The Relations Between Decision Making in
Social Relationships and Decision Making Styles

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Abstract: The research reported in this paper aimed to examine the relationships between decisiveness in social relationships and the decision-making styles of a group of university students and to investigate the contributions of decision-making styles in predicting decisiveness in social relationship (conflict resolution, social relationship selection certainty and ease of social relationship selection). A further aim of the study was to investigate whether there is a difference in the decisiveness in social relationship of university students in relation to gender and academic success. Multi Domain Decision Scale and Decision-Making Questionnaire were administered to 339 university students (165 females and 174 males) in Giresun university. When decision-making styles and decision-making in social relationships are compared, it is seen that there is no significant relationship between vigilance and ease of social relationship selection. However, there is a positive significant correlation between conflict resolution and social relationship selection certainty, although it is at a low level. The findings obtained in this research indicate that buckpassing, procrastination and hypervigilance decision-making styles adversely affect decision-making in social relationships. The findings obtained in the study show that for a higher level of relationship there is a negative correlation between hypervigilance and conflict resolution, although it is at a low level. The findings of the study show that decision-making in social relationship does not differ according to gender. When the ease of social relationship selection is predicted with decision-making styles, procrastination is defined as the most significant predictor in negative sense, although it is at a low level. The negative predictor of social relationship selection certainty is buckpassing and its positive predictor is vigilance. Once conflict resolution is predicted with decision-making styles, it is seen that vigilance is a positive predictor and hypervigilance and procrastination are negative predictors. Decision-making in conflict resolution is predicted by hypervigilance at the most significant level in negative sense. Some suggestions were presented to consultants from the findings obtained from the study in order to enhance decision making in decision-making styles and decision-making in social relationships.

Key words: Decision-making in social relationship · Decision-making styles · University students

INTRODUCTION

People select various decision making approaches in various situations. For instance, while they choose heuristic ways such as habits and values under the pressure of time in terms of decision making, they may make rational decisions about economy? A variety of research has been carried out to discover which factors are more effective in decision making [1]. Some of the researchers [2,3] think that cognitive factors are effective, some [4,5] consider that emotional factors are effective in decision making. On the other hand some researchers [6-9] think that social and individual factors are effective in decision making.

Along with the cognitive, emotional and social dimensions of decision making, there are two major types

which are individual decision making and decision making in organisations [10]. The latter is more related to economy and management and individual decision making is related to psychology. Various decision making theories, models and approaches have been developed [11]. Rational choice models define decision making as the capacity to choose the best from the alternatives [12]. Theories of reasoning analyze how individuals make their decision without rationalism [13]. Process models of decision-making indicate that effective decision making should be shaped in a sequence as follows: recognition, formulation, alternative generation, information search, judgement or choice and action and feedback [14]. Cognitive-behavioral models of decision-making point out that the factors such as self-awareness, self-regulation, problem solving, motivation influence decision making

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[15-18]. On the other hand, reasoned choice models analyze vigilant decision making and how the individuals make their decisions in conflict resolution [19,20]. The Heuristic approach to decision-making asserts that habit, stereotypic choice, use of anchoring or adjustment, moral values and emotions are effective in decision making [21-24]. According to Haraburda [25], the conflict model of decision making developed by Janis and Mann [26] which belongs with reasoned choice models and normative-affective model of decision making developed by Etzioni [23] which can be placed amongst the heuristic approach to decision-making are related to decision making in social relationships.

In the conflict model of decision making of Janis and Mann [19], the conflict between the individual and others is analyzed. The information leading to conflict necessitates change. If the individual does no make any change in accordance with the information, this situation is defined as inertia. When the change made related to information leading to indecisiveness does not cause any discomfort, this situation is named as unconflicted change. The situation in which the individuals that cannot find out a resolution mean transfer the responsibility of decision making to somebody else is defined as defensive avoidance. When the individual thinks that he or she does not have adequate time, he or she moves to the state of hypervigilance. In the state of hypervigilance, the individual may make decisions that may harm them. The conflict model of decision making indicates that a medium level of anxiety may encourage the vigilance process. A high level of anxiety leads to defensive avoidance and hypervigilance. On the other hand, low level of anxiety may cause to unconflicted loyalty or change. Vigilance is defined as an ideal method in the management of essential decisions.

Etzioni's [27] Model of Normative-Emotional Decision Making is a decision making process in social relationships in which the emotions and values are at the forefront. Etzioni [27] suggests that most decisions are decided, or strongly influenced, by values and emotions and that people make judgments and decisions within a social context that is subjective and normative/affective in nature. Etzioni's [27] Model of Normative-Emotional Decision Making emphasizes the effects of values and rational experimental knowledge in the process of decision making. As values affect an individual in the case of decision making; rational, experimental knowledge also affects the individual. In the process of decision making, normative-emotionalism (N/E) is at one end, Logical-Experimental (L/E) is at another.

Haraburda [8], defines a special decision making state about interpersonal relations as 'decisiveness in social relationship' by making use of Etzioni's [27] Model of Normative-Emotional Decision Making as opposed to Janis and Mann's [19] Conflict Theory of Decision Making. According to Haraburda [8], how we react when we are against the ideas, desires and demands of others is about conflict resolution in social relations. Social relationship selection certainty is concerned with addressing one's belief about being right or wrong when? choosing someone as a friend. Social relationship selection certainty selection is the ease and length of time involved with choosing a friend. Rapidness in establishing relationship with others and in decision making is defined as the ease of social relationship [8].

One factor affecting decision making is the decision making style [11]. Various decision making styles were determined by researchers, for instance, Kuzgun [28] defines decision making peculiarities such as logical, compulsive, dependent versus indecisiveness. Frost and Shows [29] describe indecisiveness as a compulsive symptom. Scott and Bruce [30] assert that there are rational, intuitive, dependent, avoidant and spontaneous decision-making styles. Mann *et al.* [31] suggest four decision making styles: vigilance, panic, cop-out and complacency. Bacanli [32] proposes that there are exploratory and impetuous indecisiveness styles. Nygren [33] defines logical and emotional decision strategies. Mann *et al.* [34] suggest vigilance, buckpassing, procrastination and hypervigilance decision making styles. Haraburda [25] defines decision making styles in social relations as conflict resolution, social relationship selection certainty and ease of social relationship selection.

There has been a variety of research on how decision-making styles affect decision making. For example, Burnett *et al.* [35] used vigilance, hypervigilance and defensive avoidance to test the competence of students' course planning and satisfaction. The study found a significant positive relationship between decision vigilance and course planning and satisfaction. Furthermore, Fletcher and Wearing [36] suggest that decision vigilance is associated with detailed planning, while hypervigilance and defensive avoidance are associated with superficial planning and post-decision regret.

Besides the decision making styles, the characteristics of a person are also important in decision making. A series of research studies has highlighted that indecisive individuals also show high levels of

ambivalence, anxiety and frustration, low personal identity, poor self-esteem, external locus of control [26,37-39]. According to Mann *et al.*, [34] hypervigilance is associated with severe emotional stress. Stress levels influenced which decision-making behaviour associated with low levels of stress, whereas nonadaptive decision-making behaviors were related to high levels of stress [40].

According to Gilligan [41] due to social factors and according to Craske [42] due to biological and genetic factors and there is research that asserts that women are more indecisive than men [29,43,44]. On the other hand some research suggests that men are more indecisive than women [45-47]. However, there is a large amount of research which suggests that there is not an important relationship between decision making styles and indecisiveness and gender [35,48,49]. However, there are several research studies investigating the relationship between indecisiveness and academic success. Güçray [50] asserts that academic self respect is a negative correlation between academic self esteem and hypervigilance.

The aim in conducting this research was to determine the relationships between decision making in social relationships and decision-making styles. The following questions were to be answered in this study:

- Is there a significant correlation between university students' decision-making in social relationships and decision-making styles?
- Is there a difference in the decision-making in social relationship of university students based on gender and academic success?
- To what extent do university students' decision-making styles contribute to their decision- making in social relationships?

METHODS

Participants: The sample set of the research was taken from several faculties of Giresun University, Giresun, Turkey using the random set sampling method. The participants were 339 students (165 female, 174 male) who volunteered for the study. The mean age of the participants was 22.93 years with a standard deviation of 23.78 years.

Instruments: *Decision-Making Questionnaire (DMQ)* The Melbourne Decision-Making Questionnaire, developed by Mann, *et al.* [34] based on Flinder's

Decision-Making Scale I-II. Mann *et al.* [35] which used the DMQ in cross-cultural research that included six countries with the aim of comparing decision self-esteem and the decision-making styles of university students. The DMQ-I is a scale that aims to determine the decision self-esteem level and consists of 6 items. Grading is achieved by giving numerical values to items according to the answers, as follows: *true for me*: score 2, *sometimes true*: score 1, *not true for me*: score 0. Higher scores are the indicators of a higher level of decision self-esteem. In this cross-cultural research, Cronbach alpha coefficient of the scale was found to be 0.74. The DMQ-II consists of 22 items and measures decision-making styles. The scale has 4 subscales, namely vigilance (6 items), buck passing (6 items), procrastination (5 items) and hypervigilance (5 items) decision-making styles. This scale has the same choice of responses and is graded in the same way as the DMQ-I. Reliability coefficients of the subscales were calculated as follows: for vigilance.80, buck passing 0.87, procrastination 0.81 and hypervigilance 0.74 [35]. The adaptations of the DMQ-I and DMQ-II to Turkish were performed by Deniz [51]. The reliability coefficients obtained from subscales calculated by the test-retest method varied between r=0.68 and r=0.87. The Cronbach alpha coefficients of the DMQ I and DMQ-II varied between alpha=0.65 and alpha=0.80. A scale validity similar to those of the DMQ-I and DMQ-II was performed with the Decision Strategy Scale (DSQ) developed by Kuzgun [28]. Significant relationships between r=0.15 and r=0.71 were found between correlation coefficients of the DMQ I-II and DSQ [51]. DMQ – II was used in this study.

Multi Domain Decisiveness Scale (MDDS-TR): The Multi Domain Decisiveness Scale (MDDS) was developed by Haraburda [25]. MDSS consists of two parts: general decision-making (MDDS-I) and social relationship in decision making (conflict resolution, social relationship selection certainty, ease of social relationship selection subscales) (MDDS-II). The answers to each item in each part graded through a 6-score likert scale ranging from 1 (I am completely against) to 6 (I completely agree). The first part consists of four items related with decision making in general. For example in general decision making, there are questions such as the 4th question; "After making a decision, I generally act in line with this decision". Decisiveness is evaluated with three special areas in the second part. This part consists of three subscales: conflict resolution, social relationship selection certainty and ease of social relationship. In conflict resolution, for instance, there are questions such as the

5th question; "After quarrelling with somebody, I am sure that I know how to improve the situation". In social relationship selection certainty, there are questions such as the 18th question; "I am sure of my ability to choose a friend". In ease of social relationship there are questions such as the 7th one; "I know exactly what I am looking for in a friend". After adding the scores obtained from each scale, a total score is attained. Higher scores obtained from scale demonstrate the level of decisiveness. MDDS was adapted to Turkish for this study and this scale was called MDDS-TR.

During adaptation of the scale to Turkish, after translation studies, a confirmatory factor analysis (CFA) was carried out. According to the results of the CFA of the MDDS, two items (9 and 21)were found to produce low load values in their factors and to be in high relationship with other items, were removed from the scale and the analysis was repeated. The results of the CFA showed that the 20 item scale was coherent with the 4 factor original structure and that it was compatible with the data collected. The Cronbach Alpha internal consistency coefficient was 0.86 for the overall scale, 0.64 for general decisiveness subscale, 0.62 for conflict solving subscale, 0.73 for subscale in the certainty choice of social relations, 0.56 for the subscale in the easiness choice of social relations. The corrected item-total correlations of the MDDS items were between 0.45 and 0.12 for item-factor, between 0.17 and 0.48 for item-scale. The results of the t tests that were applied the find the differences between the average item scores of the top 27% and the bottom 27% groups showed that all the differences were significant in favor of the top 27% group. In this study, social relationship in decision making subscales (MDDS-TR-II) of MDDS-TR was used.

RESULTS

The findings are reported by grouping them in the order of the research questions.
Correlations Among Decision-Making in Social Relationship and Decision-Making Styles: Pearson product–moment correlation coefficients were calculated for the subscale scores of DMQ-II and MDDS-TR. An important relation was not found only between ease of social relationship selection and vigilance in correlation analysis carried out ($p > 0.01$). In addition, there are positive significant relations which are at low level between vigilance and conflict resolution and social relationship selection certainty and decision-making in social relationship (Total MDDS-TR-II) ($p < 0.01$). There

are negative significant relations which are at low level between buckpassing, procrastination and hypervigilance and conflict resolution, social relationship selection certainty, ease of social relationship selection and decision-making in social relationship (Total MDDS-TR-II) ($p < 0.01$). The negative relationship between conflict resolution and hypervigilance draws attention as the biggest negative relationship between other decision-making styles and decision-making in social relationship.

Comparison of Decision-Making in Social Relationship Based on Gender and Academic Success Levels: Table 2 demonstrates gender (male-female), academic success levels (weak, middle, high), means and standard deviations of conflict resolution, social relationship selection certainty and ease of social relationship selection subscales of decision making in social relationship scale (MDDS-TR-II).

The analysis of variance (MANOVA) shows that there is no relation between gender and decision-making in conflict resolution ($F1,338 = 0.664$, $p > 0.5$), decision-making in social relationship selection certainty ($F1,338 = 0.664$, $p > 0.05$), decision-making in ease of social relationship selection ($F1,338 = 0.348$, $p > 0.05$) (Table 3). It can be seen in Table 2 that while the average of females in conflict resolution is 23.78, the average of males is 22.93. While the average of the females in social relationship selection certainty is 17.78, the average of males is 17.53. While the average of females in ease of social relationship selection is 25.70, the average of the males is 25.06. In spite of the fact that the averages of males in decision-making in social relationships are higher than the female averages, this difference is not significant. MANOVA demonstrates that there is no relationship between academic success and decision-making in conflict resolution ($F2,337 = 0.230$, $p > 0.5$) and social relationship selection certainty ($F2,337 = 1.356$, $p > 0.05$) (Table 3). It can clearly be seen in Table 2. In decision-making in conflict resolution the average of the people whose academic success is weak is 23.19, the average of those whose academic success is middle is 23.19 and the average of those whose academic success is high is 24.20. This difference which is very close to equality among weak, middle and high averages is not at the adequate level of significance which may lead to differences in decision-making in conflict resolution.

In decision-making in social relationship selection certainty, the average of the people whose academic success is weaker is 17.38, the average of the people whose academic success is middle is 17.52 and the

Table 1: Correlations Between DMQ-II and MDDS-TR Scales

Decision-Making in Social Relationship	Conflict Resolution	Social Relationship Selection Certainty	Ease of Social Relationship Selection	Total MDDS-TR-II
DMQ-II Vigilance	0.183*	0.161*	0.070	0.177*
Buckpassing	-0.240*	-0.193*	-0.142*	-0.241*
Procrastination	-0.289*	-0.182*	-0.242*	-0.293*
Hypervigilance	-0.326*	-0.171*	-0.214*	-0.297*

* $p < 0.01$; n=339; DMQ-II: Decision-Making Questionnaire; MDDS-TR-II: Multi Domain Decisiveness Scale Turkish Adaptation.

Table 2: Mean and Standard Deviations for Decision-Making in Social Relationship

Subscale		Gender		Academic Success Levels		
		Female ($n =165$)	Male ($n =174$)	Weak ($n =42$)	Middle ($n =247$)	High ($n =50$)
Conflict	$M=$	23.78	22.93	23.19	23.19	24.20
Resolution	$SD=$	6.56	6.32	6.32	6.25	7.22
Social Relationship	$M=$	17.78	17.53	17.38	17.52	18.52
Selection Certainty	$SD=$	4.34	4.50	4.30	4.58	3.64
Ease of Social	$M=$	25.70	25.06	24.60	25.12	27.24
Relationship Selection	$SD=$	5.72	5.42	5.68	5.68	4.57

Table 3: The Results of MANOVA for Decision-Making in Social Relationships

Variables	Sum of squares		df	Mean squares	F	Significance
Source of variance		Gender				(1. 338) df
Conflict resolution	27.353		1	27.353	0.664	0.416
Social relationship selection certainty	5.771		1	5.771	0.293	0.588
Ease of social relationship selection	10.646		1	10.646	0.348	0.556
Source of variance		Academic Success				(2. 337) df
Conflict resolution	18.968		2	9.484	0.230	0.794
Social relationship selection certainty	53.373		2	26.686	1.356	0.259
Ease of social relationship selection	231.944		2	115.972	3.791	0.024*
Source of variance		Gender	x	Academic	Success	(2. 337) df
Conflict resolution	47.516		2	23.758	0.577	0.562
Social relationship selection certainty	22.986		2	11.493	0.584	0.558
Ease of social relationship selection	81.450		2	40.725	1.331	0.266

*$p < 0.05$

average of the people whose academic success is high is 18.52. This difference which is close among weak, middle and high academic success averages is not at a level that will lead to a difference in decision-making in social relationship selection certainty.

MANOVA shows that there is a relationship between academic success and decision- making in ease of social relationship selection ($F2,337 = 3.791$, $p < 0.05$), (Table 3). This is obviously seen in Table 2. In decision-making in ease of social relationship selection the average of the people whose academic success is weak is 24.60, the average of the people whose academic success is middle is 25.12 and the average of the people whose academic success is high is 27.24. This difference among the weak,

Table 4: The Results of Hierarchical Multiple Regression Analysis of the Prediction of Decision-Making in Social Relationships from Decision-Making Styles

Dependent Variables	Independent Variables	Model 1β	Model 2β	Model 3β	Model 4β
Ease of Social	Buckpassing	0.021	-	-	-
Relationships	Vigilance	0.026	0.024	-	-
Selection	Procrastination	-0.185**	-0.177**	-0.178**	-0.242*
	Hypervigilance	-0.122***	-0.107***	-0.110***	-
	R²	0.056	0.059	0.061	0.056
	F	6.055*	8.06*	12.019*	21.047*
Social Relationship	Buckpassing	-0.101	-0.115***	-0.169**	-0.193*
Selection Certainty	Vigilance	0.122*	0.124**	0.130**	-
	Procrastination	-0.076	-0.10	-	-
	Hypervigilance	-0.054	-	-	-
	R²	0.051	0.052	0.048	0.034
	F	5.550*	7.197*	9.156*	13.002*
Conflict Resolution	Buckpassing	-0.045	-	-	-
	Vigilance	0.119**	0.122**	-	-
	Procrastination	-0.124***	-0.142**	-0.150**	-
	Hypervigilance	-0.210*	-0.222*	-0.238 *	-0.326*
	R²	0.127	0.128	0.116	0.104
	F	13.247*	17.518*	23.179*	40.111*

* p <0.01; **p <0.05; *** p <0.10

middle and high averages in academic success is in a significance level which leads to a difference in decision-making in ease of social relationship selection.

In the present study, 2 (gender) x 3 (academic success levels) MANOVA revealed insignificant main effects on conflict resolution ($F_{2,337} = 0.577$, $p > 0.05$), social relationship selection certainty ($F_{2,337} = 0.584$, $p > 0.05$) and ease of social relationship selection ($F_{2,337} = 1.331$, $p > 0.05$) (Table 3). The interaction between academic success and gender causes a significant difference in decision-making in social relationships.

The Contributions of Decision-Making Styles in Decision-Making in Social Relationships: Hierarchical multiple regression analyses were used to determine whether decision-making in social relationships (ease of social relationship selection, social relationship selection certainty and conflict resolution,) had an important impact on the prediction of university students' decision-making styles (vigilance, hypervigilance, procrastination, buckpassing) as well as which variables were the most important predictors (Table 4).

Three separate hierarchical multiple regression analyses were carried out by determining buck passing, vigilance, procrastination and hypervigilance as independent variables and ease of social relationship selection, social relationship selection

certainty and conflict resolution as dependent variables. In every hierarchical multiple regression analysis, initially buckpassing, vigilance, procrastination and hypervigilance were determined respectively as independent variables as a block and Model 1 was created. In every hierarchical multiple regression analysis, four different models were created by excluding the smallest ß value.

The results of the hierarchical multiple regression analysis determining ease of social relationship selection as a dependent variable and buckpassing, vigilance, procrastination and hypervigilance as independent variables are given below.

Firstly buckpassing, vigilance, procrastination and hypervigilance were determined as independent variables respectively as a block then multiple regression analysis was carried out and Model 1 was created. The correlation coefficient between buckpassing, vigilance, procrastination and hypervigilance as a block and the predicted variable the ease of social relationship selection is R = 0.260. The R² value indicates that buckpassing, vigilance, procrastination and hypervigilance as a block account for 0.127 per cent of the total variance of the ease of social relationship selection of university students. This contribution of ease of social relationship selection in the total variance is significant at ($F_{4,334} = 6.055$; $p < 0.01$). When the symbol of the relevant β value is considered, there is a rise in the use of effective

procrastination and hypervigilance decision-making styles because of the incompetence in the ease of social relationship selection of university students.

In the second phase, buckpassing having the lowest β value in Model 1 was excluded from the analysis. Vigilance, procrastination and hypervigilance were determined as independent variables respectively as a block, then multiple regression analysis was carried out and Model 2 was created. The correlation coefficient between vigilance, procrastination and hypervigilance as a block and the predicted variable the ease of social relationship selection is R = 0.259. The R² value indicates that vigilance, procrastination and hypervigilance as a block account for 0.059 per cent of the total variance of the ease of social relationship selection of university students. This contribution of ease of social relationship selection in the total variance is significant at (F3,335 = 8.062; p < 0.01). When the symbol of the relevant β value is considered, there is a rise in the use of effective procrastination and hypervigilance decision-making styles because of the incompetence in the ease of social relationship selection of university students.

In the third phase, vigilance which has the lowest β value in Model 2 was excluded from the analysis. Procrastination and hypervigilance were determined as independent variables as a block, then multiple regression analysis was carried out and Model 3 was created. The correlation coefficient between procrastination and hypervigilance as a block and the predicted variable, the ease of social relationship selection, is R = 0.258. The R² value indicates that procrastination and hypervigilance as a block account for 0.061 per cent of the total variance of the ease of social relationship selection of university students. This contribution of ease of social relationship selection to the total variance is significant at (F2,336 = 12.019; p < 0.01). When the symbol of the relevant β value is considered, there is a rise in the use of effective procrastination and hypervigilance decision-making styles because of the incompetence in the ease of social relationship selection of university students.

In the fourth phase, hypervigilance which has the lowest β value in Model 3, was excluded from the analysis. Procrastination was determined as an independent variable, then multiple regression analysis was carried out and Model 4 was created. The correlation coefficient between procrastination and the predicted variable, the ease of social relationship selection, is R = 0.242. The R² value indicates that procrastination accounts for 0.056 per cent of the total variance of the ease of social relationship selection of

university students. This contribution of ease of social relationship selection to the total variance is significant at (F1,337 = 21.047; p < 0.01). When the symbol of the relevant β value is considered, there is a rise in the use of effective procrastination decision-making styles because of the incompetence in the ease of social relationship selection of university students.

The results of the second hierarchical multiple regression analysis determining social relationship selection certainty as a dependent variable and buckpassing, vigilance, procrastination and hypervigilance as independent variables are given below (Table 4).

Initially buckpassing, vigilance, procrastination and hypervigilance were determined as independent variables respectively as a block, then multiple regression analysis was carried out and Model 1 was created. The correlation coefficient between buckpassing, vigilance, procrastination and hypervigilance as a block and the predicted variable the social relationship selection certainty is R = 0.250. The R² value indicates that buckpassing, vigilance, procrastination & hypervigilance as a block account for 0.051 per cent of the total variance of the social relationship selection certainty of university students. This contribution of social relationship selection certainty to the total variance is significant at (F4,334 = 5.550; p < 0.01). When the symbol of the relevant β value is considered, there is a rise in the use of effective vigilance decision-making styles because of the incompetence in the social relationship selection certainty of university students.

In the second phase, hypervigilance which has the lowest β value in Model 1 was excluded from the analysis. Buckpassing, vigilance and procrastination were determined as independent variables respectively as a block, then multiple regression analysis was carried out and Model 2 was created. The correlation coefficient between buckpassing, vigilance and procrastination as a block the predicted variable in the social relationship selection certainty is R = 0.246. The R² value indicates that vigilance, procrastination and hypervigilance as a block account for 0.052 per cent of the total variance of the social relationship selection certainty of university students. This contribution of social relationship selection certainty to the total variance is significant at (F3,335 = 7.197; p < 0.01). When the symbol of the relevant β value is considered, there is a rise in the use of effective vigilance decision-making styles because of the incompetence in the social relationship selection certainty of university students.

In the third phase, procrastination which has the lowest β value in Model 2 was excluded from the analysis. Buckpassing and vigilance were determined as independent variables as a block, then multiple regression analysis was carried out and Model 3 was created. The correlation coefficient between buckpassing and vigilance as a block the predicted variable the social relationship selection certainty is R = 0.232. The R^2 value indicates that buckpassing and vigilance as a block account for 0.048 per cent of the total variance of the social relationship selection certainty of university students. This contribution of social relationship selection certainty to the total variance is significant at $(F_{2,336} = 9.516; p < 0.01)$. When the symbol of the relevant β value is considered, there is a rise in the use of effective buckpassing decision-making styles because of the incompetence social relationship selection certainty of university students. All the same there is a rise in the use of effective vigilance decision-making styles because of the competence in the conflict resolution of university students.

In the fourth phase, vigilance which has the lowest β value in Model 3 was excluded from the analysis. Buckpassing was determined as an independent variable, then multiple regression analysis was carried out and Model 3 was created. The correlation coefficient between buckpassing, the predicted variable and the social relationship selection certainty is R = 0.193. The R^2 value indicates that buckpassing accounts for 0.034 per cent of the total variance of the social relationship selection certainty of university students. This contribution of social relationship selection certainty to the total variance is significant at $(F_{1,337} = 13.002; p < 0.01)$. When the symbol of the relevant β value is considered, there is a rise in the use of effective buckpassing decision-making styles because of the incompetence in the social relationship selection certainty of university students.

The results of the third hierarchical multiple regression analysis determining conflict resolution as a dependent variable and buckpassing, vigilance, procrastination and hypervigilance as independent variables are below (Table 4).

Initially buckpassing, vigilance, procrastination and hypervigilance were determined as independent variables respectively as a block, then multiple regression analysis was carried out and Model 1 was created. The correlation coefficient between buckpassing, vigilance, procrastination and hypervigilance as a block and the predicted variable, conflict resolution, is R = 0.370. The R^2 value indicates that buckpassing, vigilance, procrastination and hypervigilance as a block account for 0.127 per cent of the total variance of the conflict resolution of university students. This contribution of conflict resolution to the total variance is significant at $(F_{4,334} = 13.247; p < 0.01)$. When the symbols of the relevant β values are considered, there is a rise in the use of effective vigilance decision-making styles because of the competence in the conflict resolution of university students. All the same there is a rise in the use of effective hypervigilance decision-making styles because of the incompetence in the conflict resolution of university students.

In second phase, buckpassing, which has the lowest β value in Model 1, was excluded from the analysis. Vigilance, procrastination and hypervigilance were determined as independent variables respectively as a block, then multiple regression analysis was carried out and Model 2 was created. The correlation coefficient between vigilance, procrastination and hypervigilance as a block the predicted variable the conflict resolution is R = 0.368. The R^2 value indicates that vigilance, procrastination and hypervigilance as a block account for 0.128 per cent of the total variance of the conflict resolution of university students. This contribution of conflict resolution in the total variance is significant at $(F_{3,335} = 17.518; p < 0.01)$. When the symbols of the relevant β values are considered, there is a rise in the use of effective vigilance decision-making styles because of the competence in the conflict resolution of university students. All the same, there are rises in the use of effective buckpassing and hypervigilance decision-making styles because of the incompetence in the conflict resolution of university students.

In the third phase, vigilance, which has the lowest β value in Model 2, was excluded from the analysis. Procrastination and hypervigilance were determined as independent variables as a block, then multiple regression analysis was carried out and Model 3 was created. The correlation coefficient between the procrastination and hypervigilance as a block the predicted variable the conflict resolution is R = 0.348. The R^2 value indicates that procrastination and hypervigilance as a block explain 0.116 per cent of the total variance of the conflict resolution of university students. This contribution of conflict resolution in the total variance is significant at $(F_{2,336} = 23.179; p < 0.01)$. When the symbols of the relevant β values are considered, there are rises in the use of effective procrastination and hypervigilance decision-making styles because of the incompetence in the conflict resolution of university students.

In the fourth phase, procrastination which has the lowest β value in Model 3 was excluded from the analyses. Hypervigilance was determined as an independent variable, then multiple regression analysis was carried out and Model 4 was created. The correlation coefficient between the procrastination the predicted variable the social relationship selection certainty is R = 0.326. The R^2 value indicates that procrastination accounts for 0.104 per cent of the total variance of the conflict resolution of university students. This contribution of conflict resolution to the total variance is significant at ($F_{1,337}$ = 40.111; p < 0.01). When the symbol of the relevant β value is considered, there is a rise in the use of effective procrastination decision-making styles because of the incompetence in the conflict resolution of university students.

DISCUSSION

When decision-making styles and decision-making in social relationships are compared, it is seen that there is no significant relationship between vigilance and ease of social relationship selection, on the other hand there is a significant positive correlation between conflict resolution and social relationship selection certainty, although it is at a low level. The findings of Deniz [52] show that the problem-focused coping style is positively correlated to the vigilance decision-making style while it is negatively correlated to buckpassing, procrastination and hypervigilance decision-making styles. In problem-focused coping, individuals focus on the problem, share feelings about the problem and struggles with others. Moreover, they try to change the stressful situation by solving the problem, making a decision about and being very interested in, the problem [53]. In order to focus on problems, individuals must trust themselves and behave carefully. In the study by Deniz [52], a positive relationship was found between vigilance and problem-focused coping which can be seen as a social relationship style. In this study, it can be seen that there is no significant relationship between vigilance and the ease of social relationship selection, however, there is meaningful positive correlation between conflict resolution and social relationship selection certainty, although it is at a low level.

The reason for the positive relationship between problem-focused coping and vigilance in the research carried out by Deniz [52] and the reason for the meaningful relationship found between vigilance and the ease of social relationship selection in this research can be explained by two correlated factors. One is Etzioni's [27] normative-affective decision-making model, the other is that problem-focused coping is a rational decision making style. In this research it can be concluded that normative-affective decisions are chosen rather than rational decisions such as vigilance in the ease of social relationship selection. In Deniz's [52] research of, the negative relationship between vigilance and problem-focused coping occurs because of the fact that problem-focused coping is a rational decision making style. In addition it is seen there is meaningful positive correlation between vigilance decision-making style and conflict resolution and social relationship selection certainty, although it is at a low level. If this is clarified with Etzioni's [27] normative-affective decision-making model, conflict resolution and social relationship selection certainty are more rational decision making styles when compared with the ease of social relationship selection. Since conflict resolution and social relationship selection certainty is a rational decision making style in social relationships, it leads to a positive correlation with vigilance which is a rational decision making style. As a result, vigilance decision making is a conflict resolution decision, social relationship selection certainty decision making is logical- empirical decision and the ease of social relationship selection is a normative-affective decision.

The findings obtained in this research demonstrate that buckpassing, procrastination and hypervigiliance decision-making styles influence decision-making in social relationships adversely. This finding obtained from the research supports the finding of Payne, *et al.* [6] which prevails that social factors affect decision making behavior.

The findings obtained in the study show that even the highest level of relationship has a negative correlation between hypervigilance and conflict resolution, although it is at a medium level. This finding supports those of Mann *et al.*, [34] asserting that 'Hypervigilance is associated with severe emotional stress'. When conflict resolution is defined as severe emotional stress, it has a negative relationship with hypervigilance decision making style.

The findings of the research show that decision-making in social relationships does not differ according to gender. This is supported by the research findings of various authors [4,8,35,49] who have asserted that there is not an important relationship between decision making styles and indecisiveness and gender. The differences associated with gender in decision making are due to social gender role and cultural discrepancies [54].

The findings of the research suggest that decision-making in social relationships does cannot be differentiated according to gender. This finding is supported by the research finding of Güçray [50] indicating that there is a negative correlation between academic self esteem and hypervigilance. This shows that the individuals whose academic success and consequently self esteem is high can make decisions easily in the selection of social relationships. The interaction between academic success and gender causes significant differences in decision-making in social relationship. While academic success is a significant factor in the ease of decision-making in social relationship selection, the impact of both academic success and gender on decision-making in social relationship styles is not significant

When the ease of social relationship selection is predicted with decision-making styles, procrastination is determined as the most significant predictor in negative sense, although it is at a low level. This finding from the research is supported by Burka & Yuen [9] who asserted that procrastination made establishing social relationships more difficult. Procrastination is associated with self-evaluation and negative affect [7]. Procrastination which is composed of self-evaluation and negative affect has a negative correlation with the ease of social relationship selection.

The negative predictor of social relationship selection certainty is buckpassing and its positive predictor is vigilance. Uncertainty leads to indecisiveness [55]. Buckpassing increases indecisiveness, yet vigilance decreases indecisiveness [19]. Since a vigilance decision-making style increases indecisiveness, also decision-making in social relationship selection certainty increases. On the other hand, due to the fact that the buckpassing decision-making style increases indecisiveness, decision-making in social relationship selection certainty decreases. Krohne [56,57] suggests that vigilance eliminates uncertainty. As a vigilance decision-making style decreases uncertainty, decision-making in social relationship selection increases certainty. Since the buckpassing decision-making style increases uncertainty, decision-making in social relationship selection decreases certainty. Buckpassing's predicting of negative social relationship selection certainty is higher and more significant than vigilance's positive predicting. Under these circumstances buckpassing is an important variable predicting decision-making in social relationship selection certainty. This finding obtained from the research is supported by Harris [58] who asserted that decision making is an activites which aims to eliminate uncertainty.

When conflict resolution is predicted with decision-making styles, it is seen that vigilance is a positive predictor and hypervigilance and procrastination are negative predictors. Hypervigilance predicts decision-making in conflict resolution at the most significant level and negatively. Being vigilant in words and actions increases decision-making in conflict resolution. In addition, procrastination or hypervigilance adversely affects decision-making in conflict resolution. All these results demonstrate that conflict resolution establishes significant relationships with decision-making styles. This finding of the research is supported by Brilhart & Galanes, [59] who asserted that decisional conflict is important in decision making.

Some suggestions may be presented to consultants about enhancing decision making in decision-making styles and decision-making in social relationships using the findings of the research. These suggestions are as follows: Vigilance decision-making styles should be increased in order to increase decision making in conflict resolution and social relationship selection certainty. For improving decision-making in conflict resolution, vigilance decision-making styles should be increased and in particular hypervigilance decision-making styles should be decreased. In order to increase decision making in decision-making in social relationships, buckpassing, procrastination and hypervigiliance decision-making styles should be decreased. In order to increase decision-making in social relationship selection certainty, vigilance decision-making style should be increased and also, in particular, the buckpassing decision-making style should be decreased. So as to increase effective decision making in decision-making in th ease of social relationship selection, procrastination decision-making styles should be decreased. It should be noted that hypervigilance may negatively affect decision-making in the ease of social relationship. It should be considered that academic success is an important factor in improving decision-making in the ease of social relationship selection.

In line with the findings obtained from the research, a training program for improving decision-making styles should be developed in order to improve decision-making in social relationships. The efficiency of the training program for improving making-making styles in terms of improving decision-making in social relationships will support the findings of this study.

REFERENCES

1. Fischhoff, B., 1988. Judgment and decision making. In R. J. Sternberg & E. E. Smith (Eds.)., The psychology of human thought (pp. 153-187). New York: Cambridge University Press.
2. Rayner, S. and R.J. Riding, 1997. Towards a categorisation of cognitive styles and learning styles. Educational Psychology, 17: 5-27.
3. Sternberg, R.J., 1997. Thinking styles. Cambridge: Cambridge University Press.
4. Klaczynski, P.A., 2001. Analytic and heuristic processing influences on adolescent reasoning and decision-making. Child Development, 72: 844-861.
5. Stanovich, K.E. and R.F. West, 2000. Individual differences in reasoning: Implications for the rationality debate?. Behavioral and Brain Sciences, 23: 645-726.
6. Payne, J.W., J.R. Bettman and E.J. Johnson, 1993. The adaptive decision maker. Cambridge, UK: Cambridge University Press.
7. Ferrari, J.R., R.N. Wolfe, J.C. Wesley, L.A. Schoff and B.L. Beck, 1995. Ego-identity and academic procrastination among university students. Journal of College Student Development, 36: 361-367.
8. Harriott, J., J.R. Ferrari and J.F. Dovidio, 1996. Distractibility, daydreaming and self-critical cognitions as determinants of indecision. Journal of Social Behavior and Personality, II, 337-344.
9. Burka, J.B. and L.M. Yuen, 1983. Procrastination: Why you do it, what to do about it. New York: Addison-Wesley.
10. Zey, M., 1992. Decision-making: Alternatives to rational choice models. Newbury Park, CA: Sage.
11. Khemka, I., 1977. Increasing independent interpersonal decision-making skills of women with mental retardation in response to social-interpersonal situations involving abuse. Dissertation. Columbia University.
12. Fischhoff, B., 1982. Debiasing. In D. Kahneman, P. Slovic, & A. Tversky (Eds.). Judgement under uncertainty: Heuristics and Biases. New York. Cambridge University Press.
13. Oaksford, M. and N. Chater, 1993. Reasoning theories and bounded rationality. In K.I. Manktelow and D.E. Over (Eds.), Psychological and philosophical perspectives. New York: Routledge.
14. Carroll, J.S. and E.J. Johnson, 1990. Decision research: A field guide. Newbury Park, CA: Sage Publications.
15. Cacioppo, J.T. and R.E. Petty, 1982. The need for cognition. Journal of Personality and Social Psychology, 42: 116-131.
16. Biemiller, A. and D. Meichenbaum, 1992. The nature and nurture of the self-directed learner. Educational Leadership. 50(2): 75-80.
17. Mithaug, D.E., 1993. Self-regulation theory: How optimal adjustment maximizes gain. Westport, Conneticutt: Praeger.
18. Verplanken, B., 1993. Need for cognition and external information search: Responses to time pressure during decision-making. Journal of Research in Personality, 27: 238-252.
19. Janis, I. and L. Mann, 1977. Decision Making: A psychological analysis of confict, choice and commitment, New York: The Free Press.
20. Hogarth, J., 1987. Judgement and Choice: The psychology of decision (2nd ed). New York: John Wiley.
21. Kahneman, D. and A. Tversky, 1979. Prospect theory: An analysis of decision under risk. Econometrica, 47: 263-291.
22. Einhorn, H.J. and R.M. Hogarth, 1981. Behavioral decision theory: Process of judgement and choice. Annual Review of Psycology, 32: 53-88.
23. Etzioni, A., 1988. Normative-affective factors: Toward a new decision-making model. Journal of Economic-Psychology, 9: 125-150.
24. Camic, C., 1992. The matter of habit. In M. Zey (Ed.). Decision making: Alternatives to rational choice theory (pp. 185-232). Newbury Park, CA: Sage.
25. Haraburda, E.M., 1999. The relationship of indecisiveness to the five factor personality model and psychological symptomology. Dissertation, The Ohio State University. Columbos, OH,.
26. Jones, L.K., 1989. Measuring three dimensional construct of career indecision among college students: A revision of the Vocational Decision Scale – the Career Decision Profile. Journal of Counseling Psychology, 36: 477–486.
27. Etzioni, A., 1992. Normative-affective factors: Toward a new decision-making model. In M. Zey (ed.), Decision-making: Alternatives to rational choice models, pp: 89-111. Newbury Park, CA: Sage Publications.
28. Kuzgun, Y.m 1992. Decision Strategies Scale: Development and standardization. VII. National Psychology Congress Scientific Studies. Turkish Psychologists Association, Ankara (161-170).

29. Frost, R.O. and D.L. Shows, 1993. The nature and measurement of compulsive indecisiveness. Behavior Research and Therapy, 31: 683-692.

30. Scott, S.G. and R.A. Bruce, 1995. Decision-making style: The development and assessment of a new measure. Educational and Psychological Measurement, 55: 818-831.

31. Mann, L., R. Harmoni and C. Power, 1989. Adolescent decision-making: The development of competence. Journal of Adolescence, 12: 265-278.

32. Bacanli, F., 2000. Development of Indecisiveness Scale. Turkish Psychological Counseling and Guidance Journal, 2(14): 7-16.

33. Nygren, T.E., 2000. "Development of a measure of decision-making styles to predict performance in a dynamic judgment/decision-making task", paper presented at the 41st Annual Meeting of the Psychonomics Society, New Orleans, LA.

34. Mann, L., P. Burnett, M. Radford and S. Ford, 1997. The Melbourne Decision-Making Questionnaire: An instrument for measuring patterns for coping with decisional conflict. Journal of Behavioral Decision-making, 10: 1-19.

35. Mann, L., M. Radford, P. Burnett, S. Ford, M. Bond and K. Leung, 1998. Cross-Cultural ifferences in self-reported decision-making style and confidence. International Journal of Psychology, 33(5): 325-335.

36. Fletcher, H.F. and A.J. Wearing, 1992. Deciding to return to study: A field assessment of the Decision-making Questionnaire. Unpublished manuscript, University of Melbourne, Australia.

37. Fuqua, D.R., C.R. Blum and B.W. Hartman, 1988. Empirical support for the differential diagnosis of career indecision. Career Development Quarterly, 36: 364-373.

38. Lucas, M. and D. Epperson, 1990. Types of vocational undecidedness: A replication and refinement. Journal of Counseling Psychology, 37: 382-388.

39. Wanberg, C.R. and P.M. Muchinsky, 1992. A typology of career decision status: Validity extension of the vocational decision status model. Journal of Counseling Psychology, 39: 71-80.

40. Al-Hassan, M. and M. Wierenga, 2000. Exercise Participation Decisions of Jordanian Myocardial Infarction Patients: Application of the Decisional Conflict Theory. International Journal of Nursing Studies, 37: 119-26.

41. Gilligan, C., 1982. In a different voice: Psychological theory and women's development. Cambridge, MA: Harvard University Press.

42. Craske, M.G., 2003. Origins of phobias and anxiety disorders: Why more women than men? Boston: Elsevier.

43. Byers, P.Y., 1997. Organizational communication: Theory and behavior. Boston, MA: Allyn and Bacon.

44. Rassin, E. and P. Muris, 2005. To be or not to be … indecisive: Gender differences, correlations with obsessive–compulsive complaints and behavioural manifestation. Personality and Individual Differences, 38(5): 1175-1181.

45. Lewis, C.C., 1981). How adolescents approach decisions: Changes over grades seven to twelve and policy. Child Development, 52: 538-544.

46. Rickett, M. and M.A. Sheppard, 1988. Decision-making and young people. Journal of Drug Education, 18(2): 109-114.

47. Gayton, W.F., R.H. Clavin, S.L. Clavin and J. Broida, 1994. Further validation of the Indecisiveness Scale. Psychological Reports, 75: 1631-1634.

48. Burnett, P.C., L. Mann and G. Beswick, 1989. Validation of the Flinders Decision Making Questionnaire on course decision-making by students. Australian Psychologist, 24(2): 285-292.

49. Radford, M.H.B., L. Mann, Y. Ohta and Y. Nakane, 1993. Difference Between Australian and Japanese Students in Decisional Self-Esteem, Decisional Stress and Coping Styles', Journal of Cross-Cultural Psychology, 24(3): 284-98.

50. Güçray, S.S., 2005. A study of the decision-making behaviours of Turkish adolescents. Pastoral Care. 75: 34-44.

51. Deniz, M.E., 2004. Investigation of the relation between decision-making self-esteem, Decision-making styles and problem solving skills of university students. Eurasian Journal of Educational Research, 4(15): 23-35.

52. Deniz, M.E., 2006. The relationships among coping with stress, life satisfaction, decision-making styles and decision self esteem: an investigation with Turkish university students. Social Behavior and Personality, 34(9): 1161-1170.

53. Özbay, Y. and B. Şahin, 1997. Coping with Stress Inventory: Validity and reliability study. IV. Guidance and Psychological Counseling Congress, Ankara University, Ankara.

54. Yi, S. and S. Park, 2003. Cross-cultural differences in decision-making styles: A study of college students in five countries. Social Behavior and Personality, 31(1): 35-48.

55. Buhr, K. and M.J. Dugas, 2002. The intolerance of uncertainty scale: Psychometric properties of the English version. Behaviour Research and Therapy, 40: 931-945.

56. Krohne, H.W., 1989. The concept of coping modes: Relating cognitive person variables to actual coping behavior. Advances in Behaviour Research and Therapy, 11: 235-248.

57. Krohne, H.W., 1993. Vigilance and cognitive avoidance as concepts in coping research. In H.W. Krohne (Ed.), Attention and Avoidance: Strategies in coping with aversiveness (pp. 19–50). Seattle, WA and Toronto: Hogrefe & Huber.

58. Harris, R., 1988. Introduction to decision-making. California: Vanguard Universiy of Southern California.

59. Brilhart, J.K. and G.J. Galanes, 1998. Effective group discussion (9th ed.), Boston, MA: McGraw Hiil.