Constructing a Scale for Development of Economic Values among Gifted High School Students at Al-Ahsa Region

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Abstract Values have an important role in guiding the thinking and behavior of the individual. The society is suffering from many economic problems, as it is living in a difficult situation. Since students are part of society, so they have an important role in building, progressing and developing their society. Therefore, this study aims to construct a scale of economic values for gifted high school students at Al-Ahsa region. The developed scale covered four concepts including the value of rationalization of consumption (R), the value of work (W), value of respect public property ownership (O) and value of respect workers and professionals and their appreciation (A). The validity and reliability of the 55 items were tested using Raasch Model analysis. The study sample consisted of (310) respondents. The findings showed that there were statistically significant differences in the scale based on gender in favor of female. While there were no statistically significant differences based on academic branch, academic level and interaction between variables demographic of the study. Finally, the study recommended that adoption of the economic values scale in the region for gifted high school students from educators and interested in the educational process. In addition, the study promotes the economic values of students and implies economic concepts and values in all curricula.

Keywords Economic Values, Gifted High School Students, Rasch Model, Psychometric Properties

1. Introduction

The issue of values is one of the fundamental issues affecting human relations. Educational psychologists were interested in the study of values. Values have a significant role in regulating the behavior of individuals, and their judgments and attitudes. Values are directly related to human behavior, which define and guide it in the areas of life. It also plays an essential role in the formation of individual personality and actions, cohesion, stability, and progress of society [35, 37]. Values play a role in the occurrence of social and economic change. Because it is a social phenomenon that obstructs change or help in the occurrence to fit with the social needs in society including the negative or positive values. According to David McClelland, economic development requires changing values, traditional norms in society to new values and standards that push the process of economic development [34, 30]. Values are an important aspect in the study of organizational behavior, its form to understand attitudes and motivations, affect our perception, incentive force and organization of behavior and specifically for objectives and policies [6, 23]. Technical development requires a change in values, so the value has specific importance in the life of the individual

and society. Value forms culture and is considered the path of growth and progress [20]. E. Spranger classified the values into six categories: theoretical, economic, aesthetic, social, religious and political values [32].

Therefore, the Kingdom of Saudi Arabia attaches great importance to students through the provision of the enrichment programs offered by the General Directorate of Gifted Education in the Ministry of Education. The school represents the best environment for caring for gifted students, which represents their psychological stability and communication with their colleagues and with school and their sense of belonging. The earlier provision of care to gifted students gives them more chances to develop their abilities and talents. The preparation of the Gifted Education Program in school has been implemented in six educational departments with five teachers and one supervisor. They have been trained on gifted care strategies within the school. In addition, adopting the idea of qualifying national cadres that able the provision of specialized educational care for the students' diverse talents in order to work as permanent members of public education schools [10].

Most individuals are born with several creative abilities and varied talents. It can grow and develop in different age stages if it is cared for and are given attention to. Therefore, it is necessary to make young people able to face life in the era of excellence and creativity. The gifted are the cornerstone of civilization and rich wealth in the fields of development and progress of the nation. Therefore, they must be given the necessary care and put in the appropriate environment to reveal their talents and potential energies [14, 7]. The nature of the gifted appears and sometimes disappears for many reasons, social or psychological. Therefore, it is necessary to follow up on this development and change to enhance the strengths and attempts to address weaknesses to keep this talent glowing. Many creative qualities feature gifted students despite the unique characteristics of each gifted, such as curiosity, fluency, flexibility, and originality. Besides, high ability of imagination, manipulation of ideas, love of discovery, high sensitivity to beauty and strength of opinions and beliefs [15, 16].

The study of creative teaching practices is an important issue in higher education [10, 21]. Creative teaching is considered an educational activity that carried out by the faculty member using three steps: planning, implementation and evaluation in order to make a qualitative change in the learners' behavior. The faculty member performs a range of creative methods during his/her teaching to achieve the desired goals. Creative methods are based on making changes in social, educational and socialization processes through educational programs based on the productive thought development, provoking creative thinking, training on fertile imagination and creative problem solving [14].

Creative teaching practices are those teaching methods and patterns of behavior practiced and preferred by the faculty member, and distinguish him/ her from others [1, 12]. Teaching practices should focus on creative and innovation [8, 9].

Values have an important role in guiding the thinking and behavior of the individual. Although values have relative stability, it changes from generation to others by the entry or disappearance of new values. The technological progress in communication have become students' values are continually changing and renewed. The contemporary society is also suffering from many economic problems, as it is living in a difficult situation. Since students are part of society, so they have an important role in building, progressing and developing their society. Therefore, it is necessary to develop a scale of economic values to keep up with change and renewal in these values. Economic problems are part of our lives. High unemployment, competition in global markets, free trade and inflation. Besides, there are many social, political and environmental problems that have significant economic impacts [30, 5, 43].

Values are inseparable from education. The interrelations between them make education affect the individual economically and in many aspects, whether it is a distinct personality with economic interests, or an individual has economic relations with others, or being a worker involved in the economic production of society. For the individual to keep up with economic changes, he must base his relations on the right economic values. Therefore, the interest of instilling economic values among students is important, which is no less important than the knowledge that is provided to them. The development of these values will guide them to the right and economical disposition, and to deal with things in an oriented and civilized way, to be a lover of effective and productive work, committed to his ethics. Dealing with modern resources requires all saving and rationalization of consumption, planning and development, respect for each worker, and appreciation of the value of his work. The focus on the consolidation of economic values in the individual makes it possible for their effects to appear in his behavior in the future. Teaching the primary principles of economic values for the individual is an attempt to gain the right economic habits that will affect it later [29, 25].

The individual adapts to behavioral traits useful to him and other people, such as self-reliance, and the desire to do the work with acceptance and relaxation. This leads to the formation of a good man who is able to interact with society, which achieves satisfaction and happiness for him and others. Economic values have a great impact on the individual by increasing self-confidence; this leads to higher production rates, the community progress in the renaissance and industrial, agricultural and commercial civilization. Economic values motivate young people to

develop their intellectual curricula that will reflect success or failure in the economy, hence the need to strengthen those values. The secondary school stage is important, namely adulthood and adolescence, which is one of the most dangerous stages facing parents and educators. Therefore, he must be truthful and have a good and strong personality [30, 2]. So this study aimed at constructing and developing a scale of economic values for gifted high school students in the Al-Ahsa region. Furthermore, the research questions in this article are: What are the psychometric properties of economic value scale constructed to determine if it is sufficiently valid and reliable as a predictor of economic value scale? In addition, is there any significant difference in the economic value among gifted high school students in the Al-Ahsa region due to gender, academic Branch and educational level?

2. Literature Review

The study by Al - Ruwaili [39] aimed to identify the role of secondary school in the development of economic values among high school students as perceived by students, by identifying the role of the components of the school community (Teacher, school administration - curriculum - school activity) in developing the economic values of high school students from their point of view. The results showed that the role of the teacher got the highest average followed by the role of management and then the role of the curriculum and finally the role of school activity. Al-Arfaj [3] conducted a study aimed to identify the contribution of the school administration in the secondary stage in building three main values among the students. These values represent the culture of successful firms which are innovative, good service, and affiliation. The results showed that students are opposed to the assumption that there is no culture of successful firms in both schools. The results also indicated that they oppose the assumption that none of the three values, however, they estimated the existence of these values at low levels. The study by Stuer & Mezaros [36] aimed at the importance of economic education in schools. They found that economic illiteracy in the United States of America increased during the years from (1992 to 2000). The income of an individual has increased by (47%) but its expenditure increased by 61%. During these eight years, the personal saving rate has dropped from about 6% to 0%. Half of Americans live within their daily income, and (50%) of all adults did not start saving. Young people should be prepared to control their economic affairs smartly. Many strategies can be used to teach economic values in schools.

Racko [33] conducted a study aimed to explore the formation values among students at the Stockholm School of Economics to prepare economists and professionals for

emerging economic institutions. The study also analyzed the impact of social and academic contexts on students' economic values. The study concluded that social and academic context factors influenced the formation of students' economic values, and that social and academic students' experiences had an impact on the process of changing their economic values. The study by Suiter and Meszaros [40] aimed to teach savings and investment in primary and middle schools by addressing the strategies that can be used to teach economic values in schools. The study concluded that many strategies can be used to teach economic values in schools through school activities, role-playing, active learning, learning through groups and others. Al-Shammari [13] conducted a study aimed to identify the extent to which student activities contributed to the development of economic values among high school students. Also the detection of obstacles that limit the activities of student role in the development of economic values. The study concluded that student activities play a role in the development of some economic values, such as respect for handwork, rationalization of consumption, productivity and take responsibility. Many constraints limit student activities in developing economic values, such as the negative impact of some students on their colleagues, Poor use of life situations that have a role in the development of those values.

Al-Rabaani Al-Makhlafi [12] conducted a study aimed to detect the level of economic awareness among students of social studies at Sultan Qaboos University. The results showed a weak level of economic awareness among students and their lack of economic information. It also recommended the need to develop students' economic information in the field of investment and banking transactions, enhance their attitudes towards investment and benefit from the information provided by the media and communication, and work to develop their information on how to make better use of their money. The study by Al-Doosry [5] aimed to recognize the reality of the secondary school's contribution to the development of the economic awareness of their students. It also recognizes the means it can take in enhancing its contribution to the development of economic awareness of their students. The results showed that the approval of the sample of the study in a medium degree on the reality of the contribution of the secondary school in developing the economic awareness of their students. It also contributes to the development of respect for time and love of work among students as economic values. In a study by Mittal [30], the values of male and female secondary school students with their socio-economic status were examined and compared. The results showed that the existence of the average level of values among all high school students. While female secondary school student's preferred economic values on others. In addition, social and economic status had a significant impact on the

religious, social, family and health values among students. Abu Zeid & Al Zuod [1] conducted a study aimed at identifying the most and least important values of secondary school students in Amman Governorate as perceived by the students themselves. The results showed that the economic values ranked penultimate according to importance. In addition, there were no statistically significant differences due to gender, variables of class, family income, and education area.

Rasch Model Analysis (RM)

One of the most important models of the item response theory is Rasch model RM, because it achieves the objective property and independence in psychological and educational measurement. It is one of the simplest models because it includes one parameter related to item difficulty, assumes the equal discrimination of all items, provides the opportunity to delete inappropriate individuals and items which in turn provides the validity of the scale. Furthermore, it provides the reliability of the scale because it achieves the independence property. The use of Rasch model in the construction of a scale indicates the availability of an objective in the measurement of ability variable, which means verifying the validity and reliability of the estimates of both individuals' capabilities and items scale [27, 24]. RM helps to estimate the probability of an individual answering to item correctly, in terms of the individual's ability, and the difficulty coefficient of the item, regardless of the sample size and number of items.

3. Methodology

Figure 1. Procedures for Scale

This study used a quantitative descriptive survey approach. The population consisted of all gifted high

school students at Al-Ahsa region during the academic year 2019/2020. Al-Ahsa region has been randomly selected from Saudi Arabia Governorates. The sample of this study consisted of 500 gifted high school students. To achieve the objectives of the study and answer the research questions, economic values of gifted students' scale was developed. The scale is used to measure the economic values of gifted students. It consisted of four dimensions namely the value of rationalization of consumption (R), the value of work (W), value of respect public property ownership (O) and value of respect workers and professionals and their appreciation (A).

4. The Development of Scale Steps

Defining the objective of the scale, which is to measure the economic values of gifted high school students. Determining dimensions of economic values by reviewing literature review. The scale consisted of four dimensions as mentioned previously. Developing of items scale by reviewing the previous studies. The final copy of the scale consisted of 55 items.

4.1. Verifying the Validity and Reliability of the Scale

The validity of the scale was verified. The scale items were examined by 9 experts from the University of King Faisal. Based on their opinions, the researcher modified and reformulated some scale items, it also some items were omitted. To ensure the validity and reliability, the scale was piloted with some 30 gifted high school students, and the responses and feedback obtained were used in modifying the final scale. The data were analyzed using SPSS version 24. In addition, it analyzed and evaluated according to Rasch model using Winsteps software version 3.68.2.

The next step is to find the validity of the instruments by determining the discriminant coefficient (Corrected item- total Correlation) using SPSS. The items that have discriminant coefficient of less than .20 were omitted. After that, the construct validity was verified using internal consistency validity method and Rasch model analysis. Students' responses were used in the calculation of matrix correlation coefficients between the subscales and the total score as shown in Table 1.

Table 1 represents matrix correlation coefficients between the mean of subscales (AV.R, AV.W, AV.O and AV.A) and the mean of total score (AV.TOT). It also shows that the values of correlation coefficients are relatively high, this indicates that all involved in the measurement of a single concept of economic values, emphasizes the correlation of sub-scores with the total score. This is an indicator of the scale validity [41].

Cronbach Alpha: The reliability coefficient for the items scale is equal to 0.74. This value indicates that the scale has a good degree of reliability.

Table 1. Correlations Matrix of Development of Economic Values Scale

		AV.TOT	AV.R	AV.W	AV.O	AV.A
AV.TOT	Pearson Correlation	1	.540**	.835**	.774**	.844**
	Sig. (2-tailed)		.000	.000	.000	.000
AV.R	Pearson Correlation	.540**	1	.173	.064	.215
	Sig. (2-tailed)	.000		.000	.000	.000
AV.W	Pearson Correlation	.835**	.173	1	.515**	.712**
	Sig. (2-tailed)	.000	.000		.000	.000
AV.O	Pearson Correlation	.774**	.064	.515**	1	.614**
	Sig. (2-tailed)	.000	.000	.000		.001
AV.A	Pearson Correlation	.844**	.215	.712**	.614**	1
	Sig. (2-tailed)	.000	.000	.000	.001	

Table 2. Item Fit Analysis for Economic Values Scale

Items	measure	Model S.E	Infit		Outfit		Pt-measure CORR
			MNSQ	ZSTD	MNSQ	ZSTD	
R2	-.34	0.29	1.24	0.8	1.46	1.5	0.21
R9	-.16	0.29	1.24	0.7	1.16	0.7	0.23
O5	.22	0.2	1.28	1.4	1.29	1.4	0.24
W5	-.27	0.22	1.22	1	1.19	0.9	0.24
W4	.18	0.19	1.29	1.3	1.29	1.3	0.26
R3	.43	0.22	1.21	1	1.21	1	0.29
O10	-.16	0.29	1.13	0.6	1.16	0.7	0.31
R1	.04	0.27	1.14	0.6	1.19	0.7	0.31
R8	-1.08	0.55	1.04	0.2	1.09	0.4	0.37
A2	-.48	0.36	1.06	0.3	1.17	0.7	0.38
R11	-1.19	0.2	1.16	0.8	1.16	0.8	0.39
R6	-.76	.27	1.08	0.4	1.15	0.7	0.39
O13	.37	0.2	1.12	0.5	1.14	0.6	0.42
R4	-.53	0.19	1.12	0.6	1.16	0.7	0.42
A11	.66	0.23	1.06	0.3	1.2	0.6	0.44
R7	-.09	0.21	1.07	0.4	1.06	0.4	0.46
W3	-.25	0.25	1.04	0.3	1.06	0.3	0.47
A1	.37	0.62	0.99	0.1	0.93	0	0.51
W6	-.28	0.19	1.08	0.4	1.09	0.4	0.51
O2	-.37	0.18	1.1	0.5	1.09	0.5	0.53
R12	.42	0.35	0.98	0	0.96	-0.1	0.53
O11	-.19	0.23	1.02	0.2	1.07	0.3	0.54
O6	.08	0.27	1.02	0.2	1	0.1	0.55
A6	.77	0.38	0.97	0.1	0.91	-0.1	0.57
O14	.16	0.16	1.06	0.3	1.88	1.3	0.57
A5	-.38	0.32	0.98	0	1.04	0.2	0.59
R10	.51	0.16	1.09	0.5	1.11	0.6	0.59
O3	.01	0.19	1.05	0.3	1.06	0.3	0.61
R5	1.05	0.23	1	0.1	1.01	0.1	0.61
O4	.17	0.29	0.96	0.1	0.88	-0.1	0.64
W8	.23	0.21	1.02	0.2	0.95	-0.1	0.65
O9	-.18	0.18	1.05	0.3	0.9	-0.1	0.65

Table 2 Continuous

A14	-.48	0.14	1.08	0.4	1.06	0.3	0.69
W13	.04	0.21	0.95	0.1	0.83	-0.3	0.69
O7	-.27	0.17	0.97	0	1.01	1	0.69
O1	-.71	0.34	0.93	0	0.75	-0.4	0.70
W9	-.21	0.23	0.93	-0.2	0.94	-0.2	0.71
A8	-.63	0.17	0.95	-0.2	0.95	-0.1	0.73
A10	.29	0.29	0.94	-0.3	0.85	-0.5	0.74
A9	-.73	0.16	0.91	-0.2	0.94	-0.2	0.74
W15	-.09	0.32	0.89	0.1	0.46	-0.4	0.76
O8	-.37	0.16	0.94	-0.2	0.92	-0.3	0.77
A13	-.09	0.29	0.9	-0.4	0.84	-0.6	0.77
O12	.51	.19	0.9	-0.3	0.88	-0.4	0.79
A4	.01	0.23	0.85	-0.4	0.74	-0.8	0.79
W11	1.05	0.15	0.87	-0.6	0.86	-0.6	0.81
W2	.17	0.35	0.88	-0.5	0.86	-0.5	0.81
A3	.23	0.55	0.9	-0.2	0.76	-0.5	0.82
W10	-.18	0.17	0.81	-0.8	0.81	-0.7	0.83
A12	-.48	0.17	0.79	-1	0.8	-0.9	0.83
W14	.04	0.16	0.77	-1.1	0.77	-1.1	0.83
W12	-.27	0.23	0.79	-0.6	0.67	-1	0.84
W7	.03	0.28	0.79	0.1	0.77	-1.1	0.85
A7	.20	0.18	0.72	-1	0.68	-1.1	0.85
W1	-.57	0.36	0.8	-0.9	0.81	-0.9	0.87

Table 3. Calibration Scaling Analysis of Economic Values Scale

Category Lable	Score	Observed Count %	Observed Average	Infit MNSQ	Outfit MNSQ	Structure Calibration	Category Measure
2	2	2 4	-.32	.68	.60	None	(-2.49)
3	3	7 20	.43	.83	.48	-1.16	-.86
4	4	14 56	.57	.81	.66	-.49	.75
5	5	7 20	.96	.63	.88	1.65	(2.87)

4.2. Validity and Reliability Using Rasch Model

To ensure the validity using Rasch model it should be verifying: first; the item-fit Statistics, and the values of MNSQ for infit lies between .4-1.5 to be appropriate. Second, item polarity analysis (Point Measure Correlation), the acceptable value for PTMEA lies between .2-1.0. Third, calibration scaling analysis. Finally, the dimensionality is also used to verify both content and construct validity [26, 19, 42, 17, 38]. Table 2 showed that the Item Polarity and Item Fit Analysis for Economic Values Scale.

Table 2 shows that the values of MNSQ for infit ranged between .72 and 1.29. Moreover, the values of PTMEA

ranged between .21 and .87. According to Rasch model, the above values are appropriate and acceptable for construct validity. Table 3 and figure 2 below showed a summary of the category structure on a scale gradation and size structure of the intersection. It also showed the schedules for grading scale calibration analysis of the scale.

Table 3 shows the most frequent answer is the scale of participants ranking 4 which 14 (56%) the scales 3 and 7 of 7 (20%). The last grading scale was scale 2 of 2 (4%). The column of observed averages shows the pattern of respondents moves from negative to positive (-.32 to .96). This indicates normal pattern based on Rasch model.

Figure 2. The Summary of the category structure on a scale gradation

Table 4. Item Dimensionality of Economic Values Scale

	Empirical		Modeled
Total raw variance in observations	74.9	100%	100%
Raw variance explained by measures	19.9	26.6%	26.9%
Raw variance explained by persons	4.4	5.8%	5.9%
Raw Variance explained by items	15.6	20.8%	21.0%
Raw unexplained variance (total)	55.0	73.4%	100.0%
Unexplained var.in 1st contrast	7.6	10.2%	13.9%
Unexplained var.in 2nd contrast	6.4	8.6%	11.7%
Unexplained var.in 3rd contrast	5.4	7.2%	9.8%
Unexplained variance in 4th contrast	4.7	6.2%	8.5%
Unexplained variance in 5th contrast	4.2	5.6%	7.6%

Tables 4 show the raw variance explained by measures is 74.9%, it is more than 40%. The unexplained variance in 1st contrast is 7.6%, which is less than 15. Hence, dimensionality data result was appropriate to Rasch model.

To ensure the reliability using Rasch model it should be verifying the person and item reliability. The criteria of reliability should be 50% and more. Furthermore, item and person separation values should be more than 2 to be acceptable [31, 42]. Tables 5 and 6 below show that the person separation and reliability and item separation and reliability for economic values scale. The person and item reliability are greater than .5, which are .74 and .76 respectively. Furthermore, the person and item separation are greater than 2, which are 2.17 and 2.13 respectively. Based on Rasch model these reliability values indicate that the scale has good degree of reliability.

Table 5. Person Separation and Reliability for Economic Values Scale

	Raw Score	Count	Measure	Error	Infit		Outfit	
					MNSQ	ZSTD	MNSQ	ZSTD
Mean	214.0	55.0	.61	.15	.98	-0.1	1.33	-.6
S.D.	13.8	.0	.29	.01	.29	1.5	.26	1.2
Real Rmse	.16							
ADJ.SD	.25							
Separation	2.17							
Person Reliability	.76							

Table 6. Item Separation and Reliability for Economic Values Scale

	Raw Score	Count	Measure	Error	Infit		Outfit	
					MNSQ	ZSTD	MNSQ	ZSTD
Mean	97.3	25.0	-1.43	.25	1	.1	.85	.1
S.D.	18.8	.0	.56	.10	.13	.6	.22	.7
Real Rmse	.44							
ADJ.SD	.49							
Separation	2.13							
Person Reliability	.74							

5. Findings

To answer the first question: What are the psychometric properties of economic value scale constructed to determine if it is sufficiently valid and reliable as a predictor of economic value scale?

The validity and reliability of the study scale were verified in different ways as previously shown. The constructs of scale were developed and tested using Rasch Model analysis. The psychometric properties of scale developed to determine if they are sufficiently valid and reliable as a predictor of scale. This indicates that the scale has high psychometric properties, which enables it to be used effectively and efficiently.

To answer the second question: is there any significant difference in the economic value among gifted high school students in the Al-Ahsa region due to gender, academic branch and educational level?

To answer this question, the means value, standard deviations, T- Test, one-way analysis of variance and multivariate analysis of variance are used.

Table 7 shows that the mean value response of females in all dimensions of the scale and in the whole of the scale (avTOT) 4.1435 are higher than that of males 3.7917.

Table 7. Comparison of the Economic Values of Gifted High School Students in relation to their Gender

		N	Mean	Std. Deviation
avR	Male	165	3.7867	.46507
	Female	145	4.1913	.47013
	Total	310	3.9623	.50766
avW	Male	165	3.5733	.39572
	Female	145	3.8826	.51496
	Total	310	3.7075	.47570
avO	Male	165	3.8367	.33455
	Female	145	4.1478	.47149
	Total	310	3.9717	.42766
avA	Male	165	3.9783	.42331
	Female	145	4.3630	.47131
	Total	310	4.1453	.48310
avTOT	Male	165	3.7917	.25490
	Female	145	4.1435	.33457
	Total	310	3.9443	.33980

Table 8. Comparison of the Economic Values of Gifted High School Students in Relation to their Academic Branch

		N	Mean	Std. Deviation
avR	Scientific	277	4.0025	.49266
	literary	33	3.8727	.57024
	Total	277	3.7466	.46105
avW	Scientific	33	3.5515	.57343
	literary	277	4.0058	.43041
	Total	33	3.8242	.44723
avO	Scientific	277	4.1823	.46990
	literary	33	4.0121	.56886
	Total	277	3.9798	.35246
avA	Scientific	33	3.8212	.32089
	literary	277	4.0025	.49266
	Total	33	3.8727	.57024
avTOT	Scientific	277	3.7466	.46105
	literary	33	3.5515	.57343
	Total	277	4.0058	.43041

Table 8 shows that the mean values response of scientific branch students in three dimensions (first, third and fourth) and in whole of the scale (avTOT) 4.0025, 4.1823, 3.8212 and 3.7466 respectively are higher than that of literary branch students. While the mean values response of literary branch students in the second dimension, which is the value of work is higher than that of scientific branch students. Table 9 shows the results of T- Test for differences between means according to gender and Academic branch.

Table 9 showed that the value of ($t = .667$) for whole dimensions indicated that there were statistically significant differences for the differences among the means. In other word, there were statistically significant differences among the responses of the sample on the economic values scale according to gender. The value of ($t = .333$) for whole dimensions indicated that there was no statistically significant difference for the differences between the means, where the significant level is greater than (0.05). In other word, there were no statistically significant differences among the responses of the sample on the economic values scale according to academic branch.

Table 9. The results of T-Test for differences between means according to gender and Academic branch

Variables and Dimensions			No.	Mean	S. D.	T value	Sig.
Gender	avR	Male	165	3.7867	.46507	.856	0.009
		Female	145	4.1913	.47013		
	avW	Male	165	3.5733	.39572	.560	0.97
		Female	145	3.8826	.51496		
	avO	Male	165	3.8367	.33455	1.947	0.089
		Female	145	4.1478	.47149		
	avA	Male	165	3.9783	.42331	1.947	0.089
		Female	145	4.3630	.47131		
	Whole dimensions	Male	165	3.7917	.25490	.667	0.039
		Female	145	4.1435	.33457		
Academic branch	avR	Scientific	277	4.23	.706	.401	0.072
		Literary	33	4.02	.576		
	avW	Scientific	277	4.22	.659	.005	0.019
		Literary	33	3.94	.607		
	avO	Scientific	277	4.21	.755	.112	0.092
		Literary	33	4.01	.602		
	avA	Scientific	277	4.24	.684	.112	0.171
		Literary	33	4.07	.573		
	Whole dimensions	Scientific	277	4.22	.682	.333	0.061
		Literary	33	4.01	.574		

Table 10 shows that the mean values response of students in all dimensions of the scale from high to low in relation to their educational level are the second year of the secondary stage (4.0381), the first year of the secondary stage (3.9662) and the third year of the secondary stage (3.9000) respectively. Table 11 below shows the results of one-way analysis of variance for the

economic values scale according to Educational Level.

Table 11 showed that there were no statistically significant differences in all dimensions of economic values scale based on educational level, where the significant level was greater than 0.05. In general, there were no statistically significant differences in economic values scale as a total based on educational level.

Table 10. Comparison of the Economic Values of Gifted High School Students in relation to their Educational Level

		N	Mean	Std. Deviation
avR	First year of secondary	134	3.9873	.59943
	Second year of secondary	83	4.0795	.36014
	Third year of secondary	93	3.9097	.44479
	Total	310	3.9887	.50207
avW	First year of secondary	134	3.7261	.51866
	Second year of secondary	83	3.7940	.39551
	Third year of secondary	93	3.6645	.47746
	Total	310	3.7258	.47702
avO	First year of secondary	134	3.9716	.43522
	Second year of secondary	83	4.0952	.41228
	Third year of secondary	93	3.9108	.44022
	Total	310	3.9865	.43512
avA	First year of secondary	134	4.1796	.45789
	Second year of secondary	83	4.1835	.50439
	Third year of secondary	93	4.1194	.50136
	Total	310	4.1642	.48322
avTOT	First year of secondary	134	3.9662	.36903
	Second year of secondary	83	4.0381	.29831
	Third year of secondary	93	3.9000	.36445
	Total	310	3.9629	.35217

Table 11. The Results of Analysis of Variance of Differences among the Means of Responses of the Sample on Economic Values Based on Educational Level

variance source			Sum of Squares	df	Mean Square	F	Sig.
Academic Rank	avR	Between Groups	15.783	2	7.892	24.073	.346
		Within Groups	52.452	147	.357		
		Total	68.235	149			
	avW	Between Groups	9.097	2	4.548	19.655	.127
		Within Groups	54.956	147	.374		
		Total	64.053	149			
	avO	Between Groups	11.825	2	5.912	72.426	.218
		Within Groups	65.312	147	.444		
		Total	77.137	149			
	avA	Between Groups	13.401	2	6.701	72.426	.218
		Within Groups	50.954	147	.347		
		Total	64.355	149			
	Whole dimensions	Between Groups	12.362	2	6.181	51.208	.326
		Within Groups	52.342	147	.356		
		Total	64.704	149			
		Within Groups	63.938	147	.435		
		Total	64.704	149			

Table 12. The Results of Multivariate Analysis of Variance in Economic Values Based on the Gender, Academic Branch and Educational Level

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender	avR	2.439	1	2.439	11.683	.001
	avW	.949	1	.949	4.885	.028
	avO	.521	1	.521	3.143	.077
	avA	2.035	1	2.035	11.943	.001
	avTOT	1.401	1	1.401	15.939	.000
Branch	avR	.002	1	.002	.008	.927
	avW	.090	1	.090	.461	.498
	avO	.444	1	.444	2.677	.103
	avA	.078	1	.078	.460	.498
	avTOT	.092	1	.092	1.051	.306
Level	avR	.199	2	.100	.477	.621
	avW	.489	2	.245	1.260	.285
	avO	.451	2	.225	1.360	.258
	avA	.054	2	.027	.157	.855
	avTOT	.142	2	.071	.805	.448
Gender * Branch	avR	.031	1	.031	.149	.699
	avW	.341	1	.341	1.758	.186
	avO	.551	1	.551	3.328	.069
	avA	.754	1	.754	4.426	.036
	avTOT	.333	1	.333	3.790	.053
Gender * Level	avR	.781	2	.391	1.871	.156
	avW	.654	2	.327	1.683	.188
	avO	.193	2	.096	.581	.560
	avA	2.856	2	1.428	8.379	.000
	avTOT	.222	2	.111	1.260	.285
Branch * Level	avR	.039	2	.019	.093	.911
	avW	.427	2	.213	1.098	.335
	avO	.125	2	.062	.377	.687
	avA	.438	2	.219	1.284	.278
	avTOT	.138	2	.069	.785	.457
Gender * Branch * Level	avR	.378	2	.189	.906	.405
	avW	1.442	2	.721	3.711	.026
	avO	.296	2	.148	.893	.410
	avA	1.182	2	.591	3.468	.032
	avTOT	.357	2	.178	2.029	.133

Table 12 shows that there are statistically significant differences in all dimensions of the scale based on gender in favor of female. While there are no statistically significant differences in all dimensions of the scale based on academic branch, and educational level. Based on interaction between gender and branch, interaction between gender and level, interaction between academic branch and educational level and interaction between gender, academic branch and educational level there are no statically significant differences in all dimensions of

the scale.

6. Discussion of the Results

The results showed that there are statistically significant differences in all dimensions of the scale based on gender in favor of female, because females are trying to prove themselves in all fields, especially economic. The females are no less efficient than males [8, 22, 21, 30].

Females are more able than males to perceive hints and details, speed in processing information, organizing ideas, ability to discover weaknesses, differences in situation and lack of information. This helped females to present. The requirements of life have led to the promotion of encouraging economic values for female work. Females have an ambition to keep pace with technological progress. It is not surprising that the results point in favor of females, at a time when Saudi Arabia is witnessing an educational and social renaissance, with increasing attention to women. This result inconsistent with some studies that showed there are no statistically significant differences in values scale based on gender for many reasons, such as similarity in social, economic and cultural conditions, maturity factor in understanding of life and they lived in the same zone [43, 1, 5, 18].

As for academic branch, the results were logical, there are no statistically significant differences in all dimensions of the scale based on academic branch. Because the sample study from gifted students and most of them have equal motivation to face life problems, similarity in social, economic and cultural conditions [5]. This result inconsistent with some studies that showed there are statistically significant differences in values scale based on academic branch in favor of scientific [22, 21] and in favor of literary [43, 18].

Regarding of academic level, the results showed that there are no statistically significant differences in all dimensions of the scale. Because all students are gifted, mature and conscious, where they are able to face any hard economic conditions and to promote encouraging economic values [8, 44].

Inconsistency of the study results with other studies is due to varying time between this study and previous studies. Furthermore, different environments and population of study.

7. Recommendations

1. The study recommends the adoption of the economic values scale for gifted high school students from educators and interested in the educational process.
2. Implying economic concepts and values in all curricula, especially the secondary level.
3. Encourage and promote the economic values of students, especially males, to face the challenges and difficult economic conditions.
4. Conducting training programs and workshops related to economic concepts, principles and values for secondary school students periodically.

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