Validity and Reliability Scale of Perceived Future Employability Scale: A Research on Students Studying in Sports Sciences

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Abstract--- The concept of employability has gained more importance as a result of the changes and developments in economic, technological, and global fields.Those who have the qualifications to meet the needs of new business areas and the current needs of the industry caused by changes and developments can be employed.It has been determined that although the concept of perceived employability has been discussed in the scientific studies on the subject, the perceived employability of young adults began to be examined a few years ago and more research is needed.In this context, as it is necessary to investigate it, this study aims to investigate the validity and reliability of the perceived future employability scale of young adults.It is thought that examining the validity and reliability of the perceived future employability scale of young adults will contribute to researchers and practitioners.In this context, firstly the subject was explained and then the research was mentioned.The study group of the research consists of students studying in sports sciences in Turkey and a total of 400 people were reached.In order to analyze the validity of the scale, confirmative factor analysis was performed and the six-factor structure was supported. With the Cronbach Alpha analysis, it was determined that the scale and its dimensions were highly reliable.As a result of the correlation analysis, it was determined that there was a positive and significant relationship between the scale and its sub-dimensions. Hence,it was found that the scale of perceived future employability in the study group of this research is valid and reliable.

Keywords--- Employability,Employability İn Perceived Future, Sports Science, Validity and Reliability.

I. Introduction

In the 21st-century, when the effects of the Fourth Industrial Revolution were witnessed, employment has been one of the challenges.For, while job opportunities are decreasing in the current century, the number of job seekers as well as the competition among them has increased. Also, as of 2016,Industry 5.0, which is characterized by developments such as digital smart society, integration of virtual and physical spaces, human creativity and innovation, is one of the trending topics and likely to be more effective in the future. In particular, unemployment rates among university graduates are increasing every year and expected to continue at this rate.There are also many graduates in Turkey failing to find a job or feeling the need to take up a job other than their field of education.According to the data reported by the Turkish Statistical Institute (TUIK) in June 2022, while the unemployment rate was 11.3% in April 2022, this rate increased to 20% for the young population.Thus, the necessity for students to be aware of how ready they are to enter the labor market occurs after completing their education (Matius veGunawan, 2022; Zengin veZengin, 2022; Cillo vd. 2021; Alkın, Korkmaz ve Balcı Çelik, 2020; Aslam vd. 2020; TUIK, 2022).Therefore, unemployed youth has become an important problem of our time(Aslam veBhat, 2022; Helne veHirvilammi, 2022; Liotti, 2020).Employability of young adults has been very important both for them and their country.

According to Future Self Theory, future selves encompass the future professional self and characterize the subjectivity of individuals by referring to the personalized version of what individuals might be. In this respect, the perceived future employability of young adults refers to the representation of their professional selves after their work and/or education (Gunawan, Creed ve Glendon, 2019; Ellen, Wiener veFitzgerald, 2012; Cross ve Markus, 1991; Markus veNurius, 1986). As a result of changes and developments in the industry, those who have the qualifications to respond to industrial needs (for example, to be able to use technology better, to transfer expertise to virtual environments if it provides benefits) will be able to get a job. Whentaking into account the Future Self Theory, young adults will be able to try to become a skilled workforce with modern qualifications that will enable them to be employable in the future. Thus, young adults will be able to develop themselves better in accordance with modern needs during their education. For, employability is not an outcome of learning but a learning process

(Harvey, 2001). Alsouniversity commitment is closely related to students' employability perceptions and ambitions (Niu et. al. 2022).

Man is a social being and always interacts with other individuals in society.In this context, man feels the need to be in harmony with his environment while sustaining his life(Uzun ve Yılmaz, 2020). The need for skilled labor,the labor market and employment opportunities have increased and changed in recent years the demands for adaptation have increased due to the economic and social contexts, the impact of globalization, and rapid developments in technology.This has also caused employees who want to compete in the labor market to be more flexible.One of the concepts that enables the individual to cope with more flexible and unpredictable employment relationships is employability (Alkın, Korkmaz ve Balcı Çelik, 2020; Doğru veMeçik, 2018; ÇondurveBölükbaş, 2014).There are different perspectives on the employability phenomenon. Some of the researchers takeinto account the employability of the unemployed individuals and the disadvantaged in terms of finding a job in the labor market.Some of them focus on the employability of young people, recent graduates, and employed individuals (ÖktemÖzgür, 2014).In this study, the employability of young university students in the future is investigated.

Employability is generally defined as the ability of a person to keep the job s/he has or to get the job s/he wants(Van den Broeck vd., 2014; Rothwell veArnold, 2007). Employability is also conceptualized as a form of job-specific active adaptability that enables employees to identify and realize career opportunities (Fugate, Kinicki ve Ashforth, 2004). Employability skills, on the other hand, are transferable basic skill groups that represent the basic functional and enabling knowledge, skills and attitudes required by 21st-century workplaces(Ayala Calvo ve Manzano García, 2021).

Employability is a broad concept that is emphasized in international education reports, has an important place in the Europe 2020 Strategy and the Modernization Strategies of Higher Education, and cannot be reduced solely to the recruitment of a graduate(Şahin, 2021). While in the 1950s and 1960s emphasis was laid upon attitudes towards work and self-image for employability, in the 1970s there was an emphasis on knowledge and skills, and on organizational approaches to increase people's resilience as a way to develop employability and transferable skills in the 1980s, and finally since the 1990s, the scope of employability has been broadened to include the active population in general(Guilbert et al., 2016). Perceived employability, on the other hand, refers to the individual's perception of the possibilities of obtaining and maintaining employment(Bernstrøm, Drange veMamelund, 2019; Vanherckevd, 2014).

For young adults, employability is associated with the pre-employment stage, during which they begin to understand themselves as to who they are and what they want to be, as well as how to connect themselves with their work world and workplace. For this reason, employability for young adults is characterized as perceived future employability.Little is known about the factors that contribute to perceived future employability and how perceptions of the future can influence young people's current career-related behavior(HillagevePollard, 1998).The concept of perceived future employability of young adults refers to the degree to which they perceive themselves as employable in the future after general education, specialist training, and personal development (ie. when they are ready to enter the labor market while continuing their education and/or after completing their education)(Gunawan, Creed, and Glendon, 2019).

Assessment of future employability is an important mechanism for setting goals, making plans, directing action processes, and creating hopes and fears for what will happen in the future. When young adults perceive and evaluate their future employability as lower than they expect, they develop strategies to reduce their anxiety and dissatisfaction(for example, lowering goals or trying harder)(Creed et al., 2022).For this reason, young adults' perceptions of employability in the future can direct their professional thoughts and behaviors. Thus, if there is a discrepancy between their perceived future employability and their current progress towards this imagined goal, they will be able to change their behavior and/or expectations.In this context, how close individuals come to achieving their perceived future employability is based on the effectiveness of the behaviors and strategies applied (that is, how well they self-regulate) (Alkın, Korkmaz, & Balcı Çelik, 2020).

Perceived future employability of young adults direct their current professional thinking, influence, and behavior.It has been revealed by researches in different fields that there is a relationship between their future thoughts (images) and their current behaviors(Gunawan, Creed ve Glendon, 2019).For example,Comello (2015),in his study on students, determined that risk-oriented attitudes and perceived attractiveness were partially mediated in the effect of perceived risk-oriented future self on reported cannabis use.Yizhonget al. (2017) studied on a sample of university graduates in China and concluded that as optimism about employment after graduation diminishes over time, there is a decrease in self-confidence in the job-seeking process, an increase in protective strategies (for example, reduction of intentions and actual job-seeking behaviors), and reassessments of attitudes and goals towards job-seeking.

The literature reveals that scientific studies on perceived employability (Van den Broeck et al., 2014; Creedet al., 2022) have been conducted, but studies on young adults (Gunawan, Creed ve Glendon, 2019; Matius ve Gunawan, 2022)are new and few in number. As a matter of fact, considering the Future Self Theory and perceived employability studies (Gunawan, Creed and Glendon, 2019; Ellen, Wiener and Fitzgerald, 2012; Cross and Markus, 1991; Markus andNurius, 1986),the concept also includes the pre-employment stage. For, those who continue their education are those who will be employed in the future and will be able to harmonize their knowledge and skills to ensure their future employability.For this reason, young adults' perceptions of their future employability may play a role in providing employees with the qualifications that institutions will need in the future. In this context, perceived future employability is an important concept for businesses as it affects young adults' qualifications and achievements.Developed by Gunawan, Creed, and Glendon (2019) to measure the employability perception of young adults in Turkey, most of whom have a university education and one out of five of whom are likely to be unemployed after graduation, the scale was adapted into Turkish byAlkın, Korkmaz and Balcı Çelik (2020) in their research on students at two universities in the Black Sea Region. However, no validity and reliability study has been found for students studying in sports sciences who will work in the sports sector, which represents a significant share among university students in Turkey and is an important sector for both the world and Turkey.Therefore, this studyaims to analyze the validity and reliability of the scale by applying a questionnaire to students studying in sports sciences.

II. Methodology
This section includes the objective, sample, method, data collection tool, and findings of the research.

Objective, Sampling,and Method
This study has been designed to increase the external validity of the scale by conducting validity and reliability analyzes on the perceived future employability scale. The population of this study constitutes students studying in Sports Sciences in Turkey. With the convenience sampling method, a total of 400 people could be reached online.Although there are different approaches to sample size, a sample size with at least ten or five times the number of items is generally accepted by researchers (Akan, Yıldırım ve Yalçın, 2014; Uğurlu veAylar, 2017). Therefore, the sample size is sufficient since the number of subjects is ten times higher than the scale consisting of a total of 24 items.

Data Collection Tool
The perceived future employability scale was created by Gunawan, Creed, and Glendon (2019) as the perceived future employability scale (PFES) consisting of six dimensions.Matius and Gunawan (2022) also found that it was valid and reliable in their research in Indonesia. Alkın, Korkmaz, and Balcı Çelik (2020) made necessary adjustments with proper translations and found that the scale is valid and reliable in a six-dimensional structure in their research on students at two universities in the Black Sea Region of Turkey.In this study, the six-factor structure of this scale was supported. The scale was prepared as a 5-point Likert (1: I strongly disagree, 2: I disagree, 3: I am undecided, 4: I agree, 5: I strongly agree).

III. Results
This section includes descriptive statistics of the participants, confirmatory factor analysis (CFA), reliability analysis, correlation analysis of the scale and its sub-dimensions.

Descriptive Statistics Related to Participants
195 (48.8%) of the respondents were female while 205 (51.2%) were male. The average age was 22 and physical education and sports department had 183 (45.8%) students, sports management had 109 (27.3%) students, coaching education had 73 (18.3%) students, and recreation had 35 (8.8%) student. 148 (37.0%) of them were 1st-grade, 126 (31.5%) were 4th-grade, 93 (23.3%) were 2nd-grade, and 33 (8.3%) of them were 3rd-grade.

Confirmative Factor Analysis
As a result of the CFA analyzes made on the data of this study, P=.000; CMIN/DF=3,243; RMSEA=.075, NFI=.915; CFI=0.940; TLI=0.930; GFI=,869 fit values were obtained. It is seen that these fit values (Chow, Snowden, & McConnell, 2001; Özdemir &Buzlu, 2020) are within acceptable limits. Figure 1 below shows the CFA analysis.
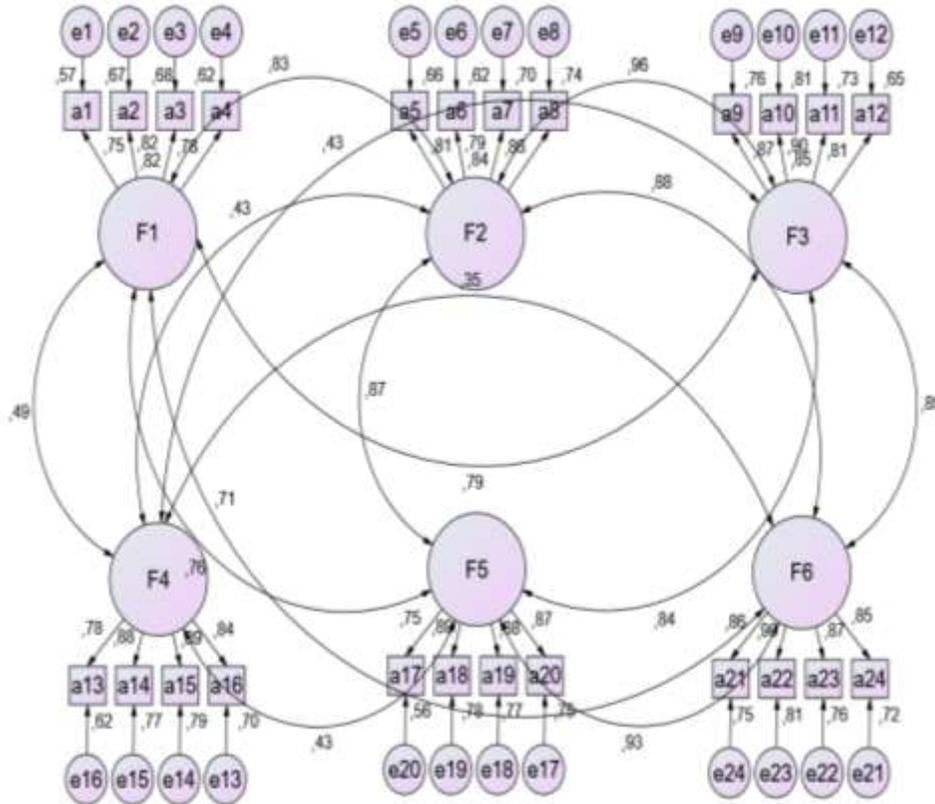
Note: F1: Perceived future communication network; F2: Perceived future experiences, F3: Perceived future personal characteristics; F4: The expected reputation of the educational institution; F5: Perceived future labor market knowledge; F6: Perceived future skills.

Figure1:Confirmative Factor Analysis of Perceived Future Employability

Reliability Analysis

As a result of the Croncach Alpha reliability analysis, the reliability value of the perceived future employability scale was 0.962, the perceived future communication network size was 0.873, perceived future experiences were 0.894, perceived future personal characteristics were 0.916, the expected reputation of the educational institution was 0.910, perceived future labor market knowledge was 0.906, and perceived future skills were 0.906 in terms of related values. Therefore, it was determined that the scale and dimensions of perceived future employability were highly reliable (Kayış, 2017).

Correlation Analysis for the Scale and its Sub-Dimensions

Table 1 below shows the correlation analysis for the scale and its sub-dimensions.

Table1:Correlation Values for the Scale and its Sub-Dimensions

Correlation Analysis							
	AgieTop	Agia	Agd	Agkö	Ekbi	Agigpb	Agb
AgieTop	1	,836**	,906**	,899**	,633**	,897**	,870**
Agia	,836**	1	,739**	,706**	,453**	,688**	,643**
Agd	,906**	,739**	1	,867**	,403**	,789**	,802**
Agkö	,899**	,706**	,867**	1	,417**	,784**	,787**
Ekbi	,633**	,453**	,403**	,417**	1	,438**	,342**
Agigpb	,897**	,688**	,789**	,784**	,438**	1	,859**
Agb	,870**	,643**	,802**	,787**	,342**	,859**	1

N= 400

Note1: $** p < 0.01$; $*p < 0.05$

Note2: AgieTop: Perceived future employability total score; Agia: Perceived future communication network; Agd: Perceived future experiences, Agkö: Perceived future personal characteristics; Ekbi: Expected reputation of educational institution; Agigpb: Perceived future labor market knowledge; Agb: skills in Perceived future.

Table 1 above reveals that there is a positive and significant relationship between the perceived future employability scale and its dimensions.

IV. Discussion and Conclusion

Future images/expectations are related to current attitudes and behaviors(Gunawan, Creed ve Glendon, 2019; Comello 2015). Perceived future employability, on the other hand, is the belief formed about what will happen when school is finished.In addition, perceived future employability may vary from country and/or major to country and/or major. Therefore, the perceived future employability level of students studying in assigned departments may be high.As a result of the review of the literature, it was seen that the examination of the perceived future employability of young adults is something new.

This study was conducted to examine the validity and reliability analyzes of the perceived future employability scale of young adults. It is thought that examining the validity and reliability of the perceived future employability scale of young adults will contribute to researchers and practitioners.In this context, first of all, the subject was explained and the research was mentioned. The study group of the research consisted of students studying in sports sciences in Turkey and 400 people were reached. As a result of the analyzes made, it was found that the perceived future employability scale was valid and reliable.With the Cronbach Alpha analysis, it was determined that the scale and its dimensions were highly reliable.As a result of the correlation analysis, it was determined that there was a positive and significant relationship between the scale and its sub-dimensions. This finding is important in terms of contributing to the generalization of the validity and reliability of the scale of perceived future employability of young adults.It is anticipated that this study can be benefited by educational institutions, career offices, students, human resources specialists, career management experts and that the perceived future employability scale of young adults can be evaluated.

As in field studies, this study also has some limitations.Since the study group of this research is students studying in sports sciences in Turkey, it will contribute to the extent to which the scale can be generalized to other students by conducting a validity and reliability study on students studying in other departments at universities throughout Turkey.In addition, it is recommended that a validity and reliability study of the scale be conducted in terms of gender, state or foundation universities.

V. Ethics Text

In this article, journal writing rules, publication principles, research and publication ethics rules, journal ethics rules were followed. Responsibility for any violations that may arise regarding the article belongs to the author. The ethical permission of this research was obtained with the decision of the Ethics Committee of Şırnak University, dated 16.09.2021 and numbered 2021/66.

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