Development and Reliability Analysis of Vocational Interest Inventory

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Abstract

In this research, it was aimed to develop a scale measuring the interests and orientations of high school students in giving career decisions. Scale was developed according to social cognitive career and self-efficacy theory. Scale is composed of 96 items. It is a Likert type scale which has six sub scales. The scale was applied on 150 high school students for validity and reliability analysis. Construct validity of the scale was determined by factor analysis. Item-total correlation, Alfa correlation and score stability of the scale were computed for reliability analysis. Findings about reliability and validity of the inventory indicated that it was a valid and reliable instrument.

Keywords: Career Decision Making, Self Efficacy, Career Decision, Professional Interest, Vocational Interest Inventory, Education Psychology

Mesleki İlgi Envanterinin Geliştirilmesi ve Güvenilirlik Analizi

Öz

Bu çalışmada lise düzeyindeki öğrencilerin meslek kararı vermede ilgi ve yönelimlerini ölçen bir ölçek geliştirilmesi amaçlanmıştır. İstanbul Gelişim Üniversitesi Mesleki İlgi Envanteri (GÜMİE), sosyal bilişsel kariyer kuramı dayalı olarak geliştirilmiştir. Araç 96 maddeden ve altı alt ölçekten oluşan Likert tipi bir ölçektir. Geçerlik ve güvenilirlik çalışmaları 150 lise öğrencisinden elde edilen veriler üzerinden yapılmıştır. Ölçeğin yapı geçerliği faktör analizi ile belirlenmiştir GÜMİE'nin güvenilirlik çalışmaları; madde toplam korelâsyonları, iç tutarlık katsayıları ve ölçeğin puan değişmezliği hesaplanarak yapılmıştır. Geçerlik ve güvenirlik çalışmalarına ilişkin bulgular GÜMİE'nin geçerli ve güvenilir bir araç olduğunu göstermektedir.

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Anahtar Sözcükler: Meslek Seçimi, Yetkinlik, Mesleki Karar Verme, Mesleki İlgi, Mesleki İlgi Envanteri, Eğitim Psikolojisi

INTRODUCTION

The choice of the right profession is an important issue for individuals to be more beneficial for themselves and for society (Pekkaya and Çolak, 2013). Profession preference is to make a choice out of many professions determined by personal characteristics such as one's interests, values, abilities as well as occupational characteristics such as social status, professional development and amount of income (London et al., 1972). One of the turning points in contemporary societies is the decision-making process of one's profession which is one of the most significant decisions one will face in his or her life. By that decision one will also choose the process that will guide his life, the atmosphere to live and the individuals to connect with (Deniz, 2008).

The word "profession" in The Grand Turkish Dictionary is defined as "a defined work that is based on the systematic knowledge and skills gained with a certain education to produce beneficial goods for people to provide services and to make money on their behalf". The choice of profession is also one of the important criteria that determines one's income, livelihood, responsibilities, and happiness. From this point of view, choosing a profession can mean the same thing as choosing one's life style. On the other hand, occupational development is a process. This development process begins from the dream profession in childhood to the actual profession in adulthood. The general methods are to carry out inventories and to do interviews with individuals about the fields they are interested in to measure and specify the professional interest (Deniz, 2008).

Although it is an easy method to refer individuals' expressions to find out their interests, the expressions are related to social likability (prestige) and biases because of the value they give to the activities (Kuzgun, 2000). Considering this condition, the scales which prioritized validity and reliability are prefered to measure the interest (Herr, Cromer, and Niles, 2004). While many psychologists were interested in occupational processes at the time, Strong developed the first interest inventory in 1925 and defined interest as "liking, disliking or indifference reaction one person shows to other person, object, or activity". Interest inventory is the most known to measure individuals' interests. Interest inventories determine activities, interests, professions, and entertainments individuals prefer and not prefer (Koç, 1997). Vocational interest is the positive attitude, tendency, or selective attention one shows to a particular occupational activity or trait. The intensity of interest changes person to person (Deniz, 2008).

First studies on vocational interests and the harmony between personality and profession were applied at Carnegie Technology Institute in 1920 (Koç, 1996), followed by E.K. Strong in 1927 who invented the first

vocational interest inventory called Strong Vocational Interest Blank. In 1939 Frederick Kuder developed Kuder Preference Reccord Vocational Inventory. In 1959 John Holland invented SDS/Self-Directed Search inventory which is still the most prefered inventory in the field (Hansen, 2005). Holland believes that individuals who are aware of their interests and competences are more likely to actively look for the right professions (Kniveton, 2004). The vocational development, the atmosphere where the interests emerge, and the occuparional outcomes are related to each other according to Holland. Finally he invented six types of personality and profession accordingly with the idea that the choice of profession reflects personality (Pekkaya and Çolak, 2013). The theory of occupational choice, which has great importance and has been studied extensively, argues that individuals tend towards one of these six types of personality and their professional preferences are parallel to these personality types (Ivancevich, 2003). This theory states that a profession has a meaningful relationship between the environment it is performed and the jobs required therefore it is an unseperable link between the profession and the personality. At the end the profession is chosen not only by chance but also by a part of the personality (Ivancevich, 2003).

According to Holland's typology, there are six different groups of personality types and environments and the occupational success depends on the adaptation of the personality and the environment. Holland (1996) groups these different environments with the activities in the content of professions and links them to the types of personalities. The theory depends on three main bulding stones including the states below: 1. There are internal differences among individuals' personalities. 2. There are different kinds of professions. 3. Individuals who have professions compatible with their personalities are expected to have better satisfactions in professional live and not to leave their professions willingly than those who do not. The mentioned personality types are Realistic, Investigative, Artistic, Social, Entreprising and Conventional. The properties of six personality types classified by Holland (1996) is prefered to mention in more detail.

Realistic Personality Type: individuals with realistic personality type, defined with the letter "R", usually like mechanical works and repair with tools. They prefer professions in the area of carpentry, motoring, farming, piloting, athletics, marine, engineering, and electrician (Holland, 1996; Ivancevich, 2003).

Investigative Personality Type: individuals with investigative personality type, defined with the letter "I", usually like investigating, understanding, speculating, and controlling things about natural and social events. They prefer professions in the area of psychology, microbiology, biology, science, engineering, and chemistry as well as research and development departments in companies (Holland, 1996; Ivancevich, 2003).

Artistic Personality Type: individuals with artistic personality type, defined with the letter "A", usually like literature, art, or music. They are usually withdrawn, emotional, and sensitive persons, and deeply imaginative who

usually prefer professions related to art, music, literature, and aestatics. They choose professions in the area of music, theatre, show business, interior architecture, decoration, modelling, and composering.

Social Personality Type: individuals with social personality type, defined with the letter "S", usually like helping serving, teaching and counseling to other people. They choose professions in the area of religion, education, guidance (Holland, 1996; Ivancevich, 2003).

Entreprising Personality Type: individuals with entreprising personality type, defined with the letter "E", usually like persuading, leading, and even controlling people. They are intraversion, energical, and high powered who choose professions in the area of law, selling, politics, and economy. They are usually managers and general directors in companies (Holland, 1996; Ivancevich, 2003).

Conventional Personality Type: individuals with conventional personality type, defined with the letter "C", like the rutine and avoid uncertainity. They are usually responsible, balanced, and tough. They prefer professions in the area of accounting, tax expertizing, inspecting and managing in public institutions (Holland, 1996; Ivancevich, 2003).

According to Holland's model, which is also referred to as RIASEC in the initials of the personality types, the individuals are described by the works they want to do. Those who define the business environment are those who work there (Armstrong et al., 2008). In Holland's model, psychological factors are used to define both personality and environment. It also mentions about the harmony between personality and environment effecting on the work-related behaviors (Costa et al., 1984). In addition even if there is a tendency towards one of the personality types, individuals can apply multiple strategies which are belong to other kinds of personality types in order to cope with environmental conditions (Ivancevich, 2003).

Holland showed a relationship between personality types with a hexagon, assuming that the more the professional tendencies are positioned closer to each other, the higher the degree of harmony between them. Those which are positioned contiguously to the occupational trends are in perfect harmony with a position and those located in opposite sides are incompatible. The theory also assumes the career achievement is depended on the harmony between the personality and the profession (Karmaşık and Bulutlar, 2010).

METHODOLOGY

The greatest expectation for guidance services within the educational process is to support the students in their abilities, orientations, and interests in the field of business and higher education, taking into consideration the conditions and requirements of the country. The main purpose of counseling in high school is to provide students awareness in their tendencies and to guide them toward realistic preferences. In this period, it would be the best for the

student to decide to go to the most appropriate job or university for the sake of his life (Deniz, 2008).

In this study it was aimed to develop an interest inventory to assist and guide the individuals in career choices. In the line with this purpose Gelişim University Vocational Interest Inventory is developed to measure 6 fields of interests by means of Holland's vocational preference inventory. There are 16 items in each field. The inventory can be used to determine the individuals with low decision-making capacities and to direct them to the guidance services to make more realistic future career plans.

2.1 Data Collection

Data is collected via a Likert-type questionnairre consisting of 96 questions and measuring 6 different subdimensions. Gelisim Universtiy Vocational Interest Inventory (GUVII) is developed based on social-cognitive career approach.

2.2 Population and Sample

The population is consisted of high school students in Turkey. 150 high school students are participated in the study by random sampling.

2.3 Data Analysis

First of all, the dominant personality types based on Holland's typology are identified and the coded personality types are entered in SPSS 22.0 programme to analyse the data. The construct validity of scale is determined by factor analysis. The reliability of the scale is determined by estimating total item correlation, internal consistancy, and consistant scores of the scale. The scale is a valid and reliable tool according to the validity and reliability studies. As a result, GUVII predicts personality types.

CONCLUSION

3.1 Factor Analysis

Factor analysis is performed to determine if the items in a scale are seperated by smaller number of items which are excluded each other. The items in the same factorial group are named according to the content of the items. Factor analysis is also used to test whether a tool is one-dimentional (Balcı, 2000). Principal Component Method is utilised in order to identify the factor load values and factors (dimensions) of the items in the scale. According to the results, KMO coefficient was calculated as 0.935, $\chi 2$ (15) = 10123.986 and p (sigma) = 0.000. . There is a high correlation between the variables according to KMO coefficient value. KMO value is calculated as 0.835 as a result

of analysis obtained from the scale. The results of Bartlett's Sphericity and Chi-Square tests are statistically significant. It is emphasized that the contributing percentage of the variance of the factors greater than 1.00 must be above %66 of the cumulative percentage and this level is between %40 and %60 in social sciences. All items in the scale are scored between the cumulative values so all items are evaluated on the factor in the current study. As a result of the analysis, items regarding the factor are accumulated as six factors under the related factor. These results show that the scale strongly fulfills the requirements of the subject investigated. Findings related to the analysis are summarized at Table 1 and Table 2.

Table. 1 KMO and Bartlett's Test Analysis Results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	861
Bartlett's Test of Sphericity Approx. Chi-Square	1012,986
Df	15
Sig	0,000

Table 2. Factor Analysis Results of Vocational Interest Inventory Factors

Factors	KMO Coefficient	χ²	Sig	Cumulative Variance
I. Factor	3,75	41,22	,000	17,75
II. Factor	2,56	40,22	,000	16,12
III. Factor	1,98	39,41	,000	24,45
IV. Factor	1,22	38,12	,000	16,17
V. Factor	1,12	40,24	,000	12,25
VI. Factor	1,03	40,01	,000	11,25
Total	11,66	293,22		97,99

3.2 Importance And Meaning Analysis of Subfactors

The first factor is "Realistic Attitude and Behavior", the second factor is "Traditional Attitude and Behavior", the third factor is "Entrepreneurial Attitude and Behavior", the fourth factor is "Social Attitude and Behavior", the fifth factor is "Creative Attitude and Behavior", and the sixth factor is "Researcher Attitudes and Behaviors". Factors are named as Realistic, Conventional, Entreprising, Social, Artistic, and Investigative under a single factor. The variance above %30 is sufficient for the studies to develop a scale in behavioral sciences (Büyüköztürk, 2002).

3.3 Reliability Analysis

The reliability of a measurement tool is depended on to the extend that how consistently it measures the variable to be measured or that the results of measurement are precise. The reliability is the consistancy of the results obtained from different menasurement tools under the same circumstances (Tavşanlı, 2002). Cronbach Alpha reliability method is used to measure the reliability of the scale and the alpha value is determined as 0.998. Cronbach alpha coefficient is ideally expected to be above .7 (Tabachnich and Fidell, 2013). The value 0.998 found in this study is a highly strong reliability value. The value of "Alpha if Item Deleted" is calculated in order to determine the extend and the direction the items effect the alpha coefficient. It was not necessary to exclude any of the items from the scale due to the strong reliability values of each items. Besides, the reliability analysis was applied for each dimension (factor) obtained from the factor analysis.

As a result of the analysis, Cronbach Alpha values; 0.992 for the first factor (Realistic), 0.996 for the second factor (Conventional), 0.992 for the third factor (social), 0.993 for the fourth factor (artistic) and 5 for the fifth factor (investigative). Results of the analysis are summarized in Table 3.

Tablo 3 Reliability Analysis Results of Vocational Interest Inventory For Each Factor

Factors	N	Mean	S.S	Alfa
Realistic	45	40,5111	62,99950	,995
Conventional	45	35,8222	43,87963	,998
Entreprising	45	38,7333	55,01049	,994
Social	45	43,0222	60,85657	,994
Artistic	45	40,3778	62,95752	,995
Investigative	45	38,1333	53,23900	,995

3.4 Internal Consistency Analysis

Cronbach Alpha colleration coefficient is calculated to determine the internal consistency of Vocational Interest Inventory. Cronbach alpha internal consistency coefficient is found as 0.984. The two-half reliability (GuttmanSplitHalf) of the scale is determined as 0.994, 0.984 for the first half-part and 0.991 for the second haft-part. The results are summarized in Table 4.

Tablo 4 Reliability Analysis Results of Vocational Interest Inventory

Realiability Statistics	
N of Items	20
Correlation Between Forms	0,59
Guttman Split-Half Coefficient	0,75
Spearman- Brown Equal Lenght Coefficient	0,75
Part 1	0,62
Part 2	0,63
Alpha	0,77

3.5 Test-Retest Reliability

Test-Retest method is utilized to statistically examine the stability of the scale depending on the time and the circumstances in terms of the quality Vocational Interest Inventory measures in the study. The scale is applied to the high school students in Gökkuşağı Collage affiliated to Ministry of National Education with the periods of two weeks to determine the test-retest reliability. Pearson Product-Moment Correlation Coefficient is examined to test the stability of the scores students have from both applications. It is found that the scale has a high positive correlation between the two sessions [r (150) = 0.89, p <05).

Beside of the factor and the reliability analysis, descriptive statistics of all items in the scale are analysized. Means, standard deviations, factor loads, and Cronbach alphas are shown in Table 3.

Table 5 Factor Analysis Results of Vocational Interest Inventory

Items	Factor 1 Realistic	Factor 2 Conventional	Factor 3 Entreprising	Factor 4 Social	Factor 5 Artistic	Factor 6 Investigative
9	38					
13	41					
19	36					
25	56					
26	34					
38	54					
40	34					
52	32					
53	39					
54	41					
59	49					
61	28					
70	39					
82	48					
84	47					
94	52					

Items	Factor 1 Realistic	Factor 2 Conventional	Factor 3 Entreprising	Factor 4 Social	Factor 5 Artistic	Factor 6 Investigative
5		45				
12		47				
23		36				
24		58				
27		57				
30		56				
36		53				
43		51				
46		47				
57		44				
69		55				
79		48				
86		33				
89		35				
96		36				
7			39			
15			39			
16			33			
18			39			
20			45			
28			44			
33			45			
35			56			
51			56			
56			58			
63			57			
67			56			
75			56			
83			58			
85			39			
91			58			
2				77		
21				75		
29				39		
37				47		
49				58		
55				55		
58				79		
60				69		
64				69		
65				58		
66				77		
73				39		
87				29		
88				47		
90				49		
93				47		
6					55	
10					69	
14					78	
31					39	
32					39	

Items	Factor 1 Realistic	Factor 2 Conventional	Factor 3 Entreprising	Factor 4 Social	Factor 5 Artistic	Factor 6 Investigative
42					68	
44					39	
45					58	
50					69	
62					39	
72					35	
74					39	
77					59	
78					59	
81					55	
95					69	
1						81
3						39
4						38
8						58
11						39
17						33
22						35
34						55
39						69
41						58
47						33
48						35
58						38
71						39
80						69
92						55

The eigenvalues and the variances of the items of Vocational Interest Inventory in 6 factors are given in Table 4. The variance above the percentage %30 is acceptable for the test-development studies in behavioral sciences (Büyüköztürk, 2002). As seen in Table 4;

The Realistic dimension: Item24, item24, item24, item24, item25, item26, item38, item40, item52, item53, item54, item59, item61, item70, item82, item84, item94, conventional size item 5, item12, item23, item24, item27, item30, item36, item43, item46, item57, item69, item76, item79, item86, item89, item96.

The Entreprising dimension : item7, item15, item 16, item 18, item 20, item 28, item 33, item 35, item 51, item 56, item 63, item 67, item 75,

The Social dimension: item2, item21, item29, item37, item49, item55, item58, item60, item64, item65, item66, item73, item87, item88, item90, item93,

The Artistic dimension: Item 6, item 10, item 14, item 31, item 32, item 42, item 44 + 45, item50, item62, item72, item74, item77, item78, item81, item95,

The Investigative dimension: Item 1, Item 3, Item 4, Item 8, Item 11, Item 17, Item 22, Item 34, Item 39, Item 41, Item 47, Item 48, Item 58, Item 71, Item 80 and Item 92.

As seen in Table 1, all 96 items of Vocational Interest Inventory are accumulated under 6 factors with the eigenvalues above 1.0 according to the results of factor analysis and Varimax vertical axis rotation in terms of vocational decision-making sufficiency of the items in the scale. 6 factors explain %52.521 of the variance of the scale. Considering each factor: the eigenvalue of the first factor, which is the most significant in terms of the quality the scale measures, is 3.334 and the variance explained %16.668; the eigenvalue of the second factor is 2.721 and the variance explain %13.606; the eigenvalue of the third factor is 2.594 and the variance explain %12.970; the eigenvalue of the fourth factor is 1.855 and the variance explained %16.17; the eigenvalue of the fifth factor is 1.258 and the variance explain %9.277; the eigenvalue of the sixth factor is 1.122 and the variance explain %11.23. According to the factor analysis, vocational decision-making competency is summarized under 6 dimensions, which are "entreprising", "realistic", "social", "artistic", "conventional", "investigative" based on the literature and the features of the items. The common variance of the six factors is between 0.325 and 0.710.

There are 96 items in Vocational Interest Inventory. Ther are six dimensions of the scale and each of which consists of 16 items. The evaluation of the scale is obtained form the evaluations of the subdimensions instead of the total score. The highest score is (3x16=45) and the lowest score is (1x16=5) in each dimension. The scores obtained from each dimension are ranged and the highest three scores of the personality types are taken into consideration as vocational personality interest. The application period of the inventory is approximately 30 minutes.

CONCLUSIONS and RECOMMENDATIONS

This study aims to develop an inventory which measures the vocational indecision levels of the high school sdudents at 8th, 9th, 10th, and 11th grade. The validity of the scale is measured via SPSS program in four stages.

This study also aims to develop an inventory which specifies the vocational decision-making competence of high school students.

The stages are respectively; the reliability analysis, the factor analysis, and the item total correlation. The sclae is found highly valid according to the results obtained from the analysis of the stages. The reliability of the scale is analysized via Cronbach alpha (.92) and test-retest analysis (.83). According to the method results, the scale is found reliable. The factor analysis is divided the items into six components and these components are found valid and reliable in detecting the patterns of vocational indecision. The factor analysis is applied on the sample consisting of the high school students in order to determine the construct validity. Items of the scale is accumulated under six factors according to the results. The first factor consists of 6 items and explains %30.91 of the variance; the second factor consists of 6 items and explains %22.08 of the variance; the third factor consists of 8 items and explains %4.99 of the variance.

The VII consists of 96 items in total. The results of the factor analysis support the idea that vocational decision-making competence include various competence patterns argued theoretically.

The scale is found distinctive across individuals on their competence of vocational decision according to the analysis which measures the significant difference in the total scale factor scores between the upper %22 and the lower %32 to in order to determine the extent to which the total items of the scale differentiate the vocational choice abilities of the individuals.

According to the reliability analysis of the internal consistency coefficients, internal consistency for each factor as follows: .995 for realistic, .998 for conventional, .994 for entreprising, .994 for social, .995 for artistic, and .995 for investigative. The results prove the high reliability of six factors in the scale. In addition, total item correlation matrix is checked for all factors and subscales, which is found positively for all, meaning that correlation matrixes for all items are evaluated in the same direction by the participants. These results show that all items are perfectly or moderately related to the scale or to the subscales.

Cronbach alpha coefficient (0.984) is calculated to assure the scale measure the occupational choice appropriately. Two-half reliability of the scale (GuttmanSplitHalf) is found as 0.994; the first half is 0.984 and the second half is 0.991, meaning that the scale is highly reliable.

After all the results, the suggestions for the vocational counseling studies and for the further research as follows:

1.   Students at 9th grade (first graders in high school) state that they are indecisive or have not an idea what profession to choose. Yet, they should realise the self occupational orientation to decide what courses to take and what profession to choose in following years.

2.   Students at 9th grade are highly effected by the enviromental factors. They mostly have the lack of occupational information. They need guidance from the counselers at schools to solve this problem.

3.   The scale which is developed to determine the indecisive students in choosing a profession can be applied to different groups of samples to test its reliability and validity.

4.   The validity of the scale can be tested by controlling the confounding variables such as overall motivation of an individual which can effect the validity.

5.   Vocational choice process could last in lifetime. For this reason, vocational choice can change according to the demographic factors of an individual. The scale can be applied according to different demographic factors and research can be done accordingly.

6.   Six most common factors are taken into consideration while developing the vocational interest inventory. The scale can be improved by adding new factors.

7.   Vocational intrest inventory consists of 96 items. A scale which is more reliable and valid can be developed.

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Özet

Bu çalışmada, Lise 9.10.11.12. sınıfa devam eden öğrencilerin mesleki kararsızlık düzeylerini belirlemek amacıyla bir envanter geliştirilmiştir. Envanterin geçerliği SPSS programı aracılığıyla dört aşamada araştırılmıştır. Bu çalışmada Lise 9.10.11.12. sınıf düzeyindeki öğrencilerin mesleki kararı vermede yetkinlik düzeylerini ölçmeyi amaçlayan bir ölçek geliştirilmeye çalışılmıştır.

Bu aşamalar sırasıyla; birinci aşama Güvenirlik analizi, ikinci aşama faktör analizi, üçüncü aşama madde toplam korelasyonlarıdır. Her bir aşamadan elde edilen çalışmalar analiz edilerek envanterin geçerliğinin yüksek olduğunu görülmüştür. Envanterin güvenirliği ise cronbach alfa.0.92' ve zamana (test-r-test) göre değişmezlik (.83) analizii ile bulunmuştur. Yapılan bu analizlerin sonucunda elde edilen bulgular envanterin güvenirliğini vermektedir. Araşrırama sonucunda yapılan faktör analizinde tüm maddelerin 6 komponente ayrılacağı ve bu komponentler sırasıyla araştırılmıştır. Araştırmada elde edilen bulgulara dayanılarak Mesleki Tercih Envanterinin, mesleki kararsızlık içinde bulunan bireylerin tespit edilmesinde kararsızlık örüntülerinin araştırılmasında geçerli ve güvenilir bir ölçek olduğu bulunmuştur.

150 Lise 9.10.11.12 sınıf öğrencisinden oluşan örneklem üzerinde Mesleki tercih envanterinin 'nin yapı geçerliğini belirlemek amacıyla yapılan faktör analizi yapılmıştır. Analiz sonucunda ölçek maddeleri toplam altı faktörde toplanmıştır. Birinci faktör 6 maddeyi kapsamaktadır ve toplam varyansın 30.91'ini oluşturmaktadır, ikinci faktör birinci faktör gibi toplam altı maddeyi içermektedir ve toplam varyansın 22.08 ini oluşturmaktadır. Üçüncü faktör 5.64'ünü ve üçüncü faktör 4.99'unu açıklamaktadır. Mesleki İlgi Envanterinin tümü 96 maddeden oluşmaktadır. Faktör analizi sonuçları araştırmanın kuramsal temelinde ileri sürülen mesleki karar yetkinliğinin farklı yetkinlik örüntülerinden oluşacağı görüşünü desteklemiştir.

Ölçeğin toplam maddelerinin bireylerin mesleki tercih yetkinliği açısından ne düzeyde ölçtüğünü ayırt ettiğini belirlemek amacıyla, ölçek faktör puanlarına göre üst % 22'lik puan arasındakiler ile alt %32 'lik puan arasındaki toplam madde puan ortalamaları arasındaki farkın anlamlılığına ilişkin yapılan analizler sonucuna göre, ölçeğin bireylerin meslek tercih yetkinliği açısından ayırt edici yapıda olduğunu belirtilmiştir.

Ölçeğin her faktörün iç tutarlığını araştırmak için hesaplanan iç tutarlık katsayıları güvenirlik analizleri sonucuna göre, ''gerçekçi', ,995, 'geleneksel', 998, 'girişimci', 994, 'sosyal', 994, 'yaratıc', 995, 'araştırmacı', 995 olduğu görülmektedir. Bu sonuçlar, ölçekte bulunan altı faktörün yüksek güvenirlik özelliğine sahip olduğu görülmektedir.

Ayrıca ölçeği oluşturan tüm faktörlerin tümünün ve alt ölçeklerinin madde toplam korelasyon matrixine bakılmıştır. Ölçeğin tüm faktörlerinin toplam madde toplam korelasyonlar matrixleri tamamı pozitif yüklü olduğu görülmektedir. Bu nedenle ölçekte tüm maddelerin korelasyon matrixlerinin katılımcılar tarafından

aynı yönde değerlerildirildiği görülmüştür. Bu bulgular maddelerin gerek alt ölçeklerle gerekse ölçeğin tümüyle orta düzeyde ilişkili olduğu görülmektedir.

Araştırma da kullanılan Mesleki Tercih Envanterinin iç tutarlık katsayısı, ölçeğin mesleki tercihi doğru olarak belirlenmesi için Cronbach'ın α korelasyon katsayısı hesaplanmıştır. Yapılan iç tutarlık analizi sonucunda, Cronbach alfa iç tutarlılık katsayısı 0.984 olarak bulunmuştur. Ölçeğin iki-yarım güvenirliği (Guttman Split Half) 0.994 olarak belirlenmiştir. Birinci yarım için 0.984 ikinci yarım için 0.991 olarak belirlenmiştir. Bu sonuçlara göre ölçeğin yüksek düzeyde güvenirlik özelliğine sahip olduğu görülmektedir.