Adaptatıon of Socıal Entrepreneurshıp Competency Scale in Hıgher Educatıon: A Scale Adaptatıon Study

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Abstract

Entrepreneurship is considered as an activity that includes the innovative perspective of individuals and organizations that play an important role in the development of societies by creating economic growth and employment in the society in which it operates. One of the types of entrepreneurship is social entrepreneurship. Social entrepreneurship is an approach that adopts free market-based methods in solving social problems. Social entrepreneurs are those that are established commercially but whose purpose is to solve social problems. In this study, an adaptation study of the relevant scale developed by Peris, Gomez, Puig and Bernardo (2020) into Turkish was carried out in order to determine the social entrepreneurship competencies of higher education students.The validity and reliability studies of the scale were carried out with the participation of 161 students studying in different departments, Vocational and Technical Sciences High School of a university.For the scope and appearance validity of the scale, 1 language specialist, 3 field specialists, 1 psychological counselor, 1 assessment and evaluation specialist were consulted. EFA was used to serve structure validity. At the end of the study, a 6-dimensional scale consisting of 30items explaining 74.31% of the total variance was obtained.The internal consistency coefficient of the scale calculated with Cronbach Alpha is .93. In the context of the confirmatory factor analysis, it was determined that the final compliance indiceswere within the desired limits.

Keywords: Entrepreneurship, Social Entrepreneurship, Scale Adaptation.

Introduction

Entrepreneurship is different in different ways among disciplines that can be defined.Entrepreneurship; the process of creating or growing a new for-profit business to create value and creating a new good or service (Bird, 1989). According to Mueller and Thomas (2000), entrepreneurship; it is an activity of perceiving an opportunity and creating an organization to seize that opportunity. While defining entrepreneurship with these definitions, factors such as: innovation and change, flexibility, dynamism, risk taking, creativity and being focused on development are effective in all of them (Korkmaz, 2000).

Entrepreneurship, which is the basis of both economic and social development, due to the end of "World War II" and the need for industrial countries to rebuild, it began to become the focus of

researchers in the mid-1900s (Hoppe, 2016).

One of the types of entrepreneurship is social entrepreneurship.Social entrepreneurship is an emerging area of investigation within the entrepreneurship and not-for-profit marketing literatures (Weerawardena ve Sullivan Mort, 2001; Weerawardena and Mort, 2006).Social entrepreneurship is an approach that adopts free market-based methods in solving social problems (Tasavori, et al., 2015). Social entrepreneurs are those that are established commercially but whose purpose is to solve social problems. The basic basis of social entrepreneurship is to find solutions to the problems of a society related to economic, social and environmental problems (Boluk and Mottiar, 2014). In this context, social entrepreneurship offers innovative approaches to address and solve complex social need (Rhodes et al., 2008).

While defining social entrepreneurship, J. Gregory Dess (1998) focuses on five factors. These are;

·Adopting a mission to create a social value and ensure its sustainability,

·To constantly pursue new opportunities to realize this mission,

·To be involved in continuous innovation, adaptation and learning process,

·Acting boldly without being limited to the resources currently available,

·To show the increased sense of responsibility towards the society.

The term social entrepreneurship, which dates back to the 1970s (McAnany, 2012), is included in H. Bowen's book, "Social Responsibilities of Businessmen", first published conceptually in 1953 (Kocak and Kavi, 2014). The first examples of social entrepreneurship from a historical perspective; "Florence Nightingale", which revolutionized the hospital structure and established a nursing school, is the first social entrepreneurship activities of the public

education reformer "Horace Mann" and the activities of "John Durand", who started working with people with mental disabilities (Paksoy et al., 2015).

The fact that the first examples of social entrepreneurship in history is related to various fields such as health, education, personal and working rights, shows the direction of social entrepreneurship to find solutions to problems in society and to provide social development (Coskun, 2015).

Universities have an important role in creating or increasing social entrepreneurship tendency.The development of analytical thinking abilities of university students will lead to an awareness of questioning, research and sharing, and thus an increase in social entrepreneurship tendencies (Cetin and Tasdemir, 2007).

In this study, an adaptation study of the relevant scale developed by Peris, Gomez, Puig and Bernardo (2020) into Turkish was carried out in order to determine the social entrepreneurship competencies of higher education students.It is predicted that the social entrepreneurship adequacy scale will be an effective data collection tool to determine the entrepreneurial behavior of university students.

Method

This research is a scale adaptation study. A detailed literature research was carried out to serve the purpose, and the theoretical framework of the scale was determined, the information about the research group and the development process of the scale and the steps followed are given below:

Sample Groups

The validity and reliability studies of the scale were carried out with the participation of 161 students studying in different departments, Vocational and Technical Sciences High School of Kafkas University in Turkey.

Tables of students' demographic data are given below:

Table 1. Gender

Gender	f	%
Female	94	58.4
Male	67	41.6
Total	**161**	**100**

Table2. Age

Age	f	%
18-20	60	37.3
21-25	78	48.4
26 and over	56	14.3
Total	**161**	**100**

Table3. Department

Department	f	%
Computer Technology	13	8.1
Programming of Computer	13	8.1
Machine	25	15.5
Electrical	37	23.0
Architectural Restoration	31	19.3
Traditional Crafts	20	12.4
Food Business	11	6.8
Veterinary Medicine	11	6.8
Total	**161**	**100**

Table4. Father'Job

Father'Job	f	%
Worker	28	17.4
Officer	21	13.0
Retired	20	12.4
Self-employed	30	18.6
Farmer	20	12.4
Artisan	38	23.6
Unemploye	4	6.8
Total	**161**	**100**

Table5. Mother'Job

Mother'Job	f	%
Worker	13	8.1
Officer	26	16.1
Retired	24	14.9
House-wife	98	60.9
Total	**161**	**100**

Table 6. Socio-economic level

Socio-economic level	f	%
Low	35	21.7
Middle	95	59.0
High	31	19.3
Total	**161**	**100**

Table7. Living Place

Living Place	f	%
Province	78	48.4
District	59	36.6
Town	7	4.3
Village	17	16.0
Total	**161**	**100**

Data Collection Tool

Information about the data collection tool used in the research is given below:

Adaptation of Social Entrepreneurship Competency Scale:

The adaptation steps of the scale are presented below.

Introduction of the scale

In this study, an adaptation study of the relevant scale developed by Peris, Gomez, Puig and Bernardo (2020) into Turkish was carried out in order to determine the social entrepreneurship competencies of higher education students.The original scale consists of 30 items and the 5-point Likert scale was used Consistency coefficient was determined "good" (α = .82) and strong correlations between items (fl = .76, p <.00).The factor loads of the scale items vary between .63 and .88.As a result, the scale can be accepted as a strong scale that tests the social entrepreneurship competence of higher education students.

Adaptation of the scale

Permission was obtained from Carlos Capella, the person who developed the scale, to conduct the adaptation study of the Social Entrepreneurship Competence Scale (SECS).The English form of the scale was translated into Turkish by a language expert who speaks English and Turkish well. The created Turkish form was given to a linguist academician and controlled.According to the feedback received, the Turkish form of the scale was seen to be close to the English form.Then, opinions were received from 3 field experts, 1 psychological counselor and 1 assessment and evaluation specialist to determine whether the relevant items served the purpose.As a result, the scale was finalized in line with the opinions and suggestions received from the experts.

After all these stages, the original form was applied to students studying in different departments of the Vocational and Technical Sciences High School of Kafkas University within 3 weeks.Structure validity was examined for the validity of the scale.The reliability study was examined with Cronbach alpha coefficient and test-retest method.

The scale items and average and standard deviation values obtained as a result of the application to the group of 161 people are given in Table 8:

Table 8.Social Entrepre neurship Competency Scale Items Average and Standard Deviation Values Application Results

Items	X	SD
M1.	4.23	1.07
M2.	4.28	.801
M3.	3.98	1.35
M4.	3.65	1.06
M5.	3.70	1.01
M6.	3.70	1.35
M7.	3.98	.897
M8.	3.91	.974
M9.	3.44	1.20
M10.	3.92	1.26
M11.	3.95	1.15
M12.	4.19	.986
M13.	3.88	1.05
M14.	3.91	1.01
M15.	3.42	1.43
M16.	3.83	1.25
M17.	3.95	.917
M18.	4.52	.662
M19.	3.61	1.36
M20.	4.02	1.012
M21.	3.65	1.22
M22.	3.88	.999
M23.	3.67	1.15
M24.	3.80	1.15
M25.	4.20	.807
M26.	4.25	1.00
M27.	4.26	.827
M28.	4.22	.999
M29.	3.84	1.08
M30.	4.16	.934
General Average	**3.93**	**1.06**

The average for the 30 items ranged from 4.52 to 3.42. Since the overall average of all items for the questionnaire is 3.93, it is revealed that the students generally "Agree" to the items related to social entrepreneurship. Highest average item is: "M18: I prefer to work in situations that involve more people"; lowest average item is: "M15: I would rather collaborate for free in a non-governmental organisation". According to all these results, it is understood that the social entrepreneurship competency of the students participating in the research is high.

Findings

Validity Processes

Appearance, scope and structure validity were examined as validity study of Social Entrepreneurship Competency Scale. For the appearance and content validity, 1 language specialist, 3 field specialists, 1 psychological counselor and 1 assessment and evaluation specialist were consulted.

Exploratory factor analysis (EFA) was performed for construct validity. According to the results of the exploratory factor analysis (EFA), a 6-dimensional scale consisting of 30 items explaining 74.31% of the total variance was obtained. According to the results obtained; the scale item with an eigenvalue greater than 1 was not detected so no item was removed from the original scale. The explained variance is 74.31%; this rate is quite enough. The explained variance rate above 30% is considered sufficient in test development studies in behavioral and social sciences (Buyukozturk, et al. 2018).

Exploratory Factor Analysis (EFA) Processes

The data obtained from the scale is normally distributed, "principal component analysis" was used while making factor analysis. This analysis calculates on total variance. Therefore, the specific variance observed in the variable itself on the factors and the error variance defined as the inexplicable part of the data set are also taken into account (Gorsuch, 1990).

In order to perform EFA, Kaiser-Meyer-Olkin (KMO) test, which tests the adequacy of the sample, was first looked at. KMO value was found as .93. As this value is greater than .70, it is concluded that factor analysis can be made on these data (Buyukozturk, vd. 2018; Hutcheson ve Sofroniou, 1999). Secondly, by looking at the Barlett Sphericity test ($x^2 = 4250.741$ p =.000), it has been determined that the data obtained differ significantly and are suitable for factor analysis. The KMO and Barlett test shows that the data are suitable for factor analysis.

While determining the items to be included in the test as a result of the EFA performed for the construct validity of the scale, it was paid attention that the factors forming the scale items were 1 and above, and the load values of the items to be 0.30 and above. In addition, attention was paid to whether the items were included in a single factor or there was at least 0.10 difference between the factors in two factors (Buyukozturk, 2018). The results obtained from EFA show that the scale has a six-dimensional structure. These dimensions are shown in Figure 1 on the Scree Plot Chart:
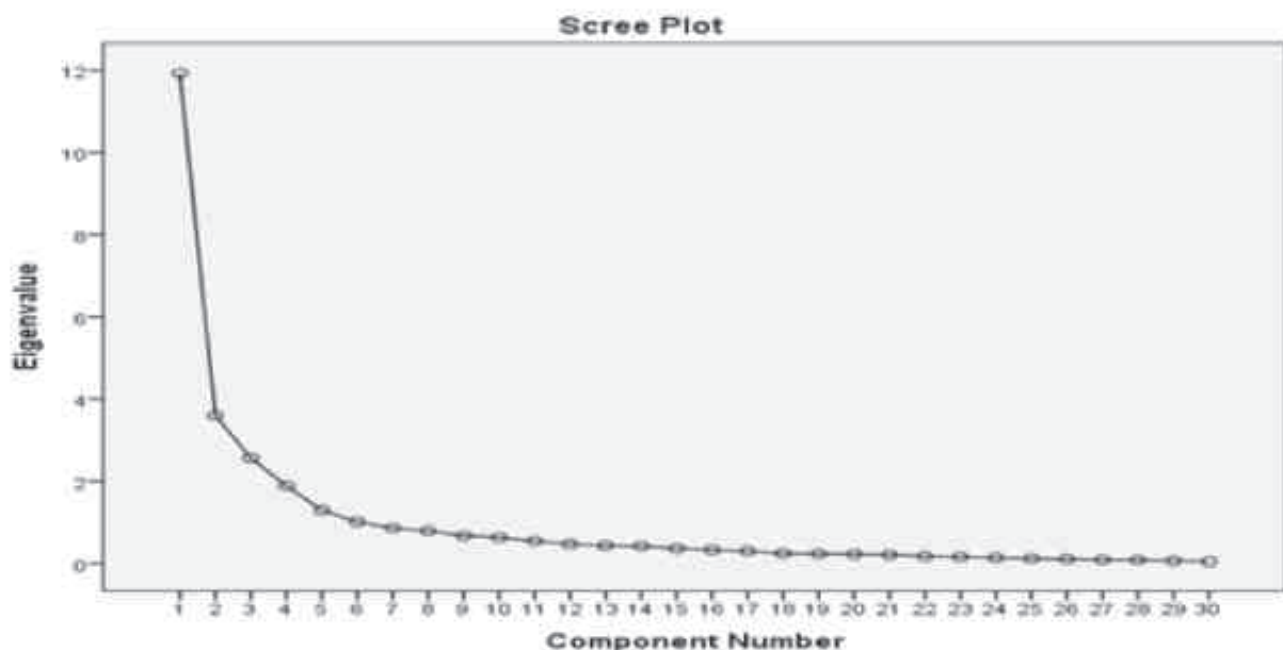

Figure 1. Eigenvalue-factor number chart of the scale

The load values and the common factor variance in the   factors with the items are shown in Table 9:

Table 9. Exploratory Factor Analysis Results

Component	Initial eigenvalues			Sum of Subtraction of Loads Square			Rotational Total of Loads Square		
	Total	Variance %	Cumulative %	Total	Variance %	Birikimli %	Total	Variance %	Cumulative %
1	11.932	39.774	39.774	11.932	39.774	39.774	10.048	33.495	33.495
2	3.603	12.009	51.782	3.603	12.009	51.782	3.915	13.049	46.544
3	2.564	8.545	60.328	2.564	8.545	60.328	2.717	9.056	55.600
4	1.888	6.294	66.621	1.888	6.294	66.621	2.303	7.678	63.278
5	1.294	4.314	70.935	1.294	4.314	70.935	1.760	5.868	69.146
6	1.013	3.378	74.313	1.013	3.378	74.313	1.550	5.167	74.313

When Table 9 is examined, it is seen that the scale consists of a 6-factor structure.It explains 74.31% of the total variance.These results show that the scale explains Social Entrepreneurship Competency features well.The scale included a total of 30 statements.

For Turkish adaptation study; these dimensions: personal features for entrepreneurship (7), innovation and cooperation in entrepreneurship (5), social features and risk on entrepreneurship (6), concordance and overcoming in entrepreneurship (4), aid and trust yourself in enterpreneurship (4), problem solving and leadership in entrepreneurship (4).

Reliability Process

In order to determine the reliability of the research, the internal consistency coefficient of the six-factor structure of the scale, which was determined by Cronbach Alpha, was found to be .93.As a result of the analysis on the sub-dimensions of the scale, the internal consistency coefficients calculated with Cronbach Alpha: for personal features for entrepreneurship dimension .90; innovation and cooperation in entrepreneurship .87; social features and risk on entrepreneurship .86; concordance and overcoming in entrepreneurship .83; aid and trust yourself in enterpreneurship .93 and problem solving and leadership in entrepreneurship .86. According to many researchers, the reliability increases when the number of coefficients approaches 1 (Sekaran, 2003).Fraenkel and Wallen (2006) reliability coefficient. If it is less than 60, the scale is very weak, with .60. They indicate that it is good to be between

70 and within the acceptable limits and above .80.Accordingly, it can be said that the reliability coefficients of each of the related dimensions of the scale are good.

Result and Suggestions

EFA was performed for the construct validity of the scale. According to the results of exploratory factor analysis (EFA), a 6-dimensional scale consisting of 30 items explaining 74.31% of the total variance was obtained.According to the results obtained; the scale item with an eigenvalue greater than 1 was not detected, so no item was removed from the original scale.The explained variance rate above 30% is considered sufficient in test development studies in behavioral and social sciences (Buyukozturk, 2018).

In order to perform exploratory factor analysis, Kaiser-Meyer-Olkin (KMO) test, which tests the adequacy of the sample, was first looked at. KMO value was found as .93. As this value is greater than .70, it is concluded that factor analysis can be made on these data (Buyukozturk, 2004; Hutcheson and Sofroniou, 1999).Secondly, by looking at the Barlett Sphericity test ($x^2 = 4250.741$ p =, 000), it has been determined that the data obtained differ significantly and are suitable for factor analysis.The KMO and Barlett test shows that the data are suitable for factor analysis.

The results obtained from EFA show that the scale has a six-dimensional structure. These dimensions are: personal features for entrepreneurship (7), innovation and cooperation in entrepreneurship (5), social features and

risk on entrepreneurship (6), concordance and overcoming in entrepreneurship (4), aid and trust yourself in enterpreneurship (4), problem solving and leadership in entrepreneurship (4).As a result of the analysis on the sub-dimensions of the scale, the internal consistency coefficients calculated with Cronbach Alpha: for personal features for entrepreneurship dimension .90; innovation and cooperation in entrepreneurship .87; social features and risk on entrepreneurship .86; concordance and overcoming in entrepreneurship .83; aid and trust yourself in enterpreneurship .93 and problem solving and leadership in entrepreneurship .86.

In the light of all these data, the reliability and validity of the relevant scale were tested.This adapted scale is a good test for testing social entrepreneurship competence. As research proposals; the scale can be applied to different sample groupsthus, different results can be obtained and future researches can be shed light on.

Reference

Bird, B. A. (1989). Entrepreneurial Behavior. Glenview, Il: Scott, Foresman and Company.

Boluk, K. A. and Mottiar, Z. (2014) Motivations of Social Entrepreneurs: Blurring the social contribution and profits dichotomy. Social Enterprise Journal, Vol. 10 Is 1: 53-68.doi:10.1108/SEJ-01-2013-0001.

Büyüköztürk, Ş., Kılıç, Ç. E., Akgün, Ö. E., Karadeniz, Ş. and Demirel, F. (2018). Bilimsel araştırma yöntemleri Ankara: Pegem Akademi.

Carlos Capella-Peris, Jesús Gil-Gómez, Manuel Martí-Puig and Paola Ruíz- Bernardo (2020) Development and Validation of a Scale to Assess Social Entrepreneurship Competency in Higher Education, Journal of Social Entrepreneurship, 11:1, 23-39, DOI: 10.1080/19420676. 2018.1545686.

Cetin, O. and Tasdemir Ö. (2017). Girişimcilik Kapasitesi ve Bireysel Yenilikçiliğin Girişimcilik Niyeti Üzerine Etkisi. Sosyal Bilimler Araştırma Dergisi, 6(3), 76-87.

Coskun, L., (2015), Sürdürülebilir Girişimcilik ile Sürdürülebilir Rekabet Avantajı Nasıl Sağlanır? http://www.mikadoconsulting.com/blog/11/. Date of access: 01.05.2020.

Dess, J., G. (1998). Social enterprise: Private Initiatives for the common good. Boston: Harvard Business School, Publishing Division, 9-395-116.

Fraenkel, R. J. and Wallen, E. N. (2006). How to design andevaluate research in education. New York: McGraw-Hill.

Hoppe, M. (2016). The Entrepreneurship Concept: A Short Introduction, Högre Utbildning Vol. 6, Nr. 2: 95-108.doi:10.1007/s11187-015-9676-7.

Hutcheson, G. and Sofroniou, N. (1999) The Multivariate Social Scientist. Sage, London.

Koçak, O and Kavi, E. (2014). Sosyal Politika Aktörü Olarak Sosyal Girişimci Belediyecilik, HAK-İŞUluslararası Emek ve Toplum Dergisi, Vol: 3, Issue:6: 26-49.

Korkmaz, S. (2000). Girişimcilik ve üniversite öğrencilerinin girişimcilik özelliklerinin belirlenmesine yönelik bir araştırma. Hacettepe Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 18(1), 163-179.

McAnany, E. G. (2012). Social Entrepreneurship and Communication for Development and Social Change, Nordicom Review: 205-218.

Monette, D., Sullivan, T. and DeJong, C. 2005. Applied social research: A tool for the human services, Belmont, CA: Thomson Brooks/Cole. [Google Scholar].

Mueller, S. L. and Thomas, A. S. (2000). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. Journal of Business Venturing, 16, 51-75.https://doi.org/10.1016/S0883-9026 (99)00039-7.

Paksoy, M. H.,Özbezek D., B. and Özçalıcı M. (2015). Bireysel ve Örgütsel Sosyal Sorumluluk Faaliyetlerinde Sosyal Girişimcilik Algısı, Muğla Sıtkı Koçman Üniversitesi, II. Uluslararası Girişimcilik ve Kariyer Sempozyumu, 9-11 Ekim 2015, Muğla (Sözel Bildiri Sunum):1-16.

Rhodes M., L, Rhodes M and Donnelly-Cox, G. (2008). Social entrepreneurship as a performance landscape: The case of Front Line, Emergence: Complexity and Organization: 1-14.

Sekaran, U. (2003) Research Methods for Business A Skill-Building Approach. 4th Edition, John Wiley and Sons, Hoboken.

Tasavori, M., Ghauri, P., N. and Zaefarian, R. (2015). Entering the base of the pyramid market in India: A corporate social entrepreneurship perspective. International Marketing Review, Vol. 33 Iss 4 pp. http://dx.doi.org/10.1108/IMR-03-2014-0085.

Weerawardena, J., & Sullivan Mort, G. (2001). Learning, innovationand competitive advantage in not-for-profit aged care marketing:A conceptual model and research propositions.Journal ofNonprofit &Public Sector Marketing, 9(3): 53–73.

Weerawardena, J. and Mort, G.S. (2006). Investigating social entrepreneurship: A multidimensional model. Journal of World Business 41 (2006) 21–35.

Annex 1. ADAPTATION OF SO CIAL ENTREPRENEURSHIP COMPETENCY SCALE TURKISH FORM

BOYUT I : GİRİŞİMCİLİĞE DAİR KİŞİSEL ÖZELLİKLER
1. Problemli çoğu durumla başa çıkabileceğime inanıyorum.
2. Her zaman kötü durumlarda olumlu tarafları ararım.
3. Bence risk alan insanların başarılı olma olasılığı almayanlara göre daha yüksektir.
4. Yaptıklarımın ve/veya söylediklerimin sonuçlarını üstlenirim.
5. Her işi olabildiğince iyi yapıyorum.
6. Eğitimimi bitirdikten bir süre sonra kendi işimi kurmayı ciddi olarak düşünüyorum.
7. Bazı şeyleri başkalarının nasıl yaptığını farklı bir şekilde hayal edebiliyorum.

BOYUT II : GİRİŞİMCİLİKTE YENİLİK VE İŞBİRLİĞİ
8. İşbirlikli çalışmalarda diğer insanları koordine etmeyi severim.
9. Bazı grup projelerinde/ortak çalışmalarda yer aldım.
10. Ortak hedefler için yeni faydalar düşünürüm.
11. Herhangi bir iş rolünde veya katıldığım projelerde genellikle çok iyi performans gösteririm.
12. Birlikte yaşama/çalışma problemleri diyaloglar kurularak çözülebilir.

BOYUT III: GİRİŞİMCİLİĞE DAİR SOSYAL ÖZELLİKLER VE RİSK ALMA
13. Öngörülemeyen durumlarla başa çıkmak konusunda iyiyim.
14. İş fırsatları yaratabilip, onlardan yararlanabilirim.
15. Problemli çoğu durumla başa çıkabileceğime inanıyorum.
16. Yaptığım hataları analiz edip, onlardan ders alıyorum.
17. İlerlemek için risk almanın gerekli olduğunu düşünüyorum.
18. Yeni fikirlerle hesaplanmış riskler almayı seviyorum.

BOYUT IV: GİRİŞİMCİLİKTE UYUM VE ÜSTESİNDEN GELME
19. Fırsatların problemlerden veya zor durumlardan çıkarılabileceğine inanıyorum.
20. Planlar değiştiğinde zorlanmadan doğaçlama çalışarak görevimi yaparım.
21. Problemli çoğu durumla başa çıkabileceğime inanıyorum.
22. İş arkadaşlarımla uyumlu ve koordineli bir şekilde çalışabilirim.

BOYUT V: GİRİŞİMCİLİKTE YARDIMSEVERLİK VE KENDİNE GÜVEN
23. Arkadaşlarıma/sınıf arkadaşlarıma yardım etmeyi seviyorum.
24. Başkalarına yardım eden insanlar takip edilebilecek örneklerdir.
25. Daha fazla insanın bulunduğu ortamlarda çalışmayı tercih ederim.
26. Her durumda potansiyelime inanıyorum.

BOYUT VI: GİRİŞİMCİLİKTE PROBLEM ÇÖZME VE LİDERLİK
27. Gruplar halinde çalışırken lider olmayı tercih ederim.
28. Henüz keşfedilmemiş sorunlara çözüm önerileri bulmaktan zevk alırım.
29. Sivil toplum kuruluşlarında/organizasyonlarda ücretsiz olarak çalışmayı tercih ederim.
30. Dahil olduğum projeleri iyileştirmek için yeni öneriler sunabilirim.