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Examination of the Problem Solving Skills of University Students in Albania and Turkey in Terms of Various Variables

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Researching the problem solving abilities of the college students in Albania and Turkey by various variances is the general purpose of this research. Within the frame of this general purpose, "are the sub-dimensions of the problem solving inventory of the students of Epoka University of Albania and Selcuk University of Turkey differentiating and according to variances of gender, age and university department?" were researhed. 526 randomly selected undergraduates from the Business, International Relations, Computer Engineering and Civil Engineering departments of the Epoka and Selcuk Universities constituted the sample of the study. Epoka University of Albania was added to the research population with Selcuk University of Turkey because of the fact that the students of it were graduated from Turkish High Schools and they could talk, understand, read and write in Turkish language. The "Problem Solving Inventory" adapted to Turkish by Sahin, Sahin and Heppner (1993) was used in the collection of data. In the study it was determined that the students of Epoka University exhibit more positive problem solving approaches in terms of impatient, avoidant and self-confident approaches than the students attending to Selcuk University. It was also determined that the total problem solving inventory points of the students of the both universities did not differentiate in terms of gender and the departments they attend to, but exhibited a significant difference in terms of the variable of age.

Introduction

We encounter a set of problems in the communal living. Problem is a status which comes onto and blocks one's way (Adair, 2000); it is the difficulties that come onto one's current strengths of a desired aim of one (Bingham, 2004). As for problem solving, it is defined as choosing from various effective and beneficial tool and behaviour possibilities for the desired aim and using it (Demirel, 1993); as an entirety of phases which one determines

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and evaluates many action alternates and applies the chosen action (Deniz, 2004); as a term which requires series of efforts for resolve the encountered hardships for the desired aim (Bingham, 2004). Anderson (1980) defined the problem solving as directing the cognitive processes to an aim in sequence (Cited by Kaptan and Korkmaz, 2002). According to Demirtaş and Dönmez (2008), problem solving is a complex term which one experiences starting from feeling of the problem and ending at the solution in which cognitive abilities have affective and behavioural aspects.

Problems can be a difficulty which requires a basic choice to be made, but they can also be a problem which includes much more complex situations and affects the human life negatively when unsolved (Arslan, 2005). One, who encounters with a problem, gets into series of efforts to resolve the problem. As a result of these efforts, if one resolves the problems successfully, one feels good emotionally and can learn how to resolve problems practically. As for one who cannot resolve problems successfully, one has emotional problems as a result of the hardships of the problem and has lower ego perception. Taylan (1990) stated that the ones who cannot effectively resolve the problems, have more emotional problems than others and cannot resolve the problems without getting helped; are more insatiable and has less ego perception than others; have hard time understanding expectations and intentions of others and are more worried, anxious, insecure and over sensitive than others. The ones who can resolve their problems effectively have positive problem solving self-evaluations. Other than that the ones who evaluate their problem solving ability positively, can resolve their problems effectively (Ferah, 2000).

Solution of the problems varies depending on the problem type and complexity. In order to solve this complex and various problems, one does benefit from different information sources (Cüceloğlu, 2004). Generally, these are previous applications, authority figures, the experience of one and science. Science provides that the problem solving is based on general, credible and most effective data of humans. One may consult one or more of these four aspects (Karasar, 2009). Demirel (1993) states that the problem solving is a scientific term for transforming the given status into a status with aim.

There are many factors affecting the problem solving term. Self-confidence, experiences and past life, emotions and thoughts, mother and father manners can be counted as these factors.

Self-Confidence: Problem solving and self-confidence is in a cyclic relation. The children with high self-confidence learn to identify the problems they encounter, to find various ways for resolving it, to attempt to resolve it always and to not run away from problems by shouldering their responsibilities better (Bingham, 2004). Ones with effective problem solving abilities have improved self-confidence; and as a result they use active planning in their problem solving (Yazıcı, 2001).

Past Life and Experiences: Having many problems in one's past only helps one to have resolving ways for these problems to come. If a problem one encountered has been encountered by one in the past, the solution performed in the past experiences is performed. If the problem has experienced for the first time by one, one tries to produce a new solution way. The more kinds of problems one experiences, the less time one needs to find a solution way. Ones who has a rich experiencing opportunity in ones' childhoods, who has been made encounter various problems consciously and who has got positive reinforces improve positive attitude for problem solving. This situation increases their problem solving success (Kasap, 1997).

Emotions and Thoughts: Expressing one's emotions in a right way has an important role for problem solving. Ones who cannot express their feelings get angry quickly. Ones who cannot control their angers can put themselves in more complex situations in problem solving. Öğülmüş (2001) states that one feels anxiety, fear, sadness, anger or frustration before solving a problem and happiness, pride or relief after solving a problem. Also the way of thinking on the problem is very important in the

problem solving term. While thoughts such as "This is very hard", "If I had more potential" harden the problem solving term, thoughts like "Problems might just get solved in a moment", "Winning f a party does not mean the losing of another party" ease the problem solving term.

Parents' Attitude: According to Thornton (1998), children and teenagers expect help from their parents for solving more complex problems. This help is the preparation of the necessary environment for them to resolve the problem; yet this environment must not be interfered with (Cited by: Demirci Danışık, 2005). In a research done with the college students, it was seen that the problem solving abilities of the students who perceive their mother and father as democratic is higher than the ones who who perceive their mother and father as authoritarians (Kılıç Basmacı, 1998). According to Gordon (1999), the attitude of "no losing" named as "effective listening" used in the solution of the problems, teaches the parents to easily encourage their children for resolving their problems by themselves (Cited by: Aydın, 2009). When effective listening is combined with empathetic understanding, the children feel valued and this might help them to resolve their problems by themselves. If parents or the adults in the environment of the children effectively listen empathetically the children, the children may solve their problems themselves (Whirter and Acar, 2000).

In order to solve the problems effectively, the "creative thinking" is also necessary (Yıldız, 2003). Creative thinking plays an important role for resolving the obstacles by thinking the solution term phases in a certain system especially for complex problems.

In the college years, the students face many problems economically, socially and psychologically. Mostly, they try to solve their problems based in their past experiences. Some of the students perceive themselves as successful in problem solving and some other as failure in it. Heppner and Petersen (1982) found out in their research done on the college students that the students who perceive themselves as "successful" show more effort than the ones who perceive themselves as "failure" in problem solving; they can perceive the problem solving term; they do not feel anxiety while facing with the problem; they can understand the problems easier; they have more effective problem solving abilities and their social ability fields are wider.

Perceiving themselves as sufficient against the problems they face will allow college students to take successful decision in the important decisions on their future. In the research of Deniz (2004) in which he researched the relation between self-esteem in deciding, deciding styles and problem solving abilities of college students, significant relations between self-esteem in deciding, postpone, careful, panicked, avoider deciding in deciding styles and problem solving inventory sub-dimensions and their total points.

Literature Review

Various theories and methods were developed on problem solving. Some of these are stated below:

John Dewey's Projective Thinking Theory: Dewey (1933) emphasizes that the schools should not only provide information to the students, but also the habit and strength of coping with new problems (Cited by: Hesapcıoğlu, 1998). Dewey's problem solving method includes five steps. These are: 1st Noticing the hardship and defining the problem, 2nd Obtaining the necessary information and classifying, 3rd Creating the suitable hypothesis, 4th Testing the possible solutions, 5th Confirming the results and evaluating them. Dewey also states that these steps are not unchangeable and do not have to follow a certain sequence. Also, according to Dewey, these phases can be widened, new phases can be developed and some of them can be taken out or shortened (Cited by: Çağlayan Dinçer, 1995).

Karl Popper and Problem Solving: Popper (1972) states that the science has started with problems not with observation. Popper approaches and defines problem solving as a philosophy. In order to be deemed to understand the problem, one has to perceive a part of the problem, meet its sub-dimensions and understand the logical pattern between them. According to this theory, one can understand a

scientific problem by living it, trying to solving it and failing to solve it. The first thing to do to understand the problem is "finding the hardship" (Cited by: Saygılı, 2000).

Alex Osborn's Problem Solving Theory: According to Osborn, the creative problem solving term consists of three phases. These are "Finding problem", "finding thought" and "finding solution". Problem finding requires definition and preparation of the problem. Defining the problem includes taking the problem from a complex structure; preparing the problem includes collecting the necessary data and analysing processes. Finding thought includes producing thoughts and developing them. Producing thoughts means producing as much as thoughts. Developing thoughts means adding the surfaced thoughts together and processing them again and choosing the suitable one. Finding thought phase is accepted as "hypothesis developing" phase. Finding solution consists of evaluation and choosing phases. Evaluation is the testing of various solutions or checking them in any other way. Choosing – Accepting the choice – phase includes comparing a thought with others and attaching it to the resolution (Cited by: Sungur, 1992).

Guilford's Creative Problem Solving Model: Guilford problem solving behaviour is stated to start with inputs both from the environment and the body of one (Cited by: Altuntaş, 2008). In his model, there are four necessary variances especially for creative term. These are: screen, memory, convergent and divergent production. The problems seen in any of these variances prevent the problem solving (Çağlayan Dinçer, 1995).

Mountrose and Five Phase Problem Solving Method: Mountrose (2000) suggests a five phase method which includes the emotions in the problem solving term. Mountrose states that the adults refer to the classic problem solving method known as "don't do this, do that" and emphasizes in the change of the behaviour, the emotion and thoughts under the behaviour must be manifested. The phases of this method which also include better communication with the children are; 1st Defining the problem, 2nd Expressing the emotions, 3rd Finding the negative belief, 4th Finding the positive belief, 5th Animating the future in mind.

In sum, the common phases of various approaches or various researchers' problem solving terms are; realizing and defining the problem, analysing the problem, developing alternate resolutions, performing the chosen resolution and evaluation of the result (Yıldız, 2003). According to Bingham (2004), even if problem solving behaviour differs according to problem and individual, the problem solving processes have some general and basic aspects. These are, recognizing the problem and feeling the urge of dealing with it, identifying the field of the problem for describing it and trying to comprehend the secondary problems related with it, collecting the necessary data and information related with the problem, choosing and regulating the most suitable data for the problem, confirming the possible solution ways under the light of collected data and information, evaluating the solution ways and choosing the most suitable solution, performing the decided resolution, evaluating the performed problem solving method at the end. These are general approach, defining the problem, creating choices, deciding and evaluating.

Purpose

Researching the problem solving abilities of the college students in Albania and Turkey by various differences is the general purpose of this research. Within the frame of this general purpose, the sub-problems stated below were developed:

(1) Are the sub-dimensions of the problem solving inventory (hasty, thoughtful, avoiding, self-confident, evaluating and planned approaches) of the students of Epoka University of Albania and Selcuk University of Turkey differentiating?
(2) Are the problem solving inventory points of the students of Epoka University of Albania and Selcuk University of Turkey differentiating according to differences of gender, age and university department?

Methodology

The survey method was used in the research. Survey models are research approaches which purposes to describe a situation of past or a situation still exists as it existed (Karasar, 2009). The problem solving abilities of the students of Epoka University of Albania and Selcuk University of Turkey were researched in this study.

Population and Sample

The population of the research are the students of Epoka University of Albania and Selcuk University of Turkey. Epoka University of Albania was added to the research population with Selcuk University of Turkey because of the fact that the students of it were graduated from Turkish High Schools and they could talk, understand, read and write in Turkish language.

The research population consists of the students of Architecture – Engineering Faculties and Economic and Administration Sciences Faculties of 2009 – 2010 education year of Epoka University and Selcuk University. The Architecture Department of Architecture – Engineering Faculty of Selcuk University has 346 students; the Computer Engineering Department of Architecture – Engineering Faculty of Selcuk University has 216 students; the Business Administration Department of Economic and Administration Sciences Faculty of Selcuk University has 686 students; International Relations Department of Economic and Administration Sciences Faculty of Selcuk University has 586 students; in total of 1834 students. The Architecture Department of Architecture – Engineering Faculty of Epoka University has 61 students; the Computer Engineering Department of Architecture – Engineering Faculty of Epoka University has 92 students; the Business Administration Department of Economic and Administration Sciences Faculty of Epoka University has 126 students; International Relations Department of Economic and Administration Sciences Faculty of Epoka University has 78 students; in total of 348 students.

A sample group of 526 students was created by basic coincidental method from the research population. 268 students of the sample group (51%) were students of Selcuk University; 258 students of the sample group (49%) were students of Epoka University. Selcuk University students of sample group had 140 (52,2%) female; 128 (47,8%) male students; Epoka University students of sample group had 133 (51,6%) female; 125 (48,4%) male students. Selcuk University students of sample group had 55 (20,5%) Architecture students; 80 (29,9%) Computer Engineering students; 75 (28,0%) Business Administration students; 58 (21,6%) International Relations students; Epoka University students of sample group had 56 (21,7%) Architecture students; 88 (34,1%) Computer Engineering students; 74 (28,7%) Business Administration students; 40 (15,5%) International Relations students.

Data Collection Tools

In the research, "Problem Solving Inventory" (PSI) for determining the problem solving abilities and "Personal Information Form" (PIF) for determining the demographic aspects were used.

Problem Solving Inventory (PSI): Inventory was developed by Heppner and Petersen (1982) and adapted to Turkish language by Sahin, Sahin and Heppner (1993). It is a measure which measures the individual's self-perception in problem solving abilities. This measure can be applied to teenagers and adults and it consists of 35 articles pointed with 1-6 points in Likert scale. The highest point can be obtained from the inventory is 192 and the lowest is 32. Higher points mean that the individual has perceives himself/herself as insufficient on problem solving abilities; lower points mean that the individual has perceives himself/herself as sufficient on problem solving abilities. The Cronbach Alpha credibility coefficient is found as .88. The credibility coefficient obtained with dividing in half is found as r = .81. As a result

of performed factor analysis, Six sub-dimensions of "Hasty approach" (13th, 14th, 15th, 17th, 21st, 25th, 26th, 30th and 32nd articles, α = 0.78), "Thoughtful Approach" (18th, 20th, 31st, 33rd and 35th articles, α = 0.76), "Avoiding Approach" (1st, 2nd, 3rd and 4th articles, α = 0.74), "Evaluating Approach" (6th, 7th and 8th articles, α = 0.69), "Self-Confident Approach" (5th, 23rd, 24th, 27th, 28th and 34th articles, α = 0.64), "Planned Approach" (10th, 12th, 16th and 19th articles, α = 0.59) were found.

Personal Information Form: A "Personal Information Form" consisting of 4 articles for determining the properties of the sample was created by the researcher based on the literature and also with an expert opinion. Form was consisting of university, department, age and gender information of the participating students.

Data Collection and Analysis

Cooperation with academicians of the stated departments of Selcuk University and Epoka University was performed for data collection. "Personal Information Form" and "Problem Solving Inventory" were applied together and the application took approximately 20 – 25 minutes.

Each measure was examined and 44 measures were counted as invalid because they were filled faulty or deficit or they were null; therefore 526 measures was taken into evaluation. The collected data was entered into SPSS for WINDOWS 13.0 package software and statistical analyses were done. For the analysis of the research data, independent sample t-test, two factor Variance analysis (ANOVA) techniques were used. As a result of variance analysis, in case a significant difference were to be found between the group averages, Tukey test was to be used for determining the groups of the difference. P<.05 significance level was taken as a standard for interpreting the difference as significant or insignificant.

Findings

In this part, problem solving inventory sub-dimension points of the students of Epoka University in Albania and Selcuk University in Turkey, and their problem-solving inventory total points according to gender, age and field of education variables in line with the sub-probs.

1. Findings concerning if ***problem solving inventory sub-dimension points of the students of Epoka University in Albania and Selcuk University in Turkey change or not*** *(hasty, thinking, avoider, self-confident, evaluator and planned approach):*

Independent sample T test results of the students of Epoka and Selcuk University related to problem solving inventory sub-dimension points are shown in Table 1.

Table 1. Independent sample T test results of the students of Epoka and Selcuk University related to problem solving inventory (PSI) sub-dimension points

PSI Sub-Dimension	University	N	$\overline{X}$	Ss	T	p
Hasty Approach	Selcuk Epoka	268 258	33,10 25,56	7,30 7,86	11,40	.000*
Thinking Approach	Selcuk Epoka	268 258	13,21 13,58	4,12 4,76	.941	.347

Avoider Approach	Selcuk Epoka	268 258	16,79 10,03	4,26 4,93	16,83	.000*
Evaluator Approach	Selcuk Epoka	268 258	7,60 7,77	2,78 3,64	.591	.555
Self-Confident Approach	Selcuk Epoka	268 258	20,90 18,88	4,24 6,28	4,32	.000*
Planned Approach	Selcuk Epoka	268 258	10,25 10,72	3,28 4,00	1,47	.143

**p<.05*

As seen in Table 1, it has been found that there are significant differences between averages in terms of hasty approach, avoider approach and self-confident approach which are among the problem solving inventory sub-dimensions of the students of Epoka and Selcuk University. No significant difference has been found among the arithmetic between in the other sub-dimensions.

When we look at the point averages of hasty approach, avoider approach and self-confident approach, it is seen that the students of Epoka University have lower point averages than the students of Selcuk University. Low points obtained from Problem Solving Inventory shows that the individual shows a more positive approach against a problem. The students studying in Epoka University show more positive problem solving approach against problems than the students of Selcuk University.

2. ***Findings concerning if problem solving inventory sub-dimension total points of the students of Epoka University in Albania and Selcuk University in Turkey, changes according to gender, age and field of education variables or not:***

Findings concerning problem solving inventory total points of the students of Epoka University and Selcuk University, changes according to gender, age and field of education variables are given in separate tables. Descriptive statistics related to problem solving inventory total points of the students of Epoka University and Selcuk University in terms of gender variable are shown in Table 2.

Table 2. Descriptive statistics related to problem solving inventory total points of the students in terms of gender variable.

University	Gender	N	$\overline{X}$	Ss
Selcuk	Female	140	113,54	14,33
	Male	128	111,09	13,92
	Total	268	112,37	14,17
Epoka	Female	132	93,48	22,99
	Male	126	96,06	24,34
	Total	258	94,74	23,65
Total	Female	272	103,80	21,49
	Male	254	103,63	21,14
	Total	526	103,72	21,30

When Table 2 is analyzed, it is seen that arithmetic point averages of the females studying in Selcuk University is (113,54); arithmetic point averages of the males is (111,09). It is seen that arithmetic point averages of the females studying in Epoka University is (93,48); arithmetic point averages of the males is (96,06). To detect if there is a significant difference between these arithmetic points averages or not, two-factor ANOVA analyze has been carried out and the results are shown in Table 3.

Table 3. Two-factor ANOVA results concerning problem solving inventory total points of the students of Epoka University and Selcuk University in terms of "university and gender".

Source of Variance	Squares Total	sd	Average of Squares	F	p
University	40392,67	1	40392,67	107,32	.000*
Gender	,611	1	.611	.002	.968
University x Gender	832,40	1	832,40	2,21	.138
Error	196467,30	522	376,37		
Total	5896817,00	526			

*$p<.05$

When Table 3 is analysed, it is found that, "university x gender" common effect isn't significant as a result of two-factor ANOVA analysis applied to problem solving inventory total points according to university and gender variable ($F_{(1-522)}=2,21$, $p>.05$). In other words, problem solving skills of the university students in terms of gender variable don't show significant differences according to university.

Descriptive statistics concerning the problem solving inventory total points of the students of Epoka University and Selcuk University in terms of age variable are shown in Table 4.

Table 4. Descriptive statistics concerning the problem solving inventory total points in terms of age variable.

University	Age	N	$\overline{X}$	Ss
Selcuk	17-19	24	114,00	17,55
	20-22	155	112,03	13,48
	23-25	89	112,52	14,47
	Total	268	112,37	14,17
Epoka	17-19	66	91,23	25,75
	20-22	161	97,73	21,85
	23-25	31	86,71	25,80
	Total	258	94,74	23,65
Total	17-19	90	97,30	25,82
	20-22	316	104,74	19,56
	23-25	120	105,85	21,24
	Total	526	103,72	21,30

As seen in Table 4, it is understood that arithmetic point averages of 17-19 ages students studying in Selcuk University is (114,00); of 20-22 ages is (112,03); of 23-25 ages is (112,52); arithmetic point averages of 17-19 ages students studying in Epoka University is (91,23); of 20-22 ages is (97,73); of 23-25 ages is (86,71). Two-factor ANOVA analysis are carried out in order to detect if there is a significant difference between these arithmetic point averages and the results are shown in Table 5.

Tablo 5. Two-factor ANOVA results concerning problem solving inventory total points of the students of Epoka and Selcuk university in terms of "university and age" variable.

Source of Variance	Squares Total	sd	Averages of Squares	F	P
University	34996,85	1	34996,85	94,31	.000*
Age	2042,47	2	1021,24	2,75	.065
University x Age	2877,02	2	1438,51	3,88	.021*
Error	192966,07	520	371,09		
Total	5896817,00	526			

*$p<.05$

When we look at Table 5, it has been found that "university x age" common effect is significant as a result of two-factor ANOVA analysis applied to problem solving inventory total points according to university and age variable ($F_{(2-520)}$=3,88, p<.05). In other words, problem solving skills of the university students in terms of age variable show significant differences according to the university they study. Tukey test is applied in order to detect which age groups are the reason for this difference and the results are shown in Table 6.

Table 6. Tukey tests results carried out in order to detect between which age groups problem solving skills of Epoka and Selcuk university show difference.

Age	17-19	20-22	23-25
17-19	$\overline{X}$ =97,30		
20-22	p<.05	$\overline{X}$ =104,74	
23-25	p<.05	-	$\overline{X}$ =105,85

According to Tukey test results given in Table 6, a significant difference at a level of p<.05 related to problem solving skills has been found between 17-19 age group's students and 20-22, 23-25 age groups' students. It is seen that this difference is in favour of 20-22 ($\overline{X}$ =104,74) and 23-25 ($\overline{X}$ =105,85) age groups' students. So, problem solving skills of individuals increase while the age is increasing.

Descriptive statistics concerning problem solving inventory total points of the students of Epoka and Selcuk University in terms of field of study variable is given in Table 7.

Table 7. Descriptive statistics concerning problem solving inventory total points in terms of field of study variable.

University	Field of Study	N	$\overline{X}$	Ss
Selcuk	Architecture	57	112,14	13,26
	Computer Engineering	80	111,44	13,48
	Business Administration	72	114,39	14,79
	International Relations	59	111,38	15,22
	Total	268	112,37	14,17
Epoka	Architecture	64	97,72	21,71
	Computer Engineering	78	96,79	22,85
	Business Administration	65	89,97	25,09
	International Relations	51	93,94	24,96
	Total	258	94,74	23,65
Total	Architecture	121	104,51	19,53
	Computer Engineering	158	104,21	20,04
	Business Administration	137	102,80	23,67
	International Relations	110	103,29	22,03
	Total	526	103,72	21,30

When Table 7 is analysed, in Selcuk University: it is seen that arithmetic point averages of Architecture students are (112,14); arithmetic point averages of Computer Engineering students are (111,44); arithmetic point averages of Business Administration students are (114,39); arithmetic point averages of International Relations students are (111,38). In Epoka University: it is seen that arithmetic point averages of Architecture students are (97,72); arithmetic point averages of Computer Engineering students are (96,79); arithmetic point averages of Business Administration students are (89,97); arithmetic point averages of International Relations students are (93,94). Two-factor ANOVA analyse has been carried out in order to detect if there is a significant difference between these arithmetic point averages and the results are given in Table 8.

Table 8. Two-factor ANOVA results concerning problem solving inventory total points of the students of Epoka and Selcuk university in terms of "university and field" variable.

Source of Variance	Squares Total	sd	Average of Squares	F	p
University	40452,27	1	40452,27	107,75	.000*
Field	622,59	3	207,53	.55	.646
University x Field	2237,60	3	745,87	1,99	.115
Error	194465,89	518	375,42		
Total	5896817,00	526			

**p<.05*

When Table 8 is analysed, it is found that "university x field" common effect is not significant as a result of two-factor ANOVA analyse applied to problem solving inventory total points according to university and field variable ($F_{(3-518)}$=1,99, p>.05). In other words, problem solving skills of the university students in terms of field variable show no significant difference according to the university they study.

Conclusions

According to the research findings, it has been found that, among the problem solving inventory sub-dimensions, there are significant differences between the hasty approach, avoider approach and self-confident approach point averages of the students of Epoka and Selcuk University; there is no significant difference between the point averages of thinking approach, evaluator approach and planned approach. It has been seen that students of Epoka University have more positive problem solving skills than the students of Selcuk University in terms of hasty approach, avoider approach and self-confident approach. It can be said that the difference between the problem solving skills of the students of Epoka and Selcuk University results from the cultural differences between the two countries. According to Kağıtçıbaşı (1990), family and community life are effective in Turkish culture: "dependency" functions as a desired feature rather than individualism and independency. Likaj (2008) says that Turkish youth cares about communal norms so much and their relation with their families are so close; but Albanian youth cares about the values that show individualism mostly. It is thought that the fact that the students of Selcuk University tend to dependant life more is a factor that affects their problem solving skills. In addition, it is thought that this difference is also related to socio-economic level. Since there are studies (Kasap, 1997; Bilge and Arslan, 2000; Terzi, 2003) showing that problem solving skills of the individuals increase while the socio-economic level rises. Also in the study of Kasap (1997), it has been found that the students whose socio-economic level is high improve a more positive problem solving approach. In the study of Terzi (2003), interpersonal problem solving skills of the students with high socio-economic level are higher than the students with low or medium socio-economic levels. In addition, Bilge and Arslan (2000) found that problem solving skills of the university students have been evaluated more positively as the monthly income of their family rises. In his study Likaj (2008), found that there is a small difference between the socio-economic levels of the families of Albanian and Turkish youth and this situation is in favour of Albanian youth. If it is thought that the socio-economic situation of the students of Epoka University is higher than the students of Selcuk University, this case can be evaluated as a factor affecting the problem solving skill positively. Education level of family is also evaluated as another factor effecting problem solving skill of the individual. In the study of Saygılı (2000), significant relationship between the education levels of parents and problem solving skill perception of the students is observed. In a study of Eroğlu (2001), the result that education levels of parents are effective for students to obtain skills and habits that improve their problem solving skills has been

obtained. In his study Likaj (2008), found that generally Turkish parents are primary school, secondary school and high-school graduates while Albanian parents are high-school, university graduate or postgraduates. When all of these are taken into account, it can be said that socio-economic level, education level of family and cultural differences are effective in the situation that the students of Epoka University show more positive problem solving approach than the students of Selcuk University in terms of hasty, avoider and self-confident approach.

When the findings are analysed, it is seen that no significant difference has been found between the problem solving inventory total points of the students of Epoka and Selcuk University in terms of gender and field of study variables, but significant difference has been found in terms of age variable. Problem solving skill is increasing as the age is getting higher. It is seen that this difference is in favour of 20-22 and 23-25 age groups. Contrary to the findings obtained in that study, in a study carried out by Korkut (2002), it is understood that gender makes a significant difference in perception of problem solving skills. That difference can result from the fact that Korkut (2002) realised that study with high-school students. It can be said that university students in both countries give more importance to gender equality than the high-school students. It is thought that the difference rising in terms of age variable in problem solving inventory total points results from the fact that with the advancing age, experiences of the students increase, their problem perception changes and they could find different solution ways. In some researches, significant differences are observed between age variable and problem solving skill. Güler (2006) has detected that there is a significant difference between age variable and problem solving skill. In a study carried out by Nacar (2010), Nacar analysed problem solving skills between 20-30, 31-40, 41-50 and over 50 age groups, and found that the result is in favour of 41-50 and over 50 ages. That research results support our findings. However, Bozkurt, Serin and Erman (2004); Tavlı (2009) and Özğül (2009) couldn't reach a significant difference in the perceptions of problem solving skill in terms of age variable in their studies. There are also some studies supporting our findings that there is no significant difference in problem solving inventory total points in terms of field of study variable. In a study carried out by Yüksel (2008), Yüksel has reached a conclusion that there is no significant difference in problem solving skills in terms of field of study variable. Although the students in each country study in different fields, it can be said that they gain problem solving skill. However, in their studies, Taylan (1990); Genç and Kalafat (2007); Nacar (2010) has determined a significant difference in problem solving skills in terms of field of study variable.

According to the results obtained from the research, it has been seen that the students of Epoka University show more positive problem solving approach than the students of Selcuk University in terms of hasty, avoider and self-confident approach. It is found that problem solving total points don't show a significant difference according to gender and field of study variable; but show a significant difference in terms of *age* variable. According to that, problem solving skill is improved as the age is increasing.

The following suggestions can be made in line with the research results;

(1) Information works should be done for students studying in Selcuk University to learn problem solving process and activities should be programmed.
(2) Problem solving skill improvement work in students should be started in the first-grade, instructors should help the students to solve the problems they meet in the lessons, and even improve their problem solving skills creating problem situations.

(3) Problem solving skill between two countries can be also be searched in terms of demographical features such as socio-economic level. Similar researches intended to different age groups between two countries can also be done.
(4) Similar comparative researches can also be done between different countries.

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