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VALIDITY-RELIABILITY TEST

OF A SCALE DEVELOPED FOR ENTREPRENEURSHIP FEATURES OF UNIVERSITY STUDENTS

PRUEBA DE VALIDEZ Y CONFIABILIDAD DE UNA ESCALA DESARROLLADA PARA LAS CARACTERÍSTICAS DE EMPRENDIMIENTO DE ESTUDIANTES UNIVERSITARIOS

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ABSTRACT

Entrepreneurship involves the production of goods or services by using human labour, bringing together the factors of production, which are considered as technology, capital and natural resources. As for entrepreneurs, they are dynamic people who take risks to realize their vision for the future by making good use of the opportunities available and leave positive marks on their environment. In order to develop a new scale for the entrepreneurship, validity and reliability studies should be conducted. Reliability and validity tests are the factors that ensure accurate results in measurements without a predetermined norm value. The second factor that makes a measurement strong is validity. Validity means compliance with the purpose of the measurement and generalization to the measured universe. The study group consisted of 386 students studying at the Faculty of Nursing of Near East University. The sociodemographic characteristics of the students were analyzed in terms of age, gender and educational status. Entrepreneurship scale scores were compared according to the nonformal education of students related to entrepreneurship. In the present study, findings regarding the reliability of the Scale were obtained with Cronbach alpha (Internal consistency). Findings showed that the reliability coefficient of the scale was sufficient, and it was concluded that the scale was valid and reliable.

Keywords: Entrepreneurship, validity, reliability, scale, scale development.

RESUMEN

El emprendimiento implica la producción de bienes o servicios mediante el trabajo humano, que reúne los factores de producción, que se consideran tecnología, capital y recursos naturales. En cuanto a los emprendedores, son personas dinámicas que se arriesgan para hacer realidad su visión del futuro haciendo un buen uso de las oportunidades disponibles y dejando marcas positivas en su entorno. Para desarrollar una nueva escala para el emprendimiento, se deben realizar estudios de validez y confiabilidad. Las pruebas de confiabilidad y validez son los factores que aseguran resultados precisos en mediciones sin un valor de norma predeterminado. El segundo factor que hace que una medición sea fuerte es la validez. Validez significa cumplimiento con el propósito de la medición y generalización del universo medido. El grupo de estudio consistió en 386 estudiantes que estudiaban en la Facultad de Enfermería de la Universidad del Cercano Oriente. Se analizaron las características sociodemográficas de los estudiantes en términos de edad, género y estado educativo. Las puntuaciones de la escala de emprendimiento se compararon de acuerdo con la educación no formal de los estudiantes relacionada con el emprendimiento. En el presente estudio, los resultados con respecto a la confiabilidad de la Escala se obtuvieron con Cronbach alfa (Consistencia interna). Los resultados mostraron que el coeficiente de confiabilidad de la escala era suficiente, y se concluyó que la escala era válida y confiable.

Palabras clave: Emprendimiento, validez, confiabilidad, escala, desarrollo de escala.

INTRODUCTION

Entrepreneurship is considered as an important factor in increasing the development level of societies. Therefore, all societies want to grow effective entrepreneurs in order to develop their countries. Generally, it is the dream of an entrepreneur that lies behind the most important world-renowned brands. The inventions of entrepreneurs, both nationally and internationally, facilitate the lives of people today and accelerate the development of the society in which they live (Lütfi & Akay, 2015).

Today, the need for people who are open to innovative ideas is increasing in the health care system.Working conditions and the opportunities that a person has improve entrepreneurship features and encourage that person to take further steps. When some of the studies conducted on this topic are examined, it is seen that scale development enhances creative power, as well.

Human beings have the most complicated and perfect structure among all creatures thanks to their position and characteristics. When the main characteristics that distinguish human beings from other creatures are examined, it is seen that human is the only being seeking for a continuous change and development.

The need for nurses, who can take the lead, can think critically and can provide safe and quality care to all patients depending on their needs by making use of technological tools and equipment, is increasing. Also, innovative ideas and practices are needed for the creation of new information. These developments will improve healthcare practices, result in the development of new health policies and thus, increase the quality of the care provided (Erol et al., 2018). The most common definitions for the concept of entrepreneurship are as follows:

Aytaç & İlhan (2007), define entrepreneurship as a concept covering all processes of making innovation, putting into practice, taking risk and chasing opportunities while Petersen (2008), emphasize in their study that a professional entrepreneur should possess a global idea, take decisions with consensus and ensures that the work is done within the framework of a business plan.

Özdevecioğlu & Cingöz (2009), defines entrepreneurship as a process where certain sources and processes are searched and used for making the best use of the opportunities caught while İrmiş & Ve Özdemir (2011), defines it as the process of determining the opportunities related to the business, making an effective risk management and creating value by using managerial skills. The process of establishing a new business for profit and growing it and gaining profit by introducing a new commodity or service is also defined as entrepreneurship.

It is possible to state that one of the main factors increasing the motivation of a person for being successful is the inherent achievement motive. Successful people have high sense of satisfaction and feel happy. These people with high motivations for success do not like ordinariness and exert effort for making innovations and presenting new ideas. Küçük (2009), emphasizes that people with high achievement motives have keen interest in investigating, seeing details and learning innovations and have skills to detect opportunities better than other people, and thanks to these factors, they can come up with new business ideas.

Kaya, Güzel & Çubukçu (2011), define entrepreneur as the person who wants to be free, take her/his own decisions, act freely and achieve her/his dreams. According to Yılmaz & Sünbül (2009), entrepreneurs, who are eager to learn the innovations and have skills to make use of opportunities, are visionary and strive at achieving their targets for the future. Fullbrook (2008), reports that the precondition of professionalism is withdrawing from daily routine works and assuming tasks requiring creative power and fulfilling them in a proper manner. Explaining the importance of entrepreneurship in nursing, Kalischuk & Thorpe (2002), argued that creativity increased problem solving in nursing practices.

Features such as ambition, self-confidence, eagerness for establishing a business, persisting even in case of failure, taking risks, creativity, seeing change as an opportunity, convincing other people, being tolerant etc. can be given as example for entrepreneurship.

Çavuş & Ve Akgemici (2008), emphasize that such personal features as previous work experience, need for success, superior social skills and personal determination should be focused for entrepreneurship.

Mueller & Thomas (2000), explain entrepreneurship as the ***"activity of perceiving an opportunity and creating an organisation to obtain that opportunity".*** Similarly, Lounsbury (1998), defines entrepreneurship as the activity of examining alternative production processes for taking an opportunity and ensuring the optimization of these processes.

Muzyka, Koning & Churchill (1994), emphasize that entrepreneurship is a process which creates value for the individual and the society, responds to economic opportunities or creates economic opportunities, is presented by people and makes innovations in the economic system with the changes it brings.

In our age, which is called as information age; personality traits of entrepreneurship and entrepreneurship, in particular, as stated by Karadal (2013), can be learned through education. Hisrich & Peters (1995), included education into six factors affecting entrepreneurship, and stated that formal education played a key role in overcoming problems encountered while starting a new business. When the literature is examined, it is seen that importance is attached to raising individuals having entrepreneurship features, and one of the main themes of discussions, speeches and policies constructed on education for more than three decades has been entrepreneurship.

The main condition of science is the attention paid to the measurability of the concept studies. To this end, measurement in research means research is checked with the data collection systematic envisaged by the method designed in accordance with its objectives. It must be noted that scientific statements can only be explained by measureable concepts. Measurement can be performed by using direct (number) and indirect (factual-judgmental, view, for determining attitudes).

According to the definition of classical measurement theory, reliability means that test or scale results reveal the phenomenon concerning the conceptual structure and measurement results give similar results when applied in different places. In modern measurement theory, reliability is the "function of response" given to the item independently of the sample.

The second factor making a measurement strong is validity. Validity means compliance with the purpose of the measurement and generalization to the measured universe. Measurability of the measurement tool is based on the assessment of the validity concept. Validity determines what can be done with the test result. It is stated that validity and reliability should work together to determine to what extent the items that the measurement tool includes represents the conceptual structure.

Cronbach combined the concepts of reliability and validity and explained them as "generalizability". When the concepts of reliability and validity are used together, standardisation meaning emerges. When validity and reliability tests of a measurement are conducted in different fields and the appropriate reliability coefficients are obtained, that measurement is accepted as standardized.

The theory of "generalizability", which was developed by Cronbach and is called as the modern measurement theory, focuses on to what extent the measurement results are suitable for the generalized universe rather than to what extent the measurement results are suitable for the "real score".

Reliability is defined as the degree of any measurement tool or method to make consistent measurements or to make measurements without errors when it is expressed in a different way.

Main factors affecting reliability are quality of items, length of test, scoring, sample size and physical conditions.

Reliability is the criterion for consistency of the scale. Measurement results should be similar even when applied in different places. In other words, obtaining similar decisive results in independent measurements shows reliability. Consistency shows to what extent a scale measures a factor correctly or productivity and continuity of the scale. For reliability, test should be repeatable and transferable. Reliability is defined as a concept which shows the consistency of all questions in a measurement tool with one another as well as its uniformity and sufficiency for measuring the entity in question, is essential but not sufficient in the assessment of the concept.

Cronbach alpha value determines whether items of a scale are consistent and whether items measure a hypothetical variable in Likert type scale, semantic difference scales, Stapel scale, other psychometric tests based on total or average scores and index type measurement tools consisting of compound items. The main function of alpha value is to determine internal consistency. Cronbach alpha, which is essentially a reliability index value, informs us to what extent the items of a scale are consistent with one another and to what extent they represent the hypothetical variable hidden behind.

According to the definition made by Garret in 1937, validity is the ***"degree of a measurement tool to measure a feature in accordance with the purpose".*** (Erku**ş,** 2010)

It can also be defined as the degree of conformity of the measurement tool or method with the measurement purpose.

To consider a measurement valid, the feature that needs to be measured should be measured correctly without being confused with any other feature. However, the primary condition of a scale for being valid is reliability.

It explains whether a scale measures the intended situation as well as its generalizability. It shows that the intended phenomenon is measured correctly. Validity of a scale means that measurement tool really measures the intended features. What matters for validity is that a test, an experiment or a scale should give the same result in the repeated measurements.

Absence of errors, which will damage the general accuracy of a research, can be explained as validity.

MATERIALS AND METHODS

In this study, the aim was to test the reliability and validity of the entrepreneurship scale developed for university students. Based on this idea, the study group of this Likert-type scale including 22 items consisted of the students of the Nursing Faculty of Near East University.

The study group consisted of 386 students studying in the Faculty of Nursing of Near East University. Researchers developing the scale planned to apply the scale in the form of a quantitative study.

In order to determine whether the entrepreneurship scale prepared by the researchers was valid and reliable, 386 students were asked to respond to the scale for data collection. Of the students in the study, 226 were female and 160 were male.

In order to determine the internal consistency of the Entrepreneurship Scale, Cronbach's Alpha test was applied first, and Cronbach's alpha value was calculated as 0.787. In addition, split half test was applied to the scale, and according to the split half test results, Cronbach's alpha value for the first half consisting of 11 items was calculated as 0.760 while Cronbach's alpha value for the second half of 11 items was found to be 0.722. The correlation coefficient between the haves was found to be 0.540, and Spearman-Brown and Guttman Split-Half Coefficients were found to be 0.711. According to Büyüköztürk (2012), if the alpha reliability coefficient calculated is over 0.70, the measurement tool is considered reliable. Accordingly, the alpha value of the scale in general was found to be high, and this showed that the measurement tool was reliable.

In addition to Cronbach's alpha and split half tests, item-total correlations were examined, and it was determined that the correlation coefficients of the items in the scale varied between 0.371 and 0.642.

RESULTS AND DISCUSSION

When Table 1 is examined, it is seen that 18,1% of the nursing students included in the study are aged 20 and below; 17,36% are 21 years of age; 20,73% are 22 years of age; 21,24% are 23 years of age; and 22,54% are aged 24 and above. While 58,55% of them are female, 41,45% of them are male. 88,86% of them are citizens of the Republic of Turkey while 11,14% of them are citizens of the TRNC.

Foreign language levels of 18,65% of students are good while those of 46,63% and 34,72% of them are moderate and poor, respectively. 79,9% of the participants stated that they were satisfied with the department where they were studying. It was observed that 31,35% of students followed the footsteps of someone else while selecting their departments. 60,88% of the participants have previous work experience and 47,15% of them have business ideas. While 32,12% of the students stated that they took course on entrepreneurship in the school, 55,18% of them did not take any course on this issue.

Table 1. Socio-demographic characteristics of students (n=386).

	n	%
Age		
20 years of age and younger	70	18,13
21 years of age	67	17,36
22 years of age	80	20,73
23 years of age	82	21,24
24 years of age and older	87	22,54
Sex		
Female	226	58,55
Male	160	41,45
Birth place		
Republic of Turkey	343	88,86
Turkish Republic of Northern Cyprus (TRNC)	43	11,14
Foreign language		
Good	72	18,65
Moderate	180	46,63
Poor	134	34,72
Satisfaction with the department		
Satisfied	308	79,79
Dissatisfied	78	20,21
Anyone set example in selecting the department		
Yes	121	31,35
No	265	68,65
Work experience		
Yes	235	60,88
No	151	39,12
Business idea		
Yes	182	47,15
No	204	52,85
Entrepreneurship courses at school		
Yes	124	32,12

No	262	67,88
Non-formal entrepreneurship training		
Yes	173	44,82
No	213	55,18

When the distribution of answers of the students to the entrepreneurship scale given in Table 2 is examined, it is seen that the students generally answered the positive statements with "I agree" and the negative statements with "I disagree".

Table 2. Answers of Students to the Entrepreneurship Scale (n=386).

	$\bar{x}$	s
2.I can handle anything by working without changing the existing order and rules.*	3,78	0,94
3.I can handle anything since I trust my intuitions.	3,90	0,91
4.Even if I like my profession very much, it cannot prevent me from dreaming a new business.	4,04	1,04
5.It is my biggest dream to own my own business.	3,98	1,07
6.It is my preference to work in a guaranteed and permanent work place with career opportunities. *	4,11	1,02
8.For a successful entrepreneurship, a good business idea and taking advantage of opportunities is more important than money.	3,74	1,08
10.I wouldn't give up my current job, even if I had an opportunity for entrepreneurship*	2,68	1,26
12.By working hard, I can complete every work successfully.	3,93	1,09
13.Preparing a good plan before starting a business will help to solve all problems.	4,15	0,94
14. In my life, I pay attention to the fact that my own wishes guide me.	4,00	0,95
15.I think that the chance for success in entrepreneurship is the most important element.	3,57	1,10
18.I control my own actions; I don't want anyone else to impress me.	3,82	1,14
19.I think you need to do the right job at the right time to be successful.	4,24	0,93
22.If one has courage and faith, s/he can overcome any obstacle.	4,08	1,10
25.If I had an opportunity, I would like to realize my idea.	4,15	0,89
31.I don't want to deal with anything other than a job bringing financial income.*	3,11	1,26
32.I am restless person; I get excited about new things.	3,69	1,19
33.I am constantly excited to do a new job.	3,58	1,21
35.I like working in new jobs all the time.	3,23	1,30
38.I would be happy to make a living by working with other people.*	3,18	1,33
39.I am deeply impressed by the excitement of creating a new job.	3,80	1,17
40.I am always afraid to enter a new environment and set sail for new jobs.*	3,20	1,32

Table 3 presents descriptive statistics concerning the Entrepreneurship Scale scores of the students participating in the research such as mean, standard deviation, minimum and maximum values. Accordingly, the score obtained by the students from the entirety of the Entrepreneurship Scale is =81,96±9,22. The minimum score obtained from the Entrepreneurship Scale is 55 while the maximum one is 105.

Table 3. Entrepreneurship scale scores of students (n=386).

	n		s	Min	Max
Entrepreneurship Scale	386	81,96	9,22	55	105

When Table 4 is examined, it is seen that there is a statistically significant difference between the Entrepreneurship Scale scores of students by sex (p<0,05). Entrepreneurship Scale scores of female students (=80,26±8,58) were found to be significantly lower than the scores of male students (=4,37±9,58).

Table 4. Comparison of Entrepreneurship Scalescores of students by sex (n=386).

Sex	n		s	t	p
Female	226	80,26	8,58	-4,416	0,000*
Male	160	84,37	9,58		

**p<0,05*

When Table 5 is examined, it is seen that the scores obtained by the students from theEntrepreneurship Scale by age are as follows:=84,90±10,87 for those aged 20 and below; =83,52±8,73 for those aged 21; =81,89±8,18 for those aged 22; =80,52±9,09 for those aged 23; and =79,83±8,52 for those aged 24 and above. It was determined that the differences between the Entrepreneurship Scale scores of the students by age were statistically significant (p<0,05). Entrepreneurship Scale scores of the students aged 23 and 24 and above were found to be significantly lower than those of the students aged 20 and below.

Table 5. Comparison of Entrepreneurship Scalescores of students by age (n=386).

Age	n		s	Min	Max	F	p	Difference
20 years of age and below	70	84,90	10,87	61	105	4,048	0,003*	1-3
21 years of age	67	83,52	8,73	62	102			1-4
22 years of age	80	81,89	8,18	55	99			
23 years of age	82	80,52	9,09	63	98			
24 years of age and above	87	79,83	8,52	58	94			

**p<0,05*

When the results shown in Table 6 concerning the comparison of Entrepreneurship Scale scores of students by their status of satisfaction with the departments where they study are examined, it is seen that there are no statistically significant difference between the Entrepreneurship Scale scores of the students by this variable (p>0,05).

Table 6. Comparison of Entrepreneurship Scale scores of students by status of satisfaction with the department of study (n=386).

Satisfaction	n		s	t	p
Satisfied	308	82,35	9,18	1,629	0,104
Dissatisfied	78	80,45	9,27		

In Table 7, Entrepreneurship Scale scores of students by the status of taking someone as example while selecting the departments where they study are compared, and it is seen that there is not a statistically significant difference between the scores of the students who took someone as example and those who did not take anyone as example (p<0,05).

Table 7. Comparison of Entrepreneurship Scale scores of students by status of taking someone as example in selecting their departments (n=386).

Taking someone as example	n		s	t	p
Yes	121	82,97	9,16	1,447	0,149
No	265	81,51	9,23		

When Table 8 is examined, it is seen that there is not a statistically significant difference between the Entrepreneurship Scale scores of the students participating in the research by their foreign language knowledge (p>0,05). Although the scores of the students with poor foreign language knowledge are lower than the other students, this difference is not statistically significant.

Table 8. Comparison of Entrepreneurship Scale scores of students by foreign language knowledge(n=386).

Foreign language	n		s	Min	Max	F	p
Good	72	83,36	9,67	55	100	2,915	0,055
Moderate	180	82,51	8,99	61	103		
Poor	134	80,48	9,15	58	105		

Table 9 presents the results of the comparison of the Entrepreneurship Scale scores of students by the status of taking course on entrepreneurship in the school, and it is seen that there is not a statistically significant difference between the scale scores of the students who took course on entrepreneurship in the school and the students who did not (p>0,05).

Table 9. Comparison of Entrepreneurship Scale scores of students by status of taking course on entrepreneurship in the school(n=386).

Entrepreneurship course in the school	n		s	t	p
Yes	124	82,90	9,12	1,367	0,172
No	262	81,52	9,25		

When Table 10 is examined, it is seen that the score of the students who received non-formal education on entrepreneurship is =83,45±9,34 while that of the students who did not receive such an education is =80,6±8,96. It was determined that the difference between the scores of the students from the Entrepreneurship Scale by the status of receiving non-formal education about the entrepreneurship was statistically significant (p<0,05). Scale scores of the students receiving non-formal education about entrepreneurship was found to be higher when compared to the scores of the students, who did not receive non-formal education on entrepreneurship.

Table 10. Comparison of Entrepreneurship Scale scores of students by status of receiving non-formal entrepreneurship training (n=386).

Non-formal entrepreneurship training	n		s	t	p
Yes	173	83,45	9,34	2,872	0,004*
No	213	80,76	8,96		

**p<0,05*

When the results given in Table 11 related to the comparison of the Entrepreneurship Scale scores of the students by the availability of work experience are examined, it is seen that the difference between the Entrepreneurship Scale scores of the students with or without work experiences is not statistically significant (p>0,05).

Table 11. Comparison of Entrepreneurship Scale scores of students by work experience (n=386).

Work experience	n		s	t	p
Yes	235	82,52	9,07	1,479	0,140
No	151	81,10	9,40		

When the results presented in Table 12 concerning the comparison of Entrepreneurship Scale scores of students by the availability of business ideas are examined, it is seen that the scale score of students having business ideas is x=83,04±9,40 while the score of students who did not have business ideas is 81,00±8,97. It was determined that the difference between the Entrepreneurship Scale scores of students by the availability of business ideas was statistically significant, and Entrepreneurship Scale scores of the students having business ideas were found to be significantly higher than the scores of the students without business ideas (p<0,05).

Table 12. Comparison of Entrepreneurship Scale scores of students by availability of business ideas (n=386).

Business idea	n		s	t	p
Yes	182	83,04	9,40	2,185	0,029*
No	204	81,00	8,97		

**p<0,05*

All of 36 items of the entrepreneurship scale obtained a factor load of 0.40, and this can be considered as evidence of the construct validity of the scale. On the other hand, as a limitation of the study, this evidence is reached only with emphasis on the results obtained from this study. Therefore, it is necessary that the future research include a study on the validity of this scale based on an external variable. For example, scores obtained from the scale in different faculties and departments can be compared with the entrepreneurial performances of the students. The item-total coefficients of the scale and the high reliability coefficient are largely indicative of the internal consistency of the tool. At the end of the statistical analysis of the data obtained in the study, no significant difference was found between the entrepreneurship levels of female and male university students.

In this study conducted with a study group consisting of 386 students studying in the Faculty of Nursing of Near East University, 226 of the students were female and 160 of them were male.

In order to determine the internal consistency of the Entrepreneurship Scale, Cronbach's Alpha test was applied and it was determined that the calculated Cronbach's alpha value was 0.787. In addition, split half test was applied to the scale and according to the split half test results, Cronbach's alpha value for the first half consisting 11 items was calculated as 0.760 while Cronbach's alpha value for the second half of 11 items was calculated as 0.722. The correlation coefficient between the haves was found to be 0.540, and Spearman-Brown and Guttman Split-Half Coefficients were found to be 0.711. According to Büyüköztürk (2012), if the calculated alpha reliability coefficient is over 0.70, it can be stated that the measurement tool is reliable. Accordingly, the alpha value of the scale in general was found to be high, and it was concluded that the measurement tool was reliable.

In addition to the Cronbach's alpha and split half tests, item-total correlations were examined and the correlation coefficients of the items in the scale varied between 0.371 and 0.642.

When Table 1 is examined, it is seen that 18,13% of the nursing students included in the study are aged 20 and below; 17,36% are 21 years of age; 20,73% are 22 years of age; 21,24% are 23 years of age; and 22,54% are aged 24 and above. While 58,55% of them are female, 41,45% of them are male. 88,86% of them are citizens of the Republic of Turkey while 11,14% of them are citizens of the TRNC. Foreign language levels of 18,65% of students are good while those of 46,63% and 34,72% of them are moderate and poor, respectively. 79,9% of the participants stated that they were satisfied with the department where they were studying. It was observed that 31,35% of students followed the lead of someone else while selecting their departments. 60,88% of the participants have previous work experience and 47,15% of them have business ideas. While 32,12% of the students stated that they

took course on entrepreneurship in the school, 55,18% of them did not take any course on this issue.

When the distribution of answers of the students to the entrepreneurship scale given in Table 2 is examined, it is seen that the students generally answered the positive statements with "I agree" and the negative statements with "I disagree".

Table 3 presents descriptive statistics concerning the Entrepreneurship Scale scores of the students participating in the research such as mean, standard deviation, minimum and maximum values. Accordingly, the score obtained by the students from the entirety of the Entrepreneurship Scale is =81,96±9,22. The minimum score obtained from the Entrepreneurship Scale is 55 while the maximum one is 105.

In some of the studies conducted on assertiveness, which is a personality trait, and entrepreneurship, significant differences could not be found by sex while some studies reported that men display more assertive and enterprising behaviours than women do. In our study, similar findings were obtained, and it was concluded that male students had higher entrepreneurship features than female students. The findings are as follows:

When Table 4 is examined, it is seen that there is a statistically significant difference between the Entrepreneurship Scale scores of students by sex (p<0,05). Entrepreneurship Scale scores of female students (=80,26±8,58) were found to be significantly lower than the scores of male students (=4,37±9,58). Accordingly, this finding can imply that male students have higher entrepreneurship levels and they have different ideas about the future.

When Table 5 is examined, it is seen that the scores obtained by the students from the Entrepreneurship Scale by age are as follows:=84,90±10,87 for those aged 20 and below; =83,52±8,73 for those aged 21; =81,89±8,18 for those aged 22; =80,52±9,09 for those aged 23; and =79,83±8,52 for those aged 24 and above. It was determined that the differences between the Entrepreneurship Scale scores of the students by age were statistically significant (p<0,05). Entrepreneurship Scale scores of the students aged 23 and 24 and above were found to be significantly lower than those of the students aged 20 and below. This finding may imply that younger people have greater interest in entrepreneurship.

When Table 10 is examined, it is seen that the score of the students who received non-formal education on entrepreneurship is =83,45±9,34 while that of the students who did not receive such an education is =80,6±8,96. It was determined that the difference between the scores of the students from the Entrepreneurship Scale by the status of receiving non-formal education on entrepreneurship was statistically significant (p<0,05). Scale scores of the students receiving non-formal education about entrepreneurship was found to be higher when compared to the scores of the students, who did not receive non-formal education on entrepreneurship.

When these findings are assessed and it is considered that the scores of students, who received education on entrepreneurship, are high, the importance of education becomes clear. It can be stated that the students, who receive education, can generate new ideas for the future and become more sensitive to the issue of entrepreneurship.

When the results presented in Table 12 concerning the comparison of Entrepreneurship Scale scores of students by the availability of business ideas are examined, it is seen that the scale score of students having business ideas is x=83,04±9,40 while the score of students who did not have business ideas is 81,00±8,97. It was determined that the difference between the Entrepreneurship Scale scores of students by the availability of business ideas was statistically significant, and Entrepreneurship Scale scores of the students having business ideas were found to be significantly higher than the scores of the students without business ideas (p<0,05).

When an assessment is made on the basis of the scores that the students with business ideas obtained from the scale, it can be stated that they are more focused on entrepreneurship.

All in all, based on the findings, it can be stated that the Entrepreneurship Scale for University Students prepared by the researchers is a reliable and valid measurement tool. The findings present evidence concerning the reliability and validity of the scale.

CONCLUSIONS

At the end of this study, an entrepreneurship scale with high reliability and validity levels was developed. However, based on the fact that opinions, attitudes and behaviours of individuals may change in the course of time, it must always be kept in mind that scales cannot maintain their validity and reliability for a long time.

Researchers developing the scale should conduct the reliability and validity tests, and those who apply the scale should examine whether the reliability and validity tests of the scale have been carried out. If there are major differences between the society where the reliability and validity tests of the scale were conducted and the society where the scale is planned to be applied later, the reliability and validity of the scale should be re-examined.

Since the sample in this study consisted of university students, it would be more appropriate to use the entrepreneurship scale developed within the scope of this study for measuring these age ranges. It is recommended that the construct validity and reliability tests be performed on the Entrepreneurship Scale with samples from other age groups.

It should be known that researchers who will conduct research for developing new scales on different topics addressing global problems by motivating university students should be encouraged and set role models.

The Turkish Republic of Northern Cyprus has a great opportunity among the countries with its potential of entrepreneurship and high tendency to innovation in the world. Improvement of this potential depends largely on the quality of our formal and university education system.

As an important role model for a society, which is open-minded to innovation and change, a student profile having entrepreneurship and is of great importance. In this respect, it will be useful to organize conferences on entrepreneurship, add courses, in-service training, seminar, and prepare teaching courses and practices in an awareness-raising manner that supports innovation and creativity.

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