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**DETERMINATION OF THE HIGH SCHOOL STUDENTS' DECISION-MAKING STYLES  
AND SELF-ESTEEM IN DECISION MAKING ACCORDING TO SOME VARIABLES**

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**Abstract**

The aim of this study is to examine the self-esteem and decision-making levels of sports high school students studying in Karaman Province in terms of some variables. The model of the research is descriptive, one of the quantitative research methods. The research group consists of 140 adolescent students studying in high schools. The "Adolescent Decision-Making Scale" developed by Mann, Harmoni and Power (1989) was used. The Skewness-Kurtosis normality distribution test was used to determine whether the measurements were suitable for normal distribution. It showed normal distribution in all dimensions according to the Skewness-Kurtosis technique. As a result, t-test and One-way-Anova tests were applied since all dimensions showed normal distribution. POST HOCK Sheff tests were used to determine the source of the difference. The SPSS (Statistical Package for Social Sciences) package program was used to evaluate the data and find the calculated values. According to the results of the study, it was concluded that the students' self-esteem, complacency, panic and cop out levels in decision-making from sub-dimensions are over the middle level, and their cautious or selective levels are mid-level. While a significant difference was found according to the variables of the students' age, class and mother's education level according to personal characteristics, no significant difference was found according to other variables.

**Keywords:** Adolescent, Self Esteem, Decision Making Styles

**INTRODUCTION**

Decision, at the end of thinking and reasoning in our language, expresses the meanings of ruling, continuity, persistence, order, appropriate anticipation. Indecisive means impatient, persistent, restless, and changeable (Tosun, 1992). Decision-making can be defined as an orientation to relieve the distress experienced when there is more than one way to reach an object that is thought to fulfill a need. When the situation requiring decision-making will be made on important issues, it becomes more important to design the results in advance and to turn to the one with the most power to reach the target (Kuzgun, 1992). In a sense, the decision-making process can be seen as the process of maintaining balance in the inner world of the individual. The individual who is in a decision-making situation is oriented towards meeting and satisfying both his/her inner world needs and environmental expectations. In order to do this, the individual must use his / her personal and environmental resources effectively and positively (Marco et al. 2003). In other words, it can be said that the value system constitutes the basis of the foundations that the decision maker will use in evaluating the decision options. Values, objects, events and opinions; it expresses its importance in terms of society, class and individual. Accordingly, values have a directing and binding effect on the decision maker in the decision process. If the decision process is put into a value framework, our thoughts are systematized to some extent (Bursalıoğlu, 2005). Adolescence, which is an important turning point in the transition from childhood to adulthood, occurs with rapid changes in physical, cognitive, social and emotional development. This period is a time period in which the adolescent discovers new options in his lifestyle

and explores his individual and social identity. It is also a time of struggle and change in which he has to make unpredictable or deliberate decisions regarding his future life. This is a developmental period, but it is a period in which the adolescent has limited experiences in terms of decision-making competencies. Conflicts and problems faced by adolescents often exceed their capacity to do and work effectively. They are considered too inexperienced to take responsibility for decision making in the second decade of life. According to Schvaneveldt and Adams (1983); adolescents actually live in a confined world and are often not supported to make decisions even on matters concerning themselves. They cannot vote, look for a job, drive a car, etc. They cannot act freely on some issues without the permission of adults. They are both near and far from a unique adult position. Decisions made during adolescence have implications that can affect the individual's health, psychological adjustment, profession and social acceptance throughout his life (Ersever, 1996). While the decisions made in this period may provide suitable living conditions in the future, they may also limit these conditions (Mann, Harmoni, & Power, 1989). Mann (1989) explains that there are significant changes regarding decision-making competence in adolescence. These; They are competencies such as employing cognitive processes in decision-making, considering achievable goals, reviewing the available information in a logical way, thinking about the possible consequences of decisions, and adhering to the decisions made. Studies on decision making have revealed that decision-making competence develops depending on age and certain cognitive skills can be learned in decision-making.

## METHODS

### Research Group

Research group; in the 2019-2020 academic year consists of a total of 140 students studying at Karaman Sports High School affiliated to the Karaman Provincial Directorate of National Education.

### Collection of Data

The available suitable information for the purpose of the study has been systematically given by scanning the literature. Thus, a theoretical framework was formed on the subject. In order to determine decision-making styles and self-esteem in decision making of the adolescents, the "Adolescent Decision-Making Scale" developed by Mann, Harmoni and Power (1989) and a personal information form was used to collect personal information of the participants.

### Data Collection Tools

The data collection tools required to achieve the determined goals related to the research are given below:

### Personal Information Form

An information form consisting of 7 questions was prepared by the researcher in order to collect information about the personal characteristics of 140 students studying in the province of Karaman and to create the independent variables of the research.

### Adolescent Decision-Making Questionary

The Adolescent Decision-Making Scale (ADMQ) was originally developed by Mann, Harmony, and Power (1989) to determine decision-making styles and self-esteem in decision making. The scale was adapted to Turkish culture by Çolakkadioğlu (2003). Adaptation studies of ADMQ have been carried out on students aged 13-15. In the factor analysis for the construct validity of the ADMQ, it was seen that it consists of 5 factors. These factors measure Self-esteem in Decision Making and Coping Styles in Decision Making: Panic, Cop Out, Carelessness and Vigilance -Selectivity. These five factors explained 30.2% of the total variance. For criterion-related validity, scores from the Children's Depression Scale were used to show Self-esteem in Decision Making ( $r = -.29$ ), Vigilance Selectivity ( $r = -.21$ ), Panic ( $r = .22$ ), Cop Out ( $r = .30$ ) and Complacency ( $r = .22$ ), the correlation coefficients were calculated. Item total correlations, internal consistency coefficients and stability coefficients were calculated in order to determine the reliability of the ADMQ. Internal consistency coefficients were found in Self-Respect in Decision Making (.79), Vigilance Selectivity (.78), Panic (.77), Cop Out (.65), and Carelessness (.73). Stability coefficients calculated by the test-retest technique were found for Self-Respect in Decision Making (.80), Vigilance Selectivity (.81), Panic (.82), Cop Out (.80), and Carelessness (.86). These findings were accepted as sufficient evidence for the reliability of the scale.

In this study; The self-esteem internal consistency (Cronbach Alpha) reliability coefficient of the participants in decision making was 0.73 and the Vigilance / Selective decision-making internal consistency reliability coefficient was 0.70, the indifferent decision-making internal consistency reliability coefficient was 0.71, and the panic decision-making internal consistency reliability coefficient was 0.64. and the internal consistency reliability coefficient for decision making to cop out was found to be 0.72.

### Data Analysis

It was determined that the Skewness / Kurtosis technique showed normal distribution by checking whether the data was suitable for normal distribution for self-esteem and decision-making sub-dimensions (Vigilance / Selective, Complacency, Panic, Cop Out) in the solution and interpretation of the data. As a result, t-test and One way - Anova tests were applied.

POST HOCK Sheff test result was checked to determine the source of the difference. The SPSS 21 (Statistical Package for Social Sciences) package program was used to evaluate the data and find the calculated values.

**Table 1.** Skewness / Kurtosis Normality Test Regarding the Self-Esteem and Decision-Making Scale of the Students Participating in the Study

	<b>Self Esteem in Decision Making</b>	<b>Vigilance</b>	<b>Complacency</b>	<b>Panic</b>	<b>Cop Out</b>
<b>n</b>	140	140	140	140	140
<b>Skewness</b>	.749	-.071	.144	-.166	-.032
<b>Kurtosis</b>	.777	.112	.113	.607	-.047

Considering Table 1, according to the Skewness-Kurtosis normality test result regarding self-esteem and decision subscales (Vigilance / Selective, Complacency, Panic, Cop Out), It is understood that it is suitable for normal distribution since all dimensions are -1.5 and +1.5.

## RESULTS

### Personal Characteristics of the Research Group

Data and comments on the demographic characteristics of the students participating in the study are given below

**Table 2.** Distribution of the Demographic Characteristics of the Sample Group Participating in the Study

<b>Personal Characteristics of Participants</b>	<b>n</b>	<b>%</b>	
<b>Gender</b>	Male	93	66.4
	Female	47	33.6
<b>Age</b>	15 - 16 Years old	86	61.4
	17 - 18 Years old	54	38.6
<b>Class</b>	1. Class	30	21.4
	2. Class	47	33.6
	3. Class	47	33.6
	4. Class	16	11.4
<b>Branch</b>	Basketball	17	12.1
	Football	54	38.6
	Handball	39	27.9
	Volleyball	30	21.4
<b>Having Difficulty Using Your Free Time</b>	Always	31	22.1
	Sometimes	67	47.9
	Never	42	30.0
<b>Father's education status</b>	Illiterate	12	8.6
	Primary school graduates	28	20.0
	Secondary / high school graduates	53	37.9
	Master's Degree	21	15.0
	Doctorate	26	18.6

<b>Mother's education status</b>	Illiterate	13	9.3
	Primary school graduates	34	24.3
	Secondary / high school graduates	60	42.9
	Master's Degree	15	10.7
	Doctorate	18	12.9

Looking at Table 2, according to the gender variable of the participants, 93 people (66.4%) are male participants while 47 people (33.6%) are female participants. According to the age variable, 86 people (61.4%) are between 15 and 16 years old, while 54 people (38.6%) are between 17-18. According to the class variable of the participants, 30 students (21.4%) 1st class, 47 students (33.6%) 2nd class, 47 students (33.6%) 3rd class and 16 students (11.4%) 4. He is studying in the classroom. Among the participants, 17 (12.1%) are engaged in basketball, 54 (38.6%) in football, 39 (27.9%) in handball and 30 (21.4%) in volleyball. According to the situation of the participants having difficulty in evaluating their spare time, 31 people (22.1%) said always, 67 people (47.9%) sometimes and 42 people (30.0%) never said. According to the father's education level, 12 (8.6%) were illiterate, 28 (20.0%) were primary school graduates, 53 (37.9%) were secondary / high school graduates, 21 (15.0%) were graduate. graduates and 26 people (18.6%) are PhD graduates. According to the mother's education level, 13 people (9.3%) are illiterate, 34 people (24.3%) are primary school graduates, 60 people (42.9%) are secondary / high school graduates, 15 people (10.7%) are graduate students. graduates and 18 people (12.9%) are PhD graduates.

Vigilance / Selective, Complacency, Panic, Cop Out

**Table 3.** Results Regarding Participants' Self-Esteem and Decision-Making Sub-Dimensions

	<b>n</b>	<b>Mean</b>	<b>Ss</b>
<b>Self Esteem in Decision Making</b>	140	2.4857	.39858
<b>Vigilance / Selective</b>	140	2.5250	.65302
<b>Complacency</b>	140	2.3857	.64444
<b>Panic</b>	140	2.4250	.59451
<b>Cop Out</b>	140	2.3750	.64693

In Table 3, the self-esteem level of the participants in decision making and the average scores of the sub-dimensions of the decision-making scale are examined. As a result of this review; The students participating in the Vigilance / Selective e research have an average score of 2.48 in the self-esteem dimension in decision-making, above the middle level, the average score in the Vigilance / Selective sub-dimension of the decision-making scale is 2.52, and in the sub-dimensions of the decision-making scale, the average score of the Complacency dimension is 2,38. It is understood that it is above the middle level with 38, the mean score of the panic dimension, one of the sub-dimensions of the decision-making scale, is above the middle level with 2.42, and the score average of the sub-dimensions of the decision-making scale is 2.37 for the Cop Out.

**Table 4.** Independent Group t Test Results Conducted to Determine Whether Sub-Dimension Scores of Self-Esteem and Decision-Making Scale Differ by Age Variable of Participants

Points	Groups	N	Mean.	ss	Shg	t Test		
						t	Sd	p
Self Esteem in Decision Making	15-16 Years Old	86	2.54	.43003	.04637	2.084	138	<b>.039*</b>
	17-18 Years Old	54	2.40	.32765	.04459			
Vigilance / Selective	15-16 Years Old	86	2.58	.65467	.07059	1.383	138	.169
	17-18 Years Old	54	2.43	.64477	.08774			
Complacency	15-16 Years Old	86	2.33	.61117	.06590	-1.261	138	.209
	17-18 Years Old	54	2.47	.69118	.09406			
Panic	15-16 Years Old	86	2.38	.58434	.06301	-1.185	138	.238
	17-18 Years Old	54	2.50	.60829	.08278			
Cop Out	15-16 Years Old	86	2.35	.63690	.06868	-.602	138	.548
	17-18 Years Old	54	2.42	.66647	.09070			

\*p<.05

As can be seen in Table 4, as a result of the independent group t test conducted to determine whether the students' self-esteem in decision making and decision-making scale sub-dimension scores differ significantly according to the age variable of the students, the arithmetic mean The difference was statistically significant (t = 2.0843; p <.05). This difference was in favor of students between the ages of 15 and 16.

**Table 5.** One-Way Analysis of Variance (ANOVA) Results Performed to Determine Whether Sub-Dimension Scores of Self-Esteem and Decision-Making Scale Differentiated According to the Class Variable

<i>f, x and ss</i> Values					Anova Results					
Mean	ss	Mean	ss		Mean	ss	KO	F	p	
Self Esteem in Decision Making	1. Class	30	2.7111	.48529	<b>Between Groups</b>	2.269	3	.756	5.192	<b>.002*</b>
	2. Class	47	2.4220	.38204	<b>In Groups</b>	19.813	136	.146		
	3. Class	47	2.4681	.32160	<b>Total</b>	22.083	139			
	4. Class	16	2.3021	.31751						
Vigilance / Selective	1. Class	30	2.6778	.72705	<b>Between Groups</b>	1.615	3	.538	1.270	.287
	2. Class	47	2.5603	.67515	<b>In Groups</b>	57.659	136	.424		
	3. Class	47	2.3901	.54427	<b>Total</b>	59.274	139			
	4. Class	16	2.5313	.71807						
Complacency	1. Class	30	2.3444	.63868	<b>Between Groups</b>	1.359	3	.453	1.093	.354
	2. Class	47	2.3333	.67566	<b>In Groups</b>	56.367	136	.414		
	3. Class	47	2.3723	.56275	<b>Total</b>	57.727	139			
	4. Class	16	2.6563	.77333						

Panic	1. Class	30	2.3944	.64101	<b>Between Groups</b>	.850	3	.283	.798	.497
	2. Class	47	2.3759	.59127	<b>In Groups</b>	48.279	136	.355		
	3. Class	47	2.4220	.50582	<b>Total</b>	49.129	139			
	4. Class	16	2.6354	.75331						
Cop Out	1. Class	30	2.2556	.64880	<b>Between Groups</b>	1.559	3	.520	1.249	.295
	2. Class	47	2.3475	.68879	<b>In Groups</b>	56.614	136	.416		
	3. Class	47	2.3901	.52622	<b>Total</b>	58.174	139			
	4. Class	16	2.6354	.81016						

\*P<0.05

As can be seen in Table 5, as a result of the one-way analysis of variance (ANOVA) to determine whether the arithmetic mean of the self-esteem dimension in decision-making scale differs significantly from the class variable, the difference between the self-esteem dimension in decision-making and the arithmetic mean of the class variable groups. It was found to be statistically significant ( $p < .05$ ). After this process, complementary post-hoc analysis techniques were used to determine which groups caused the significant difference after ANOVA. In order to decide which post-hoc multiple comparison technique will be used after ANOVA, the hypothesis of whether the variances of the group distributions are homogeneous was tested first with the Levene's test and it was determined that the variances were homogeneous ( $p > .05$ ). On top of that, if the variances were homogeneous, the widely used Scheffe multiple comparison technique was preferred. The reason why Scheffe test is preferred is that the test is sensitive to alpha type error. The results of the Scheffe multiple comparison analysis performed are presented below.

**Table 5.1.** Results of the Post-hock Scheffe Test after the One-Way Analysis of Variance (ANOVA) to Determine Which Subgroups Self-Esteem Scores Differ in Decision Making from the Dimensions of the Decision-Making Scale by Class Variable

	<b>Class (I)</b>	<b>Class (j)</b>	<b>(I-J)</b>	<b>Std. Error</b>	<b>Sig.</b>
Self Esteem in Decision Making		2. Class*	.28913	.08920	.017
	<b>1. Class</b>	4. Class*	.40903*	.11816	.009

\*p<.05

Looking at Table 5.1, one-way analysis of variance (ANOVA), which was conducted to determine which subgroups in decision-making self-esteem scores differ according to the class variable, as a result of the post-hoc Scheffe test. It is understood that their self-esteem levels are higher in decision-making at a higher level than class students.

**Table 6.** Results of One-Way Analysis of Variance (ANOVA) to Determine Whether Sub-Dimension Scores of Self-Esteem in Decision Making and Decision-Making Scale Differentiated by Class Variable

Point	<i>f, x and ss</i> Values				Anova Results					
	Group	N	Mean	ss		KT	Sd	KO	F	p
Self Esteem in Decision Making	Illiterate	13	2.42	.199	<b>Between Groups</b>	1.31	4	,330		
	Primary school graduate	34	2.49	.334	<b>In Groups</b>	20.76	135	,154		
	Secondary / High School Graduate	60	2.57	.456	<b>Total</b>	22.08	139		2.144	.079
	Master's Degree	15	2.38	.401						
	Doctorate	18	2.29	.345						
Vigilance / Selectivity	Illiterate	13	2.14	.875	<b>Between Groups</b>	4.12	4	1,030		
	Primary school graduate	34	2.47	.666	<b>In Groups</b>	55.15	135	,409		
	Secondary / High School Graduate	60	2.66	.578	<b>Total</b>	59.27	139		2.522	<b>.044*</b>
	Master's Degree	15	2.30	.535						
	Doctorate	18	2.63	.669						
Complacency	Illiterate	13	2.16	.897	<b>Between Groups</b>	2.03	4	.510		
	Primary school graduate	34	2.28	.642	<b>In Groups</b>	55.68	135	.413		
	Secondary / High School Graduate	60	2.50	.564	<b>Total</b>	57.72	139		1.236	.299
	Master's Degree	15	2.27	.498						
	Doctorate	18	2.42	.769						

Panic	Illiterate	13	2.20	.805	<b>Between Groups</b>	4.66	4	1.166	
	Primary school graduate	34	2.36	.626	<b>In Groups</b>	44.46	135	.329	
	Secondary / High School Graduate	60	2.4806	.47942	<b>Total</b>	49.129	139		3.540 .009*
	Master's Degree	15	2.1111	.52200					
	Doctorate	18	2.7778	.61037					
Cop Out	Illiterate	13	2.1923	.80751	<b>Between Groups</b>	3.483	4	.871	
	Primary school graduate	34	2.2451	.63330	<b>In Groups</b>	54.691	135	.405	
	Secondary / High School Graduate	60	2.4139	.60948	<b>Total</b>	58.174	139		2.149 .078
	Master's Degree	15	2.2556	.62952					
	Doktora	18	2.7222	.60228					

\*P<0.05

As can be seen in Table 6, as a result of the one-way analysis of variance (ANOVA) performed to determine whether the arithmetic means of the Vigilance dimension, one of the dimensions of the decision-making scale, differ significantly with respect to the mother education variable, the difference between the Vigilance dimension and the arithmetic mean of the groups of the mother education status variable is statistically significant. was found ( $p < .05$ ).

As a result of the one-way analysis of variance (ANOVA) conducted to determine whether the arithmetic means of the Panic dimension, one of the dimensions of the decision-making scale, differ significantly from the mother education variable, the difference between the panic dimension and the arithmetic means of the groups of the mother's education level was found to be statistically significant ( $p < .05$ ).

After this process, complementary post-hoc analysis techniques were used to determine which groups caused the significant differences after ANOVA. In order to decide which post-hoc multiple comparison technique will be used after ANOVA, the hypothesis of whether the variances of the group distributions are homogeneous was tested first with the Levene's test and it was determined that the variances were homogeneous ( $p > .05$ ). On top of that, if the variances were homogeneous, the widely used Scheffe multiple comparison technique was preferred. The reason why Scheffe test is preferred is that the test is sensitive to Alpha type error. The results of the Scheffe multiple comparison analysis performed are presented below.

**Table 6.1.** Results of the Post-Hock Scheffe Test after the One-Way Analysis of Variance (ANOVA) to Determine Which Subgroups Self-Esteem Scores Differ in Decision Making from the Dimensions of the Decision-Making Scale by Class Variable

	<b>Education (I)</b>	<b>Education(j)</b>	(I-J)	Std. Error	Sig.
Vigilance / Selective	Doctorate	Master's Degree	.33889	.22345	.014*
Panic	Doctorate	Master's Degree	.66667	.20064	.030*

\*p<.05

Looking at Table 6.1, the results of the one-way analysis of variance (ANOVA) and the post-hoc Scheffe test to determine which sub-groups the Vigilance / selective sub-dimension scores of the dimensions of the decision-making scale differ according to the mother education variable. It is understood that the students who participated in the study were more Vigilance and selective than the students whose mothers had a master's degree, and the students whose mothers were doctorate graduates decided to panic at a higher level than the students whose mothers were graduate graduates.

## DISCUSSION AND CONCLUSION

As a result of the work done; It is concluded that the levels of self-esteem, Complacency, panic, and Cop Out in decision making are above the middle level, and their Vigilance or selective levels are medium level. When the literature is examined, these results are seen by Temel et al. (2017) and Akpınar et al. (2014), while the results of his study do not support this study, Nas et al. (2019), Temel and Birol (2017) and Akpınar et al. (2015), on the other hand, supports the current study with its results.

As a result of the independent group t test performed to determine whether the students show a significant difference according to the age variable, the difference between the arithmetic averages of the self-esteem dimension in decision making by age variable was found to be statistically significant. It was concluded that the difference occurred in favor of students between the ages of 15 and 16. Schvaneveldt and Adams (1983) found that the styles adolescents use in coping with decision making differ according to age. With this result, it is understood that the present study is supported.

As a result of the one-way analysis of variance (ANOVA) conducted to determine whether the students show a significant difference according to the class variable, it was concluded that the 1st grade students participating in the study had higher self-esteem levels in making higher decisions than the 2nd and 3rd grade students. According to the study of Gürçay (2001), the findings regarding demographic variables; revealed that grade level variables are influencing factors in decision-making behavior. Claiming that older adolescents are more self-confident in their decision-making situations, Mann et al. (1986) does not support the research results.

As a result of the one-way analysis of variance (ANOVA) conducted to determine whether the students show a significant difference according to the mother's education level, the mothers of the students who participated in the study were more Vigilance Complacency and selective than the students with a doctorate degree, and the mother of the students participating in the study. It was concluded that those with a doctorate degree decided to panic at a higher level than students whose mothers had a master's degree. According to the study of Gürçay (2001), it was observed that there was no significant difference between the groups in the decision-making behavior of adolescents according to the education levels of their parents. According to Mann et al. (1989), disruptions in family structure and functions affect adolescent behaviors in decision making. Brown and Mann (1991) define the family as an important laboratory where the adolescent sees the effects and consequences of the decisions made by others and receives support in making choices. The research findings of Tremper and Feshback (1982; cited in: Schvaneveldt, 1983), which revealed that adolescents' attitudes and behaviors are more similar to those of their mothers and those of their fathers, are also not consistent with these results.

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