The Factors affecting the education, expectations, and views of fisheries and aquaculture engineering students: The case of Antalya Province

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Abstract

Education Vocational Fisheries andAquaculture given at higher education level in Turkey; It is carried out in three stages: 2-year vocational schools at associate degree level, 4-year fisheries faculties at undergraduate level, and master's and doctoral degrees at graduate level. In this study, the education given at the Faculty of Fisheries at the undergraduate level and its results were examined and the problems related to the subject were examined. Because, the rapid increase in the Faculty of Fisheries and the number of graduates accordingly in our country has led to an increase in the employment problems of the graduates, and the education given in the relevant units has become very controversial. This research was carried out in order to learn the opinions of the students who are studying Fisheries Engineering about the education system and their future professional studies that affect their faculty preferences. For this purpose, a questionnaire was prepared to be applied to fisheries engineer candidates at every stage of the 4-year education. In the evaluation made, while the fisheries faculty ranked first with 34,5% in the preference order of all classes, the belief in doing their profession with the education received was 72,8%.

Key words: fisheries and aquaculture engineering, education, career, Antalya

INTRODUCTION

In our country, education for fisheries was carried out in Faculty of Agriculture, Fisheries Departments, Science Faculties, Hydrobiology Units and Veterinary Faculties until 1980s. However, the aquaculture industry, which started to develop since the mid-1980s, brought the need for qualified personnel to work in aquaculture businesses. For this reason, although associate and undergraduate programs providing education and training in aquaculture have been opened in many provinces and districts, the number of these educational institutions did not increase in parallel with the employment of graduates. In our country, there are fisheries programs in 23 Fisheries Faculty and 9 Vocational Schools, together with the fisheries faculty opened in Turkish Republic of Northern Cyprus.

Considering that especially aquaculture is among the fastest growing sectors in our country as in the world, the importance of aquaculture engineering education is indisputable. In the 1970s, our production was 178 thousand tons with aquaculture, which started production in closed bays, wooden cages, by collecting juveniles from the nature and fattening, while in the 1980s it reached 430 thousand tons (TMMOB, 2017), as of 2019 it was approximately 836 thousand tons (TÜİK, 2020).

Turkey aquaculture production in the second of bream and perch among European Union countries, despite being ranked first in the trout in some years, especially in foreign sales still encountered problems; It has revealed the necessity of raising a workforce equipped with sufficient professional knowledge and skills. In the studies conducted in this context, it is reported that aquaculture education will reduce these problems.

Since aquaculture education is a vocational education that requires the combination of theory and practice, it requires following the technological innovations that the sector benefits and uses, and the gathering of stakeholders, educational institutions and business owners. For this reason, for about two years, officials of public institutions and deans of fisheries faculties have been working on fisheries education.

In addition to these studies, the opinions and expectations of Akdeniz University Faculty of Fisheries students regarding their education and profession were discussed in order to contribute to the education of fisheries.

MATERIALS AND METHODS

The population of the study consists of Akdeniz University Fisheries Faculty students. Although 63 students were enrolled in the program, a survey was conducted with 58 students using the full count method. On average, the response rate was 92%. Students' satisfaction with the current vocational education and training with the survey study; it has been tried to measure whether the existing vocational education meets the future expectations or not. Detailed information about the situation in question and evaluation of the answers given to the questions were presented in the study.

The data obtained in the study were evaluated in the SPSS statistical program and presented in the form of frequency analysis, and the significance of the results was calculated with the statistical analysis. In addition, while using the information obtained from the higher education institution (YÖK) and other institutions that have direct or indirect relations with the fisheries sector, the literature studies conducted so far have also been used.

RESULT AND DISCUSSIONS

As is known, education is a very important factor in choosing a profession and being successful in that profession. On the other hand, achieving sustainable success in the constantly changing and developing business world is directly related to the adequacy and quality of education (Morkoç & Doğan, 2014). However, in studies conducted in the fisheries sector, it is emphasized that there are problems related to

education and the sector needs better trained students (Özdemir & Dirican, 2006).

Turkey had aquaculture production, aquatic products have followed a path parallel to the increase in education (Elbek and the Ark., 2006), while the number of current aquaculture educational institutions in our country, the increase in line with the employment of graduates, aquaculture engineers instead of agriculture and food engineers or employing veterinarians, technicians or veterinarians having signature rights due to taking some relevant courses during the establishment phase of aquaculture facilities, and vaccinating fish only by veterinarians cause significant problems in the choice of fisheries faculties and employment of graduate fisheries engineers. However, if a positive change in employment priorities and market conditions is desired for the fisheries sector, the qualifications of students should be strengthened first (Doğu & Şahinöz, 2017).

In this study, which was carried out with the aim of evaluating the aforementioned situation from the perspective of fisheries engineer candidates, the expectations and opinions of the students studying at Akdeniz University Faculty of Fisheries from the first to the last year about education in fisheries faculties were discussed.

Faculty of fisheries students' preference ranking of their faculties

In this context, students' preferences and reasons for the Faculty of Fisheries were examined first. The rate of female students participating in the study is 22,4%, while the rate male students is %77,6. According to the results of the research, Akdeniz University Fisheries Faculty is the first choice of 31,6% of the first year students who started education in the academic year of 2018-2019. 26,4% of this ratio is male and 5,2% is female students. Faculty of Fisheries is the third choice of 15,8% of the other students, while 10,6% of these students are male and 5,2% are female students. It is the fourth preference of 5,2% male students and the fifth choice of 5,2% male students in the first year of the faculty in question (Table 1).

Table 1. Ranking of first year fisheries faculty students' preferences for their faculties

Order of Preference	Number of Students	Student Gender		Rate (%)		Total (%)
		Male	Female	Male	Female	
1	6	5	1	26,4	5,2	31,6
3	3	2	1	10,6	5,2	15,8
4	1	1	-	5,2	-	5,2
5	1	1	-	5,2	-	5,2
Subtotal	**11**	**9**	**2**	**47,4**	**10,4**	**57,8**
6-10	3	2	1	10,6	5,2	15,8
10-20	4	4	-	21,2	-	21,2
20-30	1	1	-	5,2	-	5,2
Subtotal	**8**	**7**	**3**	**37,0**	**5,2**	**42,2**
Total	19	16	3	84,4	15,6	100,0

While 84,4% of the first year students of the Faculty of Fisheries, the subject of the research, are male students, 15 of them are female students. In the order of preference, it is observed that 47,4% of male students are in the 1st to 5th

preference range and 37,0% of them are in the 6th to 30th preference range. On the other hand, 10,4% of female students are in the 1st to 5th preference range, and 5,2% are in the 6th to 30th preference range (Table 1).

Table 2. Ranking of second year fisheries faculty students' preferences for their faculties

Order of Preference	Number of Students	Student Gender		Rate (%)		Total (%)
		Male	Female	Male	Female	
1	7	5	2	35,7	14,3	50,0
2	1	1	-	7,1		7,1
4	1	1	-	7,1	-	7,1
5	1	1	-	7,1	-	7,1
Subtotal	**10**	**8**	**2**	**57,0**	**14,3**	**71,3**
6-10	4	4	-	28,7	-	28,7
10-20	-	-	-			
20-30	-	-	-			
Subtotal	**4**	**4**	**2**	**28,7**	**-**	**28,7**
Total	14	12	2	85,7	14,3	100,0

As can be seen in Table 2, the first choice of 50% of the 2nd grade students in the survey study is Akdeniz University Faculty of Fisheries. 35,7% of the said ratio is male and 14,3% is female student. The related Faculty is the second choice of 7,1% of second year students, while 7,1% is the fourth choice, and 7,1% is the fifth choice. The rate of male students who evaluate the faculty during their 6th to 30th preference is 28,7% (Table 2).

While 85,7% of second year students are male students, 14,3% are female students. In the order of preference, it is observed that 57,0% of male students are in the 1st to 5th preference range and 28,7% of them are in the 6th to 30th preference range. On the other hand, 14,3% of female students are in the 1st to 5th preference range (Table 2).

Table 3. Ranking of third year fisheries faculty students' preferences to their faculties

Order of Preference	Number of Students	Student Gender		Rate (%)		Total (%)
		Male	Female	Male	Female	
1	4	4	-	26,6		26,6
2	1	1	-	6,7		6,7
5	1	-	1		6,7	6,7
Subtotal	**6**	**5**	**1**	**33,3**	**6,7**	**40,1**
6-10	5	2	3	19,9	13,3	33,2
10-20	2	2		13,3	-	13,2
20-30	2	1	1	6,7	6,7	13,4
Subtotal	**9**	**5**	**4**	**39,9**	**20,0**	**59,9**
Total	15	10	5	66,7	33,3	100,0

The first choice of 26,6% of the third grade students in the survey study was Akdeniz University Faculty of Fisheries. The faculty in question is the second choice of 6,7% of male students in the third year, while it is the fifth choice of 6,7% of female students. The rate of male students who evaluate the faculty in the 6th to 30th preference range is 39,9%, and the rate of female students is 20% (Table 3).

While 66,7% of third year students are male students, 33,3% of them are female students. In the order of preference, 33,3% of male students are in the 1st to 5th preferences, 6,7% of female students are in the 1st to 5th preferences, and 20% are in the 6th to 30th preferences (Table 3).

Table 4. Ranking of fourth year fisheries faculty students' preferences for their faculties

Order of Preference	Number of Students	Student Gender		Rate (%)		Total (%)
		Male	Female	Male	Female	
1	3	1	2	10,0	20,0	30,0
2	3	2	1	20,0	10,0	30,0
3	2	2		20,0		20,0
Subtotal	**8**	**5**	**3**	**50,0**	**30,0**	**80,0**
6-10	2	2		20,0	-	20,0
10-20						
20-30						
Subtotal						
Total	10	7	3	70,0	30,0	100,0

Akdeniz University Faculty of Fisheries is the first choice of 30% of the fourth year students interviewed. Fisheries faculty, which is the first choice of 10% of male students in the

fourth grade, is the first choice of 20% of female students in the same class. The same faculty is the second choice of 20% of male students in the fourth grade and 10% of female

students, while it is the third choice of 20% of male students. The rate of private students who evaluate the Faculty during the 6th to 30th preference is 20% (Table 4).

While 70% of fourth grade students are male students, 30 of them are female students. In the order of preference, it is observed that 50% of male students are in the 1st to 5th preference range and 20% of them are in the 6th to 30th preference range, while 30% of female students are in the 1st to 5th preference range (Table 4).

When all classes are taken into consideration, according to the calculations made, male students (77,4%) prefer fisheries faculties more than female students (22,4%) and most of the

students (62,3%) willingly receive education in fisheries faculties. It turned out that they wanted.

Information sources of fisheries faculty students in faculty preferences

In the study, it was determined that social media was considerably effective in the selection of Akdeniz University Faculty of Fisheries. As a matter of fact, the rate of students who learn about the Faculty of Fisheries from social media is approximately 42,1%.

Table 5. First year students' information resources about the faculty

Sources of Information	Number of Students	Student Gender		Rate (%)		Total (%)
		Male	Female	Male	Female	
Television, Radio, Magazine, Brochure	5	3	2	15,8	10,5	26,3
Social Media	8	8	-	42,1	-	42,1
Subtotal	**13**	**11**	**2**	**57,9**	**10,5**	**68,4**
From The University Preference Form	5	4	1	21,2	5,2	26,4
Family Profession	1	1	-	5,2	-	5,2
Subtotal	**6**	**5**	**1**	**26,3**	**5,2**	**31,6**
Total	19	16	3	84,2	15,8	100,0

When the sources of information are questioned while making the choices of first grade students in the study; It was revealed that 68,4% learned the faculty from the mass media and 26,4% from the University preference form. 5,2% of the students stated that the family profession is fisheries production, so they chose the relevant faculty (Table 5).

Table 6. Information sources of second year students about the faculty

Sources of Information	Number of Students	Student Gender		Rate (%)		Total (%)
		Male	Female	Male	Female	
Television, Radio, Magazine, Brochure	1	1	-	7,1	-	7,1
Social Media	6	6	-	42,9	-	42,9
Subtotal	**7**	**7**	**-**	**50,0**	**-**	**50,0**
From The University Preference Form	3	2	1	14,4	7,1	21,4
Family Profession	1	-	1	-	7,1	7,1
Friend	3	3	-	21,4	-	21,4
Subtotal	**7**	**5**	**2**	**35,8**	**14,2**	**50,0**
Total	14	12	2	85,8	14,2	100,0

Approximately 43% of the second year students stated that they were influenced by social media while making their faculty preferences, 21,4% by the university preference form, and 21,4% by their friends. The rate of students whose family occupation is aquaculture in the second year is 7,1% (Table 6).

Table 7. Information sources of third year students about the faculty

Sources of Information	Number of Students	Student Gender		Rate (%)		Total (%)
		Male	Female	Male	Female	
Television, Radio, Magazine, Brochure	1	1	-	6,7	-	6,7
Social Media	5	4	1	26,6	6,7	33,3
Subtotal	**6**	**5**	**1**	**33,3**	**6,7**	**40,0**
From The University Preference Form	6	4	2	26,7	13,3	40,0
Family Profession	1	1	-	6,7	-	6,7
Friend	2	1	1	6,7	6,7	13,3
Subtotal	**9**	**6**	**3**	**40,0**	**20,0**	**60,0**
Total	15	11	4	73,3	26,7	100,0

It was revealed that 40% of third grade students preferred mass media as the source of information, while the source of information was the university preference form, while 6,7% of the students preferred the faculty because it was a family

profession. The rate of students learning about the Faculty of Fisheries from social media is 33,3%, the rate of male students whose source of information is social media is 26,6%, while the rate of female students is 6,7% (Table7).

Table 8. Information sources of fourth year students about the faculty

Sources of Information	Number of Student	Gender Student		Rate (%)		Total (%)
		Male	Female	Male	Female	
Television, Radio, Magazine, Brochure	2	1	1	10,0	10,0	20,0
Social Media	4	3	1	30,0	10,0	40,0
Subtotal	**6**	**4**	**2**	**40,0**	**20,0**	**60,0**
From The University Preference Form	3	2	1	20,0	10,0	30,0
Family Profession Friend	1	1		10,0		10,0
Subtotal	**4**	**3**	**1**	**30,0**	**10,0**	**40,0**
Total	10	7	3	70,0	30,0	100,0

When fourth grade students' sources of information about the faculty are examined; It has been determined that 60% of the students' information source is mass media, 30% is the university preference form, and 10% of the students chose the faculty because it is a family profession. The rate of students learning about the Faculty of Fisheries from social media is 40,0%, the rate of male students is 30,0%, while the rate of female students is 10,0% (Table 8).

Considering all classes; The students' reasons for choosing the seafood faculties are first of all their own wishes, then friends and parents. Contrary to what is expected in the choice of profession in the study, it was observed that the parental effect was higher in male students compared to female students.

Satisfaction degrees from the education and training received by fisheries faculty students

The research was conducted after the beginning of education training, and in the study, whether the students were satisfied with the education they received was also questioned.

Table 9. Level of satisfaction with the education received by first year students

Satisfaction Level	Number of Student	Gender Student		Rate(%)		Total (%)
		Male	Female	Male	Female	
Very Good	5	4	1	21,2	5,2	26,4
Good	8	7	1	36,9	5,2	42,1
Middle	6	5	1	26,3	5,2	31,5
Weak						
Too Weak						
Total	**19**	**16**	**3**	**84,4**	**15,6**	**100,0**
Average (Severity)	**3.95**	**3.94**	**4.00**	**-**	**-**	**-**

In this context, as can be understood from Table 9, 26,4% of the first year students were very satisfied with the education they received, 42,1% were satisfied with the education they received, and 31,5% were moderately satisfied. They have stated. In total, 68,5% of the students stated that they were satisfied with the education at a very good or good level, 58,1% of the satisfied were male students and 10,5% were female students. The rate of those who are moderately satisfied is 31,5%, 26,3% are boys and 5,2% are girls. In the statistical analysis, the satisfaction level of the students was calculated as 3,95 out of five (Table 9).

Table 10. Degree of satisfaction of second year students with the education they received

Satisfaction Level	Number of Students	Gender Student		Rate(%)		Total (%)
		Male	Female	Male	Female	
Very Good						
Good	7	6	1	42,9	7,1	**50,0**
Middle	5	4	1	28,6	7,1	**35,7**
Weak	2	2		14,3		**14,3**
Too Weak						
Total	14	12	2	85,8	14,2	100,0
Average (Severity)	**3.36**	**3.33**	**3.5**			

When questioned whether the 2nd grade students are satisfied with the program, it was concluded that 85,7% of them are satisfied and 14,3% are not satisfied. As can be seen from the Table 10, when the satisfaction level of the second grade students with their education is examined, it was observed that 50% of them rated the education as good, 35,7% of them found it medium and 14,3% of them found it weak. While 42,9% of the students who rated the education they received as good were male, the ratio of male students who rated their education as medium is 28,6%. 7,1% of the female

students stated that they found the education they received good, and 7,1% found it moderate. While the rate of male students who define their education as good and moderately good is 71,5%, the rate of female students is 14,2. In the statistical analysis, the satisfaction level of second-grade students was found to be 3,36 out of five. Accordingly, it can be said that 2nd grade students' satisfaction with education and training in the faculty is generally high (Table 10).

Table 11. Grade of satisfaction with the education and training received by third year students

Satisfaction Level	Number of Student	Gender Student		Rate(%)		Total (%)
		Male	Female	Male	Female	
Very good						
Good						
Middle	9	6	3	40,0	20,0	**60,0**
Weak	6	5	1	33,3	6,7	**40,0**
Too weak						
Total	**15**	**11**	**4**	**73,3**	**26,7**	**100,0**
Average (Severity)	**2.60**	**2.55**	**2.75**	**-**	**-**	**-**

While 26,7% of the 3rd grade students are female students, 73,3% are male students. 60% of the mentioned students stated that they were moderately satisfied with the education and 40% of them were not satisfied. The ratio of male students who are moderately satisfied with education is 40% and the ratio of female students is 20%. While the rate of male students who are not satisfied with education is 33,3%, the rate of female students is 6,7%. As a matter of fact, in the statistical analysis, it was determined that the class that was the least satisfied with education was the 3rd grade, and the degree of satisfaction was 2,60 (Table 11).

Table 12. Degree of satisfaction of fourth grade students with the education they received

Satisfaction Level	Number of Student	Gender Student		Rate(%)		Total (%)
		Male	Female	Male	Female	
Very good	1		1	-	10,0	10,0
Good	2	2		20,0		**20,0**
Middle	6	4	2	40,0	20,0	**60,0**
Weak	1	1		10,0		**10,0**
Too weak						
Total	**10**	**7**	**3**	**70,0**	**30,0**	**100,0**
Average (Severity)	**3.30**	**3.14**	**3.66**			

70% of the 4th grade students are male students and 30,0% are female students. While 20% of male students are satisfied with the education and training, 40,0% of them are moderately satisfied. 10,0% of the female students are very satisfied with the education and 20,0% of them are moderately satisfied. The rate of students to be satisfied with education is 10,0%, all of them are male students. Accordingly, 90,0% of 4th grade students are satisfied with the program they are in, while 10,0% of them are not. In the analysis, the satisfaction level of the said class was determined as 3.30 out of 5 (Table 12).

When all classes are evaluated for the situation in question; It was observed that 89,5% of the students were satisfied with the education and 10,5% were not satisfied. 73,7% of the satisfied students are male students while 15,8% are female students. One of the female students stated that although she was in the 6th to 30th place in the Faculty of Fisheries preference list, she was satisfied with the education and 2 male students (10,5%) stated that they were not satisfied (Table 12).

In the analysis, it was observed that the satisfaction level of the 3rd grades was lower than the other grades. This situation is thought to be related to the preference of the class to Akdeniz University Faculty of Fisheries. As a matter of fact, considering the order of preference of third graders, it is observed that only 26,6% of the students in this class have the first choice of Akdeniz University Faculty of Fisheries. At the same time, students are thought to be a little more worried about approaching graduation, getting to the stage of getting to know the sector more closely with courses such as internship and professional practice, because the grade with the highest degree of satisfaction is Grade 1.

The views of the fisheries faculty students on the compatibility of the theoretical education and practices in the faculty

The compatibility of theoretical education in faculties with knowledge and skills acquired in practice is another issue that needs to be examined. Since the fisheries faculties carry out applied education as well as theoretical education, it was also questioned whether the students participating in the survey found the harmony regarding education and training successful.

Table 13. 1st Grade students' views on the compatibility of the theoretical education and practices in the faculty

Degree of Success	Number of Student	Gender Student		Rate(%)		Total (%)
		Male	Female	Male	Female	
Very Successful	5	4	1	21,5	5,2	26,7
Successful	9	9	-	47,5	-	47,5
Moderately Successful	4	2	2	10,3	10,3	20,6
Unsuccessful	1	1	-	5,2	-	5,2
Very Unsuccessful	-	-	-	-	-	-
Total	19	16	3	84,5	15,5	100,0
Average (Severity)	3.95	4.00	3.66	-	-	-

When the opinions of the 1st graders are examined for the situation in question, we see that approximately 94,8% of the students find this harmony successful and 5,2% find it unsuccessful. 84,5% of the students who find it successful are male, while 15,5% are female students. As can be seen from the numbers, the rate of students who find this harmony successful is the majority. As a matter of fact, the importance of finding the fit successful in the analysis was determined as 3.95 (Table 13).

Table14. 2nd Grade students' opinions about the compatibility of the theoretical education and practices in the faculty

Degree of Success	Number of Student	Gender Student		Rate(%)		Total (%)
		Male	Female	Male	Female	
Very Successful						
Successful	6	5	1	35,8	7,1	42,9
Moderately Successful	5	5		35,8		35,8
Unsuccessful	3	2	1	14,2	7,1	21,3
Very Unsuccessful						
Total	14	12	2	85,8	14,2	100,0
Average (Severity)	3.21	3.25	3.00	-	-	-

While the rate of students who find compliance with education in the faculty unsuccessful is 21,3% in the second year, the rate of students who find it successful is 78,7%. While the rate of male students who find it successful is 71,6%, the rate of female students is 7,1%. The importance degree of the second year students' opinions on adaptation was found to be 3.21 out of 5 (Table 14).

Table 15. 3rd Grade students' opinions on the compatibility of the theoretical education and practices in the faculty

Degree of Success	Number of Student	Gender Student		Rate (%)		Total (%)
		Male	Female	Male	Female	
Very Successful						
Successful	5	4	1	26,7	6,7	33,4
Moderately Successful	2	1	1	6,7	6,7	13,3
Unsuccessful	8	6	2	40,0	13,3	53,3
Very Unsuccessful						
Total	15	11	4	73,4	26,6	100,0
Average (Severity)	2.80	2.82	2.75	-	-	-

When the opinions of third year students about the compatibility of theoretical education and practices in the Faculty are examined, it is seen that the satisfaction rate of the students is 46,7%. While 33,4% of the students who find it successful are male students, 13,4% are female students. While 40,0% of the students who find it unsuccessful are male students, 13,3% are female students. The significance level of this situation calculated for the third graders in the study is 2., 0 (Table 15).

Table 16. 4th Grade students' opinions about the compatibility of the theoretical education and practices in the faculty

Degree of Success	Number of Student	Gender Student		Oran(%)		Total (%)
		Male	Female	Male	Female	
Very Successful	2	1	1	10,0	10,0	20,0
Successful	2	1	1	10,0	10,0	20,0
Moderately Successful	6	5	1	50,0	10,0	60,0
Unsuccessful						
Very Unsuccessful						
Total	10	7	3	70,0	30,0	100,0
Average (Severity)	3.60	3.43	4.00	-	-	-

Almost all of the fourth grade students reported that the harmony of theoretical lessons and practices was complete, but 60,0% of them emphasized that it was moderately compatible. In the statistical analysis, the significance level of compliance

was found as 3.60 out of five (Table 16). When all classes were evaluated, most of the students reported that the information they obtained from the theoretical courses was compatible with the practices. In the statistical analysis, this compliance was determined as 3.39 out of 5 (Table 16).

Consultancy

Studies have proven that students' success in faculties is directly related to consultancy services. As a matter of fact, in a study conducted by Külahoğlu, the effect of counseling services on student achievement was revealed, and it was emphasized that counseling services in universities in the European Union reduce student failure (Külahoğlu, 2000).

Table 17. 1st students' satisfaction with the consultancy services of their faculty

Degree Of Success	Number of Student	Gender Student		Rate(%)		Total (%)
		Male	Female	Male	Female	
Very Pleased	6	6	-	31,7		31,7
Satisfied	8	7	1	36,9	5,2	42,1
Moderately Satisfied	4	2	2	10,5	10,5	21,0
Not Glad	1	1		5,2		5,2
Not Satisfied At All	-	-	-	-	-	-
Total	**19**	**16**	**3**	**84,3**	**15,7**	**100,0**
Average (Severity)	**4.00**	**4.13**	**3.33**			

In this context, when first-year students were asked about their satisfaction with the consultancy services of their faculty, 31,7% stated that they were very satisfied, 42.1% were satisfied, and 21,0% were moderately satisfied. According to this situation, as can be observed in table 17, 94,8% of the students expressed their satisfaction and 5,2% expressed their dissatisfaction. According to the results of the research, approximately 79,1% of male students are satisfied with the counseling service in the first year, while 15,7% of the female students are satisfied. The importance level of this satisfaction is calculated as 4 out of five.

Table 18. 2nd Grade students' satisfaction with the consultancy services of the faculty they study

Degree of Success	Number of Student	Gender Student		Rate (%)		Total (%)
		Male	Female	Male	Female	
Very Pleased	2	2		14,2	-	14,2
Satisfied	5	4	1	28,7	7,1	35,8
Moderately Satisfied	6	6		42,9		42,9
Not Glad	1		1		7,1	7,1
Not Satisfied At All						
Total	**14**	**12**	**2**	**85,8**	**14,2**	**100,0**
Average (Severity)	**3.72**	**3.66**	**3.00**			

While 50% of the 2nd grade students are satisfied with the consultancy services in the faculty, 42,9% of them are moderately satisfied and 7,1% of them are not satisfied. However, the satisfaction rate is generally high. Because, as can be seen in Chart 18, 85,8% of male students in the second grade are satisfied and 7,1% of female students are not satisfied with the counseling service. As a matter of fact, the importance level of satisfaction was determined as 3.72 in the analysis.

Table 19. 3rd Grade students' satisfaction with the counseling services of their faculty

Degree of Success	Number of Student	Gender Student		Rate (%)		Total (%)
		Male	Female	Male	Female	
Very Pleased	3	3		20,0		20,0
Satisfied	3	2	1	13,3	6,7	20,0
Moderately Satisfied	5	3	2	20,0	13,3	33,3
Not Glad	4	3	1	20,0	6,7	26,7
Not Satisfied At All						
Total	**15**	**11**	**4**	**73,3**	**26,7**	**100,0**
Average (Severity)	**3.33**	**3.45**	**3.00**			

In the research, 73,3% of the 3rd grade students emphasized that they were satisfied with the counseling service. While the ratio of male students who are satisfied with the counseling service is 53,3%, the ratio of female students is 20,0%. The importance level of satisfaction is 3.33(Table 19).

According to these figures, third and fourth grades have a lower rate of satisfaction with consulting services than other grades. This situation led to the idea that the counselors have deficiencies in students' professional motivation. As a matter of fact, in a study conducted by Gözüm et al. (2014), it was emphasized that counseling services should be continuous and should be constantly reviewed (Gözüm et al., 2014).

Table 20. 4 th Grade students' satisfaction with the counseling services of their faculty

Degree of Success	Number Of Student	Gender Student		Rate(%)		Total (%)
		Male	Female	Male	Female	
Very Pleased	1		1		10,0	10,0
Satisfied	4	3	1	30,0	10,0	40,0
Moderately Satisfied	3	2	1	20,0	10,0	30,0
Not Glad	2	2		20,0		20,0
Not Satisfied At All						
Total	**10**	**7**	**3**	**70,0**	**30,0**	**100,0**
Average (Severity)	**3.40**	**3.14**	**4.00**	**-**	**-**	**-**

According to Chart 20, 80% of fourth grade students are satisfied with the consultancy service, along with those who are moderately satisfied. According to the aforementioned situation, the ratio of male students who are satisfied with the consultancy service is 50.0%, and the ratio of female students is 30,0%. According to the statistical calculations made, the level of satisfaction is 3.40 (Table 20). When all grades are taken into consideration, it has been determined that most of the students (82.7%) are satisfied with the counseling services. In the statistical analysis, the satisfaction level of importance was determined as 3.61 out of 5(Table 20).

The belief degree of fisheries faculty students to perform their profession with the education they received

Higher education institutions are one of the most important tools in the creation of highly qualified manpower, which is at the core of human capital. Fisheries faculties have a privileged place in higher education institutions. Today, when there are important problems regarding food quality and safety, the strategic importance of aquaculture engineering is increasing day by day (Çiftçi, 2009). However, in the meetings held within this scope, stakeholders; He states that students who graduate from faculties cannot meet the expectations of business owners in terms of qualifications, knowledge and skills and that they cannot be employed sufficiently in the sector due to some deficiencies in the laws (Yılmaz & Yılmaz, 2016). However, it is imperative that the curriculum and the labor market's expectations of trained personnel are in line with respect to applicability and professional motivation (Yılmaz, 2006). For this reason, taking into account the aforementioned opinions of the sector representatives, the beliefs of the students in performing their profession when they graduate were also questioned.

When the students' beliefs about whether they have gained the ability to perform their professions through the education they received at the faculty are questioned, their answers are given above. According to this, while the belief degree of the first graders is 4.16 out of five, it is 2.86 for the 2 grades, 2.53 for the third grade and 3.33 for the fourth grade. Students with a low degree of belief stated that this situation was related to the lessons. These students argue that some courses in the curriculum should be changed. As a matter of fact, this request of the students is evaluated by the council of deans before YÖK.

Table 21. The degree of belief that 1st year students can practice their profession with the education they receive

Degree of belief	Number Of Student	Gender Student		Rate (%)		Total (%)
		Male	Female	Male	Female	
I believe so much	6	6	-	31,7	-	31,7
I believe	11	9	2	47,4	10,5	57,9
I moderately believe	1	-	1		5,2	5,2
I do not believe	1	1		5,2	-	5,2
I don't believe at all	-					-
Total	**19**	**16**	**3**	**84,3**	**15,7**	**100,0**
Average (Severity)	**4.16**	**4.25**	**3.66**	**-**	**-**	**-**

89,6% of the first grade students stated that they believed that they could do their profession with the education they received, 5,2% of them believed that their belief was moderate for the situation in question, and 5,2% of them did not believe. As can be seen from Table 21, the belief that they can do their profession with the education they receive in their first grade is higher in male students. In the statistical analysis made, the degree of belief in being able to perform their profession with the education they received was 4.16 (Table 21).

Table 22. Degree of belief that 2nd grade students can do their profession with the education they receive

Degree of Belief	Number of Student	Gender Student		Rate(%)		Total (%)
		Male	Female	Male	Female	
I believe so much						
I believe	4	4		28,7		28,7
I moderately believe	6	4	2	28,7	14,2	42,9
I do not believe	2	2		14,2		14,2
I don't believe at all	2	2		14,2		14,2
Total	**14**	**12**	**2**	**85,8**	**14,2**	**100,0**
Average (Severity)	**2.86**	**2.83**	**3.00**	**-**	**-**	**-**

On the other hand, 28,7% of the 2nd grade students stated that they believed that they could do their profession with the education they received, 42,9% believed it moderately and 28,4% did not believe it. While all of the students who say "I believe I can do my profession" with the education they received are male students, 28,7% of the students who stated that they believe moderately are male and 14., % are female students. While all of the students who stated the idea that I do not believe or even do not believe at all were male students, it was 28,4%. In the statistical analysis, the degree of belief in the 2nd grade students to perform their professions with the said education was 2.86 (Table 22).

Table 23. The degree of belief that 3rd grade students can do their profession with the education they receive

Degree of belief	Number of Student	Gender Student		Rate (%)		Total (%)
		Male	Female	Male	Female	
I believe so much	1	1		6,7		6,7
I believe	1	1		6,7		6,7
I moderately believe	4	2	2	13,3	13,3	26,6
I do not believe	8	6	2	40,0	13,3	53,3
I don't believe at all	1	1		6,7		6,7
Total	**15**	**11**	**4**	**73,4**	**26,6**	**100,0**
Average (Severity)	**2.53**	**2.54**	**2.50**	**-**	**-**	**-**

The least belief that students can do their profession with the education they receive is in the 3rd grade. As a matter of fact, the majority of students who have this belief are male, while the majority of students who do not believe are female students. Approximately 40,0% of third year students have this belief, while 60,0% are not. As a matter of fact, the belief of this class that they can perform their profession with the education they received was calculated as 2.53 in the analysis (Table 23).

Table 24. The degree of belief that 4th grade students can do their profession with the education they receive

Degree of belief	Number of Student	Gender Student		Rate (%)		Total (%)
		Male	Female	Male	Female	
I believe so much	1		1		10,0	10,0
I believe	2	2			20,0	20,0
I moderately believe	6	4	2	40,0	20,0	60,0
I do not believe	1	1		10,0		10,0
I don't believe at all						
Total	**10**	**7**	**3**	**50,0**	**50,0**	**100,0**
Average (Severity)	**3.33**	**3.14**	**3.66**	**-**	**-**	**-**

The belief that fourth grade students can do their profession with the education they receive is around 90,0% together with the moderate believers. 40,0% and 50,0% of this rate are female students. The belief degree calculated by statistical analysis was calculated as 3.33 out of five (Table 24).

When all classes are evaluated, the average rate of belief in success in the profession with the courses taken in the relevant Faculty is 3.14 according to the statistical analysis. These results show that students' professional expectations are generally positive. In fact, according to calculations, it can be said that female students are more optimistic than male students (Table 24).

CONCLUSION

According to the results of the research, the rate of students who preferred Akdeniz University Faculty of Fisheries in the first place was 34,5%, while male students (77,4%) preferred fisheries faculties more than female students (22.4%) and the majority of students (62,3%) it was determined that they willingly want to study in fisheries faculties. When all classes are considered; The reasons for students to choose the seafood faculties are first of all their own wishes, then friends and parents.

In addition, in the study, it was determined that especially social media was important in the selection of Akdeniz University Faculty of Fisheries. As a matter of fact, the rate of students who learn about the Faculty of Fisheries from social media is approximately 40,0%.

In the study, 89,5% of the students stated that they were satisfied with the education and training of Akdeniz University Faculty of Fisheries and 10,5% of them were not satisfied. While 77,2% of the satisfied students are male students, 93,8% are female students. Most of the students stated that the information they obtained from the theoretical courses was compatible with the applications, and in the statistical analysis, this compliance was determined as 3.39 out of 5. Again, it was determined that most of the students (82,7%) were satisfied with the counseling services. In the statistical analysis, the satisfaction level of importance was determined as 3,61 out of 5. The average rate of belief in success in the profession with the courses taken at the faculty is 3.14. These results show that students' professional expectations are generally positive.

However, it can be thought that there is a contradiction between the results and student preferences. As a matter of fact, total 358 students preferred 17 fisheries faculties in the 2020-2021 academic year. For this reason, it is beneficial to review education-training programs especially in line with the requirements of the sector. In faculties, it may be sufficient to give the key to how the student can access information when he / she needs it. However, the aquaculture sector demands that the staff trained by the Faculties are trained in practice with theoretical knowledge. Therefore, higher education institutions should not have a physical infrastructure and equipment shortage. In this context, while the government should transfer more resources to meet the needs of fixtures, the contribution of sector representatives is also expected.

On the other hand, taking into account the opinions of the sector representatives regarding education and training, the recommendations in the restructuring of education in the fisheries faculties that have been studied in recent years; Considering that the education and training to be implemented should be not only national but also international, it foresees to increase ties with the industry. As a matter of fact, in the proposed new models, it is observed that education, research and practice are interdependent and therefore aimed together in this education, which is named as 7 + 1 (education model in fisheries faculties for a period of 7 terms).

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