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Analyzing Decision Making Styles and Self-esteem at Decision Making of University Students Regarding to Shyness and Self-esteem Level

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Authors' contributions

This work was carried out in collaboration between both authors. Author CA designed the study and supervised the work. Authors CA and ASY carried out performed the statistical analysis. Author CA managed the analyses of the study. Author ASY wrote the first draft of the manuscript. Authors CA and ASY managed the literature searches and edited the manuscript. Both authors read and approved the final manuscript.

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ABSTRACT

This study examined decision making styles and self-esteem at decision making of university students regarding shyness, self-esteem. The working group of the study has been determined as Faculty of Education, Faculty of vocational Training, Technical Training Faculty and Faculty of Arts & Science in Selcuk University. Total research sampling composes 636 students. Regression analysis technique was used to determine self-esteem at decision-making, decision making styles, and shyness. When the research findings were considered regarding shyness, it has been

concluded that there is negative relation between shyness and self-esteem in decision-making and vigilance decision making; in another mean as much as shying increases self-esteem and vigilance decision-making decreases. It has been concluded that a significant relation was determined between self-esteem at decision making and hyper vigilance decision-making; beside this no any significant relation was found between procrastination approaches at decision making.

Keywords: Self-esteem; shyness; decision making; decision making styles.

1. INTRODUCTION

Individuals constantly have expectations and are in search for novelty, which leaves them in a tight spot in terms of using the strategies they follow in decision making [1]. Therefore, the strategies and styles the individuals use when they are in decision making approaches and behaviours, come into prominence. For individuals to be satisfied with their lives and to improve themselves, they need help in acquiring the proper and efficient decision making skills [2].

Decision making behaviour includes defining the purpose to collect information related to the purpose, creating options via considering and evaluating such information and choosing the option that most serves the purpose [3]. Designing the consequences in advance and choosing the option which is the strongest in achieving the goal gain more importance, when the situation requiring decision making is related to important issues, [4]. In decision making behavior, personal and environmental factors of the individual can affect their choice. While some individuals believe that, they have the control related to decision making behavior in decision making process, others believe that this control is determined by external factors [5].

Individual differences are effective on the decision making behavior [6]. One of these characteristics is self-esteem. As an important part of the personality, self-esteem affects all sides of individuals' lives and directs their behaviors. Self-esteem has an important part in personality development and is the sum total of perceptions, feelings and thoughts and it plays an important role in the socializing levels of individuals [7].

Campbell and Lavallee, define individuals with low and high self-esteem as follows:

 Individuals with high self-esteem define themselves better and more positive, while individuals with low self-esteem intend to

- define themselves in a more negative manner.
- Individuals with high self-esteem are more internally consistent than individuals with low self-esteem in terms of self-belief and self-respect [8].

In other words, shyness is being afraid of interacting with people, avoiding them and being self-conscious in social environments. Shy individuals never do or say anything attentiongrabbing, because they think other people will find them ridiculous and therefore they will pity them [9]. Shyness is defined as: being evaluated negatively by others [10], sense of uneasiness, shyness, timidity and diffidence [11], and restlessness, and anxiety experienced in social environments including [12], the fear of being evaluated by the authority [13]. Shyness affects not only the social relations of individuals, but also the levels the individuals value themselves, and their cognitive interpretations of events and people. Shy people are easily affected by the negative reactions from others. Negative judgments about shy people result development of low self-esteem [11]. According to Page, the negative effects of shyness show up differently for all individuals. Shyness causes low self-esteem, depression, anxiety and isolation. Shy individuals exhibit some non-functional attitudes with some negative personal features and they have difficulty in timing their reactions. Besides, these individuals have fewer friends and less satisfying personal relations, use more negative expressions about themselves and experience more solitude. Shy individuals pay more attention to how others evaluate themselves and experience social avoiding and exclusion in extreme situations [14,15].

Researches on the relationship between selfesteem and decision-making presented following findings. Students with efficient decision-making skills have high self-esteem [16,17], there is a positive relationship between efficient decisionmaking and self-esteem [18]. In addition, there is a negative relationship between shyness and self-esteem [19-21].

The purpose of the present research is examining university students' decision-making and levels of self-esteem at decision making in terms of self-esteem and shyness.

2. MATERIALS AND METHODS

2.1 Participants

The present research adopted survey model. The sample set of the research was created from several Faculties of Selcuk University by random set sampling method. The sample consisted of 636 university students (423 females and 213 males) who participated in the research voluntarily. The mean age of the participants was 21.57 years with a standard deviation of 1.81 years. Descriptive statistics are given Table 1.

2.2 Instruments

2.2.1 Shyness Scale

Shyness Scale is a likert type scale developed by Cheek and adapted to Turkish society by Gungor (2001). The scale consists of 20 items intended at measuring the extent of shyness the individuals perceive themselves generally in various situations. The highest score to be got from the 5-point likert scale is 100 and the lowest score is 20. High scores are interpreted as that individual perceives themselves as shy [16]. The reliability of the test was calculated twice in two ways: test-retest, and internal consistency. The scale was implemented on 78 university students at three weeks interval and the correlation between implementations was calculated as 0.83. Cronbach Alpha coefficient calculated to determine the internal consistency was found as 0.91 [22].

2.2.2 Rosenberg Self-Esteem Scale (RSES)

The RSES was developed by Rosenberg (1965) and adapted to Turkish by Cuhadaroglu [23]. A 10-item brief RSES refers to the global self-worth of individuals, rating on a 4- point Likert type scale (1 = strongly disagree to 4 = strongly agree). Higher scores on the scale items indicate higher levels of self-esteem. Cuhadaroglu reported test-retest reliability coefficient of.71 with a 4-week period between two administrations for the Turkish version [23].

2.2.3 Decision-Making Questionnaire (DMQ)

The Melbourne Decision-Making Questionnaire was developed by Mann, Burnett, Radford, and Ford [24]. The DMQ-I is a scale that aims to determine decision self-esteem level. It consists of 6 items. Grading is done by giving numerical values to items according to the answer 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 .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 hyper vigilance (5 items) decision-making styles. This scale is answered and scored in the same way as the DMQ-I. Reliability coefficients of the subscales were calculated as follows: for vigilance .80, buck-passing .87, procrastination .81 and hyper vigilance .74 (Mann et al., 1998). The adaptations of the DMQ-I and DMQ-II to Turkish were performed by Deniz (2004). The reliability coefficients obtained from subscales calculated by the test-retest method varied between r=.68 and r=.87. Cronbach alpha coefficients of the DMQ I and DMQ-II varied between alpha=.65 and alpha=.80 [6.24].

2.3 Data Analysis

SPSS 16.0 was used in order to evaluate the data which were collected by the scales employed in the research. The Pearson correlation coefficient technique was used to determine the relationship between self-esteem, shyness and decision making. Multiple regression analysis was used to search whether self –esteem and shyness significantly explain decision making.

3. RESULTS

As can be seen in Table 2, There was a statistically significant (p < .01; p < .05) positive relationship between self-esteem and self-esteem in decision making, and negative relationship between self-esteem and buck-passing, hyper vigilance. There was a statistically significant (p < .01) positive relationship between shyness and buck-passing, procrastination, hyper vigilance. There was also a statistically significant (p < 0.01) negative relationship between shyness and self-esteem in decision making, vigilance.

It is understood from Table 3 that in general terms, specific contribution of self-esteem and shyness are significant on Self-esteem in decision making (R^2 =.15, F(2/633)=57.52, p<.01). This result indicates that self-esteem and shyness explain 15% of total variance in Self-esteem in decision making. According to the standardized regression coefficient (b), significance order of precursor variables on Self-esteem in decision making is as follows: shyness (β =-.37, p<.01) and self-esteem (β =.09, p<.02).

It is understood from Table 4 that in general terms, specific contribution of self-esteem and shyness are significant on vigilance (R²=.02, F(2/633)=6.41, p<.01). This result indicates that self-esteem and shyness explain 2% of total variance in vigilance. According to the standardized regression coefficient (β), significance order of precursor variables on vigilance is as follows: shyness (β =-.14, p<.01).

It is understood from Table 5 that in general terms, specific contribution of self-esteem and shyness are significant on buck-passing (R^2 =.10, F(2/633)=35.30, p<.01). This result indicates that self-esteem and shyness explain 10% of total

variance in buck-passing. According to the standardized regression coefficient (β) , significance order of precursor variables on buck-passing is as follows: shyness $(\beta=.29, p<.01)$ and self-esteem $(\beta=-.08, p<.03)$.

It is understood from Table 6 that in general terms, specific contribution of self-esteem and shyness are significant on procrastination (R²=.07, F(2/633)=22.82, p<.01). This result indicates that self-esteem and shyness explain 7% of total variance in procrastination. According to the standardized regression coefficient (β), significance order of precursor variables on procrastination is as follows: shyness (β =.26, p<.01.

It is understood from Table 7 that, specific contribution of self-esteem and shyness are significant on hyper vigilance (R²=.12, F(2/633)=43.56, p<.01). This result indicates that self-esteem and shyness explain 12 % of total variance in hyper vigilance. According to the standardized regression coefficient (β), significance order of precursor variables on hyper vigilance is as follows: shyness (β =.34, p<.01.

Table 1. Descriptive statistics

	N	Minimum	Maximum	Mean	Standard deviation
Shyness	636	20.00	100.00	68.09	14.27
Self-esteem	636	15.00	40.00	26.92	3.03
Self-esteem levels in decision making	636	.00	11.00	3.20	2.25
Vigilance	636	.00	12.00	2.72	2.47
Buck-passing	636	.00	12.00	7.62	2.65
Procrastination	636	.00	10.00	5.89	2.38
Hyper vigilance	636	.00	10.00	5.43	2.25

Table 2. Correlations between Self-esteem in decision making, decision making styles, self-esteem and shyness

	Self-esteem in decision making	Vigilance	Buck-passing	Procrastination	Hyper vigilance
	r	r	r	r	r
Self-esteem	.15 ^{**}	.04	13 ^{**}	06	09 [*]
Shyness	38**	14 ^{**}	.31 ^{**}	.26**	,35**
		*p<.05,	** p<.01		

Table 3. Multiple regression analysis on self-esteem in decision making

Variables	R	R^2	R ² _{ch}	F	df	В	β	р
(Constant)	.39 ^a	.15	.15	57.52	2/633	5.4		.00**
Self-esteem						.07	.09	.02*
Shyness						05	37	.00**

Table 4. Multiple regression analysis on vigilance

Variables	R	R^2	R ² ch	F	df	В	β	р
(Constant)	14	.02	.02	6.41	2/633	4.02	•	.00**
Self-esteem						.01	.02	.71
Shyness						02	14	.00**

Table 5. Multiple regression analysis on buck-passing

Variables	R	R^2	R ² ch	F	df	В	β	р
(Constant)	.32ª	.10	.01	35.30	2/633	5.85		.00**
Self-esteem						07	08	.03*
Shyness						.06	.29	.00**

Table 6. Multiple regression analysis on procrastination

Variables	R	R^2	R ² ch	F	df	В	β	р
(Constant)	.26	.07	.06	22.82	2/633	3.45		.00**
Self-esteem						02	02	.58
Shyness						.04	.26	.00**

Table 7. Multiple regression analysis on hyper vigilance

Variables	R	R^2	R ² ch	F	df	В	β	р
(Constant)	.35 ^a	.12	.12	43.56	2/633	2.38		.00**
Self-esteem						02	03	.41
Shyness						.05	.34	.00**

4. DISCUSSION

As a result of the research, a significant positive correlation was found between the university students' self-esteem levels in decision making and their self-esteem. A significant negative correlation was detected self-esteem with buckpassing decision making and hyper vigilance approach in decision making. However, there were no significant correlations detected between self-esteem and other sub-dimensions; vigilance decision making, and procrastination approach in decision making. In his research, Ramanigopal found a positive correlation between vigilance decision making and selfesteem and a negative correlation between selfesteem and other sub-dimensions of decision making [25]. Avsaroglu found a strong correlation between self-esteem in decision making and selfesteem [26]. Paisley and Hubbard state that efficient decision making is related to high selfvalue [27]. In their research, Deniz, Tras and llaslan found a positive correlation between selfesteem and decision making [7].

Burnett determined in his research that, there are positive correlations between all sides of self and vigilance decision making style, and negative correlations between self and careless decision making and internal-impulsive decision making styles. Besides, he stated that there is a positive correlation between vigilance decision making style and self-esteem, but there is a negative correlation between self-esteem and careless decision making and internal-impulsive styles [18]. The results of all these researches support the findings of the present research.

Another finding of the present research is that, there is a negative correlation between self-esteem and decision making styles in decision making with shyness. This indicates that, when the level of shyness increases, self-esteem and vigilance in decision making decreases. Besides, there is a positively significant correlation between shyness and buck-passing decision making, procrastination approach in decision making and hyper vigilance approach in decision making.

Another important factor that determines the interpersonal relations is "shyness" which can be defined as nervousness and sense of restriction experienced in environments where there are other people [28]. Shyness is considered as the most important factor that makes meeting new people, making new friends and enjoys different experiences difficult for individuals [29].

According to Enc., shyness is a disturbing feeling that is felt during relations with others and inhibits correct behaviours [30]. Carducci considers shyness as a problem in interpersonal relations generally caused by over prudency, low selfesteem and fear of rejection experienced in interpersonal relations [31]. One of the dimensions of a shy individual's behavior totally affects the decision making dimensions of that individual. At this point, shyness is an automatic system unintentionally developed by the individuals who will be affected negatively in such a situation in order to protect themselves [32]. Nathanson argues that, we develop shyness against pressures surrounding us [33]. As can be deduced from these thoughts, shyness is a social context and it is an intentional or unintentional effort to protect oneself in decision making processes.

According to Alphen individuals with high and low levels of shyness exhibit different reactions in decision making process. Individuals with low shyness level can tolerate the situations that can occur after decision making more easily in the shyness dimension, whereas individuals with high shyness level have weak motivations in decision making process and they want the action to end guickly. Moreover, they exhibit attitudes of protecting themselves instinctively. Besides the cons, high shyness levels create positive effects in careful decision making approaches. Shy individuals feel an intense pressure on themselves in decision making processes and as a result of this pressure, individuals experience a more cautious decision making process [34]. Bagozzi, Verbeke and determined that Gavino under these circumstances, culture is directly related to decision making and shyness. In eastern societies, shyness is generally concealed with violence, whereas in western societies, shyness is considered as a more acceptable feeling [32]. Leith and Baumeister emphasize that individuals exhibit high risk behaviours when they are sad and use the sense of shyness as a selfprotection strategy that can occur as a result of decision making [35]. These findings and statements overlap with the findings of the present research.

In this sub-dimension of the present research, self-esteem, and shyness levels, self-esteem and power to explain self-esteem and decision making styles in decision making are examined. According to the findings, original contribution of shyness and self-esteem to self-esteem in

decision making can explain 15% of the variance. The predictor variables' order of importance on self-esteem in decision making is; shyness and self-esteem. It is observed that self-esteem and shyness levels of students affect the vigilance decision making which is one of the decision making sub-dimensions, at a significant level. According to the findings, original contribution of shyness and self-esteem to vigilance decision making can explain the 2% of the variance. The predictor variable is shyness.

According to the findings, original contribution of shyness and self-esteem to buck-passing decision making can explain the 10% of the variance. The predictor variables' order of importance on self-esteem in decision making is; shyness and self-esteem.

Students' self-esteem and shyness levels can explain procrastination approach in decision making which is one of the sub-dimensions of decision making at a significant level. According to the findings, original contribution of shyness and self-esteem to procrastination approach in decision making can explain 7% of the variance. The predictor variable is shyness.

Students' self-esteem and shyness levels can explain hyper vigilance approach in decision making which is one of the sub-dimensions of decision making at a significant level. According to the findings, original contribution of shyness and self-esteem to hyper vigilance approach in decision making can explain 12% of the variance. The predictor variable is shyness.

Some researches point out that self-esteem affects decision making. Burnett, Mann and Beswick found in their research that, students' decision making styles and self-esteem are effective in determining the decision making behavior. Moreover, they found a positive correlation between cautious-selective decision making style and career choice and subject choice. Besides, they state that students with high self-esteem similarly use cautious-selective decision making style and present a positive correlation between career choices, and there is no significant correlation between students using other decision making styles and career choices [18]. Paisley and Hubbard, indicate that efficient decision making skill is related to higher selfvalue [27]. Shyness, as being evaluated negatively by others [10], sense of uneasiness, shyness, timidity and diffidence [11] and restlessness, and anxiety experienced in social

environments including the fear of being evaluated by the authority [13], affects decision making processes negatively and makes taking steps difficult for individuals. The findings of the present research that, self-esteem and shyness are effective in self-esteem in decision making and decision making styles, overlap with the theoretical information and findings of the earlier researches [26].

5. CONCLUSION AND RECOMMENDA-TIONS

Following recommendations can be made as a result of the present research;

- Shyness is an extremely important problem for university students. University students need to know what shyness is and how it affects their lives and what kind of help them can get to overcome it in order to prevent and overcome shyness. At this point, trainings interactional group works for shy students can be effective.
- 2. In the present research, we found that there is a positive relationship between positive decision making styles and self-esteem; and there is a negative relationship between positive decision making styles and shyness. Therefore, more activities can be conducted, for increasing self-esteem, preventing shyness, and developing friendships.
- In order to generalize the findings of the present research for the whole country, new researches can be carried on different samples and in accordance with the findings of these researches, various variables can be added to latter researches.
- Longitudinal researches related to decision making, self-esteem and shyness can be carried. Training programs on decision making skill, increasing self-esteem and decreasing shyness levels can be developed and their effects can be tested.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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