Number of Items*	*$\bar{x}$*	*SS*	*Item Averages ($\bar{x}$/ number of items)*
Individual Creativity Scale	16	64.90	8.77	4.06
Teachers' Self-Efficacy Towards Implementing The Constructivist Approach Scale	29	117.79	14.24	4.06

When Table 2 is examined, it is seen that teachers' individual creativity and self-efficacy beliefs towards implementing the constructivist approach are at a high level. ($\bar{x}$: 4.06) level.

Individual Creativity and Self-Efficacy Towards Implementing the Constructivist Approach Levels of Teachers by Age

The second sub-problem of the research sought to answer the question; "Do the teachers' individual creativity levels and self-efficacy levels of teachers towards implementing the constructivist approach differ significantly according to their age?" The findings obtained by performing the Kruskal Wallis H test for the Individual Creativity and Teachers' self-efficacy towards implementing the constructivist approach Scales are presented in Table 3.

Table 3

Kruskal Wallis H Test Values in Terms of Age Variable

Scale	*Age*	*N*	*Rank Average*	x^2	*Df*	*p*
Individual Creativity Scale	20-30	113	213,87	3.80	2	.284
	31-40	155	194,34			
	41-50	94	189,11			
	51+	39	218,65			
Teachers' Self-Efficacy Towards Implementing the Constructivist Approach Scale	20-30	113	208,27	5,827	3	.120
	31-40	155	203,78			
	41-50	94	178,00			
	51+	39	224,33			

According to Table 3, when the teachers' self-efficacy beliefs towards implementing the constructivist approach were examined in terms of age variable, it was seen that the age variable did not create a significant difference on the self-efficacy beliefs towards implementing the constructivist approach ($p>0.5$). The group with the highest score in the entire scale of teachers' self-efficacy beliefs towards implementing the constructivist approach was teachers aged 51 and over, while the group with the lowest score was teachers aged 41-50.

In light of the data in Table 3, when the individual creativity levels of teachers were examined in terms of age groups, no significant difference was found between their individual creativity ($p>.05$). In light of the data in the table, the individual creativity levels of teachers in the 51 and above age group were higher than those of teachers in other age groups. The group of teachers with the lowest individual creativity levels was teachers between the ages of 41 and 50.

Individual Creativity and Self-Efficacy Towards Implementing the Constructivist Approach Levels of Teachers by Year of Seniority

The third sub-problem of the research sought to answer the question "Do the teachers' individual creativity levels and self-efficacy levels of teachers towards implementing the constructivist approach differ significantly according to their year of seniority?" The findings obtained by performing the Kruskal Wallis H test for the Individual Creativity and Teachers' self-efficacy towards implementing the constructivist approach Scales are presented in Table 4.

Table 4

Kruskal Wallis H Test Values in Terms of Year of Seniority Variable

Scale	*Year of Seniority*	*N*	*Rank Average*	x^2	*df*	*p*
Individual Creativity Scale	1-5	105	204,09	1.722	3	.632
	6-10	87	203,45			
	11-15	81	186,08			
	15+	128	206,25			
Teachers' Self-Efficacy Towards Implementing The Constructivist Approach Scale	1-5	105	203,65	11.7	3	.098
	6-10	87	216,80			
	11-15	81	173,80			
	15+	128	205,44			

According to Table 4, when the individual creativity levels of teachers were examined in terms of the seniority year variable, it was seen that the seniority year variable did not create a significant difference in individual creativity (p>0.5). In light of the data in the table, the group with the highest individual creativity level was teachers who completed 15 years of seniority and above, while the group with the lowest was teachers who completed 11-15 years of seniority. (p<.05).

Individual Creativity and Self-Efficacy Towards Implementing the Constructivist Approach Levels of Teachers by Type of School They Work At

The fourth sub-problem of the research sought to answer the question "Do the teachers' individual creativity levels and self-efficacy levels of teachers towards implementing the constructivist approach differ significantly according to the type of school they work at?" The findings obtained by performing the Kruskal Wallis H test for the Individual Creativity and Teachers' self-efficacy towards implementing the constructivist approach Scales are presented in Table 5.

Table 5

Kruskal Wallis H Test Values in Terms of Type of School Working At

Scale	*Type of School Working At*	*N*	*Rank Average*	x^2	*df*	*p*
Individual Creativity Scale	Primary	146	199,22	,521	2	,771
	Secondary	142	197,60			
	High	113	207,57			
Teachers' Self-Efficacy Towards Implementing the Constructivist Approach Scale	Primary	146	208,45	1,092	2	,529
	Secondary	142	199,16			
	High	113	193,69			

According to Table 5, when the individual creativity levels of teachers were examined in terms of Type of School Working At variable, it was seen that Type of School Working At variable did not create a significant difference on individual creativity (p>0.5). In light of the data in the table, the group with the highest individual creativity level was teachers who worked at a high school, while the group with the lowest was teachers who worked at a secondary school. (p<.05).

When Table 5 is examined, no significant difference was found between the type of school they work at and the teachers' self-efficacy beliefs towards implementing the constructivist approach. (p>.05) However, it can be said that the self-efficacy beliefs towards implementing the constructivist approach of teachers working at primary schools are higher than those working at secondary and high schools. The group with the lowest belief in implementing the constructivist approach is the teachers working at high schools.

The Relationship Between Individual Creativity and Self-Efficacy Towards Implementing the Constructivist Approach Levels of Teachers

The fifth sub-problem of the research is " Is there a statistically significant relationship between teachers' individual creativity levels and self-efficacy levels of teachers towards implementing the constructivist approach?" 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 6.

Table 6

Spearman-Brown Test Values of the Relationship Between Teachers' Individual Creativity Levels and Self-Efficacy Levels of Teachers Towards Implementing the Constructivist Approach

		Self-Efficacy Levels of Teachers Towards Implementing the Constructivist Approach
Individual Creativity	Person Correlation	,574
	Sig. (2-tailed)	,000
	N	401

When Table 6 is examined, it is concluded that there is a significant, moderate and positive relationship between teachers' individual creativity and their self-efficacy beliefs towards implementing the constructivist approach in terms of r=0.574, (p<.05). Accordingly, it can be said that as individual creativity increases, self-efficacy will increase, and as self-efficacy increases, individual creativity will increase.

Discussion

In this section, the results of the research conducted to examine the relationship between teachers' individual creativity and their self-efficacy beliefs towards implementing the constructivist approach are discussed in the light of sub-problems. In order to measure the individual creativity levels of teachers, the "Individual Creativity Scale" was applied within the scope of the study. The study revealed that the individual creativity levels of teachers were high.

When the literature is examined, it is concluded that the creativity of science teachers is at a high level in the study conducted by Uçkan (2019), which is similar to this study. Similarly, the relationship between school innovation and individual creativity was examined in the study conducted by Yüner and Özdemir (2020) and it was found that the individual creativity levels of teachers were high. In the study conducted by Tetik (2021), the effect of teachers' perception of the learning organization on their individual creativity was investigated and it was found

that the individual creativity levels of teachers were high. In a similar study conducted by Meral and Tezel Şahin (2019) with preschool teachers, the individual creativity levels of teachers were found to be high. In the study conducted by Baloğlu (2020), it was concluded that the creativity levels of classroom teachers were high. In the study conducted by Çoban and İnan (2020), the individual creativity levels of preschool teachers were found to be high. In the study conducted by Bayındır and Zeteroğlu (2023), it was found that the individual creativity levels of preschool teachers were high. In addition to these, the results obtained in the studies conducted by Kesici (2023), Bramwell et al., (2011), Kasirer and Shnitzer Meirovich (2021) also found that the individual creativity levels of teachers were high and are similar to the results of this study. However, it is seen that there are also studies in the literature that concluded that the individual creativity levels of teachers are not high. In the study titled "Evaluation of the Relationship Between Primary School Teachers' Creativity Levels and Democratic Attitudes" conducted by Kurnaz (2011), it was concluded that teachers' individual creativity levels were low. Similarly, in the study conducted by Polat and Kontaş (2018) with classroom teachers, it was concluded that teachers' individual creativity levels were low. In addition, in the study conducted by Ulusoy Yılmaz and Yıldız (2019) with teachers, it was concluded that teachers' individual creativity levels were low. In addition, as a result of the literature review conducted in different countries, it was seen that Lapėnienė and Bruneckienė (2010) with physical education teachers also concluded that teachers' creativity levels were low.

Based on the results of this study, it can be interpreted that teachers have high individual creativity levels. It is an important point in terms of education that teachers, who are at the center of education, implementers of curriculum and guides of future generations, have high creativity levels. Teachers, who are in a position to contribute to the development of the education and culture level of society, are open to innovations and continuous learning, which allows them to keep up with the society they are in and adapt their students. In this case, it can be thought that teachers can be role models. If the individual creativity level is high, teachers can provide opportunities for students to develop their talents and help them think critically and differently. Starting from primary school, where basic education begins, students are supported to become constructive and creative individuals by taking them out of the usual rote learning system. When it is considered that the first step to ensure students think creatively is taken in preschool and primary school and can increase day by day in the following school years, it can be said that creativity skills are important for teachers who have this skill at a high level.

In order to measure the self-efficacy beliefs of teachers towards implementing the constructivist approach, the "Self-Efficacy Belief Scale for Implementing the Constructivist Approach" was applied to the teachers within the scope of the study. The study revealed that the teachers' self-efficacy belief levels towards implementing the constructivist approach were high. In parallel with the results of this study, the study conducted by Kaya (2013) concluded that the self-efficacy of classroom teachers towards implementing the constructivist approach was high. Similarly, in the study conducted by Uçkan (2019) with science teachers, it was concluded that the teachers considered themselves competent in implementing the constructivist approach and their scores were high. In the study conducted by Fidan and Duman (2014) with classroom teachers, it was found that the teachers' self-efficacy belief levels towards implementing the constructivist approach were high. In the study conducted by Çınar and Şahin Taşkın (2020), it was concluded that the self-efficacy beliefs of classroom teachers

towards implementing the constructivist approach were high. In the study conducted by Hwang et al. (2020), it was found that the self-efficacy belief levels of primary school mathematics teachers working in Korea towards implementing the constructivist approach were high. Similarly, according to the results obtained in the study titled "Examination of Teachers' Self-Efficacy Beliefs Towards Implementing the Constructivist Approach" conducted by Güven and Genç (2024), the self-efficacy beliefs of teachers towards implementing the constructivist approach were found to be high. It can be interpreted that teachers' self-efficacy belief levels towards implementing the constructivist approach are high. It is a very important point in terms of education that teachers, who are the implementers of the curriculum, have high self-efficacy belief levels towards the approach they implement. It can be said that teachers' scores are at a high level due to their adoption of the program they implement and their perception of themselves as competent in this regard.

When the individual creativity levels of teachers were examined according to the age variable, no significant difference was found in the overall individual creativity scale. It was concluded that the individual creativity scores of teachers aged 51 and over were higher than those of teachers in the 20-30, 31-40, and 41-50 age groups. It was found that the age group with the lowest creativity scores was teachers aged 41-50. In the study conducted by Meral and Tezel Şahin (2019), it was concluded that there was no significant difference between the creative thinking tendencies of preschool teachers and the age variable. Similarly, as a result of the study conducted by Çoban and İnan (2020) with preschool teachers, no significant difference was found between creativity and the age variable. In the study conducted by Pehlivan (2019) with classroom teachers, no significant difference was found between creativity and the age variable. In addition, studies conducted by Burak and Atabek (2023), Jaussi and Randel (2014) also concluded that there is no significant relationship between teachers' individual creativity and the age variable. As a result of the overlap between the results of this study and most of the studies in literature, it can be said that there is no relationship between teachers' individual creativity and their age. When the results obtained in this study and other studies in literature are considered, it has been concluded that there is no significant difference between teachers' individual creativity and the age group. When creativity skill is evaluated as different perspectives brought to the solution of problems and continuing from the moment people start expressing themselves until their death, it can be considered as a skill that should be possessed at a similar level in every age group. Individuals with creativity skills will always be open to development, change and learning new things regardless of their age. However, according to the results of the research, the high scores of teachers aged 51 and over can be interpreted as their desire to follow the technological developments they are involved in more closely and seeing themselves equipped in terms of professional competence. Since the sample group of the study includes individuals aged 20 and above, it can be said that the study was conducted with an adult age group. Creativity is a cognitive feature. When the theories related to cognitive development are considered, it is seen that individuals aged 18 and above fit the adult classification (Aslan & Köksal Akyol, 2007). Since the sample group of the study is in the same group in terms of cognitive development, it can be thought that no significant difference was reached in terms of age variable in individual creativity levels.

Considering the results obtained in this study and other studies in literature, it was concluded that there was no significant difference between the self-efficacy beliefs of teachers towards implementing the constructivist approach and the age variable. Since the

constructivist approach is the approach taken as the basis for the implementation of curriculum, it can be considered as a skill that should be possessed at a similar level in every age group. It can be said that individuals who have a self-efficacy belief in a skill are individuals who are self-confident and find themselves sufficient. However, according to the results of the research, the high scores of teachers aged 51 and over may be due to the fact that teachers in this age group see themselves as sufficient due to working for many years or that they think they are professionally experienced. Professional experience is defined as the knowledge, skills and attitudes that must be possessed while practicing a profession (Yenen, 2022). In professional experience, the field knowledge that each individual has regarding their own profession and the process of transferring this knowledge into practice are also important. In the teaching profession, a teacher's competence in all subjects related to their field and correctly conveying these subjects with certain methods and techniques during the teaching process can be considered as professional experience. This experience can also be considered as a competence that will develop over time, and the high scores of teachers aged 51 and over can be associated with their professional experience.

When the individual creativity levels of teachers were examined in terms of the seniority variable, it was seen that there was no significant difference in the entire individual creativity scale, but although there was no significant difference, it was concluded that the scores of teachers with 15 years of seniority and above were higher than the average scores of teachers with 1-5, 6-10, 11-15 years of seniority. Similar studies are found in literature. In the study conducted by Gürel and Arslan (2023), where the creative thinking skills of preschool teachers were examined in terms of various variables, no significant difference was found between the individual creativity of teachers and the seniority variable. In the study conducted by Kalafat (2012) with secondary school teachers, it was concluded that there was no significant difference between the individual creativity of teachers and the seniority variable. In the study conducted by Altıntaş Yüksel (2019) with classroom teachers, no significant difference was found between professional creativity and the seniority variable. In the study conducted by Tan (2022), it was concluded that there was no significant difference between the individual creativity of teachers and the seniority variable. Unlike this study, Ng et al. (2013) conducted a study examining creativity-related behaviors based on age and tenure, and concluded that teachers with fewer years of seniority had significantly higher creativity skills than teachers with more years of seniority. Within the scope of the study, it was concluded that teachers' individual creativity levels did not differ according to years of seniority. It was concluded that the scores teachers received from the individual creativity scale created differences between years of seniority. When the scores were examined, teachers with 15 years of seniority and above saw themselves as more creative than teachers with other years of seniority. The group with the lowest scores was teachers with 11-15 years of seniority. In light of these findings, it can be said that teachers with 15 years of seniority and above saw themselves as sufficient and creative in terms of professional competence and knowledge. Teachers with 11-15 years of seniority can be considered to be in a period of stagnation against productivity according to Erikson's (1968) psychosocial development theory before retirement, and therefore routine work can be considered difficult. Considering that even creative and productive individuals can sometimes experience stagnation and a feeling of inefficiency during this period, the findings obtained in the study can be interpreted in this way.

When the self-efficacy beliefs of teachers for implementing the constructivist approach were examined in terms of the seniority variable, it was concluded that there was no significant difference in the entire self-efficacy belief scale. The scores of teachers with 11-15 years of professional experience were found to be lower than the scores of teachers who had been working for 1-5, 6-10, and had 15 years or more of seniority. Many studies conducted with teachers have been found in the literature regarding whether the self-efficacy beliefs of teachers for implementing the constructivist approach differ in terms of the seniority variable. When the studies in literature are examined, it is also found that there are studies that are similar to this study. In the study conducted by Özdemir and Kıroğlu (2011), it was concluded that there was a significant difference between the knowledge levels of classroom teachers with 0-5 years of seniority and the knowledge levels of classroom teachers with 21-25 years of seniority in favor of teachers with 21-25 years of seniority. In the study conducted by Koç (2013), in which the self-efficacy of classroom teachers and their skills in creating a classroom environment for implementing the constructivist approach were examined, it was concluded that there was a significant difference between self-efficacy and the seniority variable. The self-efficacy beliefs of classroom teachers with 6-10 years of seniority regarding classroom management were found to be higher than the self-efficacy beliefs of classroom teachers with 16-21 years of seniority; the self-efficacy beliefs of classroom teachers with 6-10 years of seniority regarding classroom management were found to be higher than the self-efficacy beliefs of classroom teachers with 26 and above years of seniority regarding classroom management; the self-efficacy beliefs of classroom teachers with 21-25 years of seniority regarding classroom management were found to be higher than the self-efficacy beliefs of classroom teachers with 16-20 years of seniority regarding classroom management. Karaşahin and Kahyaoğlu (2011) examined teachers' self-efficacy beliefs and the seniority variable and concluded that there was a significant difference between teachers with 26 and more years of professional seniority and teachers with 1-5 years of professional seniority in favor of teachers with 26 and more years of professional seniority. In the study conducted by Coşkun (2012), as a result of examining the constructivist method competencies of religious culture teachers in terms of various variables, it was concluded that although the general constructivist method competency levels of religious culture and ethics teachers did not differ significantly depending on the seniority variable, it differed significantly in the "teaching planning" sub-dimension between teachers with 11-15 and 16-20 years of professional seniority in favor of 16-20 years of seniority; and between teachers with 16-20 and 26 and more years of professional seniority in favor of 26 and more years of seniority. According to the results of the study conducted by Güven and Genç (2024), it was found that teachers with 21 years of seniority and above had higher averages in all sub-dimensions and total scores in terms of seniority variable. A significant difference was found between the seniority variable and the sub-dimensions of the scale, guiding and activating students, and the total score of the scale; no significant difference was found in the sub-dimensions of encouraging thinking with alternative assessment. In the "Guiding" dimension, teachers with 21 years of seniority and above received higher scores than those with 11-20 years of seniority. In the "Student Activation" sub-dimension, it was concluded that teachers with 21 years of seniority and above received higher scores than those with 11-20 years of seniority and 0-10 years of seniority. As a result of the study, it was concluded that there was no significant difference in the self-efficacy belief scale in terms of teachers' self-efficacy beliefs towards implementing the constructivist approach and the year of seniority variable. The self-efficacy belief scores of teachers who have completed 11-15 years of seniority

were found to be lower than those of other seniority groups. The low scores of teachers in this age group can be interpreted as being before retirement and therefore seeing their own self-efficacy low and losing their knowledge of concepts and practices related to the constructivist approach. The reason for the high scores of teachers who have completed 6-10 years of professional experience can be thought to be that they have recently acquired knowledge of concepts and practices related to the constructivist approach and are closer to implementing this approach, as well as being accustomed to the profession and being at the beginning of the profession.

When the individual creativity levels of teachers were examined in terms of the school type variable, it was seen that there was no significant difference in the entire individual creativity scale, but even though there was no significant difference, it was concluded that the creativity level scores of high school teachers were higher than the scores of primary and secondary school teachers. When the studies in the literature were examined, it was seen that there were studies examining individual creativity according to school type. The scale titled "Teachers' Perceptions of Creative Teaching and Classroom Practices", made by Gülözer and Alpan (2023) was applied to high school teachers, and it was seen that the individual creativity of high school teachers differed in terms of the school type variable. It was concluded that the creative teaching perceptions of teachers working in Social Sciences high schools were at a higher level compared to Imam Hatip High School teachers. Different from this study, studies are in the literature such as Saraniero et al. (2014); Lee and Kemple (2014); Kim et al. (2015); Ölçer and Aşıkoğlu Özdemir (2018); Arslan (2019). In the study conducted by Yılmaz and Güven (2019), a significant difference was found between the individual creativity level scores of primary school teachers and the individual creativity level scores of teachers working at other levels. It was concluded that the individual creativity of primary school teachers was significantly higher than that of teachers working in secondary and high schools. In contrast to these studies, the study conducted by Berkant and Burun (2021) examined the individual creativity levels of teachers and the type of school they worked in, and it was concluded that the individual creativity of teachers working in secondary schools was significantly higher than that of high school and primary school teachers. Within the scope of the study, it was concluded that the individual creativity levels of teachers did not differ according to the type of school they worked in, but there were differences between the types of schools they worked in terms of scores. It was concluded that the individual creativity level scores of high school teachers were higher than the scores of primary and secondary school teachers, and the lowest score belonged to secondary school teachers. Based on this information, it can be thought that high school teachers should design materials in more creative ways and manage the educational processes with a different process for high school students who are in the abstract operations period and trying to acquire skills such as scientific thinking, reasoning, abstract thinking, metacognition, hypothetical thinking, and analogy. It can be thought that the reason for the low scores of middle school teachers is that the students at this level are in the concrete operations period and the activities that teachers do in their classes appeal to a lower level of creativity.

In order to measure the relationship between teachers' individual creativity and their self-efficacy beliefs towards implementing the constructivist approach, the "Individual Creativity Scale and the "Self-Efficacy Belief Scale for Implementing the Constructivist Approach" were applied within the scope of the study. As a result of the analysis, it was concluded that there was a significant, moderate and positive relationship both in the sub-dimensions and in the

overall total of the scale. Accordingly, it can be said that as individual creativity increases, self-efficacy will increase, and as self-efficacy increases, individual creativity will increase. It is seen that there is no study examining these two variables in literature. Individual creativity is characterized as a skill that individuals bring to the world as a potential power from birth and which they can or cannot reveal later with certain factors. When this skill is considered as practical, different and personal solutions to problems in human life, it is very important for individuals. Individuals with individual creativity skills see, discover, design and apply what is different from others in their minds. Individual creativity can be considered as a skill that teachers who work together with more than one student with individual differences in the field of education should also have. Designing education and training, using teaching methods and techniques, ensuring that information is learned by actively participating in the student through various approaches, requires the teacher to use creativity skills appropriately and correctly. The teacher's attempt to reveal the potential creativity within the student by using individual creativity skills also shows the importance of this skill. Another important issue other than individual creativity can be considered as teachers' self-efficacy beliefs towards the implemented curriculum. Curricula developed based on the constructivist approach are considered as an approach based on actively including students in the educational processes and creating individual learning schemes. In this approach, which is different from the traditional rote-learning system, both the level of teachers' self-efficacy beliefs towards the constructivist approach they apply and their use of their individual creativity during the implementation phase are considered as two interrelated issues. When these two issues in the study are considered in connection with each other, the conclusion that they will affect each other is revealed by the research findings. In the literature review, no studies were found examining the relationship between teachers' individual creativity and their self-efficacy beliefs towards implementing the constructivist approach. As a result of the analysis, it was concluded that there is a significant, moderate and positive relationship between the sub-dimensions and the total of the scale. According to this result, it can be said that as individual creativity increases, self-efficacy will increase, and as self-efficacy increases, individual creativity will increase.

Conclusion and Implications

Based on the findings obtained, it was concluded that the teachers' individual creativity and self-efficacy beliefs towards applying the constructivist approach are at a high level. The individual creativity of the teachers did not differ according to age, seniority year, and the type of school where they are working at. It has been concluded that the teachers' self-efficacy beliefs towards applying the constructivist approach are at a high level. While teachers' self-efficacy beliefs about applying the constructivist approach did not differ in terms of age, type of working, or seniority year variable. It has been concluded that the relationship between teachers' individual creativity and self-efficacy beliefs aimed at implementing the constructivist approach is at a significant level in terms of total score and sub-dimension scores, at a high level and in a positive direction in general.

Recommendations

According to the results obtained, it was determined that individuality was at a high level. In order to evaluate this positive situation, it can be suggested to enrich the activities that will develop the creativity of the educational programs that are changing in educational environments. According to the obtained results, the high storage of individual creativity and the processing of it in this way, using it to design in-class activities and a product output section that emerges at the end of this process.

According to the findings obtained in this research, teachers aged 51 and over and teachers with 15 years and more seniority, who have individual talents, and players with higher rates than other players. Based on this finding, teachers aged 51 and over working in the National Education and players with 15 years and more seniority can be directed by activities and training where they will present treatment innovations. The characteristics of other age groups are also planning in-class activities where you can use your talents.

Based on the finding that teachers' self-efficacy beliefs towards implementing the constructivist approach were found to be high in this study, it can be suggested that educational environments be designed in accordance with the constructivist approach.

Based on the finding that teachers aged 51 and over had the highest self-efficacy beliefs towards implementing the constructivist approach, teachers aged 41-50 had the lowest scores, and teachers with 6-10 years of seniority had significantly higher self-efficacy belief scores towards implementing the constructivist approach than teachers with 11-15 years of seniority, it can be suggested that working individuals experience burnout after a certain age, have a negative attitude towards the profession, or worry about not being able to keep up with the updated curriculum and the era and their inadequacy of knowledge, and therefore, self-efficacy decreases. Therefore, it can be suggested that lifelong learning activities outside of school be organized for certain age groups, or teachers can be provided with in-service training to refresh their professional knowledge.

Author Contributions

-The first author has made substantial contributions to the conceptualization and research design, data collection, or analysis and interpretation of the data,

-The second author has been involved in drafting the manuscript or revising it, critically for a significant intellectual content.

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The text should be single-spaced and justified, as well as it should be written in size 11 and Segoe UI Font. This section should not include sub-headings. Acknowledgment may be given to the persons or institutions contributing to the manuscript. Acknowledgements should be added after acceptance.

Declarations

Ethical Approval and Informed Consent

This study was approved by Kırklareli University Institutional Ethical Review Board. All procedures in this study were conducted in accordance with Kırklareli University Institutional Review Board's approved protocols. Written informed consent was obtained from the participants for their anonymized information to be published in this article.

Supplemental Material

Supplemental material for this paper is available online.

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TÜRKÇE GENİŞ ÖZET

Öğretmenlerin Bireysel Yaratıcılıkları ile Yapılandırmacı Yaklaşımı Uygulamaya Yönelik Öz Yeterlik İnançları Arasındaki İlişkinin İncelenmesi

Giriş

Gün geçtikçe yaşanan gelişmeler bireyin niteliklerinde de beklentiler doğurmuştur. Bu nitelikler de yaratıcılık, öğrenmeyi öğrenme, eleştirel düşünme, empati kurma, kendini gerçekleştirme gibi bireye özgü becerileri içermektedir. Bireylerde istenen bu becerileri geliştirmenin yolu da eğitimin yapılma şekli ile ilişkilidir (Jia, 2010). Bu nedenle eğitimin nasıl yapılması ve nelerin değişmesi gerektiği tartışılan bir nokta olmuştur. Eğitim süreci bilginin doğrudan aktarıldığı, öğrencinin sadece dinleyici olduğu ve öğrencilerin uygulama sürecinin ihmal edildiği ve bir süre sonra kendi başına düşünmeyi reddettiği geleneksel yaklaşımdan uzaklaşarak öğrencinin aktif olduğu, yaparak yaşayarak öğrendiği çağdaş bir yaklaşıma doğru evrilmiştir. Bu yaklaşım ile birlikte bireyin durağan kalması neredeyse imkansızlaşmış ve belirli bir dinamizde hareket etme gerekliliğini doğurmuştur. Bu hızlı hareket, eğitimde geleneksel yaklaşımların geride bırakılıp yeni yaklaşımların tercih edilme gereksinimini ortaya çıkarmıştır (Erdamar Koç ve Demirel, 2008).

Eğitim sisteminde öğrenenin en donanımlı şekilde yetiştirilmesi eğitimin başlıca hedefidir (Berner, 2013). Bu hedefle birlikte anlatılacak olan konu belirlenir ve bu doğrultuda dersin kapsamı çizilir. Dersin kapsamının çizilmesinden sonra öğrenme, öğretme sürecinin planlaması yapılır. Tüm bu işlemler gerçekleştikten sonra nasıl ve ne kadar etkili bir eğitim yapıldığını belirlemek üzere değerlendirme süreçleri tasarlanır böylece bir eğitim programı geliştirilmiş olur. Ülkelerin eğitim programları yetiştirilmesi istenen bireyde bulunması gereken özelliklere göre güncellenmektedir. 2005 yılı öncesi davranışçı yaklaşım Türkiye'de eğitim sisteminde etkili olan yaklaşımdı. Bu yaklaşım doğrultusunda öğrenci pasif konumdaydı, öğretmen dersi anlatan, öğrenci ise dersi dinleyen konumdaydı. Yapılandırmacı yaklaşım ile birlikte öğrencilerin eleştirel, yaratıcı düşünme, empati yapma gibi üst düzey düşünme becerileri önemsenmeye başlandı (Özden, 2013). Toplumda sürekli ifade edilen belirli kalıplar da (eskiye alışma yeniyi reddetme, kendini geliştirmeme ve öz farkındalığa sahip olmama) yaratıcılık ve bireyin öz yeterlik inançlarının engelleri olarak görülebilir. Bu çalışmada da yüksek olan becerilerin kullanılamama ve programlara aktarılamama nedenleri bu engeller olarak düşünülebilir. Öğretmenin ve eğitim programlarının bu içeriklerden mahrum kalması ve öğrenciyi bireysel

olarak yönlendirememesi de bu becerilerin körelmesine neden olabilir. Yapılandırmacı yaklaşımı benimseyen bir eğitim programının başarılı olması için, programın uygulayıcısı öğretmenlerin bu yaklaşımı bireysel yaratıcılıklarını kullanarak nasıl uyguladığı ve bu programa karşı öz yeterlik inançları da birbirleri ile çok yakın ilişki içinde bulunan iki kavram olduğundan dolayı bu araştırmanın konusu olarak seçilmiştir. Bu araştırmada öğretmenlerin bireysel yaratıcılıkları ile yapılandırmacı yaklaşımı uygulamaya yönelik öz yeterlik inançları arasındaki ilişkinin incelenmesi amaçlanmıştır.

Araştırmanın problem cümlesi "Öğretmenlerin bireysel yaratıcılıkları ile yapılandırmacı yaklaşımın uygulanmasına ilişkin öz yeterlilik inançları arasında bir ilişki var mıdır?" şeklindedir. Bu problem doğrultusunda araştırmada aşağıdaki sorulara yanıt aranmıştır.

1- Öğretmenlerin yapılandırmacı yaklaşımı uygulamaya yönelik öz yeterlilik düzeyleri ve bireysel yaratıcılık düzeyleri nelerdir?
2- Öğretmenlerin yapılandırmacı yaklaşımı uygulamaya yönelik öz yeterlilik düzeyleri ve bireysel yaratıcılık düzeyleri yaşlarına göre anlamlı bir şekilde farklılaşmakta mıdır?
3- Öğretmenlerin yapılandırmacı yaklaşımı uygulamaya yönelik öz yeterlilik düzeyleri ve bireysel yaratıcılık düzeyleri kıdem yıllarına göre anlamlı bir şekilde farklılaşmakta mıdır?
4- Öğretmenlerin yapılandırmacı yaklaşımı uygulamaya yönelik öz yeterlilik düzeyleri ve bireysel yaratıcılık düzeyleri çalıştıkları okul türüne göre anlamlı bir şekilde farklılaşmakta mıdır?
5- Öğretmenlerin yapılandırmacı yaklaşımı uygulamaya yönelik öz yeterlilik düzeyleri ve arasında bireysel yaratıcılık düzeyleri istatistiksel olarak anlamlı bir ilişki var mıdır?

Yöntem

Araştırmada ilişkisel tarama yöntemi kullanılmıştır. 2023-2024 eğitim-öğretim yılında Kırklareli İl Milli Eğitim Müdürlüğüne bağlı okullarda görev yapan 3100 öğretmen, araştırmanın evreni olarak belirlenmiştir. Gerekli izinlerin alınmasının ardından Kırklareli il ve ilçelerinde bulunan tüm okullara resmi yazı gönderilmesi veya buralarda görev yapan öğretmenlere e-posta yöntemiyle ulaşılarak 401 kişilik örneklem grubuna ölçek uygulaması yapılmıştır. Veri toplama aracı olarak, Kişisel Bilgi Formu, "Örgütsel Yaratıcılık Ölçeği" ile "Öğretmenlerin Yapılandırmacı Yaklaşımı Uygulamaya Yönelik Öz Yeterlik İnanç Ölçeği" kullanılmıştır. Elde edilen veriler istatistik paket programına aktarılmıştır. Değişkenlerden elde edilen sonuçlarla uygun olacak şekilde, Mann Whitney U testi, Kruskal Wallis H testi ve Spearman-Brown Korelasyon Analizi yapılmıştır.

Bulgular

Öğretmenlerin bireysel yaratıcılık düzeylerinin yüksek olduğu sonucuna ulaşılmıştır. Öğretmenlerin bireysel yaratıcılıkları yaş, kıdem yılı, görev yapılan okul türü değişkenlerine göre farklılık göstermemiştir. Öğretmenlerin yapılandırmacı yaklaşımı uygulamaya yönelik öz yeterlik inançlarının yüksek düzeyde olduğu sonucuna ulaşılmıştır. Öğretmenlerin yapılandırmacı yaklaşımı uygulamaya yönelik öz yeterlik inançları yaş, görev yapılan okul türü ve kıdem yılı açısından farklılık göstermemiştir. Öğretmenlerin bireysel yaratıcılıkları ile yapılandırmacı

yaklaşımı uygulamaya yönelik öz yeterlik inançları arasındaki ilişkinin toplam puan ve alt boyut puanları açısından anlamlı düzeyde, genel olarak yüksek düzeyde ve pozitif yönde olduğu sonucuna ulaşılmıştır.

Tartışma

Literatür incelendiğinde bu çalışmaya benzer şekilde Uçkan (2019) tarafından yapılan çalışmada da fen bilimleri öğretmenlerinin yaratıcılıklarının yüksek düzeyde olduğu sonucuna ulaşılmıştır. Benzer şekilde Yüner ve Özdemir (2020) tarafından yapılan çalışmada okul yenilikçiliği ile bireysel yaratıcılık arasındaki ilişki incelenmiş ve öğretmenlerin bireysel yaratıcılık düzeylerinin yüksek olduğu bulunmuştur. Tetik (2021) tarafından yapılan çalışmada ise öğretmenlerin öğrenen örgüt algılarının bireysel yaratıcılıkları üzerindeki etkisi araştırılmış ve öğretmenlerin bireysel yaratıcılık düzeylerinin yüksek olduğu bulunmuştur. Meral ve Tezel Şahin (2019) tarafından okul öncesi öğretmenleri ile yapılan benzer çalışmada öğretmenlerin bireysel yaratıcılık düzeylerinin yüksek olduğu bulunmuştur. Baloğlu (2020) tarafından yapılan çalışmada sınıf öğretmenlerinin yaratıcılık düzeylerinin yüksek olduğu sonucuna ulaşılmıştır. Çoban ve İnan (2020) tarafından yapılan çalışmada ise okul öncesi öğretmenlerinin bireysel yaratıcılık düzeylerinin yüksek olduğu bulunmuştur.

Bireysel yaratıcılık arttıkça öz yeterliliğin artacağı, öz yeterlilik arttıkça bireysel yaratıcılığın artacağı söylenebilir. Literatürde bu iki değişkeni inceleyen bir çalışmanın olmadığı görülmektedir. Bireysel yaratıcılık, bireylerin doğuştan potansiyel bir güç olarak dünyaya getirdikleri ve sonradan belirli etkenlerle ortaya çıkarabildikleri veya çıkaramadıkları bir beceri olarak nitelendirilmektedir. Bu beceri, insan yaşamındaki sorunlara pratik, farklı ve kişisel çözümler olarak düşünüldüğünde bireyler için oldukça önemlidir. Bireysel yaratıcılık becerisine sahip bireyler, başkalarından farklı olanı zihinlerinde görür, keşfeder, tasarlar ve uygularlar. Bireysel yaratıcılık, eğitim alanında bireysel farklılıkları olan birden fazla öğrenciyle bir arada bulunan öğretmenlerin de sahip olması gereken bir beceri olarak düşünülebilir.

Sonuç ve Öneriler

Bu çalışmada elde edilen sonuçlara göre öğretmenlerin bireysel yaratıcılık düzeylerinin yüksek olduğu belirlenmiştir. Bu pozitif durumun değerlendirilebilmesi için eğitim ortamlarında uygulanacak olan eğitim programlarının yaratıcılığı geliştirecek etkinliklerle zenginleştirilmesi önerilebilir. Bu çalışmada elde edilen sonuçlara göre bireysel yaratıcılıkları yüksek olan öğretmenlerin bu becerilerin kullanarak sınıf içi etkinlikler tasarlaması ve bu sürecin sonunda ortaya bir ürün çıkması sağlanabilir.

Bu araştırmada elde edilen ilkokul öğretmenlerinin yapılandırmacı yaklaşımı uygulamaya yönelik öz yeterlik inançlarının diğer kurumlarda görev yapan öğretmenlere göre yüksek bulunmasının nedeni ortaokul ve lisede eğitimin merkezi sınavlara odaklı bir şekilde gerçekleştirilmesinden kaynaklı olabilir. Buradan yola çıkılarak ortaokul ve lisede merkezi sınav odaklı eğitimden uzaklaşılması gerektiği önerilebilir.