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The Relationship between Preservice Teachers' Educational Philosophy Preferences and Their Group Work Skills

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ABSTRACT

This study investigates the relationship between preservice teachers' educational philosophy preferences and their group work skills, employing a correlational survey design. The population consists of 2,617 preservice teachers enrolled in the Faculty of Education at a state university during the Spring Semester of the 2021-2022 academic year. A random sample of 557 preservice teachers was selected for analysis. Data were collected using the "Philosophy Preference Assessment Scale," the "Group Work Skills Questionnaire," and an open-ended questionnaire to gather qualitative insights. The quantitative data from the scales were analysed using the Jamovi package program, calculating percentages, frequencies, arithmetic means, and standard deviations to assess participants' personal characteristics and levels of educational philosophy and group work skills. Qualitative data from the open-ended questionnaire were analysed using descriptive statistics, categorizing responses and determining their frequencies. This study found that preservice teachers predominantly adopt contemporary educational philosophies while exhibiting strong group work skills. As academic levels increase, there is a positive correlation between contemporary philosophy preferences and group work skills, with those in primary and language education showing the highest levels. Increased participation in group work enhances both philosophical beliefs and collaborative abilities, highlighting the importance of experiential learning in teacher training.

Keywords: Teacher candidates, philosophical preferences, group work skills, philosophy of education.

Öğretmen Adaylarının Benimsedikleri Eğitim Felsefeleri ile Grup Çalışma Becerileri Arasındaki İlişki

ÖZ

Bu çalışmanın amacı öğretmen adaylarının benimsedikleri eğitim felsefeleri ile grup çalışması becerileri arasındaki ilişkinin incelenmesidir. Araştırmanın evrenini, 2021-2022 eğitim öğretim yılı bahar döneminde bir devlet üniversitesinin eğitim fakültesine kayıtlı 2.617 öğretmen adayı oluşturmaktadır. Analiz için 557 öğretmen adayından oluşan rastgele bir örneklem seçilmiştir. Veriler "Felsefe Tercihi Değerlendirme Ölçeği", "Grup Çalışma Becerileri Anketi" ve açık uçlu bir anket kullanılarak toplanmıştır. Ölçeklerden elde edilen nicel veriler, Jamovi paket programı kullanılarak analiz edilmiştir. Katılımcıların kişisel özellikleri ile eğitim felsefi ve grup çalışması beceri düzeylerini değerlendirmek için yüzdeler, frekanslar, aritmetik ortalamalar ve standart sapmalar hesaplanmıştır. Açık uçlu anketten elde edilen nitel veriler, betimsel analizler kullanılarak analiz edilmiştir. Bu araştırmada, öğretmen adaylarının güçlü grup çalışması becerileri sergilerken ağırlıklı olarak çağdaş eğitim felsefelerini benimsedikleri ortaya konulmuştur. Akademik seviyeler arttıkça, çağdaş felsefe tercihleri ile grup çalışması becerileri arasında pozitif bir korelasyon vardır ve ilköğretim ve dil eğitimi programları en yüksek seviyeleri göstermektedir. Grup çalışmasına katılımın artması hem felsefi inançları hem de iş birliği yeteneklerini geliştirir ve öğretmen eğitiminde deneyimsel öğrenmenin önemini vurgular.

Anahtar Kelimeler: Öğretmen adayları, felsefi tercihler, grup çalışması becerileri, eğitim felsefesi.

**Sorumlu yazar*

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Introduction

Philosophy, the main source of all sciences, is known as the earliest intellectual discipline, shapes human curiosity and the quest for understanding, serving as the progenitor of all sciences. By posing fundamental questions about existence, reality, knowledge, ethics, and the nature of being, philosophy lays the groundwork for the development of various fields of inquiry, including the educational sciences. The philosophy of education is a sub-discipline of philosophy that explores the fundamental principles, theories, and values underlying educational systems and practices. Stemming from the foundational role of philosophy as the primary source of inquiry and understanding in human endeavors, particularly in the pursuit of knowledge and understanding of the world, the philosophy of education is concerned with examining the essential questions, concepts, and assumptions that inform educational theory and practice.

Philosophy of education uses philosophical thought and movements to understand the foundations of education and to guide educational practice (Carr, 2005). By questioning about how education should function (Doğanay, 2011), it examines and shapes the basic purpose, nature, methods and values of the educational process (Aslan, 2014).

The philosophy of education serves as a foundational framework for the conception, design, and implementation of educational programs and classroom practices (Ornstein, 1990). It functions as a primary source of guidance in the development of educational initiatives, offering concrete principles and guidelines for curriculum design and instructional methods (Ornstein & Hunkins, 2014). Through its examination of fundamental questions and principles concerning the nature, purpose, and goals of education, the philosophy of education provides educators with logical rationales and theoretical underpinnings for their pedagogical decisions and practices. In essence, it serves as a theoretical cornerstone for educational endeavours, offering educators a systematic framework for understanding, evaluating, and refining their teaching methodologies and approaches (Doğanay, 2011).

The philosophy of education examines the roles of teachers, the experiences of students, the content of instruction, and teaching activities, as well as the aims of the educational process and the values and attitudes to be instilled through education (Cevizci, 2015). From this perspective, the philosophy of education also influences beliefs, perspectives, and hence practical applications in the learning and teaching environment (Conti, 2007). As practitioners of educational programs, teachers make a series of choices and decisions within the classroom based on the values, attitudes, and beliefs they develop (Beatty et al., 2009; Ornstein, 1990).

It is believed that there is a strong connection between teachers' beliefs and their behaviours in classroom (Chan & Elliott, 2004). The philosophy of education provides a logical understanding that determines the teaching methods used and preferred by the teacher (Beatty et al., 2009). This is because educational philosophies are based on two fundamental perspectives: progressivism and perennialism. Perennialism falls under the traditional understanding of educational philosophy, advocating for an education approach centered on the teacher and the preservation and continuation of existing structures from generation to generation (Alanoğlu et al., 2022). Perennialism is an approach in education that emphasizes cultural transmission. This philosophy advocates for education to be primarily based on classical works, foundational knowledge, and cultural values. However, perennialism is not as conservative as traditionalism, meaning it does not mandate strict adherence to classical works. In traditional educational philosophies, it is important for knowledge to be imparted to students by the teacher, but the student's self-realization, psychological maturity, interests, and needs are not prioritized (Aytaç, 2021). Progressivism and reconstructionism, on the other hand, are among contemporary educational philosophies advocating for education to be conducted with a learner-centered approach, viewing education as a means of change and transformation (Ornstein & Hunkins, 2014). Progressivism is a philosophy in education that prioritizes the individual. It emphasizes self-realization of the learner, taking into account individual interests and needs, and views of learner as an active process. It focuses on students exploring their own learning progress and developing their abilities (Wiguna et al., 2021). On the other hand, reconstructionism is an approach in education that prioritizes society. This philosophy encourages societal transformation and change (Ellis, 2015). Reconstructionism aims to empower social justice, equality, and human rights using education as a tool. It focuses on the needs of society and promotes the critical examination, questioning, and transformation of social structures within the educational process (Noddings, 2016). Ultimately, progressivism tends to focus more on the individual, whereas reconstructionism adopts a perspective that emphasizes society more prominently (Aytaç, 2021).

Given that a teacher's educational philosophy is a significant factor that influences how the teacher perceives oneself and behaves in the classroom, impacting various aspects such as how the teacher will instruct students, promote learning, approach classroom management, employ assessment methods, enforce discipline policies, and engage in student-teacher interactions (Coşkun & Taneri, 2021). It can be expected that teachers with traditional philosophical beliefs and perspectives may prefer to utilize a more traditional and discipline-oriented instructional approach. On the other hand, teachers with contemporary philosophical beliefs and perspectives may need to design learner-centered and collaborative learning environments and activities.

This is because educational philosophies are often emphasized as guiding teachers and preservice teachers in designing instructional programs and content (Aslan, 2011). Studies in the relevant literature have shown that teachers and preservice teachers tend to embrace contemporary philosophical views and beliefs regarding education to a greater extent (Aslan, 2014; Aybek & Aslan, 2017; Aytaç, 2020; Ince & Yıkmış, 2021; Ozbakis, 2018; Yazici, 2016). In this case, it is expected that teachers and preservice teachers will utilize skills emphasized by contemporary educational philosophies, such as problem-solving, critical thinking, and collaborative work in their instructional classroom practices. This is because contemporary educational philosophies position the learner at the center of the teaching-learning process, emphasizing an educational approach and practice where students are actively engaged in the process, take responsibility for their own learning, and collaborate with others (Ornstein & Levine, 2008). This emphasis on student-centered learning and collaboration leads contemporary educational philosophies to highlight collaborative learning and group work skills.

Group work is defined as the collaboration of a small group of students within a classroom to accomplish a targeted task (Ozan, 2018). It is an active and collaborative learning skill that requires numerous students to work together to make a series of decisions to achieve a specific goal (Burgess et al., 2014). Group work is a learner-centered instructional approach that enables students to use and apply knowledge (Michaelsen & Sweet, 2008). It positively influences various variables in the learning environment, such as students' academic achievement, the quality of peer interactions, self-esteem, attitudes towards learning activities, and social support (Cumming et al., 2014). Thus, individuals who acquire the ability to collaborate and work with others may have greater job opportunities in real-world conditions (Kıngır et al., 2021). The 21st century world expects individuals to emerge as competent individuals with high communication and teamwork skills, rather than emerging from competitive environments, and to be able to easily adapt from one project to another in work environments (Maxwell et al., 2009). Although there are few studies on preservice teachers' group work skills in the relevant literature, Kıngır et al. (2021) concluded in their study that undergraduate students had high group work skills, but any relationship was not found between students' philosophical beliefs and group work skills. As indicated above, although the relevant literature generally suggests consistent relationships between philosophical beliefs and teaching practices, in some cases, the opposite results may be obtained (Görmez, 2015). Based on this situation, this study aims to examine the relationship between the educational philosophies embraced by teacher candidates and their group work skills. Within this general aim, the following research questions were sought:

1. What is the level of preservice teachers' educational philosophy preferences and their group work skills?
2. Is there a significant difference between the levels of preservice teachers' educational philosophy preferences and their group work skills based on: a) the academic level, b) field of study, c) number of group work activities participated in undergraduate education?
3. What is the relationship between the preservice teachers' educational philosophy preferences and their group work skills?
4. What are the views of preservice teachers towards participating and not participating in group works?
5. What are the views of preservice teachers regarding the effect of university courses on group working skills?

Method

Research Design

This study adopted the correlational survey model since the aim was to examine the relationship between preservice teachers' educational philosophy preferences and their group work skills. Correlational design is used to describe and measure the degree of relationship between variables in a research (Creswell, 2012). When the study is mainly concerned with establishing relationship between variables correlational research is preferred. The researcher tries to find an answer whether is there is a relationship between variables. If there is a relationship he tries to find the direction and magnitude of association among variables (Cohen, Manion and Morrison, 2018).

The Population and Sample of the Study

The population of the study consists of 2617 preservice teachers enrolled at the Faculty of Education in a state university during the Spring Semester of the 2021-2022 academic year. The sample of the study comprises 557 preservice teachers randomly selected from this population. The suggested sample size was determined as 335 with a 95% confidence level and a 5% margin of error for a population size of 2617 (https://www.research-advisors.com/tools/SampleSize.htm). Therefore, it can be said that the sample of 557 represents the population. The descriptive characteristics of the sample was presented in Table 1.

Instruments

The data collection tools used in the study included the "Philosophy Preference Assessment Scale," the "Group Work Skills Questionnaire," and an open-ended questionnaire.

The Philosophical Preference Assessment Scale: The scale was developed by Çetin, İlhan, and Arslan (2012) and consists of 39 items and 2 dimensions. The first dimension is Contemporary Philosophies of Education, consisting of 17 items related to progressivism and reconstructionism. The second dimension is Conventional Philosophies Education, consisting of 22 items related to perennialism and essentialism. The internal consistency coefficients

calculated for the reliability of the scale were found to be .90 for the Contemporary Philosophies of Education subscale and .86 for the Conventional Philosophies Education subscale (Çetin, İlhan, & Arslan, 2012). In this study, the coefficients were calculated as .88 for the Contemporary dimension and .84 for the Conventional one.

Group Work Skills Questionnaire: It was developed by Cumming et al. (2014) and adapted into Turkish language by Ozan (2018). The original scale consists of two factors with a total of 10 items, including five items related to task groupwork skills and five items related to interpersonal groupwork skills. In the adaptation study, results obtained from exploratory factor analysis revealed a two-factor structure consisting of 10 items, consistent with the original scale, and this structure was confirmed through confirmatory factor analysis. Additionally, the Cronbach's Alpha reliability coefficient for the overall scale was calculated as .80 in the adaptation study (Ozan, 2018). In this study, the Cronbach's Alpha reliability coefficient was found to be .866 for the whole scale.

Open-ended Questionnaire: The open-ended questionnaire, consisting of two questions, was developed by the researchers specifically for this study. During the development process of the questionnaire, three questions prepared by the researchers were sent to three experts in the field of educational sciences. Following the feedback received from the experts, necessary revisions were made. Subsequently, the questionnaire was sent to the experts again. After incorporating the second-round expert opinions, the final version of the questionnaire was prepared. The questionnaire consists of the following questions:

- Would you prefer working collaboratively in groups in your undergraduate courses? Please explain with reasons if your response is yes or no?
- Do you think your undergraduate training process in university has equipped you with group work skills? Please explain with reasons if your response is yes or no?

Table 1. The distrubution of sample in line with descriptive variables

Variables	Category	N	%
Gender	Male	385	69.1
	Female	172	30.9
Academic Level	1st Year Freshman	131	23.5
	2nd Year (Sophomore)	142	25.5
	3rd Year (Junior)	146	26.2
	4th Year (Senior)	138	24.8
Branches	1. Elementary Education	31	5.6
	2. Mathematics	27	4.8
	3.Mathematics for Primary Education	75	13.5
	4. Fine Arts	72	12.9
	5. Preschool Education	54	9.7
	6. Turkish Language and Literature	22	3.9
	7. Social Studies	39	7.0
	8. English Language Teaching	82	14.7
	9. German Language Teaching	25	4.5
	10.Science Education	33	5.9
	11.Turkish Language Teaching	40	7.2
	12.Geography	29	5.2
	13.History	28	5.0
Field of Study	1. Primary Education	85	15.3
	2. Linguistics	169	30.3
	3. Mathematics and Science	135	24.2
	4. Social Sciences	96	17.2
	5. Special Education	72	12.9
Number of Group work Activities	0	85	15.3
	1-5	290	52.1
	6-10	119	21.4
	11-15	29	5.2
	16 and above	34	6.1
Total		557	100

Data Collection Process: Before starting the data collection process, ethical approval was obtained from the Social and Human Sciences Ethics Committee of a state university. The data collection tools were administered face-to-face between March 29, 2022, and May 27, 2022.

Data Analysis: Since this study involves quantitative and qualitative data obtained from both scales and open-ended questionnaires, these two types of data were analyzed separately. Data obtained from the scales were analyzed using the Jamovi package program. Percentages and frequencies of the personal characteristics of the preservice teachers participating in the study were calculated. Arithmetic means and standard deviation values were calculated to determine the level of data obtained from the scales. The mean scores were interpreted considering the following score ranges and levels, created according to the ratings of the scales in Table 2.

The normality of the dataset was initially assessed to determine the type of statistical analysis to be used. Skewness coefficients were used to determine whether the dataset show a normal distribution. The skewness coefficients were found to be -1.34 for contemporary educational philosophies score, .315 for conventional educational philosophies score, and .628 for group work skills score, respectively. Skewness coefficient values within the range of -1 to +1 indicate that there is no significant deviation from normal distribution (Büyüköztürk, 2011: 40). Taking into account the obtained skewness values, it can be stated that the dataset for conventional educational philosophies and group work skills exhibits a normal distribution, whereas the dataset for contemporary educational philosophies does not conform to a normal distribution. However, it is important to note the Central Limit Theorem, which underpins many analytical methods, asserting that the means of samples selected randomly from any distribution tend to approximate a normal distribution. Therefore, in cases where we have samples with a large number of observations, the distribution of the data may be disregarded (Altman & Bland, 1995: 298). In other words, regardless of the distribution of the random variable of interest in the population, the sample mean of a certain volume of samples taken from a population (typically 30 or more) will naturally be a normally distributed random variable (Korum, 1985: 135). Parametric tests assume that the populations from which samples are taken are normally distributed. However, violation of this assumption with sufficiently large sample sizes (+30) does not typically lead to significant issues (Pallant, 2017: 227). Furthermore, according to the Central Limit Theorem, when comparing means for each group, if the sample size for each group is greater than 40, you can still use parametric procedures even if your data does not exhibit a normal distribution (Elliott & Woodward, 2007: 26). Based on these justifications, considering the sample size of the study, it has been concluded that the use of parametric tests for contemporary educational philosophies scores does not pose a threat in terms of the assumption of normality. Levene's test was conducted to check the homogeneity of variances across independent variables, and the results for each independent variable considered in the study are presented in Table 3.

Table 2. Ranges and levels used in interpreting score averages

Score Ranges	Level (Philosophical Preference Assessment Scale)	Level (Group Work Skills Scale)
1.00 – 1.80	I strongly disagree	Never
1.81 – 2.60	I disagree	Rarely
2.61 – 3.40	I partly agree	Sometimes
3.41 – 4.20	I agree	Often
4.21 – 5.00	I strongly agree	Always

Table 3. Results of levene's test

Dependent Variable / Independent Variable	Contemporary Educational Philosophies Scores		Conventional Educational Philosophies Scores		Group Work Skills Scores	
	F	p	F	p	F	p
Academic Level	1.958	.119	2.784	.040*	.437	.727
Field of Study	.405	.805	.981	.417	.291	.884
The number of groupwork	2.83	.024*	.2.91	.021*	2.07	.084

*p<.05

The One-Way ANOVA test was used to test the significant differences in the levels of educational philosophies and group work skills among preservice teachers based on independent variables. When using the One-Way ANOVA test, if the assumption of homogeneity was met, the results were reported using Fisher's Test; if not met, Welch's Test was utilized. If a significant difference was found in the ANOVA results, Tukey's Test was applied to determine the source of the difference in the case of homogeneous variances, while Games-Howell Test was used when variances were not homogeneous. The relationship between preservice teachers' prefences for educational philosophies and group work skills was calculated using the Pearson Correlation coefficient. According to Büyüköztürk (2011: 32), a correlation coefficient between .70 and 1.00 is interpreted as a high level of relationship, between .30 and .70 as a moderate level, and between .00 and .30 as a low level of relationship. The significance level for comparisons was tested at .05 degree. Effect size (Eta-squared) was calculated to determine the magnitude of significant differences. Eta-squared values of .01-.06 indicate a small effect, .06-.14 indicate a moderate effect, and above .14 indicate a large effect (Akdağ, 2021: 187).

The data obtained from the open-ended survey form were analyzed with descriptive statistics. In the study, descriptive statistics were used because the answers given to the questions in the open-ended survey form were divided into categories and their frequencies were determined.

Findings

The findings of the study are presented according to the research questions. The educational philosophies adopted by the preservice teachers and their group work skills levels are presented in Table 4.

When Table 4 is examined, contemporary educational philosophies adopted by the pre-service teachers participating in the research are at the level of agree and the conventional educational philosophies adopted by the pre-service teachers are at the level of partially agree. In addition, it was determined that pre-service teachers' group work skills were at the level of often. The findings on whether there is a significant difference between the contemporary educational philosophies, conventional educational philosophies and group work skills of preservice teachers according to their academic level are presented in Table 5, Table 6 and Table 7 respectively.

When Table 5 is examined, the contemporary educational philosophies adopted by pre-service teachers according to the academic level variable differ significantly. When the arithmetic averages are examined, it is determined that the freshmen preservice teachers have the lowest average. However, it is seen that the averages of contemporary educational philosophies generally increase (there is only a very small decrease between Sophomores to Juniors) when going towards the upper grades. When the source of the difference was analysed, it was found that the difference was between the freshmen and other academic levels. Considering the effect size, it can be said that the significant difference is at a low level.

Table 4. Mean and standard deviation values regarding the educational philosophies and group work skills adopted by preservice teachers

Variable	N	$\overline{X}$	ss	Level
Contemporary Educational Philosophies	557	4.19	.512	Agree
Conventional Educational Philosophies	557	2.88	.551	Partially Agree
Group Work Skills	557	4.12	.629	Often

*p<.05

Table 5. ANOVA (Fisher's) results regarding preservice teachers' contemporary philosophies of education according to academic level variable

Dependent Variable	Academic Level	N	$\overline{X}$	SS	F	p	Tukey	Effect Size
Contemporary Educational Philosophies	Freshmen	131	4.05	.613	4.72	.003*	1-2, 1-3, 1-4	.025
	Sophomores	142	4.23	.457				
	Juniors	146	4.22	.513				
	Seniors	138	4.25	.430				

*p<.05

Table 6. ANOVA (Welch's) results regarding conventional educational philosophies of preservice teachers according to academic level variable

Dependent Variable	Academic Level	N	$\overline{X}$	SS	F	p	Gomes-Howell	Effect Size
Conventional Educational Philosophies	Freshmen	131	3.03	.558	10.3	.000*	1-4, 2-4	.054
	Sophomores	142	2.96	.436				
	Juniors	146	2.85	.592				
	Seniors	138	2.68	.550				

*p<.05

Table 7. ANOVA (Fisher's) results regarding group work skills of preservice teachers according to academic level variable

Dependent Variable	Academic Level	N	$\overline{X}$	SS	F	p	Tukey	Effect Size
Group Work Skills	Freshmen	131	3.93	.626	8.28	.000*	1-2,1-3,2-4	.043
	Sophomores	142	4.29	.710				
	Juniors	146	4.15	.596				
	Seniors	138	4.08	.518				

*p<.05

Table 8. ANOVA (Fisher's) results regarding preservice teachers' contemporary educational philosophies according to field of study variables

Dependent Variable	Field of Study	N	$\overline{X}$	SS	F	p	Tukey	Effect Size
Contemporary Educational Philosophies	Primary Education	85	4.30	.514	2.28	.060	-	-
	Language Education	169	4.22	.469				
	Math and Science Education	135	4.10	.459				
	Social Sciences Education	96	4.18	.587				
	Special Needs Education	72	4.17	.570				

*p<.05

When Table 6. is examined, the conventional educational philosophies adopted by preservice teachers differ significantly according to the academic level variable. When the mean scores are examined, it is determined that the senior preservice teachers have the lowest average. However, it is seen that the averages of conventional educational philosophies decrease when going towards the upper grades. When the source of the difference was analyzed, it was determined that the difference was between freshmen grade and seniors and between sophomores and seniors. Considering the effect size, it can be said that the significant difference is at a low level.

When Table 7 is examined, the group work skills of preservice teachers differ significantly according to the academic level variable. When the mean scores were analyzed, it was determined that the lowest average was found among freshmen preservice teachers. When the source of the difference was examined, it was determined that the difference was between freshmen and sophomores, freshmen and juniors, and sophomores and seniors. Considering the effect size value, it can be said that the significant difference is at a small level. The findings on whether there is a significant difference between the contemporary educational philosophies, conventional educational philosophies and group work skills of preservice teachers according to their study fields are presented in Table 8, Table 9 and Table 10, respectively.

When Table 8 is examined, it is seen that there is no significant difference between the scores of contemporary educational philosophies adopted by preservice teachers according to the field of study variable.

Table 9. ANOVA (Fisher's) results regarding preservice teachers' conventional educational philosophies according to field of study variables

Dependent Variable	Field of Study	N	$\overline{X}$	SS	F	p	Tukey	Effect Size
Conventional Educational Philosophies	Primary Education	85	2.54	.541	17.8	.000*	1-2, 1-3, 1-4, 1-5, 2-4, 2-5	.114
	Language Education	169	2.80	.466				
	Math and Science Education	135	2.91	.524				
	Social Sciences Education	96	3.09	.567				
	Special Needs Education	72	3.11	.541				

*p<.05

Table 10. ANOVA (Fisher's) results regarding group work skills of preservice teachers according to field of study variables

Dependent Variable	Field of Study	N	$\overline{X}$	SS	F	p	Tukey	Effect Size
Group Work Skills	Primary Education	85	4.20	.549	4.18	.002*	1-3, 2-3, 3-4,	.029
	Language Education	169	4.15	.669				
	Math and Science Education	135	3.95	.574				
	Social Sciences Education	96	4.25	.556				
	Special Needs Education	72	4.09	.624				

*p<.05

When Table 9 is examined, it is seen that the conventional educational philosophies adopted by preservice teachers according to the field variable differ significantly. When the mean scores were analysed, it was determined that the lowest average was found among the preservice teachers studying in the field of primary education. When the source of the difference was examined, it was determined that the difference was between primary education and other study fields, language education and social sciences, and language education and special need education fields. Considering the effect size value, it can be said that the significant difference is at a moderate level.

When Table 10 is examined, it is seen that group work skills of preservice teachers differ significantly according to the field of study variable. When the mean scores are examined, it is determined that the lowest average is in the field of mathematics and science education and the highest average is in the field of social sciences. When the source of the difference was examined, it was determined that the difference was between mathematics and science education and primary education, language education and mathematics and science education, mathematics and science education and social sciences. Considering the effect value, it can be said that the significant difference is at a small level. The findings regarding whether there is a significant difference between the contemporary educational philosophies, conventional educational philosophies and group work skills of preservice teachers according to the number of group work they participated in during their undergraduate education are presented in Table 11, Table 12 and Table 13, respectively.

When Table 11 is examined, it is seen that there is a significant difference between the scores of contemporary educational philosophies adopted by preservice teachers according to the number of group work they participated in. It was determined that as the number of group work studies participated by preservice teachers increased, their mean scores of contemporary educational philosophies also increased. Considering the effect size value, it can be said that the significant difference is at a small level.

When Table 12 is examined, it is seen that there is a significant difference between the scores of traditional educational philosophies adopted by preservice teachers according to the number of group work they participated in. It was determined that the mean scores of preservice teachers' conventional educational philosophies decreased as the number of group studies they participated in increased. Considering the effect size value, it can be said that the significant difference is at a moderate level.

Table 11. ANOVA (Welch's) results regarding contemporary philosophies of education according to the number of groupwork studies participated by preservice teachers

Dependent Variable	Participation in Group Work	N	$\overline{X}$	SS	F	p	Gomes-Howell	Effect Size
Contemporary Educational Philosophies	0	85	4.01	.669	6.58	.000*	1-3,1-4, 1-5, 2-5	.042
	1-5	290	4.17	.495				
	6-10	119	4.26	.425				
	11-15	29	4.35	.427				
	16 and more	34	4.44	.366				

*p<.05

Table 12. ANOVA (Welch's) results regarding conventional philosophies of education according to the number of groupwork studies participated by preservice teachers

Dependent Variable	Participation in Group Work	N	$\overline{X}$	SS	F	p	Gomes-Howell	Effect Size
Conventional Educational Philosophies	0	85	3.06	.637	16.0	.000*	1-3,1-4, 1-5, 2-3, 2-4, 2-5, 3-4, 3-5	.113
	1-5	290	2.96	.497				
	6-10	119	2.78	.471				
	11-15	29	2.45	.491				
	16 and more	34	2.36	.579				

*p<.05

Table 13. ANOVA (Fisher's) results regarding group work skills of preservice teachers according to the number of groupwork studies they participated

Dependent Variable	Participation in Group Work	N	$\overline{X}$	SS	F	p	Tukey	Effect Size
Group Work Skills	0	85	3.89	.727	8.92	.000*	1-3,1-4, 1-5, 2-5	.061
	1-5	290	4.08	.564				
	6-10	119	4.22	.496				
	11-15	29	4.35	.450				
	16 and more	34	4.52	1.033				

*p<.05

When Table 13 is examined, it is seen that there is a significant difference between the group work skills scores of preservice teachers according to the number of group work they participated in. It was determined that as the number of groupwork studies participated by preservice teachers increased, the mean scores of group work skills also increased. Considering the effect size value, it can be said that the significant difference is at a moderate level. The findings on the relationship between the educational philosophies adopted by preservice teachers and their group work skills are presented in Table 14.

Table 14. Findings related to the relationship between the educational philosophies adopted by preservice teachers and their group work skills

		Contemporary Educational Philosophies	Conventional Educational Philosophies
Group Work Skills	r	.583	-.215
	p	.000*	.000*

*p<.05

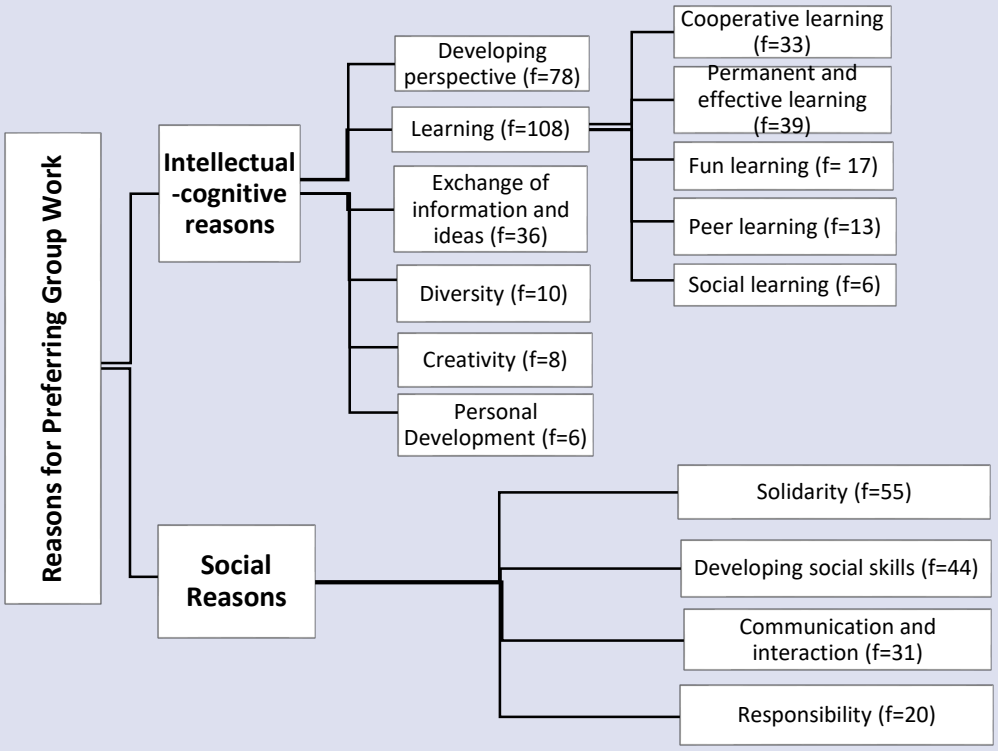

Figure 1. Preservice teachers' reasons for preferring group work

When Table 14 is analyzed, it is seen that there is a moderate positive relationship between pre-service teachers' group work skills and contemporary educational philosophies. In addition, a low level and negative significant relationship was determined between group work skills and conventional educational philosophies.

Findings Related to Qualitative Data

15. Reasons for Pre-Service Teachers' Preference for Group Work: When the data obtained from the semi-structured interview form were analyzed, the reasons why preservice teachers prefer to work with groups in undergraduate courses were grouped under the themes of intellectual-cognitive reasons and social reasons. Among the intellectual-cognitive reasons, perspective development, exchange of information and ideas, creativity, personal development and diversity were mentioned. Among the social reasons for preferring group work, the issues of developing social skills, solidarity, communication and interaction, and responsibility were mentioned. The themes created based on the data obtained from the reasons for preservice teachers' preference for group work are shown in Figure 1.

The pre-service teachers who participated in the research stated that they prefer to use group work in lessons for intellectual-cognitive reasons. One of these reasons is the contribution of group work to the development of perspective. The participants stated that different ideas and opinions were expressed in group work, so they had the opportunity to develop their own perspectives. Excerpts from the opinions of the pre-service teachers participating in the research on this subject are as follows:

P.96 *"I prefer working in a group because it helps me respect different opinions and improve my perspective.* P.220 *"People are different from each other by nature. Since*

they are different in terms of knowledge and thought, they can contribute to each other." P.397 *"Working in a group means working with different ideas. Having many perspectives on an event improves us."* P.491 *"I think working in a group broadens my horizons by seeing different perspectives."* P.506*"We can learn different ideas in group work."*

Among the intellectual-cognitive reasons for preferring group work are cooperative learning, permanent and effective learning, fun learning, learning from peers and social learning. According to the participants, group work provides preservice teachers with the opportunity to experience cooperative learning, learning through group work is more permanent and effective, and learners have fun while learning. In addition, working in groups provides students with the opportunity to learn from their peers and enables social learning. The views of the participants on this issue are as follows:

P.261 "Working with a group bases learning on a cooperative understanding and gives responsibility to the student. It also makes students active with their peers. "P.304 Because it requires working together and in cooperation. This leads to raising individuals who can express themselves better". P.331 "Learning that takes place in cooperation is more permanent" P.368 Cooperative learning always provides meaningful learning. Interaction and information sharing strengthen learning. P.534 "In cooperative learning environment, students build their own knowledge, and more permanent knowledge is acquired. P.21 "I think that group work becomes more fun." P.22 "Because I like cooperative learning, and I think it is a more enjoyable process. What one person does not know, other people can teach and help." P.183 "I prefer it because in cooperative learning, learning is both more fun and more permanent."

Another reason for the preservice teachers who participated in the study to prefer group work is that group work allows them to exchange information and ideas. The opinions of the participants on this issue are as follows:

P.330 "I prefer working with a group. Because in this way, I can see different opinions. I can also benefit from the knowledge of other people in the group. The process will be more beneficial for everyone." P.336 "I prefer it because knowledge increases as it is shared." P.1 "Knowledge should be shared. I learn from my friends who know about something I don't know." P.127 'Because there is more information sharing.'

Among the intellectual-cognitive reasons for preferring group work, the diversity potential of group work was emphasized and it was stated that this situation provides rich inputs for both learning and intellectual development. The views of the participants in this regard are as follows:

P.99 "Group work can create a rich knowledge transfer environment. 'P.100 'When it comes to working with different people, we should not forget that they will also contribute to the work. Thinking about how to do better in group work creates more opportunities. P. 218 "Yes, I prefer it, because I think that in group work, a rich flow of information takes place between the group members and thus I get useful results for the study."

The preservice teachers who participated in the research emphasize the potential of group work to develop creativity as a reason for preferring group work. The opinions of the participants on this subject are as follows:

P.5 "When there are group assignments, more creative things come out and since it is a collaborative work, the communication there improves even more." P14 "In addition, the ideas put forward in group work are more creative". P.168 "Working in a group will be more productive thanks to the creative ideas generated by different individuals."

Among the intellectual-cognitive reasons for pre-service teachers' preference for working in groups, personal development is another issue. Participants believe that working with a group will contribute to their development both in their teaching and school life. The statements of the participants in this regard are as follows:

P.24 …"because it contributes and will contribute to both my student life and my teaching life in the future." P.51 "Witnessing different ideas and working with a group improves the personP. 237 "One develops oneself better in group work. Ideas and thoughts from each different person help the student." P. 353 …"because collaborative work contributes more to the development of the student."

The pre-service teachers who participated in the research stated that they preferred to use group work in lessons for social reasons as the second main theme. One of these reasons is the spirit of solidarity that group work embodies. The views of the participants on this issue are as follows:

P.316 …"because working in a group helps solidarity and cooperation." P.337 "We see each other's shortcomings and support each other." P.365 "Students feel more comfortable and have the opportunity to share things with their friends." P.403 "There is strength in unity. People are also emotionally nourished by group relationships."

Among the social reasons for pre-service teachers to prefer group work, the role of group work in the development of social skills is emphasized. They state that empathy, respecting different opinions, integrating into society, living in order and human relations are developed through group work. Participant opinions on this subject are as follows:

P.37 "The sense of empathy and respect for other opinions increase within the group. The ability to work together improves." P.202 "It makes me a more social person. It integrates me better into society." P.204 "People form society as individuals and they should learn to live together in a certain order. Therefore, working with a group improves our team spirit." P.484 "School is not only a place where information is transferred, but also one of the most suitable environments where students can socialize. Participating in group activities can be a good option to get rid of the feeling of selfishness." P.508 "It makes it possible to respect people's opinions and work in a democratic environment."

Among the reasons for preferring group work, preservice teachers mentioned the potential of group work to improve communication and interaction. Participant opinions on this issue are as follows:

P.53 "Thanks to group work, my communication power increases and I learn better." P.282 "Yes, I think it will improve my communication with people, my emotions and skills." P.304 …"It improves working together and in cooperation. This leads to individuals who can express themselves better."

Lastly, the sense of responsibility was emphasized among the social reasons for preferring to work in groups. The statements of the participants in this regard are as follows:

P.10 "Working in a group gives a sense of responsibility." P.47 "It gives me feelings such as self-confidence and responsibility." P.165 "Yes, group work will have a positive effect on individuals in terms of equality and responsibility."

16- Reasons for Pre-service Teachers Not Preferring Group Work: When the data obtained with the semi-structured interview form were analyzed; 134 of the pre-service teachers who participated in the study stated that they did not prefer group work. From the data obtained, the reasons why pre-service teachers do not prefer to work in groups in undergraduate courses are classified as internal reasons and external reasons. While internal reasons include preference for individual work and perfectionism, external reasons include irresponsibility, conflict and communication problems. The themes obtained regarding the reasons why pre-service teachers do not prefer group work are presented in Figure 2.

The participant preservice teachers stated that they were introverted individually as an internal reason for not preferring group work, so they liked individual work more and preferred to learn in this way. In addition, some of the participants stated that they personally had a perfectionist structure and that they preferred individual work instead of group work because they wanted the assignments to be done perfectly. Participant opinions on this subject are as follows:

P.43 "I prefer individual work, because I think I learn better this way." P.48 "I find individual work more effective." P.78 "Since I have an introverted behavior style, I can express myself better in the field of individual work in general." P.29 "Because I have a perfectionist nature, I want everyone to care as much as I do. Although I don't show it, this situation sometimes makes me very sad and angry." P.34 "Because I am too much of a perfectionist, I care a lot about everyone in the group having responsibility. When I take on the responsibilities of other members, it wears me out."

The preservice teachers who participated in the research drew attention to the irresponsibility of group members, conflicts and communication problems experienced during the group work process as external reasons for not preferring group work. The views of the participants on this issue are as follows:

P.9 "I prefer to do it alone, because problems arise when I do it with the group. Friends sometimes act irresponsibly, and problems arise." P.23 "I do not prefer group work because not everyone fulfils their duties and responsibilities in group work. P. 68 "I would not prefer it because there were still people who did not have a sense of responsibility among university students. This situation was sad." P.66 "There are too many conflicts in groups." P.417 "There can be disagreements and problems within the group." P.18 "We have problems in communication, and we cannot meet at a common time and talk about the assignment." P.250 "because there are times when it is difficult to communicate as a group." P347 "We may have communication problems because there are people with different ideas."

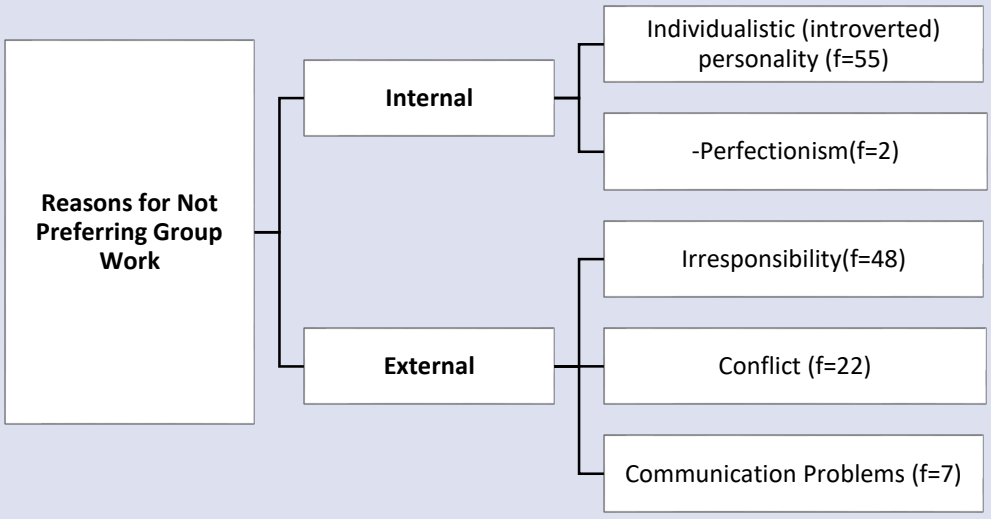

Figure 2. Preservice teachers' reasons for not preferring group work

17- The Effect of University Education on Group Work Skills: In the study, pre-service teachers were asked about their opinions on whether their university education provided them with the ability to work in groups. In response to this question, most of the participants (f=305) stated that their undergraduate courses contributed to their group work skills, while some of them (f=151) stated that they thought that they did not contribute to the development of these skills. The opinions of the participants who stated that their group work skills developed in undergraduate education were grouped under the theme of social-cognitive skills. Under this theme, according to the frequency of opinions, it was stated that cooperation and cooperation skills, communication and interaction, socialization, respect, responsible behaviour, adaptation and open-mindedness skills were developed respectively. The themes and subcategories obtained about the effect of university education on the ability to work in groups are shown in Figure 3.

The pre-service teachers who participated in the research stated that university education improved the ability to cooperate and help from the skills of working with the group the most. It is stated that by experiencing how they will cooperate with other individuals through group studies conducted in undergraduate trainings and which strategies they will follow, the skills of cooperation have also improved in this process. In addition, the participants mentioned that group work contributed to their ability to communicate and interact. The views of the participants are as follows:

K.16 "I have learned to make the strategy and plan to work in cooperation even with people I do not know." K.92 "I got help from my friends where I was deprived and I supported them and we learned to work together." K.261 "I have had many group studies and I have gathered around a common goal with different personalities and learned how to accomplish this goal." K.22 "It was very effective especially in applied courses. Both the communication was strengthened and the pleasure of bringing something out collectively was understood. K.237 "Because it gives the student different skills. It provides everyday skills such as open-mindedness or communication, for example."

The pre-service teachers who participated in the research say that university education has improved their ability to socialize, respect and act responsibly in the context of working with the group. The views of the participants are as follows:

K. 295 "Presentation and group assignments benefit us socially." K.383 "I can certainly show by example that I have increased power to be social, to communicate well and to empathize" K.494 "A more social and active process takes place in the university with group study." K.223 "We often make presentations with friends, and I gain skills such as respect for one another in collaborative work." K.155 "Making new skills by taking on a different responsibility." K.195 "I learned how being collaborative brings responsibility I became more aware of my responsibilities with."

The pre-service teachers who stated that the university trainings helped them develop the ability to adapt and have an open mind and to look at events and phenomena from different angles. The statements of the participants are as follows:

K.312 "Sharing knowledge with friends who don't share with my values is not appropriate for me, but I did not refuse to work with the group because it is mandatory K.313 "I think I've won. I can see that I am more harmonious with my group work every day. K.530 "Teaches to be compatible in the team together in terms of socialization." K.69 "We learn to look in different directions." K.237 "Because it gives the student different ideas. It provides skills such as focus, open-mindedness and strong communication skills, for example."

Some of the teacher candidates (f=151) who participated in the study stated that they did not think that undergraduate courses at the university improved their skills in working with the group. As a result, the majority stated that they could not do enough group work. In addition, reasons such as not being able to cooperate, having discussions and disagreements with the group, lack of awareness of responsibility and lack of ideal environment for working with the group were also mentioned. The themes and categories obtained from this section are presented in Figure 4.

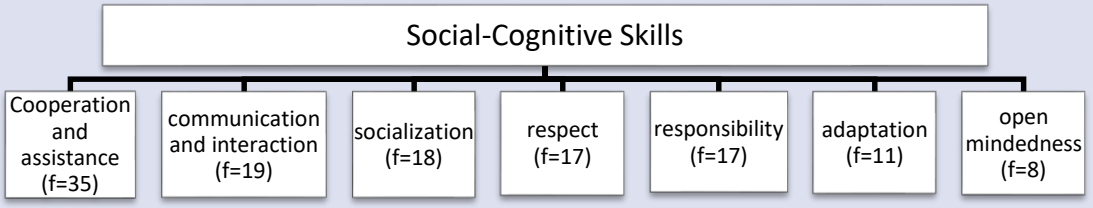

Figure 3. The impact of university learning on group working skills

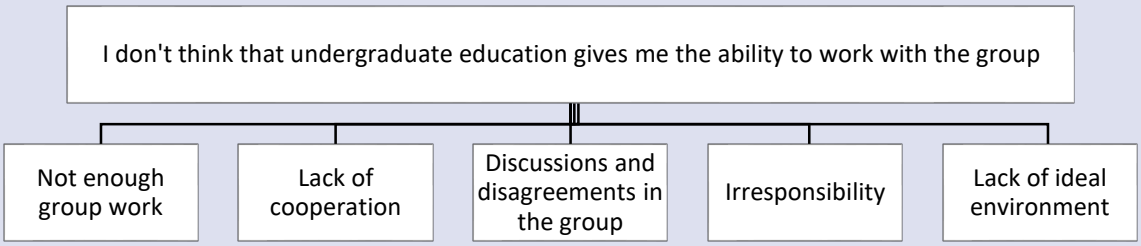

Figure 4. Undergraduate education didn't give me the skills to work with the group

The views of the participants regarding the lack of influence of undergraduate education on the ability to work with the group were collected in the categories of not enough group work, not being able to establish cooperation, having discussion and disagreement in the group, lack of responsibility awareness and lack of ideal environment. The views of the participants are as follows:

K.43 "Because there is not a lot of work we can work with the group and design activities, these skills have improved little." K. 62 "No, because qualitatively and quantitatively we do not say that we do very effective group work." K.91 "I don't think because we don't do a lot of group work." K.28 Since there is a constant discussion in the assignments with group studies, I do not think that I gain skills because there is no awareness of responsibility K.66 " There could also be disagreements in those who did not have a lot of work." K.29 "Working with people who lack the sense of responsibility did not add much to me."

Conclusion Discussion and Implications

In this study it was determined that the preservice teachers adopted contemporary educational philosophies at the level of "I agree" and conventional educational philosophies at the level of "I partially agree". When the relevant literature is examined, it is seen that the preservice teachers adopt contemporary educational philosophies more (Alanoğlu et al., 2022; Aslan, 2014; Aslan &Aybek 2017; Aytaç, 2020; Coşkun & Taneri, 2021; İnce & Yıkmış, 2021; Özbakış, 2018; Sönmez-Ektem, 2018; Yazıcı, 2016). In addition, it has been determined that preservice teachers' group work skills are at the often level. Similarly, Kingır et al. (2021) concluded that undergraduate students' group work skills are high, and Main (2010) stated that group work skills in higher education should be developed for students' future professional careers. It is thought that the fact that the education and training process in Turkey is based on contemporary educational philosophies and constructivist educational approach positively affects preservice teachers' contemporary educational philosophical preferences and group work skills. Contemporary educational philosophies and constructivist educational approach advocate a student-centered educational approaches which assert that individuals cultivate their unique competencies through engagement in active learning experiences (Ornstein & Hunkins, 2014; Wiguna et al., 2021). Especially since the early 20th century, educators such as John Dewey, Jean Piaget, and Lev Vygotsky have emphasized the use of small groups and teamwork in the learning process rather than a competitive education approach (Kopparla & Goldsby, 2019). In educational systems that adopt contemporary educational philosophies and approaches shaped by the views of these educators, collaborative and active learning experiences are frequently used (Coşkun & Taneri, 2021), which contributes to the acquisition of collaborative skills (Walker et al., 2020).

It is observed that the educational philosophical preferences of the preservice teachers differ significantly according to their academic level variable. It has been determined that as the preservice teachers' academic level increases, their mean scores regarding contemporary educational philosophical preferences and group work skills increase, albeit irregularly, while their mean scores regarding conventional educational philosophical preferences decrease. The relevant literature also reveals results that confirm these findings (Aslan & Aybek, 2017; Aytaç, 2020; Biçer et al., 2013). As it is known, as the academic level increases in the teacher training process, it is thought that the knowledge and experience of the preservice teachers regarding contemporary educational philosophies and practices also increase. As Yaralı (2020) stated, educational programs based on contemporary educational philosophies and constructivist educational approaches allow preservice teachers to defend their practices regarding contemporary educational philosophies such as progressive and reconstructionism and to develop the problem-solving and collaborative working skills that these philosophies bring to the forefront. The use of cooperative learning methods in the classroom contributes to the development of not only academic knowledge but also interpersonal and group work skills in learners (Walker et al., 2020). Based on this situation, experiences related to the philosophical and educational approaches on which the educational programs in the teacher training process are based may have increased the knowledge, beliefs and experiences of preservice teachers regarding these approaches. As a matter of fact, John Dewey, one of the names that shaped the progressive education philosophy and constructivist education approach, declaims the

learner and the educational program as two sides of the same coin and argues that one cannot exist without the other (Hasan & Abdulkarim, 2022).

When the philosophical preferences adopted by the preservice teachers according to the field of study variable are examined, it is determined that the preservice teachers studying in the field of primary education and language education have the highest score regarding contemporary educational philosophical preferences and the lowest score regarding conventional educational philosophy preferences. Other studies in the relevant literature have also concluded that the study field variable of the preservice teachers significantly affects their educational philosophy preferences, and especially the preservice teachers studying in the field of primary education and language education have higher contemporary educational philosophical preferences compared to other disciplines (Aslan & Aybek, 2017; Eğmir, 2019; Kumral, 2015; İlhan et al., 2019). A similar result is observed in the group work skills adopted by the preservice teachers according to the study of field variable. It was concluded that the group work skills of the preservice teachers studying in the fields of mathematics and science were significantly low, while the group work skills of the preservice teachers studying in the fields of social sciences, primary education and language education were significantly high. This result can be associated with the nature of the field in which the preservice teachers study. In fact, Çelikten & Kinay (2020) stated that such differences can be observed on a field of study basis because each teacher training program includes different purposes and learning goals, and that some teaching fields are less likely to allow for the design of a theoretical knowledge-focused learning and teaching process, while some teaching fields may be more suitable for interactive learning and teaching processes. Main (2010) stated that in addition to participating in group work activities of a limited number and quality during the university education process, group work skills and evaluation processes should also be taught explicitly. Based on this, it is considered important to include pedagogical practices that will develop active, student-centered and collaborative student skills in university courses (Jackson et al., 2014).

When the number of group studies that preservice teachers participated in was taken as a basis, it was determined that as the number of group studies increased, significant increases were observed in the contemporary education philosophy scores and group work skill scores of preservice teachers, however there was a significant decrease in their conventional education philosophy scores. In the relevant literature, it is stated that the experiences of preservice teachers during their education process shape their beliefs and their beliefs affect their skills (Çelikten & Kinay, 2020). In this case, it is seen that participating in frequent and effective group work activities during the higher education process supports both the philosophical beliefs and group work skills of preservice teachers. As a matter of fact, it is known that the frequent use of group work activities in higher education mostly produces positive results (Kıngır et al., 2021), and therefore, students are directed to group work activities in universities and their skills to work with others are tried to be developed (McMahon, 2013).

There is a moderate positive relationship between group work skills of preservice teachers and contemporary educational philosophies, and a low and negative significant relationship between group work skills and conventional educational philosophies. Based on this, it is understood that as the group work skills of preservice teachers increase, their tendency to adopt contemporary educational philosophies increases, but their tendency to adopt conventional educational philosophies decreases. In Turkey, the Ministry of National Education (MoNE) has aligned its educational programs with the constructivist learning approach based on pragmatist philosophy starting from the primary school level in the 2005-2006 academic year (Erdem, 2011). Since this date, preservice teachers who have been trained with educational programs based on the constructivist approach have had education and experiences within the framework of the constructivist learning approach based on pragmatist philosophy. Since constructivism emphasizes an understanding that emphasizes the active participation of students in the learning process and the support of learning with social environments and studies (Liu & Matthews, 2005), it draws attention to the use of group and team work skills, such as performing a task together, exchanging ideas or findings, and providing feedback, which increase students' interaction in learning environments (Erbil, 2020; Schcolnik et al., 2006). Therefore, this situation may have led to the development of cooperative and group work skills of preservice teachers and an increase in the tendency of preservice teachers to prefer contemporary educational philosophies. As a matter of fact, the relevant literature also states that the personal lives and experiences of preservice teachers affect their educational philosophical preferences and tendencies (Bingöl & Kinay, 2018).

The reasons why preservice teachers prefer group work in undergraduate courses are gathered under the themes of intellectual-cognitive reasons and social reasons. Among the intellectual-cognitive reasons, perspective development, learning, exchange of information and ideas, creativity, personal development and diversity are mentioned. Among the social reasons for preferring group work, solidarity, developing social skills, establishing communication and interaction and responsibility are mentioned. When these results are evaluated, it is remarkable that preservice teachers prefer group work because of its contribution to intellectual and cognitive development. Slavin (1980: 337) states that the use of collaborative techniques such as group work is more effective in the application of knowledge and principles. Allen (2012: 308) argues that students who experience well-designed group work have more chances to express their thoughts, are able to retain concepts as well as achieve deeper learning, and are able to combine their own ideas with those of others by respecting their own ideas. According to Johnson and Johnson (1984), students in

cooperative learning groups use higher-level thinking skills, do more verbal repetition, and discover higher-level strategies compared to individual work. Johnson and Johnson (2017: 284) report that extensive research on social engagement points out that compared to competitive and individual learning, cooperative learning increases the levels of success, retention, and transfer of what is taught, and tends to encourage the internalization of necessary attitudes, values, and behavioral patterns and membership in a community of practice. Burdett (2003: 183) states that university students' positive views on group work are gathered under the categories of exchanging and generating ideas, meeting people and establishing friendships, improved learning process, sharing work, and higher grades. Other studies also point out that the rich information sharing potential of group work provides positive cognitive contributions to students' learning processes (Beebe and Masterson (2015: 13-15; Baines et al., 2007; Johnson, et al. , 2007, Zariski, 1997: 779; Shimazoe and Aldrich, 2010: 53). According to Yadgarovna and Husenovich (2020: 66), small group work offers advantages such as better understanding of the teaching content and development of communication skills in students. Gottschall and García-Bayonas (2008) concluded that students have positive, negative and neutral views on group work. Positive views include being able to produce more ideas, learning how to work with others, developing relationships with friends, multiple minds being better than a single mind, deeper learning opportunities regarding course content, increasing psychological well-being, positive attitudes towards school, and increasing self-confidence.

It was concluded that the preservice teachers who participated in the study preferred group work for social reasons such as the sense of solidarity provided by such studies, the opportunity to develop social skills, the opportunities to communicate and interact, and the sense of responsibility. Johnson and Johnson (1984) state that cooperative learning groups create positive commitment and require learners to use skills such as leadership, decision-making, trust-building, communication, and conflict resolution skills. They state that cooperative learning is effective in reducing racial, ethnic, and other prejudices. Chan and Pheng (2018: 60) concluded that university students have both positive and negative thoughts about group work. Accordingly, the analysis of students' attitudes towards group work revealed that most of the students participate in such cooperative activities because, thanks to such activities, they gain self-confidence, improve their academic and social skills, identify their strengths and weaknesses, prepare for their future careers, make more friends, become good problem solvers, and experience a sense of belonging to the class. Taqi and Al-Nouh (2014) concluded in their research that students are mostly happy to work in a group and socialize with other students. With group work, students are more motivated to work and have high-level communication skills. Greenop (2007) reports that student opinions about small group work are gathered under positive themes such as thinking, talking, discussing and participating with others, hearing the ideas of others, understanding better, meeting other students, and accessing relevant examples.

When the views of the preservice teachers participating in the study were examined, it was concluded that some of the participants did not prefer to work in groups. In addition to internal reasons such as being individualistic and introverted, perfectionism, issues such as irresponsibility shown by group members, conflicts in the group and communication problems were mentioned. Burdett (2003: 184) reported in his research with university students that the negative aspects of group work were not being distributed fairly among the group members, difficulties in creating a schedule to get together and lack of support from staff or faculty members. Beebe and Masterson (2015: 14) listed the disadvantages of working by communicating with a group as group members pressuring others to obey, a single individual in the group being dominant, not fulfilling their responsibilities by relying on others excessively and group work being more time consuming than individual work. Payne, et al., (2006) stated in their study examining learner views on the development of group work that communication is a basic strategy for better group work. According to the research, communication plays a key role in group work, and when communication cannot be established in the group, the entire group suffers. Zariski (1997: 779) reports that participants in group projects draw attention to the possibility of conflict between group members and unequal contribution to group work. Although there is no significant conflict between students, it should be considered that group members may suppress their frustration or feel anger while dealing with “free riders”. Yadgarovna and Husenovich (2020: 66) state that small group work has some disadvantages. In small groups, strong students are more likely to receive low grades because of weak students. The ability to monitor all students while monitoring group activities is low. Negative competition may arise between groups. Mutual conflict may arise at the expense of inactive students in the group. Chan and Pheng (2018: 60) state that most students in group work are worried about free riders; A middle class group of students express that they are afraid of different educational levels and the (negative) impact of group work on their grades and group performance. According to them, 'free riding' seems to be the main problem in group work. Similarly, Taqi and Al-Nouh (2014) point out that one group member is dominant in some groups, which is among the disadvantages of group work. It is necessary to be careful that this situation may present an unfair situation in grading. Gottschall and García-Bayonas (2008) stated that among the negative opinions of students regarding group work, difficulties in arranging hours to work together, freeloaders who do not contribute, difficulties in providing equal contributions, preference for individual work, possibility of disagreements, inadequate instruction from instructors, not wanting to be responsible for others' grades, etc. are prominent issues. According to Greenop (2007), among the negative opinions of students regarding small group work, there are elements such as

disengagement from the lesson, confusing each other, not everyone participating in group work, need for more time, obligation to participate, noise, and poor or inadequate feedback from group members.

This study has several limitations and implications for future research. The sample size of 557 preservice teachers may not fully represent the diverse perspectives of the broader population, and reliance on self-reported data could introduce bias. Additionally, the cross-sectional design limits causal inferences. Future studies could benefit from a longitudinal approach to track changes over time and expand the sample to include a wider variety of educational contexts. Employing mixed methods approaches, such as interviews or focus groups, could provide deeper insights into preservice teachers' experiences with group work. Finally, intervention studies could explore the effectiveness of targeted training programs aimed at enhancing both group work skills and educational philosophy alignment in real educational settings.

Genişletilmiş Özet

Giriş

Felsefe, bilime rehberlik eden akıl temelli bir düşünce etkinliğidir. Bu akıl temelli sistematik düşünme yoluyla evrenin tutarlı bir anlayışı ortaya çıkar. Bu bakımdan felsefe hem bilimsel etkinlikler hem de insan davranışları için sistematik, bütüncül ve tutarlı bir entelektüel çerçeve sunar. Eğitim, felsefenin düşünsel izdüşümlerinin uygulandığı alanlardan biridir. Felsefenin temel sorularının eğitime uygulanması sonucunda, eğitim felsefeleri olarak adlandırabileceğimiz eğitimle ilgili felsefi çerçevelerle karşılaşırız. Eğitim felsefesi, eğitimin temellerini anlamak ve eğitim uygulamalarına rehberlik etmek için felsefi düşünceyi ve düşünce okullarını kullanır (Carr, 2005). Bu bakımdan Gerçek nedir? Bilginin kaynağı nedir? İyi ve kötü nedir? Güzellik nedir? gibi sorular eğitim sistemini şekillendirir. Eğitimin nasıl işlemesi gerektiğini sorgulayarak (Doğanay, 2011), eğitim sürecinin temel amacını, doğasını, yöntemlerini ve değerlerini inceler ve şekillendirir (Aslan, 2014). Eğitim felsefesi, öğretmenlerin rol ve sorumluluklarını, öğrencilerin deneyimlerini, müfredatı ve öğretim etkinliklerini, eğitim sürecinin amaçlarını ve eğitim yoluyla aşılanacak değer ve tutumları inceler (Cevizci, 2015). Bu bağlamda, eğitim felsefesinin öğretmen tarafından kullanılan ve tercih edilen öğretim yöntemlerini belirleyen mantıksal bir çerçeve sağladığı söylenebilir (Beatty vd., 2009). Geleneksel felsefi inançlara sahip öğretmenlerin, modern olanlardan çok daha fazla geleneksel öğretim yaklaşımlarını tercih etmeleri beklenir. Öte yandan, çağdaş felsefeyi benimseyen öğretmenler, öğrenci merkezli ve iş birliğine dayalı öğrenme ortamları tasarlamayı tercih edebilirler. Bunun nedeni, eğitim felsefelerinin genellikle öğretmenlere ve öğretmen adaylarına öğretim programları ve içerikleri tasarlamada rehberlik etmesidir (Aslan, 2011).

Eğitim felsefesi değiştikçe, öğretim teknikleri de görece değişmektedir. Geleneksel eğitim felsefeleri doğrudan öğretim metodolojisini önerirken, çağdaş felsefeler öğrenme ortamlarında iş birliğinin rolünü ve önemini vurgulamaktadır. Grup çalışması, belirli bir hedefe ulaşmak için çok sayıda öğrencinin bir dizi karar almak üzere birlikte çalışmasını gerektiren aktif ve işbirlikçi bir öğretim yöntemidir (Burgess vd., 2014). Grup çalışması, öğrencilerin bilgiyi kullanmalarını ve uygulamalarını sağlayan öğrenci merkezli bir yaklaşımdır (Michaelsen ve Sweet, 2008). Öğrencilerin akademik başarıları, akran etkileşimlerinin kalitesi, öz saygıları, öğrenme etkinliklerine yönelik tutumları ve sosyal destek gibi öğrenme ortamındaki çeşitli değişkenleri olumlu etkiler (Cumming vd., 2014). Mevcut literatür incelendiğinde, öğretmen adaylarının grup çalışması becerileri ile ilgili bazı çalışmalara rastlanmakta ancak benimsenen eğitim felsefeleri ile öğretmen adaylarının grup çalışması becerileri arasındaki ilişkiye odaklanan yeterli çalışma bulunmamaktadır. Bu anlamda bu çalışma, öğretmen adaylarının eğitim felsefeleri ile grup çalışması becerileri arasındaki ilişki hakkındaki soruya cevap vermeyi amaçlamaktadır.

Yöntem

Bu çalışmada, öğretmen adaylarının eğitim felsefesi tercihleri ile grup çalışması becerileri arasındaki ilişkiyi incelemek amaçlandığından metodolojik olarak ilişkisel tarama yöntemi benimsenmiştir. Korelasyonel betimleyici desen, bir araştırmada değişkenler arasındaki ilişkinin derecesini tanımlamak ve ölçmek için kullanılır (Creswell, 2012). Araştırmanın evrenini 2617 öğretmen adayı, örneklemini ise tesadüfi örnekleme ile seçilen 557 öğretmen adayı oluşturmaktadır. Çalışmada veri toplama araçları olarak "Felsefe Tercihi Değerlendirme Ölçeği", "Grup Çalışması Becerileri Anketi" ve “Açık Uçlu Anket” kullanılmıştır. Ölçeklerden elde edilen veriler Jamovi paket programı kullanılarak analiz edilmiştir. Çalışmaya katılan öğretmen adaylarının kişisel özelliklerinin yüzde ve frekansları hesaplanmıştır. Ölçeklerden elde edilen verilerin düzeyini belirlemek için aritmetik ortalamalar ve standart sapma değerleri hesaplanmıştır. Nitel veriler ise tematik analiz kullanılarak analiz edilmiştir.

Bulgular

Çalışma sonucunda, araştırmaya katılan öğretmen adaylarının benimsediği çağdaş eğitim felsefelerinin katılıyorum düzeyinde, geleneksel eğitim felsefelerinin ise kısmen katılıyorum düzeyinde olduğu bulunmuştur. Öğretmen adaylarının benimsediği çağdaş eğitim felsefeleri akademik düzey değişkenine göre anlamlı bir şekilde farklılaşmaktadır. Aritmetik ortalamalar incelendiğinde, birinci sınıf öğretmen adaylarının en düşük ortalamaya sahip olduğu belirlenmiştir. Son sınıf öğretmen adayları akademik düzey değişkenine göre geleneksel eğitim felsefesini benimseme konusunda en düşük ortalamaya sahiptir. Birinci sınıf öğretmen adaylarının akademik düzey değişkenine göre grup çalışması becerileri açısından en düşük ortalamaya sahip oldukları belirlenmiştir.

Öğretmen adaylarının benimsediği çağdaş eğitim felsefeleri puanları öğrenim görülen alan değişkenine göre anlamlı bir fark bulunmazken; geleneksel eğitim felsefelerinin ilköğretim alanındaki öğretmen adayları tarafından en az benimsendiği belirlenmiştir. Grup çalışması becerileri açısından öğretmen adayları öğrenim görülen alan değişkenine göre anlamlı bir şekilde farklılaşmaktadır. En düşük ortalama matematik ve fen bilimleri eğitimi alanında iken, en yüksek ortalama sosyal bilimler alanındadır. Ayrıca, öğretmen adaylarının katıldıkları grup çalışması sayısına göre benimsedikleri çağdaş eğitim felsefeleri puanları arasında anlamlı bir fark olduğu bulunmuştur. Öğretmen adaylarının katıldıkları grup çalışması sayısı arttıkça çağdaş eğitim felsefeleri puan ortalamaları da artmıştır. Ayrıca, öğretmen adaylarının katıldıkları grup çalışması sayısı arttıkça geleneksel eğitim felsefeleri puan ortalamalarının azaldığı belirlenmiştir. Ayrıca, öğretmen adaylarının katıldıkları grup çalışması sayısı arttıkça grup çalışması becerileri puan ortalamalarının da arttığı belirlenmiştir. Öğretmen adaylarının grup çalışma becerileri ile çağdaş eğitim felsefeleri arasında orta düzeyde pozitif bir ilişki tespit edilmiştir. Ayrıca, grup çalışması becerileri ile geleneksel eğitim felsefeleri arasında düşük düzeyde ve negatif yönde anlamlı bir ilişki tespit edilmiştir. Yarı yapılandırılmış görüşme formundan elde edilen veriler incelendiğinde, öğretmen adaylarının lisans derslerinde grupla çalışmayı tercih etme nedenleri düşünsel-bilişsel nedenler ve toplumsal nedenler temaları altında toplanmıştır. Elde edilen verilerden, öğretmen adaylarının lisans derslerinde grup halinde çalışmayı tercih etmemelerinin nedenleri içsel ve dışsal nedenler olarak sınıflandırılmıştır. Çalışmada, öğretmen adaylarına üniversite eğitimlerinin kendilerine grup halinde çalışma becerisi kazandırıp kazandırmadığı konusundaki görüşleri sorulmuştur. Bu soruya yanıt olarak, katılımcıların çoğu lisans derslerinin grup halinde çalışma becerilerine katkıda bulunduğunu belirtirken, bazıları ise bu becerilerin gelişimine katkıda bulunmadığını düşündüğünü belirtmiştir.

Sonuç ve Tartışma

Bu çalışmada öğretmen adaylarının çağdaş eğitim felsefelerini "Katılıyorum" düzeyinde, geleneksel eğitim felsefelerini ise "Kısmen Katılıyorum" düzeyinde benimsedikleri belirlenmiştir. İlgili literatür incelendiğinde öğretmen adaylarının çağdaş eğitim felsefelerini daha çok benimsedikleri görülmektedir (Alanoğlu vd., 2022; Aslan, 2014; Aslan ve Aybek 2017; Aytaç, 2020; Coşkun ve Taneri, 2021; İnce ve Yıkmış, 2021; Özbakış, 2018; Sönmez-Ektem, 2018; Yazıcı, 2016). Ayrıca öğretmen adaylarının grup çalışma becerilerinin çoğu zaman düzeyinde olduğu belirlenmiştir. Benzer şekilde Kingır vd. (2021) lisans öğrencilerinin grup çalışma becerilerinin yüksek olduğu sonucuna ulaşmış, Main (2010) ise yükseköğretimde grup çalışma becerilerinin öğrencilerin gelecekteki mesleki kariyerleri için geliştirilmesi gerektiğini ifade etmiştir. Öğretmen adaylarının eğitim felsefesi tercihlerinin akademik düzey değişkenine göre anlamlı bir şekilde farklılaştığı görülmektedir. Öğretmen adaylarının akademik düzeyi arttıkça çağdaş eğitim felsefesi tercihleri ve grup çalışması becerilerine ilişkin puan ortalamalarının arttığı, geleneksel eğitim felsefesi tercihlerine ilişkin puan ortalamalarının ise azaldığı belirlenmiştir. İlgili literatür de bu bulguları doğrulayan sonuçlar ortaya koymaktadır (Aslan ve Aybek, 2017; Aytaç, 2020; Biçer vd., 2013).

Öğretmen adaylarının çalışma alanı değişkenine göre benimsedikleri felsefi tercihler incelendiğinde, ilköğretim ve dil eğitimi alanında öğrenim gören öğretmen adaylarının çağdaş eğitim felsefesi tercihleri konusunda en yüksek, geleneksel eğitim felsefesi tercihleri konusunda ise en düşük puana sahip oldukları belirlenmiştir. İlgili literatürdeki diğer çalışmalarda da öğretmen adaylarının çalışma alanı değişkeninin eğitim felsefesi tercihlerini anlamlı şekilde etkilediği, özellikle sınıf eğitimi ve dil eğitimi alanında öğrenim gören öğretmen adaylarının çağdaş eğitim felsefesi tercihlerinin diğer disiplin alanlarına göre daha yüksek olduğu sonucuna ulaşılmıştır (Aslan ve Aybek, 2017; Eğmir, 2019; Kumral, 2015; İlhan vd., 2019). Öğretmen adaylarının katıldıkları grup çalışması sayısı temel alındığında, grup çalışması sayısı arttıkça öğretmen adaylarının çağdaş eğitim felsefesi puanlarında ve grup çalışması beceri puanlarında anlamlı artışlar görülürken, geleneksel eğitim felsefesi puanlarında anlamlı bir düşüş olduğu belirlenmiştir. İlgili literatürde öğretmen adaylarının eğitim sürecindeki deneyimlerinin inançlarını şekillendirdiği, inançlarının da becerilerini etkilediği ifade edilmektedir (Çelikten ve Kinay, 2020). Öğretmen adaylarının grup çalışması becerileri ile çağdaş eğitim felsefeleri arasında orta düzeyde pozitif ilişki, grup çalışması becerileri ile geleneksel eğitim felsefeleri arasında ise düşük düzeyde ve negatif yönde anlamlı ilişki bulunmaktadır. Buna dayanarak, öğretmen adaylarının grup çalışması becerileri arttıkça çağdaş eğitim felsefelerini benimseme eğilimlerinin arttığı, ancak geleneksel eğitim felsefelerini benimseme eğilimlerinin azaldığı anlaşılmaktadır. Türkiye'de Millî Eğitim Bakanlığı (MEB), 2005-2006 eğitim-öğretim yılından itibaren ilkokul düzeyinden başlayarak eğitim programlarını pragmatist felsefeye dayalı yapılandırmacı öğrenme yaklaşımıyla uyumlu hale getirmiştir (Erdem, 2011). Bu tarihten itibaren yapılandırmacı yaklaşıma dayalı eğitim programlarıyla yetiştirilen öğretmen adayları, pragmatist felsefeye dayalı yapılandırmacı öğrenme yaklaşımı çerçevesinde eğitim ve deneyimler edinmişlerdir. Yapılandırmacılık, öğrencilerin öğrenme sürecine aktif katılımını ve öğrenmenin sosyal ortamlar ve çalışmalarla desteklenmesini vurgulayan bir anlayışı vurguladığı için (Liu ve Matthews, 2005), öğrenme ortamlarında öğrencilerin etkileşimini artıran, bir görevi birlikte yapma, fikir veya bulgu alışverişinde bulunma, geri bildirim sağlama gibi grup ve takım çalışması becerilerinin kullanılmasına dikkat çekmektedir (Erbil, 2020; Schcolnik vd., 2006).

Öğretmen adaylarının lisans derslerinde grup çalışmasını tercih etmelerinin nedenleri düşünsel-bilişsel nedenler ve toplumsal nedenler temaları altında toplanmıştır. Slavin (1980), grup çalışması gibi işbirlikçi

tekniklerin kullanılmasının bilgi ve ilkelerin uygulanmasında daha etkili olduğunu belirtmektedir. Allen (2012), iyi tasarlanmış grup çalışması deneyimi yaşayan öğrencilerin düşüncelerini ifade etme konusunda daha fazla şansa sahip olduklarını, kavramları hatırlayabildiklerini, daha derin öğrenmeyi başarabildiklerini ve kendi fikirlerine saygı göstererek kendi fikirlerini başkalarının fikirleriyle birleştirebildiklerini ileri sürmektedir. Çalışmaya katılan öğretmen adaylarının görüşleri incelendiğinde, katılımcıların bir kısmının grupla çalışmayı tercih etmediği sonucuna ulaşılmıştır. Bireyselci ve içe dönük olma, mükemmeliyetçilik gibi içsel nedenlerin yanı sıra, grup üyelerinin gösterdiği sorumsuzluk, grup içi çatışmalar ve iletişim sorunları gibi sorunlar da dile getirilmiştir. Burdett (2003), üniversite öğrencileriyle yaptığı araştırmada, grup çalışmasının olumsuz yönlerinin grup üyeleri arasında adil bir şekilde dağıtılmaması, bir araya gelmek için program oluşturmada yaşanan zorluklar ve öğretim elemanlarından veya öğretim üyelerinden destek eksikliği olduğunu belirtmiştir. Beebe ve Masterson (2015), bir grupla iletişim kurarak çalışmanın dezavantajlarını, grup üyelerinin başkalarına itaat etmeleri için baskı yapması, gruptaki tek bir bireyin baskın olması, başkalarına aşırı güvenerek sorumluluklarını yerine getirememeleri ve grup çalışmasının bireysel çalışmaya göre daha fazla zaman alması olarak sıralamıştır. Zariski (1997), grup projelerine katılanların, grup üyeleri arasında çatışma ve grup çalışmasına eşit olmayan katkı olasılığına dikkat çektiğini bildirmektedir.

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