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Adaptation and validation of self-perceived employability scale: An analysis of sports department students and graduates

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The purpose of this study was twofold: first, to adapt and test the construct validity of the Self-Perceived Employability Scale; and second, to analyze the employability perceptions of students and graduates of sports departments according to their gender, level of education, ability to communicate in a foreign language, and work experience. A data-collection procedure was conducted two times, and the scale was implemented on two different sample groups. The first implementation of the scale was done for exploratory factor analysis and the second implementation was conducted for confirmatory factor analysis and for the analysis of whether demographic variables (gender, communicating in a foreign language, work experience, and academic status [senior student - new graduate]) caused any difference in participants' employability perceptions. The Turkish version of Self-Perceived Employability Scale varied from the original version. Items related to individuals' perceptions about their engagement with studies and academic performance were discarded. A shorter three-factored, structurally valid, and reliable scale emerged after the exploratory and confirmatory factor analysis. Significant differences were observed in employability perceptions of participants related with their level of education (senior students and new graduates) and work experience in the study field. On the other hand, results indicated that the variables of gender and communicating in a foreign language did not make any difference in participants' employability perceptions. As a conclusion, the Turkish version of the Self-Perceived Employability Scale has proven its construct validity and utility for the assessment of employability perceptions of Turkish university students. Furthermore, findings revealed that level of education and having work experience in the study field had a significant role in participants' employability perceptions.

Key words: Employability perception, higher education, sports, work experience, foreign language.

INTRODUCTION

Employing well-equipped, skilled, and qualified workers in the labor market inevitably increases productivity and profitability. Therefore, developed and competitive countries all over the world give importance to and

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make investments in higher education. Further, the desire to be employable by studying a specific course and obtaining a degree (Johnes, 2006) increases personal investment in higher education. This two-sided investment results in an expansion in higher education, which proceeds faster than the capacity of the labor market, leads to unemployment, and brings employability to the agenda.

Higher education and employability

Employability, which has become a performance indicator in the determination of the quality of higher education, has aroused the interest of numerous researchers (De Vos et al., 2011; MacArdle et al., 2007; McQuaid and Lindsay, 2005; Morley, 2001). As a process and ability to exchange individual investments amid self-development and education for a job, employability has been defined in several ways by scholars. For example, Fugate et al. (2004) portrayed employability as a psycho-social construct, which incorporates individual characteristics that foster adaptive cognition, behavior, and affect and enhance the individual-work interface. Additionally, according to them, employability as a concept subsumes a host of synergistically combined person-centered constructs to help workers adapt to the possible changes in work environments. Moreover, Forrier and Sels (2003), who described employability as a time- and place-related dynamic characteristic of individuals that depends on the personal and labor market context, defined employability as "individuals' chance of a job in the internal and/or external labour market." In an alternate definition, Dacre Pool and Sewell (2007) put emphasis on personal factors and described employability as having the ability to select and obtain a satisfactory job or occupation via a set of skills, knowledge, understanding, and personal attributes. Besides all these definitions and approaches, Rothwell et al. (2008) with a new terminological and conceptual approach defined employability as "the perceived ability to attain sustainable employment appropriate to one's qualification level."

Self-perceived employability

Grounded on the literature, Rothwell et al. (2008) constructed a self-perceived employability matrix built on four components that interact with each other. The components were: (a) "my university," dealing with the reputation and brand image of the university; (b) "my field of study," dealing with the demand for individuals with degrees in particular participants; (c) "the state of the external labour market," dealing with awareness about the opportunities provided in the market, perceptions of the students about the external labor market, and the demand from the external labor market; and (d) "self-belief," a component relating to internal factors, including vocational knowledge and skills, mastery of job search, and potential to learn (Table 1).

Factors affecting employability

Employability, which can be enhanced through a well-designed learning and teaching environment (Knight and Yorke, 2003), is evaluated sometimes by the ability, quality, and attributes that graduates possess and sometimes by the effectiveness of institutions on the basis of employment rates of their graduates at a certain time (Knight and Yorke, 2003). It has been subject to vocational studies, but it also has been studied in empirical research studies mainly focused on education (Gracia, 2009; Groot and Van Den Brink, 2000; Knight and Yorke, 2003; Morley, 2001; Pan and Lee, 2011; Dacre and Sewell, 2007).

As "the ability of the graduate to get a satisfying job" (Harvey, 2001), employability can be affected by individuals' career development, learning, experience (experience in work and experience in life), degree of subject knowledge, understanding and skills, generic skills, emotional factors, reflection and evaluation, self-efficacy, self-confidence, and self-esteem (Dacre Pool and Sewell, 2007). In addition to these, there are other employability components - such as the type of higher education institution, mode of study, location and mobility of student, subject of study, previous work experience, age, ethnicity, gender, social class, and ability to communicate in a foreign language—that may affect the employment processes of job seekers and job recruiters identified (El Mansour and Dean, 2016; Harvey, 2001).

Even though there are many factors affecting the employability performance, gender, level of education, ability of communicating in foreign language and work experience were the factors which were decided to be analyzed in the recent research, and the forthcoming sub-headings are organized accordingly.

Work experience and employability

Even though there are contradictory findings in the literature, reporting work experience of no significance in the employability perceptions of participants (Rothwell et al., 2009), it is widely agreed that graduates with work experience are more likely to secure employment than graduates without such experience (Dacre and Sewell, 2007). In their previously dated paper, Knight and Yorke (2003) reported work experience as an advantageous competency from the perspective of employers and offered design-work attachments into degree programs to increase students' competitiveness in the labor market.

Table 1. Student self-perceived employability (Rothwell et al., 2008).

	My University			
Self-belief	1. My engagement with my studies and academic	2. My perception of the strength of the university's brand.	3. The reputation my university has within my field of study.	My field of study
	8. My confidence in my skills and abilities.	My ambition	4. The status and credibility of my field of study.	
	7. My awareness of opportunities in the external labour market.	6. My perception of the state of the external labour market.	5. The external labour market's demand for people in my subject.	
	The state of the external labour market			

Also, the need for work experience, which was stated as the common component of employability from the perspectives of graduates and employers (Andrews and Higson, 2008), has been expressed by Harvey (2001) as one of the factors affecting the employment process of job seekers and job recruiters. Additionally, Helyer and Lee (2014), who investigated the effect of work experience on employability, reported positive effects of internship as a work experience on the employability perceptions of students. Similar to Harvey's (2001) report, in their practical model of graduate employability named "Key to Employability," Dacre Pool and Sewell (2007) mentioned work experience among the essential components of employability. With *a fortiori* analysis, Qenani et al. (2014) emphasized work experience as a significant variable that causes variations in employability perceptions of participants. In their study on students, they reported that the students who experienced work through internship were almost 2.5 times more likely to feel highly confident of their employability. In another study, Blackwell et al. (2001) reported supportive findings about the importance of work experience on employability. In their study conducted on engineering students, they addressed the impact of work experience upon student learning and employability, and they concluded that the students thought that having work experience would increase their employability. Besides, in the same paper, Blackwell et al. (2001) analyzed work experiences' effect on the employability perceptions of art and design graduates. Findings were similar with engineering students' approach toward work experience. The graduates of art and design regarded work experience as useful and important for future employability.

Gender and employability

According to Qenani et al. (2014)'s analysis on employability perceptions of university students, the employability perceptions showed variation relative to their gender. According to their results, females found themselves 50% less likely to consider themselves as employable as males. Contrary to the Qenani et al.'s (2014) finding, gender as a variable did not make any significant contribution in the employability perceptions of participants in Rothwell et al. (2008, 2009) investigations.

Communicating in foreign language and employability

There are several studies mentioning that university education alone does not mean everything in the way to employability. For instance, participants of Tomlinson's (2008) research declared the need to add value to their university education or higher education credentials in order to increase their competence and competitiveness while seeking career in labor market. Also, in another paper, Smetherham (2003) reported that first-class graduation credential alone did not have any meaning for employability.

Besides investment in education and job experience, competence development is the third component that enhances individuals' capability of achieving a job or being employable. In their research, Bernston et al. (2006) and De Vos et al. (2011) pointed to the positive relationship between competence development and employability.

Communicating in a foreign language, which is perceived as an employability skill both by university faculty and employers of human resource development fields (El Mansour and Dean, 2016), has also been defined as one of the most important employability competences (Burgaz, 2008; Rivera et al., 2012). An empirical study conducted on Malaysian undergraduates presented the significant relationship between teaching English for occupational purposes and employability skill. A further study conducted on undergraduates, master's students, and doctoral students, to find out how foreign-language skills impact employability, revealed perceptions of respondents concerning the necessity of foreign language skills for the labor market (Grasmane and Grasmane, 2011). Parallel to the mentioned studies, the European Commission's final report, which focused on foreign language proficiency and employability, stated

that foreign-language skills provide competitive advantage both for businesses and job seekers (Beadle et al., 2015).

Rationale and aim of the study

Besides its contribution of preparing high-qualified workers and thus benefitting the welfare of countries, higher education also makes great contributions to individuals' welfare by increasing their income levels and employability possibilities (Tanrıkulu, 2011). The increases in the population of people who are of university-going age and in the benefits of higher education have increased the demand for higher education. Turkey is one of the developing countries that have experienced this demand increment (Kurt and Gümüş, 2015). While the number of university graduations in 2008 was 3,508,000, it increased to 6,706,000 in 2013. While the unemployed university graduate rate was 10.3% in 2008, in 2013 the rate of unemployed university graduations increased to 12.9% (Toprak, 2015). The circumstance is also similar for the individuals who graduated from the schools of physical education and sports. Only 8% of the total graduates (approximately 15,000 graduates per year) of these schools are employed in the National Ministry of Education, and the rest find themselves in a job search struggle (BESYO Mezunlarının İstihdam Oranı Artıyor, 2015). The statistical figures point out that the expansion of graduate statistics in schools of physical education and sports proceeded faster than the development of the labor market's capacities, which resulted in unemployment and brings employability as a concept and reality to the agenda.

Despite the statistical realities, employability perceptions of students and graduates of schools of physical education and sports have not attracted scholars' attention. Even though there are some research and reports (Aybaş and Kırbaşlar, 2014), employability as a concept has not been handled substantially in the literature in Turkey. Also, the literature lacks a valid and reliable scale that could be used in the evaluation of students' employability perceptions. Therefore, the purpose of this study was twofold: first, to adapt and test the construct validity of the Self-Perceived Employability Scale (Rothwell et al., 2008); and second, to analyze whether gender, level of education, ability to communicate in a foreign language, and work experience cause variation in the employability perceptions of students and graduates of sports departments.

METHODOLOGY

Sample of the study

In this research study, sampling as a procedure was conducted two times: once for exploratory factor analysis (EFA) and once for confirmatory factor analysis (CFA) and for testing demographic variables' effects on participants' employability perceptions.

The first sample group, from which the data was collected for EFA, was composed of 72 male and 101 female university students. All the students were seniors who were attending their last year at the university before their graduation. Students who accepted voluntarily participation were included in the study.

For the confirmatory factor analysis procedure and for testing demographic variables' effects on participants' employability perceptions, the Self-Perceived Employability Scale with the remaining items after exploratory factor analysis was administered to a second sample group composed of senior students and recent graduates of sports departments who were enrolled to a pedagogical competency certificate program at Abant Izzet Baysal University. Of the participants, 104 (61.2%) were recent graduates and 66 (38.8%) were senior students who were in their last year at the university. In addition, 117 members of the sample group were male (63.2% recent graduates and 36.8% senior students) and 53 were female (56.6% recent graduates and 43.4% senior students). In two sessions, all participants were informed about the research and were assured of data confidentiality.

Data-collection instrument

The Self-Perceived Employability Scale developed by Rothwell et al. (2008) was used as the data collection instrument. It composed of 16 items and based on four components: my university, my field study, the state of the external labor market, and self-belief. These components were represented on a matrix, and Rothwell et al. (2008) believed that they were not to be isolated from each other. The corners of the matrix were intended to represent the interaction between components. Two of the four components were in interaction, and each cell of the matrix represented two items in the scale. Responses were on a five-point Likert-type scale with anchors strongly disagree (1) to strongly agree (5).

Before conducting the scale on students for EFA, the original scale was translated and adapted into Turkish language. The committee method and translation-back-translation method were used during the process. For the content validity of the scale, the items of the Turkish version of the scale were revised and approved by measurement and evaluation experts and by the experts of physical education and sports. Just after this revision, the scale was conducted to a small group of university students for the language comprehensibility. Finally, after minor modifications in line with students' critiques, the scale was ready for usage.

Statistical analysis

To define the underlying dimensions of the Self-Perceived Employability Scale, exploratory factor analysis was conducted. Principle component analysis and Varimax rotation method were used for factor extraction and for factor rotation. As a cut point for items loading under factors, 0.30 was determined. Items having loaded more than one factor with a loading variance lower than 0.10 and less than three items loaded were omitted. Consequently, for the internal consistency estimation Cronbach's Alpha test was conducted. In the final step, item-total tests were conducted to display items' relationships with their own factors and with the other factors.

To analyze the construct validity of Self-Perceived Employability Scale with the help of Lisrel 8.7, a confirmatory factor analysis of the scale items that remained after exploratory factor analysis was conducted. After that, to determine the tests to be conducted and to

Table 2. KMO and Bartlett's Sphericity test results.

Kaiser-Meyer-Olkin measure of sampling adequacy		0.749
Bartlett's Test of Sphericity	Approx. Chi-Square	470.01
	Degrees of freedom	45
	Significance	0.000

Table 3. Items' factor loadings and internal consistency values of factors.

Items	Factors				
	Factor 1	Factor 2	Factor 3	Communalities	Cronbach's-α
3	0.734			0.564	0.79
4	0.681			0.609	
5	0.828			0.726	
6	0.788			0.648	
8		0.697		0.558	0.66
9		0.837		0.702	
10		0.635		0.577	
14			0.644	0.456	0.64
15			0.819	0.684	
16			0.794	0.677	
Eigenvalues	3.372	1.732	1.097		
% Variance	25.618	18.337	18.061		
Cumulative %	25.618	43.955	62.016		

determine the demographic variables' effects on the students' employability perceptions, the Kolmogrov-Smirnov Normality tests were conducted. According to the results of the normality tests, Mann Whitney U tests were conducted to identify the demographic variables' (gender, level of education [new graduate or senior student] communication in a foreign language, and work experience) effects on employability perception.

RESULTS

Exploratory factor analysis results of self-perceived employability scale

The KMO measure of sampling adequacy was found (0.749), and Bartlett's test of sphericity value was significant at a 0.05 level (Table 2).

According to the Varimax rotation method in principle component analysis, 10 of 16 items were grouped under three factors, which have eigenvalues over 1. The communality values of the items ranged between 0.456 to 0.726. The first and second factors accounted for 25.62 and 18.34% of the variance, respectively, and the third factor accounted for 18.06% of the variance of 10 variables. In total, the three factors accounted for 62.02% of the variable variance. The original scale that was composed of 16 items was decreased to ten. The remaining items were grouped under three factors: items 3, 4, 5, and 6 composed the university prestige, while items 8, 9, and 10 composed the credibility of study field factor, and items 14, 15, and 16 composed the self-belief factor (Table 3).

In Table 4, total item correlations and items' correlations with the other factors comprising the total scale were reported. The results showed that items had stronger correlations with the factors that they composed when they were compared with the correlation values they shared with the other factors.

Internal consistency

The Cronbach's-α value of university prestige factor was 0.79, the credibility of study field factor was 0.66, and it was 0.64 for the self-belief factor. The total scale's Cronbach's-α value was 0.81.

Confirmatory factor analysis results of self-perceived employability scale

After the underlying dimensions of the Self-Perceived

Table 4. Total item correlations and items' correlations with other sub-factors.

Items	Factors		
	University prestige	Credibility of study field	Self-belief
University prestige			
3	0.53	0.30	0.15
4	0.59	0.49	0.10
5	0.69	0.37	-.01
6	0.63	0.36	0.12
Credibility of study field			
8	0.39	0.46	0.19
9	0.26	0.46	0.15
10	0.47	0.48	0.25
Self-belief			
14	0.17	0.26	0.35
15	0.14	0.13	0.51
16	-0.02	0.19	**0.49**

Employability Scale were determined, CFA was conducted on the data collected from the students via the Self-Perceived Employability Scale, which was composed of 10 items grouped under three factors: university prestige (items 1, 2, 3, and 4), credibility of study field (items 5, 6, and 7), and self-belief (items 8, 9, and 10). Responses were again evaluated on a five-point Likert-type scale with anchors from strongly disagree (1) to strongly agree (5).

Chi-square value of the goodness-of-fit statistics was statistically significant, ($p<0.01$). The ratio between chi-square and degrees of freedom (68.62/32) was 2.14, which indicated an excellent fit (Kline, 2005). RMSEA displayed poor fit with a value of 0.082 (Tabachnick and Fidell, 2001). GFI value was 0.92, and AGFI was 0.87. GFI and AGFI index values declare an excellent fit when they are above 0.95 and a good fit when they exceed 0.90 (Hooper et al., 2008). In this context, GFI showed a good fit, but AGFI showed a poor fit. The standardized RMR value was found at 0.068, and the RMR value was 0.069. According to the criteria mentioned by Brown (2006), both SRMR and RMR values showed a good fit. Two more indices that have to be equal or higher than 0.90 to show good fit, or which have to be equal or exceed 0.95 are NNFI and CFI.

(Sümer, 2000). In our analysis results, NNFI showed good fit with a value of 0.93, and CFI showed an excellent fit with a value of 0.95.

According to the modification suggestions, a decrease from 68.62 to 53.22 in chi-square value is mentioned if a modification between variable 1 and variable 3 is conducted. This decrease may result in an improvement in the ratio between Chi-square and degrees of freedom and in the indices, which showed poor fit. Therefore, the modification suggestion between variable 1 and variable 3 was performed, and the fit index values were re-interpreted.

After modification, the difference between expected covariance matrix and observed covariance matrix (chi-square value) maintained significance. The chi-square and degrees of freedom ratio decreased to 1.74. According to Tabachnick and Fidell (2001), this ratio represented an excellent fit. Improvement resulted in the RMSEA value with a decrease to 0.066, which meant a good fit (Steiger, 2007). GFI (0.94) and AGFI (0.89) values increased, which corresponded to a good fit (Hooper et al., 2008). Also, RMR (0.060) and SRMR (0.060) values showed a good fit (Brown, 2006). NNFI increased to 0.95, and CFI increased to 0.97, which represents excellent fit.

Also, the t values of the latent variables were significant at a 0.01 level (Figure 1), and the error variance values of the variables were neither higher nor equal to 0.90 (Çokluk et al., 2010).

Finally, the analysis results confirmed the items and factor structure of the Self-Perceived Employability Scale.

Analysis of employability perceptions of participants according to their demographic variables

Here, participants' employability perception values are analyzed. Kolmogorov and Smirnov normality tests were performed on data for each variable, such as gender, age, and personal qualifications (graduate or not, foreign language knowledge, and having work experience in a related area) to determine the suitable tests (parametric or non-parametric). The significance level was set as

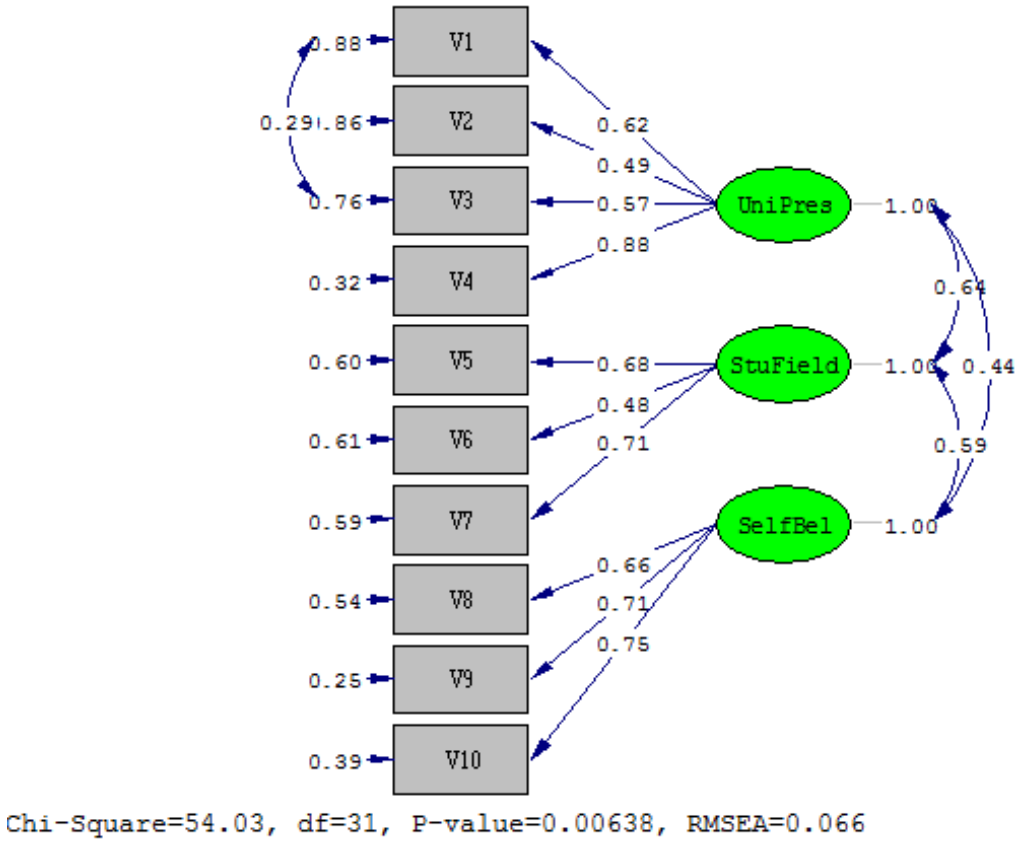

Figure 1. DFA results and error variances regarding self-perceived employability questionnaire.

Table 5. Participants' employability perception comparison according to their gender.

	Gender	N	Mean rank	Sum of ranks	U	P
University prestige	Male	117	83.56	9776.00	2873.000	0.441
	Female	53	89.79	4759.00		
	Total	170				
Credibility of study field	Male	117	85.21	9969.00	3066.000	0.907
	Female	53	86.15	4566.00		
	Total	170				
Self-belief	Male	117	88.36	10338.50	2765.500	0.253
	Female	53	79.18	4196.50		
	Total	170				

0.05 (Table 5).

There was no significant difference observed in university prestige factor (U=2,873, p>0.05), credibility of study field factor (U = 3,066, p>0.05), and self-belief factor (U=2,765.50, p>0.05), according to the participants' gender (Table 5.).

Significant differences were observed in university prestige (U=2,502.50, p<0.05) and in credibility of study field subsets (U=2,602.50, p<0.05) between senior students and new graduates, but there were no significant differences identified between new graduates' and seniors' self-belief perceptions (U=3,258.50, p>0.05;

Table 6. Participants' employability perception comparison according to their academic status.

Perception	Level of education	N	Mean rank	Sum of ranks	U	P
University prestige	Newly graduate	104	76.56	7962.50	2502.500	**0.003**
	Senior Student	66	99.58	6572.50		
	Total	170				
Credibility of study field	Newly Graduate	104	77.52	8062.50	2602.500	**0.007**
	Senior Student	66	98.07	6472.50		
	Total	170				
Self-belief	Newly Graduate	104	87.17	9065.50	3258.500	0.574
	Senior Student	66	82.87	5469.50		
	Total	170				

Table 7. Participants' employability perception comparison according to their ability in communicating knowledge in a foreign language.

Perception	Communicating in foreign language	N	Mean rank	Sum of ranks	U	P
University prestige	Yes	103	88.72	9138.50	3118.500	0.287
	No	67	80.54	5396.50		
	Total	170				
Credibility of study field	Yes	103	83.05	8554.00	3198.000	0.416
	No	67	89.27	5981.00		
	Total	170				
Self-belief	Yes	103	86.89	8949.50	3307.500	0.644
	No	67	83.37	5585.50		
	Total	170				

Table 6). The mean ranks show that senior students had higher perceptions about university prestige than new graduates, and also senior students had higher level perceptions about the credibility of their study field than the new graduates had.

Foreign language knowledge did not make any significant difference in participants' university prestige perceptions ($U = 3118.50$, $p > 0.05$), credibility of study field perceptions ($U = 3198.00$, $p > 0.05$), and self-belief perceptions ($U = 3307.50$, $p > 0.05$; Table 7).

Having work experience in a study field area caused significant variances in participants' university prestige perceptions ($U = 1941.50$, $p < 0.05$), credibility of study field ($U = 1986.50$, $p < 0.05$), and seniors' self-belief perceptions ($U = 1772.00$, $p < 0.05$; Table 8).

DISCUSSION

The recent study which aimed to adapt and structurally validate the Self-Perceived Employability Scale (Rothwell et al., 2008) and to analyze the effects of gender, level of education, communicating ability in a foreign language, and work experience on students and graduates of sports departments—attained satisfactory and significant results. A shorter and structurally validated Self-Perceived Employability was developed for the Turkish population. In addition, according to the analysis, level of education and work experience emerged as significant components affecting the employability perceptions of the participants.

Exploratory factor analysis

Rothwell et al. (2008) who constructed and validated the Self-Perceived Employability Scale, conducted an exploratory principle component analysis and identified four distinct subsets that in total explained 48.99% of the variance in the employability scale. The exploratory factor

Table 8. Participants' employability perception comparison according to their work experience in a related study field.

Perception	Study field work experience	N	Mean rank	Sum of ranks	U	P
University prestige	Yes	113	84.82	9584.50	1941.500	**0.020**
	No	45	66.14	2976.50		
	Total	158				
Credibility of study field	Yes	113	84.42	9539.50	1986.500	**0.030**
	No	45	67.14	3021.50		
	Total	158				
Self-belief	Yes	113	86.32	9754.00	1772.000	**0.003**
	No	45	62.38	2807.00		
	Total	158				

analysis conducted in this study identified three distinct subsets that in total explained 62.01% of the variance in the employability scale. The first subset of the scale, identified by Rothwell et al. (2008), was composed of items drawn from the cells related to the university's reputation in the field of study, the status and credibility of the field of study, and the external labor market's demand for it. In the Turkish-adapted version, the first subscale, named "university prestige," was composed of items drawn from the cells related to one's perception of the strength of the university brand and university reputation in the field of study. While the first subset of the original version explained 16.28% of the variance, the first subset of this study explained 25.62% of the variance.

The second subset of the original version scale explained 12.61% of the variance and was composed of items drawn from the cells dealing with one's perception about a university's brand strength and the state of the external labor market. In the present study, the second subscale, named "credibility of study field," was comprised of items related to the status and credibility of field of study, and to the external labor market's demand for people from the related subject field. The second subset of the present study explained 18.34% of the variance of the total scale.

In the original version, the third subset comprised of items dealt with individual attributes, namely confidence in one's own skill and abilities and awareness of opportunities in the labor market. The third subset explained the 12.1% of the variance. In the adapted version, the third subset, named "self-belief," showed conformity with the original scale's third subset and was composed of items drawn from the same cells related with awareness of opportunities in the external labor market and confidence in one's own skills and abilities. The third and the last subset of the Turkish-adapted scale explained 18.06% of the total variance. The fourth and final subset of the original version scale was composed of items related to individuals' perceptions about their engagement with studies and academic performance, which explained 8.1% of the variance. Contrary to Rothwell et al.'s (2008) results, in the present study the items related to academic performance and individuals' perceptions of their engagement with study did not work. Cultural diversification may be the reason for the reduction of items. In scale adaptation studies, especially adaptation from a different language, translation and culturally diverse settings emerge as a handicap.

In another study on post-graduate students, Rothwell et al. (2009) tested and reported Self-Perceived Employability Scale's validity and reliability properties. According to their results, the scale preserved its psychometric properties with a good internal reliability coefficient 0.84. Even though the internal consistency value of "credibility of study field" factor was 0.66 and for the "self-belief" was 0.64, the values were in the acceptable range for psychological constructs (Kline, 1999). The internal consistency coefficient of the total scale for the Turkish-adapted version was 0.81, which was as good and strong as it was for original scale.

Also, the analysis results of item total and items' relations with the other factors were encouraging. Items' correlations to the total score of their own sub-factor were stronger than their correlations with the other sub-factor's total scores (Table 4.). Finally, the exploratory factor analysis results of the present study produced a reliable three-factored structure that culminated in the extraction of six items of the original scale.

Confirmatory factor analysis

After the scale was revised according to the mentioned exploratory factor analysis results, the final version of the

10-item Turkish version of Self-Perceived Employability Scale was implemented to a second group composed of participants who were still students in a sports department and who had recently graduated from a sports department. In this phase, a confirmatory factor analysis was conducted to test the construct validity of the scale, and an inferential test was conducted to identify whether participants' employability perception levels varied according to determined demographic variables (gender, level of education [senior student and new graduate], communicating in a foreign language, work experience in related study field).

According to the confirmatory factor analysis' results, the adapted version of Self-Perceived Employability Scale showed a good fit with the fit indexes' cutoff criteria (Schreiber, Nora, Stage, Barlow and King, 2010) and preserved the three-factored structure, which was determined via exploratory factor analysis.

Effects of demographic variables on employability perception

Gender, which had been a discriminant variable for most of the human attitudes and behaviors in numerous research studies, did not make any sense in the present research. Our results were parallel to the findings of Rothwell et al. (2009), who reported that gender did not make any significant difference in participants' self-perceived employability attitudes. The content of the scale may be the reason why gender did not make any significant difference on the employability perceptions of the participants. Different from the employability measures evaluating individual's perceptions about their own skills, individual competencies and self, this scale is mainly oriented in external factors such as participants' perceptions about the brand strength and reputation of university, and the credibility of the field of study and external labor market demand.

Level of education, which was categorized as senior students and new graduates, resulted in a significant difference in employability perceptions of participants. The ones who were still students in sports departments had significantly higher employability perceptions than the newly graduated ones. Even self-belief perceptions did not significantly differ' new graduates self-belief perceptions were higher than senior students. On the other hand senior students' perceptions about their university's prestige, and the credibility of the field of study were significantly higher than those of the newly graduated students. Experiences ended up with failure in the labour market and unsatisfied expectations of the graduates may be the reasons of the diversity. Being unemployed and being in a race with the graduates from other universities of the country may have lowered their perceptions both about their university's prestige and about the credibility of their study field. Also, they may have encountered with the employability skills required by the external labour markets and employers, which might have exceeded their qualifications obtained from education program.

Employability, not only depends on graduation, but also on the skills and competencies of the job seekers. Competency development, which refers to those activities carried out by an organization and its employees to maintain or enhance employees' functional, learning, and career competencies (Forrier and Sels, 2003), may result in higher earnings and better chances of promotion (Bernston et al., 2006). Even competency development of the participants, in the research of De Vos et al. (2011), was positively associated with their employability perceptions, in the present study, having the ability in communicating in foreign language, which was considered as a competency and to cause differences in students' employability perceptions, did not cause any difference in the employability perceptions of this sample group.. This finding was also inconsistent with the report of Rivera et al. (2012), which emphasized a second language or having the ability of communicating in different languages as an employability competence. A competence which is perceived as an employability skill both by university faculty and employers of human resource development fields (El Mansour and Dean, 2016), and which has also been defined as one of the most important employability competences (Burgaz, 2008; Grasmane and Grasmane, 2011; Rivera et al., 2012) had no impact on the employability perceptions of the participants of this study. The unawareness about the importance of communicating in a foreign language in the labour market may be the reason of the absence of variation in employability perceptions of participants.

While there are studies that address work experience's effect on employability from an employer's point of view, there also are studies that addressed work experience from an employee's standpoint. Knight and Yorke (2003) stated that employers generally prefer to hire people who have work experience. In their studies, Helyer and Lee (2014) and Qenani et al. (2014), who worked on university students' employability perceptions, emphasized work experience's positive effect on their employability perceptions. The results of the present study also were in line with the literature. The participants who had work experience in their study field area declared high employability perceptions. The perceptions about their university's prestige and the credibility of their study field were significantly higher than their inexperienced counterparts. Conspicuously, the deepest difference was in their self-belief perceptions. The ones who had work experience had higher self-belief values, a finding which was supported by Valiante and Morris (2013), who reported the participants' experiences as the most powerful tools for creating belief. Also, working

experience, which provides practical learning opportunity about the job requirements, about the requests of employers and about the demands of labour market, may have a positive effect on the employability self-perceptions of the participants.

Consequently, recent study, which is an initial research , focused on sport department students and graduates employability perceptions, provided important end-products which may be beneficial both for the scholars of sports science and for sports department curriculum developers in higher education institutions in Turkey. Firstly, the adaptation process of Self-Perceived Employability Scale (Rothwell et al., 2008) has provided a valid and a reliable scale which could be conducted on sports department students and graduates in further studies by researchers. Additional to this, the analysis on demographic variables revealed significant differences in participants' employability perceptions. Level of education, categorized as new graduates and senior students, emerged as a significant difference causing variable. Moreover, as an important factor in individual competence development, work experience in related study field, which made a significant positive effect on participants' employability perceptions, should be taken into consideration by the decision makers and curriculum developers of sports departments.

RECOMMENDATIONS

The sample of this study was limited with participants who were enrolled to a pedagogical competency certificate program at Abant Izzet Baysal University. In a further research, determining employability perceptions of students and graduates from different departments of Abant Izzet Baysal University and a comparison between them and sports department students and graduates can be studied. Such a study which will identify any difference between employability perceptions of participants from the same university can be beneficial in identifying strengths and weaknesses of education programs.

Conflict of Interests

The author has not declared any conflicts of interest.

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