

# Investigation of The Attitudes of University Students at Different Departments Against Cooperative Learning

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## Abstract

Cooperative learning is a kind of teaching method, which includes students working together in projects. The teacher has to provide a cooperative situation that creates interdependence among the students. It consists of five different elements. These are positive interdependence, individual accountability, face to face interaction, interpersonal- small groups, social skills, and group processing. This study is aimed to investigate the attitudes of university students studying in different departments towards cooperative learning. Thus, the current situation is described with the analysis of the data obtained from the applied scales. The research is descriptive. The group of the research consists of students studying in different departments of Bozok University in Yozgat. For the research, the data collected and processed into the data coding form. Then, statistical analysis was applied to the data transferred to SPSS 24.0 Packet program. There is no statistically significant difference found between genders. There was a statistically significant difference in the attitude scores towards cooperative learning between the ages, the departments, and the grades. Cooperative learning is a more suitable method for students in the classes and develops learners' attitudes. Institutes are encouraged for positive collaboration involvement among students who will be connected in groups within the work environment in the long term.

**Keywords:** attitude, cooperative learning, positive interdependence, teamwork

## 1. Introduction

In classrooms, the learning goals of the students can be utilized according to the different types of learning goals, which are cooperative, competitive, and individualistic efforts. The different goals have distinct remarkable structures, and each goal is aimed to be accomplished by activities. In an ideal classroom, the target of education should be learning how to work cooperatively with others and accomplish their goals. Cooperative learning is one of the foremost momentous and rich ranges of hypothesis, investigation, and practice in education. Cooperative learning exists when students work together to achieve shared learning goals (Johnson & Johnson, 1999). Each student can accomplish his or her learning objective as it were if the other bunch of individuals accomplishes theirs (Deutsch, 1962). In the past three decades, advanced cooperative learning has ended up a broadly utilized guidelines method in preschool through graduate school levels, in all subject ranges, in all perspectives of instruction and learning, in non-traditional and traditional learning circumstances indeed in after-school and non-school instructive programs. Cooperative learning may be a useful teaching procedure in little groups, each with students of different levels of capacity. It utilizes numerous learning exercises to progress their understanding of a subject. Each member of a group is liable not only for information that is taught but also for helping other group individuals to learn, hence creating an environment of success.

Cooperative learning has five objectives. These are positive interdependence, individual accountability, face to face interaction, interpersonal and small groups social skills, and group processing. Positive interdependence is the interaction of students in a class environment during the education process (Johnson & Johnson, 1987). Individual accountability is the significant contribution of each member to group work and face to face interaction is to share the knowledge, source, to support and encourage each group member through the process. The group work that includes and requires both learning the academic subject and improving social skills is categorized as interpersonal and small groups social skills. Group processing is maintaining a productive relationship while working and

communicating in the working process. There is agreement among cooperative learning analysts that personal accountability and positive interdependency are fundamental components for fruitful agreeable learning (Slavin, 1989).

A plan with structure and group rewards is necessary to team learning (Slavin, 1978; Whicker, Cloister, & Bol, 1997). Group rewards empower all students to participate since individual students are rewarded only when all individuals of the group are successful. Students participate in teams, and some cooperative learning strategies promote competition between the groups, increasing collaboration. Therefore, structure, rewards, recognition, and individual responsibility are all vital to the cooperative teaching model.

According to the findings, cooperative learning approach; supports student learning and educational fulfillment, increases student support, progresses student satisfaction with their learning involvement, helps students develop abilities in verbal articulation, increases students' social abilities, improves student self-esteem and helps to promote positive race relations (Kagan, 1994). Cooperative learning is not only the group work. A fundamental distinction between cooperative learning and traditional group work is that in classical group work, students are inquired to work in groups with no consideration compensated to group functioning, though in cooperative learning, group work is carefully organized, arranged, and examined (Jacobs, Lee, & Ng, 1997; Johnson & Johnson, 1994). Even though the cooperative learning is a substantial educational method, it should be guided by teachers. Students might not be able to achieve the right path of cooperation without teachers' instruction (Johnson & Johnson, 1987). To coordinate cooperative learning in classrooms instructional models, and structures can be designed (Abrami, 1995).

Cooperative learning makes a significant impact on the hypothesis of traditional teaching methods. Classical teaching strategies are inadequate to teach, so there have to combine with cooperative learning. In this way, the students-centered approach is utilized to alter the teaching-learning environment for the improvement of learners and their scholastic accomplishments (Akhtar, Perveen, Kiran, Rashid, & Satti, 2012).

This study aimed to investigate the attitudes of university students studying in different departments towards cooperative learning.

## **2. Method**

This study aimed to investigate students' attitudes in the Department of Physical Education and Sports, Faculty of Theology, Department of Business, Department of Classroom Teaching, and Department of International Relations at Bozok University in Yozgat, towards cooperative learning. The study conducted with randomly selected 305 students. Thus, the current situation is described with the analysis of the data obtained from the applied scales. Since the situation will be determined in the research, it is descriptive. For the research, the data collected were first processed into the data coding form. All of the data obtained were included in the study. Then, statistical analysis was applied to the data transferred to SPSS 24.0 Packet program.

### *2.1 Experimental Group*

When the frequency distribution of gender, age, department, and class variables of the students participating in the research is examined, 50.8% of the students were female, and 49.2% were male. When the age variable frequencies were examined, 32.5% of the students participating in the study were 18-20 years, 34.1% were 21-23 years, 29.2% were 24-26 years, 4.3% were 27 years and above. Also, 21.3% of the students were in the School of Physical Education and Sports, 9.5% were in the Faculty of Theology, 15.7% were in the Department of Business Administration, 17.4% were in the Department of Classroom Teaching, 17.7% were in Department of Preschool Education, and 18.4% were in Department in International Relations.

### *2.2 Data Collection Tool*

"Cooperative Learning Attitude Scale" developed by Kiper (2016) and "Personal Information Form" prepared by the researcher were used as data collection tools.

"Cooperative Learning Attitude Scale" consists of 20 items. 11 out of 20 items contain positive, and 9 out of 20 items contain negative statements. In the evaluation of positive items, "Strongly Agree" (5), "Agree" (4), "Undecided" (3), "Disagree" (2), "Strongly Disagree" (1), while evaluating negative items, "Strongly Agree" (1), "Agree" (2), "Undecided" (3), "Disagree" (4), "Strongly Disagree" (5) scores were used. Cronbach Alpha coefficient was calculated in order to determine the reliability of the scale. Accordingly, the Cronbach Alpha value obtained for the total scale was calculated as 0.65.

**Table 1.** Demographic Characteristics of the Study Group

		f	%
<b>Gender</b>	Female	155	50,8
	Male	150	49,2
	Total	305	100
	18-20 Years	99	32,5
<b>Age</b>	21-23 Years	104	34,1
	24-26 Years	89	29,2
	27 Years and Over	13	4,3
<b>Dept.</b>	Total	305	100
	Physical.Education.and Sports	65	21,3
	Faculty of Theology	29	9,5
	Business	48	15,7
<b>Grade</b>	Classroom Teaching	53	17,4
	Preschool Education	54	17,7
	International Relations	56	18,4
	Total	305	100
<b>Grade</b>	1st Class	76	24,9
	2nd Class	91	29,8
	3rd Class	93	23,9
	4th Class	65	21,3
	Total	305	100

### 3. Results

When the attitudes of university students studying in different departments towards cooperative learning were examined in terms of gender variable, there was no statistically significant difference between male and female genders at  $p < 0.05$  alpha level. The mean scores of women were found to be  $x = 3.42$  and men  $x = 3.39$ .

**Table 2.** Analyzes between Attitude Towards Cooperative Learning and Gender

	N	X± Ss	t	p
<b>Female</b>	155	3,42±0,33	0,781	0,45
<b>Male</b>	150	3,39±0,33		

When the attitudes of university students studying in different departments towards cooperative learning were examined in terms of age variable; there was a statistically significant difference in the attitude scores towards cooperative learning between the ages of 18-20 and 27 years, between the ages of 21-23 and 27 years, and between the ages of 24-26 and 27 years. It was determined that this difference is due to the average score of the age group of 27 years and over. As a result of the analyzes, the attitudes of students between the ages of 21 and 23 to cooperative learning were highest ( $x = 3.45$ ), while the attitudes of students between the ages of 27 and older towards cooperative learning were the lowest ( $x = 3.04$ ).

**Table 3.** Analyzes between the Attitude Towards Cooperative Learning and Age Variable

Age	n	X± Ss	F	p	Tukey HSD
<b>18-20 year<sup>1</sup></b>	99	3,42±0,30	6,519	0,00	<b>1-4*</b>
<b>21-23 year<sup>2</sup></b>	104	3,45±0,28			<b>2-4*</b>
<b>24-26 year<sup>3</sup></b>	89	3,38±0,36			<b>3-4*</b>
<b>27 year and over<sup>4</sup></b>	13	3,04±0,43			

When the attitudes of university students studying in different departments towards cooperative learning were examined in terms of department variable; it was found that there was a statistically significant difference between  $p < 0.05$  alpha level between the departments of International Relations with School of Physical Education and Sports, Faculty of Theology and Business and International Relations, Business and Classroom Teaching, Classroom Teaching and International Relations. When the average scores of the departments with significant differences were

examined, it was seen that the highest average score ( $x = 3.55$ ) belongs to the Faculty of Theology, and the lowest average score ( $x = 3.28$ ) belongs to the International Relations department.

**Table 4.** Analyzes between the Attitude Towards Cooperative Learning and Department Variable

Dept.	n	X± Ss	F	p	Tukey HSD
<b>Physical Education and Sports<sup>1</sup></b>	65	3,43± 0,28	6,519	0,00	<b>1-6*</b>
<b>Faculty of Theology<sup>2</sup></b>	29	3,55± 0,21			<b>2-3*</b>
<b>Business<sup>3</sup></b>	48	3,33± 0,42			<b>2-6*</b>
<b>Classroom Teaching<sup>4</sup></b>	54	3,40± 0,32			<b>5-3*</b>
<b>Preschool Education<sup>5</sup></b>	53	3,48± 0,21			<b>5-6*</b>
<b>International Relations<sup>6</sup></b>	56	3,28,± 0,42			

When the attitudes of university students studying in different departments towards cooperative learning were examined in terms of the class variable; A statistically significant difference was found between the  $p < 0.05$  alpha level between 3<sup>rd</sup> and 4<sup>th</sup> grade. When the average scores of the classes were examined, it was seen that the highest mean score ( $x = 3.46$ ) belonged to the 3<sup>rd</sup> grade, and the lowest mean score ( $x = 3.34$ ) belonged to the 4<sup>th</sup> grade.

**Table 5.** Analyzes between the Attitude Towards Cooperative Learning and the Class Variable

Bölüm	n	X± Ss	F	p	Tukey HSD
<b>1<sup>st</sup> Grade<sup>1</sup></b>	76	3,38± 0,36	1,787	0,150	<b>3-4*</b>
<b>2<sup>nd</sup> Grade<sup>2</sup></b>	91	3,42± 0,33			
<b>3<sup>rd</sup> Grade<sup>3</sup></b>	73	3,46± 0,24			
<b>4<sup>th</sup> Grade<sup>4</sup></b>	65	3,34± 0,37			

#### 4. Discussion & Conclusion

When the frequency distribution of gender, age, department, and class variables of the students participating in the research is examined, 50.8% of the students were female, and 49.2% were male. When the age variable frequencies were examined, 32.5% of the students participating in the study were 18-20 years, 34.1% were 21-23 years, 29.2% were 24-26 years, 4.3% were 27 years and above. Also, 21.3% of the students were in the School of Physical Education and Sports, 9.5% were in the Faculty of Theology, 15.7% were in the Department of Business Administration, 17.4% were in the Department of Classroom Teaching, 17.7% were in Department of Preschool Education, and 18.4% were in International Relations.

As a result of the statistical analyzes conducted within the research;

No statistically significant difference was found between male and female genders at  $p < 0.05$  alpha level. There was a statistically significant difference in the attitude scores towards cooperative learning between the ages of 18-20 and 27 years, between the ages of 21-23 and 27 years, and between the ages of 24-26 and 27 years. It was determined that this difference is due to the average score of the age group of 27 years and over. According to the results obtained from the research, it can be said that the cooperative learning level increases as the age variable decreases. The reason for this might be that individuals between the ages of 18-25 can adapt more quickly to social and school environments. When examining the literature, Sezgin (2019) found that the attitudes of prospective teachers of social studies towards cooperative learning did not show significant differences according to age variable. This study does not support the results of the research. The reason for this might be the departmental differences and the characteristics of upbringing.

It was found that there was a statistically significant difference between  $p < 0.05$  alpha level between the departments of International Relations with School of Physical Education and Sports, Faculty of Theology and Business and International Relations, Business and Classroom Teaching, Classroom Teaching and International Relations. When the average scores of the departments with significant differences were examined, it was seen that the highest average score ( $x = 3.55$ ) belongs to the Faculty of Theology, and the lowest average score ( $x = 3.28$ ) belongs to the International Relations department. Haberyan (2007) states that team learning is more enjoyable, motivating, and engaging, especially for science, medical, business, and education students. When the inclination for cooperative learning between Faculty of Theology students and International Relations students is compared, this statement supports the study conducted.

A statistically significant difference was found between the  $p < 0.05$  alpha level between 3rd and 4th grade. When the average scores of the classes were examined, it was seen that the highest mean score ( $x = 3.46$ ) belonged to the 3rd grade, and the lowest mean score ( $x = 3.34$ ) belonged to the 4th grade. When the literature is examined, Sezgin (2019) concluded that the attitudes of prospective social studies teachers towards cooperative learning did not show a significant difference at the class level. This study is incompatible with the research. The results reveal that students might be more oriented to the environment because of the difference between university or region. They might have experienced cooperative learning in the 1<sup>st</sup> and 2<sup>nd</sup> grades in students' departments so that the students' attitudes towards cooperative learning is developed in the 3<sup>rd</sup> and 4<sup>th</sup> grades.

In conclusion, the research was designed to investigate the attitudes of university students studying in different departments towards cooperative learning and the effectiveness of the teaching approach. Cooperative learning is an adequate approach towards learning for the majority of the students. This approach improved the socialization in groups. The effective learning process boosted the grades, which satisfied the students more. Arbab (2003) found that cooperative learning has more effect on students' general science success than those who teach with the classical method. Cooperative learning increased the numbers of student that wants to participate in the work compared to the conventional study groups. For Gillespie (2006), the use of small groups in universities and colleges has become more prevalent within the last twenty years. Cooperative learning is a more suitable method for students in the classes and develops learners' attitudes. Therefore, all the institutes should encourage positive collaboration involvement among students who will be connected in groups within the work environment of the long term.

## References

- Abrami, P. C. (1995). *Classroom connections: understanding and using cooperative learning*. Toronto: Harcourt Brace.
- Akhtar, K., Perveen, Q., Kiran, S., Rashid, M., & Satti, A. K. (2012). A Study of Student's Attitudes towards Cooperative Learning. *International Journal of Humanities and Social Science*, 2(11), 141-147.
- Deutsch, M. (1962). Cooperation and trust: Some theoretical notes. In M. R. Jones (Ed.), *Nebraska symposium on motivation* (pp. 275-319). Lincoln, NE: University of Nebraska Press.
- Gillespie, D. F., Rosamond, S., & Thomas, E. (2006). Grouped Out? Undergraduates Default Strategies for Participating in Multiple Small Groups. *The Journal of General Education*, 55(2), 81-102. <https://doi.org/10.1353/jge.2006.0022>
- Haberyan, A. (2007). Team-based learning in an industrial/organizational psychology course. *North American Journal of Psychology*, 9, 143-152.
- Jacobs, G. M., Lee, C., & Ng, M. (1997). *Cooperative learning in the thinking classroom*. Paper presented at the International Conference on Thinking, Singapore.
- Johnson, D. W., & Johnson, F. P. (2009). *Joining Together: Group Theory and Group Skills*. Boston: Pearson.
- Johnson, D. W., & Johnson, R. T. (1987). *Learning together and alone*. Englewood Cliffs, NJ: Prentice-Hall.
- Johnson, D. W., & Johnson, R. T. (1999). *Multicultural education and human relations: valuing diversity*. Upper Saddle River, NJ: Prentice-Hall.
- Kagan, S. (1994). *Cooperative Learning*. San Clemente, CA: Kagan Publishing.
- Kiper, A. (2016). The validity and reliability of the Turkish version of the Collaborative Learning Scale. *International Journal of Educational Research Review*, 1(2), 42-48. <https://doi.org/10.24331/ijere.309966>
- Oktaylar, H. C. (2011). *Kpss: Eğitim bilimleri*. Ankara: Yargı Yayınevi.
- Parveen, Q., & Batool, S. (2012). Effect of Cooperative Learning on Achievement of Students in General Science at Secondary Level. *International Education Studies*, 5(2), 154-158. <https://doi.org/10.5539/ies.v5n2p154>
- Senemoglu, N. (2003). *Gelişim öğrenme ve öğretim: kuramdan uygulanmaya*. Ankara: Gazi Kitabevi.
- Sezgin, S. (2019). *Sosyal Bilgiler Öğretmen Adaylarının İşbirlikli Öğrenmeye Yönelik Tutumları ile Etkili İletişim Becerileri Arasındaki İlişki* (Unpublished master's dissertation). Niğde Ömer Halisdemir Üniversitesi. Niğde.
- Slavin, R. E. (1989). Here to Stay – or Gone Tomorrow? Educational Leadership. *The Journal of Educational Research*, 91(1), 42-48.
- Whicker, K. M., Bol, L., & Nunnery, J. A. (1997). Cooperative Learning in the Secondary Mathematics Classroom.

*The Journal of Educational Research, 91(1), 42-48. <https://doi.org/10.1080/00220679709597519>*