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Hüseyin Gül

Kocaeli University

hgul@kocaeli.edu.tr

Kocaeli-Turkey

**THE ANALYSIS OF THE HIGHER EDUCATION STUDENTS' LEVELS OF PERSONAL
INDECISIVENESS BEHAVIOUR**

ABSTRACT

In this analysis, it has been studied whether there is a significant variance between the levels of personal indecisiveness behaviour of the higher education students and their gender, type of education and age groups. The findings have been maintained by analysing the data received from 4.746 students using the personal decision scale developed by Bacanlı (2005). Cronbach's α value of the study was found to be .89. In the study, the differences between female and male students in personal indecisiveness were found significant in favour of female students. No significant variation was seen in terms of education type -however, a significant variation was found in favour of the younger age groups among age groups. It was emphasized that certain precautions to improve the decision-making skills, increase their self-confidence, and provide opportunities for their self-realisation should be taken.

Keywords: Indecisiveness, Decision-Making, Personal Indecisiveness, Decision-Making Skills, Level of Indecisiveness,

**YÜKSEKÖĞRETİM ÖĞRENCİLERİNİN KİŞİSEL KARARSIZLIK DAVRANIŞI
DÜZEYLERİNİN İNCELENMESİ**

ÖZET

Bu araştırmada yükseköğretimde öğrenim gören öğrencilerin kişisel kararsızlık davranışı düzeyi boyutları ile onların cinsiyet, öğretim türü ve yaş grupları arasında anlamlı bir farklılığın bulunup bulunmadığı araştırılmıştır. Bulgular, Bacanlı (2005) tarafından geliştirilen kişisel karar ölçeği ile 4.746 öğrenciden alınan veriler analiz edilerek elde edilmiştir. Araştırmanın Cronbach's α değeri .89 bulunmuştur. Araştırmada kadın öğrencilerle erkek öğrencilerin kişisel kararsızlık düzeyleri arasındaki farklılık kadın öğrenciler lehine anlamlı bulunmuştur. Öğrenim türü bakımından anlamlı farklılık görülmemiş, bununla birlikte yaş grupları arasında küçük yaş grupları lehine anlamlı farklılık bulunmuştur. Öğrencilerin karar verme becerilerini geliştirici ve özgüveni artırıcı, kendini gerçekleştirmeye fırsat ve imkân sağlayıcı önlemlerin alınması gerektiği vurgulanmıştır.

Anahtar Kelimeler: Kararsızlık, Karar Verme, Kişisel Kararsızlık, Karar Verme Becerileri, Kararsızlık Düzeyi

1. INTRODUCTION (GİRİŞ)

Decision making is either the ability; the process to make a choice among multiple options by making possible calculations in the mental process, or the method used to serve to this purpose (Budak, 2000). Choosing between different options requires the ability to decide. The decision also brings about responsibilities. Individuals are only able to carry on with the current conditions as a result of several decisions they have taken in their past. Future success, happiness and unhappiness are all determined by the decisions made in the present. Undoubtedly, as Tiryaki (1997) suggests, the new problems in a society that are caused by the developing technology, the adoption of democracy as a lifestyle and the wish to live a happy life are all factors that lead the individuals to take sound decisions.

The act of decision-making is a process that includes the activities starting when a decision related to a situation must be taken and ending when the individual determines how and when he/she will decide upon facing this situation (Alver, 2005). According to this, an individual in a decision-making process evaluates the situation, analyzing with a specific approach; and turns to his choice with his own will after assessing various options and the cause-and-effect relationships of these options (Ersever, 1996). Kuzgun (1993), on the other hand, suggests that an individual follows one of these strategies: independent, logical, impulsive and indecisiveness, in a decision-making moment. According to Jacobs and Klaczynski (2002), an individual makes his/her decisions, at first, within the framework of his/her social interaction with his/her friends and later based on intellectual, logical and scientific reasons.

The act of decision-making is a problem-solving. A problem is defined as the circumstances that an individual cannot resolve or quit with the reactions one possesses in him/herself (Açıkgöz 2003). Decision making and problem solving skills go through four stages. These are, respectively: the phases of input, process, output and evaluation (Gömleksiz & Kan, 2007). These stages may also be defined in another form as: defining the objective, gathering information, forming the idea, evaluating, deciding and applying (Gökbaş, 2001; Deniz, 2004). According to Gömleksiz and Kan (2007), the hardest stages of the decision-making are the decision's implementation and evaluation, because all the positive and negative consequences of the decision can be seen in these stages.

Decisions made may also prove to be risky. Decisions that minimize the risk and maximize the benefits can be described as the efficient ones. Individuals with developed decision-making skills tend to have a higher potential of development of self-confidence through the power to cope better with the problems faced (Spunt, Rassin & Epstein, 2009). Self-confidence is one's self-assessment and self-valuing with a positive and realistic point of view. An individual's viewing oneself as self-sufficient and awareness of his/her potential decision-making powers help the individual to increase self-belief, to get rid of prejudices, to be in peace with oneself, to control the actions, to be appreciated by him/herself and the social environment. Laird (2005) and Antonio (2004) emphasize that the different experiences of a student; the positive relations he/she forms in especially the different courses he/she attends and meets their peers, are important factors in increasing their academic self-confidence and critical thinking abilities. Lack of self-confidence may lead to the emergence of some cognitive problems in decision-making and one's developing an indecisiveness behaviour (Beckmann, Beckmann & Elliot; 2009). The quality of the status of self-confidence behaviour should

be thought of as a factor that affects the happiness and success of an individual (Rothman, Maldonado & Rothman, 2008).

Indecisiveness refers to hesitation, irregularity, inconsistency and indecisiveness (Alver, 2005). There are many factors that prevent decision-making. In general, not being able to fully understand the aims, lack of information, time constraints, physical and mental diseases, hasty character, being unable to evaluate the options correctly may cause indecisiveness. Lack of self-confidence, being afraid of the cost, avoiding responsibility, being unable to say 'no', hesitation caused by the possible social pressure may each be a behaviour learned from family. Indecisiveness is portrayed as a mono-dimensional concept that shows continuity from certain to uncertain or from uncertain to certain in the present-day studies (Kuzgun & Bacanlı, 2005). Researches related to indecisiveness started to be made after 1960's. These researchers studied either career indecisiveness or personal indecisiveness. Career indecisiveness is defined as the situation that individuals who haven't decided on their careers go through. Career indecisiveness results from the individual are not fulfilling his/her professional development tasks related to the period he/she is in. Personal indecisiveness, on the other hand, is a continuous state of indecisiveness based on one's character traits (Kuzgun & Bacanlı, 2005). The first scale on indecisiveness in Turkey was developed by Bacanlı (Bacanlı, 1999; Bacanlı, 2000).

2. RESEARCH SIGNIFICANCE (ÇALIŞMANIN ÖNEMİ)

Education must take into consideration when preparing an individual for the future that he/she is going to belong to an organization in his/her future working life. His being able to efficiently carry out his tasks in the organization is closely related to the quality of the education he/she has received before the service. The higher education institutions are responsible for providing the convenient, preparatory educational atmosphere for their most basic output, the graduates, in a way as for him/her to be able to undertake duties and responsibilities in various managing positions in an organization. This way, as Gümüşeli (2002) suggests, the individuals will not be constantly dependent on their superiors in their work life, but will be able to solve their problems by making decisions on their own.

Several factors such as family, school, age, education, health, cognitive skills and character may be influential in decision-making. It is believed that through analysing and studying how influential they are; the executives may be able to create educational atmospheres that will help the higher-education students in developing their decision-making skills. Thus it was considered necessary to study on what level the higher education institutions give their students the basic information on problem-solving and decision-making, what kind of efforts they spare to provoke the students to use their personal creativity and how much they enabled the students to gain self-confidence and autonomy during their education at that institution. In this study, it has been studied whether there is a significant variable between the levels of personal indecisiveness behaviour of the higher education students and their gender, type of education and age groups.

3. METHOD (YÖNTEM)

The pattern of this research is description and survey. The levels of personal indecisiveness behaviour of the higher education students was taken as the dependent variable, whereas their gender, type of education and age groups which are considered influential

factors on the levels of their indecisiveness were taken as the independent variables.

3.1. Scope and Sampling (Evren ve Örneklem)

The scope of the research consists of the 57.340 students receiving education in one of Kocaeli University's 11 faculties, 6 higher education schools, 19 vocational higher education schools and 3 institutes in 2009-2010 academic year. The sampling of the research includes 4.746 students. Simple random sampling method was used while choosing the sampling. In this method, all the subjects have an equal possibility of being chosen. The choosing of a subject does not, in any way, influence the choosing of another (Balcı, 2001; Büyüköztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2008).

3.2. Data Collection Means (Veri Toplama Araçları)

"Personal Decision Scale" (PDS) developed by Bacanlı (2005) was used as means of data collection (Kuzgun & Bacanlı; 2005). The following options were given to the subjects in the scale for evaluation: 'completely wrong / somewhat wrong / somewhat correct / correct / completely correct'. PDS was projected in such a style that it could be sent to experts through the ASP programming language, and also to students via the web of Kocaeli University. Its style also made it possible for the researchers to download it to their computers through their personal code and in Excel format. After the questions were harmonized, the questionnaire was applied.

3.3. Validity and Reliability (Geçerlik ve Güvenirlik)

Research on the validity and reliability was made by Bacanlı (2005) on 367 subjects and as factor structure, he found out 18 articles with two dimensions. Factor load values of the articles were to be within the interval of .45 and .76. Both dimensions were composed of 9 articles. It was found out that sum of factor load values of both dimensions accounts for 43.04 % of variance. If this percentage is over 40%, it is acceptable (Büyüköztürk, 2008; Kline, 1994). We defined the first dimension of the scale as "inquisitive indecisiveness", and the second one as "hasty indecisiveness". Cronbach's α reliability co-efficient of the scale was 0.88 for the first dimension, .85 for the second dimension, totally, it was .90 (Bacanlı, 2005).

3.4. Analysis of the Data (Verilerin Analizi)

The data collected from the scale has been evaluated by giving 1 to 'completely wrong', 2 to 'somewhat wrong', 3 to 'somewhat correct', 4 to 'correct' and 5 to 'completely correct'. The data gathered was tested to find out whether there is variance in terms of overall indecisiveness levels as well as inquisitive indecisiveness and hasty indecisiveness, according to gender, education type and age groups. Applying the t-test in gender and education type, which are the dual groups while using the f-test in age groups which is the triple one and transferring the results into the tables in a way that can make possible some solutions suitable for the purpose. It is convenient to use the T-Test in cases where the dependent variable groups are two, and the F-Test where they are more than two (Gren, Salkind & Akey, 2000). In case of finding a significant variance in the results of the F-Test; the LSD test has been applied within the .95 confidence interval. In qualifying the points maintained in the scale, the 0.8 interval was used as the quotient. In the evaluation for the inquisitive and the hasty indecisiveness, average points defined for the 9 statements for each group were maintained. The average point

intervals were found as: 09,00-16,19 for 'completely wrong', 16,20-23,39 for 'somewhat wrong', 23,40-30,59 for 'somewhat correct', 30,60-37,79 for 'correct' and 37,80-45,00 for 'completely correct'. In total, however, the intervals were defined as 18,00-32,39 for 'completely wrong', 32,40-46,79 for 'somewhat wrong', 46,80-61,19 for 'somewhat correct', 61,20-75,59 for 'correct' and 75,60-90,00 for 'completely correct'. So, an increase in one group's average of points should also be interpreted as an increase in that person's level of indecisiveness. On the other hand, a decrease in one group's average of points should be interpreted as a decrease in that person's level of indecisiveness. The characterization was done accordingly.

4. RESULTS (BULGULAR)

Whether there is a significant variance between the points that the higher education students got in the dimensions of inquisitive, hasty and total personal indecisiveness behaviour according to the gender was examined with the t-test.

Table 1. The results of the t-test on the levels of personal indecisiveness behaviours of the higher education students according to the gender

(Tablo 1. Yükseköğretimde öğrencilerin kişisel kararsızlık davranışı düzeylerinin cinsiyete göre yapılan t-testi sonuçları)

Scale Type	Sex	N	\bar{X}	SD	Significant Level	
					t	p
Inquisitive	Female	1823	22,70	7,95	10,66	.00**
	Male	2923	20,24	7,54		
Hasty	Female	1823	19,84	7,34	4,69	.00**
	Male	2923	18,82	7,23		
Total	Female	1823	42,54	13,98	8,42	.00**
	Male	2923	39,07	13,69		

*p<.05; **p<.01; df =4744

When the data shown in Table 1 as a result of the t-test on the levels of personal indecisiveness behaviours of the higher education students according to the gender were examined, the followings were found:

- Personal indecisiveness shows significant variance according to the gender variable in terms of the inquisitive dimension of the scale. In the inquisitive dimension the scale's personal indecisiveness level of females is ($\bar{X}=22,70$) while that of males is ($\bar{X}=20,24$). Upon comparing the two group's average points, it was maintained that there is a significant variance in favour of females on the p<.05 level (p=.00). Thus it was concluded that in terms of inquisitive dimension the female students have a higher level of personal indecisiveness compared to that of males.
- In the hasty dimension of the scale, level of personal indecisiveness shows significant variance according to gender. In the hasty dimension the scale's level of personal indecisiveness of females is ($\bar{X}=19,84$) while that of men is ($\bar{X}=18,82$). Upon comparing the two group's average points, it was maintained that there is a significant variance in favour of females on the p<.05 level (p=.00). According to this, the level of personal indecisiveness of the females is higher compared to the male students.

- In the total dimension of the scale, level of personal indecisiveness shows significant variance according to gender. In the total dimension the scale's level of personal indecisiveness of females is ($\bar{X}=42, 54$) while that of men is ($\bar{X}=39, 07$). Upon comparing the two group's average points, it was maintained that there is a significant variance in favour of females on the $p<.05$ level ($p=.00$). Thus the finding has been maintained that the level of personal indecisiveness of the females is higher compared to the male students. When these three findings maintained are considered altogether, the level of personal indecisiveness of the students show significant variance (in the dimensions of inquisitive, hasty and total) in favour of women when compared according to gender. Thus being a male or a female should be seen as a variable of their personal indecisiveness. Whether there is a significant variance between the points that the higher education students got in the dimensions of inquisitive, hasty and total personal indecisiveness behaviour according to the education type was examined with the t-test.

Table 2. The results of the t-test on the levels of personal indecisiveness behaviours of the higher education students according to the education type

(Tablo 2. Yükseköğretimde öğrencilerin kişisel kararsızlık davranışı düzeylerinin öğretim türüne göre yapılan t-testi sonuçları)

Scale Type	Education Type	N	\bar{X}	SD	Significant Level	
					T	p
Inquisitive	Day Classes	2753	21,34	7,85	1,64	.10
	Evening Classes	1983	20,97	7,71		
Hasty	Day Classes	2763	19,33	7,30	1,32	.18
	Evening Classes	1983	19,05	7,26		
Total	Day Classes	2763	40,68	13,99	1,61	.10
	Evening Classes	1983	40,02	13,77		

* $p<.05$; df =4744

As seen in Table 2, no findings of variance was maintained in the students' level of personal indecisiveness in the dimensions of inquisitive, hasty and total according to their education type. According to this, it is clear that whether the students attend the day or the evening classes is not a variable of their personal indecisiveness. The variance analysis was applied in order to determine whether there is a variance between the students' level of personal indecisiveness in the dimensions of inquisitive, hasty and total according to their age groups.

As seen in Table 3, it was found that there is a variance between the levels of the students' level of personal indecisiveness in the dimensions of inquisitive, hasty and total according to their age groups. This significant variance reveals itself as: ($F=24, 14$; $p=.00$) $p<.05$ in the inquisitive dimension, as ($F=18, 46$; $p=.00$) $p<.05$ in the hasty dimension and as ($F=24, 98$; $p=.00$) $p<.05$ in the total dimension. LSD test was used in order to determine which groups the variance was between.

Table 3. The results of the variance analysis on the levels of personal indecisiveness behaviours of the higher education students according to their age groups

(Tablo 3. Yükseköğretimde öğrencilerin yaş gruplarına göre kişisel kararsızlık davranışı düzeylerinin varyans analizi sonuçları)

Scale Type	Source of Variance	Sum of Squares	df	Mean Square	F	p
Inquisitive	Between Groups	2906,32	2	1453,16	24,14	.00**
	Within Groups	285407,18	4743	60,17		
	Total	288313,51	4745			
Hasty	Between Groups	1950,10	2	975,05	18,46	.00**
	Within Groups	250305,08	4743	52,77		
	Total	252255,19	4745			
Total	Between Groups	9567,62	2	4783,81	24,98	.00**
	Within Groups	908144,12	4743	191,47		
	Total	917711,74	4745			

*p<.05; **p<.01

Table 4. The results of the LSD test carried out between the average values found in the higher education students' level of indecisiveness according to the age groups

(Tablo 4. Yükseköğretimde öğrencilerin kişisel kararsızlık davranışı düzeylerinin yaş gruplarına göre bulunan ortalama değerleri arasında yapılan LSD testi sonuçları)

Scale Type	Age Groups	N	\bar{x}	SD	Significant Level (p)		
					17-19	20-22	23 and above
Inquisitive	17-19	866	22,20	7,85		.00**	.00**
	20-22	2717	21,41	7,71	.00**		.00**
	23 and above	1163	19,91	7,65	.00**	.00**	
Hasty	17-19	866	19,88	7,57			.00**
	20-22	2717	19,47	7,34			.00**
	23 and above	1163	18,12	6,82	.00**	.00**	
Total	17-19	866	42,08	14,22		.02*	.00**
	20-22	2717	40,88	13,92	.02*		.00**
	23 and above	1163	38,04	13,34	.00**	.00**	

*p<.05; **p<.01

Upon examining the values in Table 4, the followings have been maintained as a result of the comparisons of the LSD test carried out between the average values found in the higher education students' level of indecisiveness according to the age groups:

- In the Inquisitive Dimension:
 - o Among the 17-19, 20-22 and 23 and above age groups; a significant variance in favour of the 17-19 age group can be observed in the inquisitive dimension.
 - o Among the 20-22 and 23 and above age groups; there can be found a significant variance in favour of the 20-22 age group in the inquisitive dimension.

- In the Hasty Dimension:

Among the 17-19, 20-22 and 23 and above age groups; a variance in favour of the 17-19 and 20-22 age groups exists in the hasty dimension. However, there is no significant variance between the 17-19 and 20-22 age groups.

According to this, we can say that there is no significant variance between the levels of personal indecisiveness of the higher education students in the 17-19 and 20-22 age groups in the hasty dimension although as they reach the 23 and above age group their hasty personal indecisiveness decreases related to this.

- In the Total Dimension:
 - o Among the 17-19, 20-22 and 23 and above age groups; a significant variance in favour of the 17-19 age group can be observed in the total dimension.
 - o Among the 20-22 and 23 and above age groups; there can be found a significant variance in favour of the 17-19 age group in the inquisitive dimension.
 - o According to the data collected in the total dimension, we can conclude that as the age group the higher education students belong to get younger; their level of personal indecisiveness increases and withstanding their level of personal indecisiveness decreases as their age group gets older.

5. CONCLUSION AND DISCUSSION (SONUÇ VE TARTIŞMA)

When the levels of personal indecisiveness behaviour of the higher education students are examined according to their gender; the indecisiveness behaviour was found to be more in favour of the female students in the dimensions of inquisitive, hasty and total. Thus was seen that gender is a variable of the indecisiveness behaviour. Similar findings have been reached in also Alver's (2005) research. The fact that females have a higher degree of indecisiveness compared to males can be related to the traditional and patriarchal family structure of the society and we can say that such a structure starts in early childhood and goes on into the higher education period. Parents, by interfering too much in the child's data collection, gaining experience and motivation phases in a decision-making process, are behaving in an over-protective way regarding their children's decision-making and hindering them from self-exploration (Kesici, Hamarta & Arslan, 2008; Kinnier, Brigman & Noble, 2001). The fact that females are more likely to possess indecisiveness may also be related to the fact that women generally tend to be more inquisitive and think more detailed in order to be able to make a healthy and right decision. Aysan (1998) stated that female students' attitudes on problem solving and seeking social support are much more prevalent than those of males, however the male students have less tendency to blame themselves. In some other researches with a similar topic (Avşaroğlu, 2007; Deniz, 2002; Köse, 2002; Sinangil, 1992; Taşdelen, 2002; Yüksel-Şahin, 2002), there has been found no significant variance between the gender variable and decision-making. Notwithstanding, with these results, Osipow & Reed (1985) found that men are more indecisive compared to women in a decision-making situation.

It was found that the education type the students belong to was not a cause for variance in the inquisitive, hasty and total dimensions. According to this, whether a student attends the day or the evening classes shouldn't be seen as a variable of their personal indecisiveness. The fact that there is no big difference between the points they need to get from the university entrance exam or the amount of fees they have to pay can be a reason for this. On the other hand, Morales, Ferrari & Cohen (2008), found a relationship between the people who avoid abeyance in their decisions and the people who live more active at nights. According to this, a night person usually delays or lingers their decisions.

It has been maintained that the higher education students' level of indecisiveness behaviour shows a significant variance in the inquisitive, hasty and total dimensions according to age groups. The results show that as the age group the students are in get younger, their level of personal indecisiveness increases -and similarly, as the age group gets older, the level of personal indecisiveness decreases in the dimensions of inquisitive, hasty and total. According to these findings, the age group should be considered a variable of the personal indecisiveness. Sinangil's (1992) and Tiryaki's (1997) researches support these results. Ersever (1996) emphasizes that his ability to make appropriate and efficient decisions should be improved for an individual to achieve self-realization and satisfaction in his/her life. From the early adulthood period to the late adulthood period, the growing age affects the two-directional communication, the access to sources of information and the interactive cognitive development, thus an individual's capability of making a decision also increases (Peters, Hess, Vastfjall & Auman; 2007). When we look at the related literature, we see that as the individuals grow more mature, they maintain healthier information related to themselves and their work life (Kinnier, Brigman & Noble, 2001; Nichols, 2006). But proofs also show that the young adult individuals' ability to make consistent decisions and decide confidently increases after a certain amount of expertise information (Kim & Hasher; 2005). Even the mentally challenged individuals were seen to develop consistent decision making and confidence gaining behaviour at the end of the decision making skills programmes (Suto, Clare, Holland & Watson, 2005). However, the adolescents' level of taking risks and being influenced by their peers were higher compared to the adults (Gardner & Steinberg, 2005). There was found a positive relationship between the socio-economical statuses, cognitive skills and decision making styles (Bruin, Parker & Fischhoff, 2007). It was seen that there is a relation between the Intelligence Quotient and the abstract thinking ability in decision-making, and that individuals who lack sufficient abstract thinking ability have more difficulty in making a decision (Kambam & Thompson, 2009). The difficulty in decision-making may be caused by situational or personal anxiety and a bad decision may be related to a character structure vulnerable to gambling, alcohol consumption, not being able to control oneself, tendency to commit a crime (Campagna & Curtis, 2007; Patrick, Blair & Maggs; 2008).

The individuals who are able to make efficient decisions usually have a healthy character structure and they are the people who can act logically serving to the purpose, use their time efficiently, choose the best option among many others without getting in a rush in their actions, evaluate the data he/she acquires as a result of his/her choices, be objective, search for new information and make plans related to his/her decision (Yüksel-Şahin, 2002).

Generally speaking, the higher education students' level of indecisiveness is not extremely high but they do lack a few things about problem solving and decision making skills. So, plans aiming at developing the students' capability of making decisions and solving problems as well as increasing their self-confidence should be implemented. The success of the students in the responsibilities undertaken by them in a research project, observation or experiment assigned to them by their professors can be an important factor in increasing the self-confidence. Individual's potential self-confidence should be strengthened by removing the effects of any negative factors remaining from their previous lives. This is why departments of guidance and psychological counselling should be set up in the faculties or departments where sufficient number of experts with

suitable qualifications should be employed to provide guidance and psychological counselling as well as planning and implementing extra-curricular social activities inside and outside the school. Thus, an individual can achieve to gain potential self-confidence and become aware of his/her relevant leadership skills and realize him/herself.

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