Career Predictions of Female Students at Faculty of Sports Sciences: Perceived Barriers, Role Model and Coaching Efficacy[1]

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ORIJINAL ARTICLE

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Abstract

As with most executive positions, women hold very few head coaching positions in sports. This does not mean that women do not do sports and do not have many positions in the field of sports. They take on smaller roles such as assistant trainer, trainer, or manager/board positions. The previous requirements suggest that same-sex role models can help increase the raising of women who choose coaching as a career. For this reason, the aim of the study is to control the Social Cognitive Career Theory counseling of the barriers perceived by female athlete students and the relationship between their role model perceptions and self-efficacy. In order to achieve this goal, 109 female athletes-students working on prevention at the Faculty of Sport Sciences were formed. Parametric tests were applied because the research environments showed normal distribution. Independent Samples t-Test was used to find differences in paired variables perspectives for hypothesis testing, one-way ANOVA to find differences between groups, and Pearson Correlation Analysis to combine relationships. At the same time, regression analysis was performed to determine the effect between variables. As a result of the research, a difference was found between the age of the athlete students, the gender of the coach, the year he played sports and the sports branch, and the dimensions of coaching self-efficacy and role modeling. Differences were found between the age of the athletes, the gender of the trainer, the branch of sports and the discrimination dimension, which is the sub-dimension of the Perceived Barriers Scale. A significant relationship was found between trainer gender and self-efficacy and role modeling.

Keywords: Self-Efficacy, Perceived Hindrance, Role Model, Athletes-Students

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Spor Bilimleri Fakültesi Kadın Öğrencilerin Kariyer Yordayıcıları: Algılanan Engeller, Rol Model ve Antrenör Öz-Yeterlik

Öz

Birçok liderlik pozisyonunda olduğu gibi, kadınlar sporda çok az baş antrenörlük pozisyonuna sahiptir. Bu, kadınların spor yapmadığı ve spor alanında çok fazla mevki sahibi olmadığı anlamına gelmemektedir. Yardımcı antrenör, eğitmen veya yönetici/yönetim kurulu pozisyonları gibi daha küçük roller üstlenmektedirler. Önceki araştırmalar, aynı cinsiyetten rol modellerin, antrenörlüğü kariyer olarak tercih eden kadın sayısını artırmaya yardımcı olabileceğini öne sürmektedir. Bu nedenle çalışmanın amacı, sporcu kadın öğrencilerin algıladıkları engeller ve rol model algıları ile öz yeterlik arasındaki ilişkiyi Sosyal Bilişsel Kariyer Kuramı temelinde incelemektir. Bu amaç doğrultusunda araştırmanın örneklemini Spor Bilimleri Fakültesinde öğrenim gören 109 kadın sporcu-öğrenci oluşturmuştur. Araştırma verilerine normal dağılım gösterdiği için parametrik testler uygulanmıştır. Hipotez testleri için eşleştirilmiş değişkenler açısından farklılıkları bulmak için Bağımsız Örneklemler t-Testi, gruplar arasındaki farkları bulmak için tek yönlü ANOVA ve ilişkileri karşılaştırmak için Pearson Korelasyon Analizi kullanılmıştır. Aynı zamanda değişkenler arasındaki etkiyi belirlemek için regresyon analizi yapılmıştır. Araştırmanın sonucunda, sporcu öğrencilerin yaşı, antrenörün cinsiyeti, spor yaptığı yıl ve spor branşı ile antrenörlük öz-yeterlik ve rol model olma boyutları arasında farklılık bulunmuştur. Sporcuların yaşı, antrenörün cinsiyeti, spor branşı ve algılanan engellik ölçeği alt boyutu olan ayrımcılık boyutu arasında farklılıklar bulunmuştur. Antrenör cinsiyeti ile öz-yeterlik ve rol model alma arasında anlamlı bir ilişki bulunmuştur.

Anahtar kelimeler: Öz yeterlik, Algılanan Engellilik, Rol Model, Sporcu-Öğrenciler

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[1] Bu araştırma doktora tezinden üretilmiştir

Introduction

People go through a number of career development periods from the moment they are born to the time they end their lives and try to fulfill their career development tasks that are specific to each period. Especially the university years are a critical period when young people make important decisions regarding their future careers. The fact that career decisions in this period affect the professional future, psychological and physical well-being of young people, their social acceptance and thus their overall quality of life (Mann et al. 1989), making these decisions difficult and complex (Gati et al. 1996). Today, the issue of career, which brings many economic and psychological consequences, has become one of the popular topics that attract the attention of many researchers (Betz, 1992; Osipow, 1999).

To date, many career choice and development theories have been developed that try to understand and explain the career decision-making process of individuals. In recent years, researchers have emphasized that many interacting factors, environmental conditions and conditions have an important place in the career decision-making process (Büyükgöze-Kavas, 2011; Şirin et al., 2020). In parallel with these developments, Social Cognitive Career Theory has a comprehensive structure that enables the individual, family, cultural and environmental factors that may affect career choice and development to be addressed and evaluated in a wide framework (Büyükgöze-Kavas, 2011; Döşyılmaz and Şirin, 2021). It has also been used frequently in recent years as one of the contemporary approaches to explain academic and career development. Social Cognitive Career Theory forms the theoretical basis of this study.

Social Cognitive Career Theory tries to establish conceptual links with existing career development theories. The theory emerged especially from Bandura's General Social Cognitive Theory. Social Cognitive Career Theory adopts Bandura's triple reciprocal causality model. This triple model argues that personal characteristics (such as internal, cognitive and emotional states), external environmental factors and apparent behaviors are the set of variables that mutually affect each other. Social Cognitive Career Theory emphasizes three variables in conceptualizing individual determinants of career development, namely self-efficacy beliefs, outcome expectations, and personal goals that help individuals regulate their career behavior. Accordingly, it can be said that the model emphasizes three social cognitive mechanisms: (a) self-efficacy, (b) outcome expectations, and (c) personal goals that form the center of the social cognitive career approach to professional behavior. (Büyükgöze - Kavas, 2011)
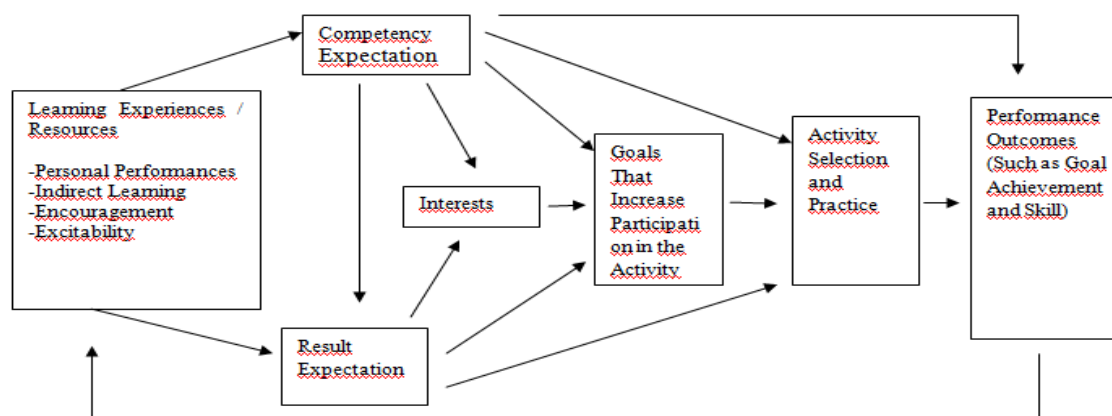
Figure 1. Social Cognitive Theory. S.D. Brown and R.W. Lent.(2005). Career development and counseling: Putting theory and research to work. Hoboken, NJ: Wiley 2005.

To sum up, this theory focuses on three cognitive-person constructs. These are self-efficacy, outcome expectancies, and goal setting. This opinion also concentrate on how these forms interact with environmental factors to predict the choices people make relating to their academic life and professional decisions.

These structures, their relationships and their environmental factors are presented below.

Self-Efficacy and Coaching Efficacy

Bandura introduced the concept of self-efficacy to the literature and presented it within the scope of Social Cognitive Theory (Bandura, 1997). Today, it has been put into practice in many psychosocial areas such as health, education, exercise and sports psychology (Barut, 2008).

Self-efficacy belief is effective in shaping the behaviors of individuals, and Bandura, who is its pioneer, has placed this concept at the center of social learning theory (Yılmaz, 2014). Self-efficacy is not a person's existing skills, but a belief in what one does not imagine under different conditions with these processes. When a person encounters a certain task, he first visualizes the characteristics of this task in his mind and decides whether he can perform this task with the individual equipment he has. At this point, the self-efficacy belief of individuals emerges as an insecure that is not made from the forms of individuals involuntarily in performing that task (Bandura, 1997). In addition, SCCT (Social Cognitive Career Theory) estimates are related to task-specific self-efficacy (Lent et al, 1994). Therefore, rather than general efficacy expectations that predict future attitudes and behaviors, Lent et al. (1994) suggests that expectations of competence are related to particular activities and he adds that these activities should result in subsequent outcomes such as professional interests, goal setting, and behaviors (Bandura, 1986).nIndividuals who believe that they have the necessary requirements for a career to succeed in a particular occupation are more likely to develop

an interest in that occupation (Lent et al., 1994). Therefore, female athletes' beliefs about their ability to perform their coaching duties (ie, coaching self-efficacy) are likely to be an important predictor of their interest in coaching, especially as it relates to coaching (Lent et al., 1994).

As it is known, sports enable individuals to gain skills such as self-discipline, self-control, freedom, leadership and communication. Sportive self-efficacy; shows how well the learner of a sportive skill is able to perform the skill or action to be performed, as possessed. An athlete who runs a short distance sprint may have a very high self-confidence in the 100 meters, but the same athlete may not see that competence in himself/herself in a marathon. A student who is good in social lessons may not see proficiency in numerical lessons in himself/herself. (Stodolsky and Glaessner, 1991; cited in Etiler, 2017).

In addition, sportive self-efficacy is stated as the thoughts of the person who learns a sportive skill about how well he/she can perform the skill or action he/she will apply (Özkan, 2019).

Outcome Expectencies

The second cognitive-person variable, outcome expectations, is defined as "beliefs about the consequences of various action styles" (Lent et al., 2003). According to Lent et al. (1994), while Self-efficacy is about whether a person has the ability to perform a certain behavior, expectations of outcome are related to expected results of the behavior, and whether these outcomes are positive or negative (Doherty and Johnson, 2001; Zülkadiroğlu et al., 2007).

Goal Setting

Choosing goals represent the last cognitive-person variable and embody "the intention to engage in a particular action or set of actions" (Lent et al. 1994). In this variable, it is argued that professional interests accelerate goals selection, such that if a person adheres to a particular occupation or a particular job, he will likely intend to pursue that career option (Lent et al., 1994).

However, it is important to note that cognitive-person variables do not operate in isolation; Environmental factors affect people life, their effectiveness, expectations about various behavioral choices, and ultimately the behavioral choices they make. Lent et al. (2000) used the terms barriers and supports (ie facilitators) to describe environmental factors affecting cognitive-person variables. Lent and colleagues also hypothesized that environmental variables, such as role models and percieved barriers, also influence career choices by shaping one's learning experiences or softening the relationship between career interests and choice. Recent theoretical developments show that self-efficacy mediates the relationship between contextual variables and career interests (Cunningham et al., 2005; Lent et al. 2003).

Perceived Barriers

While Social Cognitive Career Theory (SCCT), like other social constructivist career theories, emphasizes the effect of one's own career development, it also emphasizes obstacles such as social and economic conditions that may not always be under the control of the individual. However, although there are some situations over which the person has no control, it should not be forgotten that the person is not a victim of his/her destiny in career development, and the beliefs of the person about himself and his environment play a key (Lent et al., 2002). In this respect, interventions based on SCCT focus on these beliefs, which play a key role in people's career processes.

Thus, from this perspective, supports and barriers are thought to directly affect self-efficacy, influencing later interests, choice goals, and actions. In the researches has supported the mediated pathways model as it has been found that supports (i.e., factors thought to facilitate a particular behavior) and barriers (i.e., factors thought to inhibit a particular behavior) indirectly influence choice goals and actions through self-efficacy (Lent et al., 2001, 2003).

Role Model

Social cognitive career theory postulates that environmental variables, such as exposure to salient role models, can affect self-efficacy for a particular career – and thus probability of entry (Moran-Miller and Flores, 2011).

In the context of sports careers, many researchers have found support for this model (Cunningham, 2005; 2003). For example, Cunningham et al. (2005) used SCCT to examine college students' intentions to enter sports careers; among other findings, they found support for the idea that contextual variables (such as the presence of role models) influence the probability of entering a particular occupation through self-efficacy (Perrone et al., 2002). Quimby and DeSantis's study on women's career choices reveals that role models (not sport-specific) have a direct impact on career choice (Quimby and DeSantis, 2006).

In their study of female athletes, Moran-Miller and Flores (2009) found that the number of female trainers, the quality of female trainers, working hours, and perceived discrimination affect a woman's coaching self-efficacy, which in turn affects her interest in coaching and outcome expectations. The SCCT model and existing research support the widely held belief that coach role models can influence athletes' career decisions, but support a clearer understanding of how female coaches only influence female athletes' odds to become coaches. Self-efficacy towards coaching - can significantly increase efforts to improve the representation of women in coaching (Deckelbaum, 2016).

Thus, the aim of this study is to examine the Self-efficacy, Perceived Hindrances and Role Model perceptions of the Faculty of Sport Sciences students on the basis of Social Cognitive Career Theory.

Material and Method

Research Model and Hypotheses
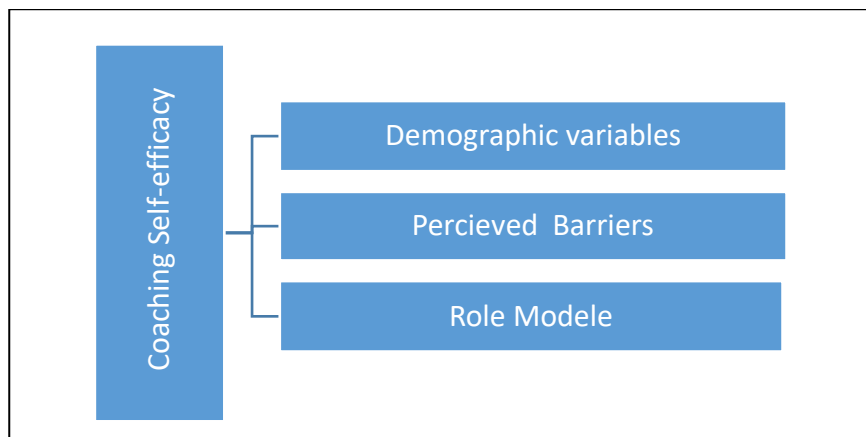
H1. There is a significant relationship between female athletes' demographic variables (age, gender) and coaching self-efficacy.

H2.There is a relationship between perceived hindrances variable of female athletes and coaching self-efficacy.

H3. There is a significant relationship between perceived role model variable of female athletes and coaching self-efficacy.

Procedure

The "simple random sampling method", which is accepted as one of the probability-based sampling methods, was used in the sample selection of the study. The purpose of this method is to randomly select participants from the universe list (Büyüköztürk et al., 2014). The sample of the study consists of 109 female students studying at the Faculty of Sport Sciences, Coaching and Physical Education Teaching Department.

Demographic characteristics of the participants in the sample group; All female student-athletes in four female team sports that were consistent across departments participated in the study: 20% basketball, 21% volleyball, 20% football, 16% tennis, and 28% table tennis. 50% of the participants are 18-21 years old; 22% are 22-25 years old; 26% of them are between the ages of 26-29 and over. 15% of the participants have 1-3 years, 26% 4-6 years, 18% 7-9 years, 39% 10 or more years of sports experience. 31% of female student-athletes stated that they work with female coaches, while 68% stated that they work with male trainers. It was determined that 15% of the athletes were married and 92% were single.

Data Collection Tools

Personal Information Form: This form, which prepared by the researcher, aims to determine the demographic characteristics of the people participating in the research.

Coaching Self-Efficacy Scale; It was developed by Feltz, Chase, Moritz and Sullivan (1999). It has been updated by Myers et al. (2008). The Turkish adaptation study was carried out by Unutmaz and Gencer (2017), and as a result of CFA, the overall internal consistency coefficient of the scale was determined as. 89. According to Büyüköztürk (2018), a reliability coefficient of. 70 and higher for psychological tests is considered appropriate for the adequacy of test scores.The form of the scale consists of 18 statements and the statements are measured with a 4-point Likert-type rating. The cronbach alpha reliability value of the scale was found to be. 93.

Perceived Barriers Scale; It consists of a two-dimensional structure: working hours and perceived discrimination, developed by Everhart and Chelladurai (1998). The scale, which consists of a total of 18 items, is measured with a 7-point Likert-type rating. This scale was adapted to Turkish.

Role Model Effect Scale; It consist of a two-dimensional structure: Providing Support and Role Model Influence, developed by Nauta, Kokaly (2001). The scale, which consists of a total of 15 items, is measured with a 7-point Likert-type rating. In this study, the Role Model Effect dimension, which is one of the sub-dimensions, was used. This scale was adapted to Turkish.

Data Analysis

The fact that the skewness values of the research data are between -1 and +1 indicates that all three measurement tools have a normal distribution (Schumacker & Lomax, 2004; Büyüköztürk, et al. 2011). According to the results, Coaching self-efficacyskewness=-.15; Perceived Disability skewness=.36; Role Model Effect was found to be -.30. Therefore, parametric tests were applied to the research data. Independent Samples t-Test was used to find differences in terms of paired variables for hypothesis testing, and one-way ANOVA analysis was used to find differences between groups. In order to determine the differences between the groups as a result of the Anaova analysis, it was determined by the Tukey analysis from the post-hoc test. Pearson Correlation Analysis was used to determine the relationship between the variables. In the analysis of the research data, confirmatory factor analysis (CFA) was performed for the validity and reliability of the Perceived Hindrances Scale and the Role Model Effect Scale, and internal consistency coefficients and correlation values were calculated. In addition, descriptive statistics were used (f, %). MPlus program was used for Confirmatory Factor analysis. When evaluating model fit criteria in DFA, $\chi^2 / sd \leq 3$ (Kline, 2011), RMSEA $\leq$ .08 (Browne & Cudeck, 1993), TLI $\geq$ .95, CFI $\geq$ .95 (Bentler, 1980) and WRMR<1 (Yu, 2002) criteria were taken into account.

Adaptation Process: For the adaptation study, first of all, Everhart, one of the authors who developed the scale, was contacted via e-mail and necessary permission was obtained. The serial

approach method was used in the translation-back translation procedure to the research scales (Herrera et al. 1993).

For the language validity of the English scale, translation-re-translation was made and field experts were consulted. For this purpose, three experts with a bachelor's degree in English translated the scale into Turkish and their translations were collected in a common draft by the researchers. This draft has been re-translated into the English language by linguists. The translation-retranslation forms of the scale were compared and it was checked whether there was a similarity in meaning. After this process, the final version of the scale was examined by two field experts and after it was evaluated in terms of suitability and intelligibility, it was made ready for application.

Construct Validity

CFA was conducted to determine whether the two-factor structure of the Perceived Hindrances Scale would be confirmed in the sample of Turkish university athlete students. $x2 / df \leq$ 3, GFI, NFI, CFI, IFI $\geq$ .90, RMSEA $\leq$ .80 values were accepted as good fit criteria of the model (Cokluk, Şekercioğlu & Büyüköztürk, 2010). According to the CFA results, it is seen that the structure of the scale in its original form was confirmed, that the 15-item and 2-factor structure was appropriate, and that the scale had acceptable fit values in the Turkish sample. The cronbach alpha reliability value of the scale was found to be .91. The fit indices for the scale are given in Table 1.

Table 1
Fit Indices for the Model

Model	X^2	Sd	GFI	RMSEA	NFI	CFI	IFI
Perceived Hindrances Turkish Form	481,885	105	.85	,072	.86	.94	.94

Role Model Effect

According to the CFA results, it is seen that the structure in the original form of the scale was confirmed, the 7-item and single-factor structure was appropriate, and the scale had acceptable fit values in the Turkish sample. The cronbach alpha reliability value of the scale was found to be .86. The fit indices for the scale are given in Table2.

Tablo 2
Fit Indices for the Model

Model	X^2	Sd	GFI	RMSEA	NFI	CFI	IFI
Perceived Hindrances Turkish Form	481,885	105	.85	,072	.86	.94	.94

Findings

Table 3
T-test Analysis Results according to the gender of the Athlete-Students' Coaching

Variable	Coach gender	n	X	ss	t	p
Coaching Self-efficacy	Female	34	3,27	,49	-2,139	0,03*

	Male	75	3,08	,40		
Role Model	Female	34	3,16	,97	-2,922	0,00**
	Male	75	2,55	1,02		
Discrimination	Female	34	3,20	1,34	2,300	0,02*
	Male	75	3,82	1,30		
Working hours	Female	34	2,83	1,22	-1,806	0,07
	Male	75	3,31	1,44		
Percieved Barriers	Female	34	3,42	,99	0,833	0.40
	Male	75	3,24	1,19		

When Table 3 is examined, female athletes' Coaching self-efficacy dimension (t= -2,139; p=,03), Discrimination dimension (t=2,300; p=,02) and role model (t=-2.922; p=,00) dimension, trainer A significant difference was found according to the gender variable. When the averages were examined, the coaching self-efficacy perceptions of the athletes who worked with a female trainer were found to be higher than those who worked with a male trainer. The role model perception of the athletes who have a female trainer is higher than that of the athletes who have a male trainer. As another result, the discrimination perceptions of the athletes who have a male trainer were found to be higher than those who have a female trainer.

Table 4
Results of Anova Analysis According to Athlete-Student Age Variable

Dimensions	Age	n	$\overline{x}$	SD	F	p	diff.
Coaching Self-efficacy	a.18-21age	55	3,11	,37	5,386	0,00*	c>a,b
	b.22-25age	25	3,10	,48			
	c.26-29age+	29	3,49	,53			
Role Model	a.18-21age	55	2,66	,95	3,748	0,01*	a<b,c
	b.22-25age	25	3,36	1,04			
	c.26-29age+	29	3,23	,97			
Discrimination	a.18-21age	55	3,75	1,39	4,115	0,00*	c<a,b
	b.22-25age	25	3,40	1,36			
	c.26-29age+	29	2,70	1,01			
Working hours	a.18-21age	55	3,23	1,46	,373	0,77	-
	b.22-25age	25	3,28	1,00			
	c.26-29age+	29	2,93	1,54			
Percieved Barriers	a.18-21age	55	3,54	1,12	2,965	0,03*	c<a,b
	b.22-25age	25	3,35	,98			
	c.26-29age+	29	2,80	1,13			

When Table 4 is examined, a significant difference was found in the dimensions of Coaching Self-efficacy, Role model, Discrimination, and Perceived hindrances. (p<.05). When the differences were examined, the coaching self-efficacy perceptions of the athletes aged 26-29 were found to be higher than the athletes aged 18-21 and 22-25. When the source of the differences is examined, the role model perceptions of the athletes between the ages of 18-21 are lower than those of the older age groups; It was found that the discrimination and perceived disability perceptions of the athletes aged

26-29 were lower than the athletes aged 18-21 and 22-25. No significant difference was found in the working hours sub-dimension. (p>.05).

Table 5
Results of Anova Analysis According to Athlete-Student the Year Playing Sports Variable

Dimensions	Sports Year	n	$\bar{x}$	sd	F	p	diff.
Coaching Self-efficacy	a.1-3year	17	2,97	,26	8,726	0,00*	d>a,b,c
	b.4-6year	29	3,15	,38			
	c.7-9 year	20	2,96	,50			
	d.10 and above	43	3,45	,47			
Role Model	a.1-3 year	17	3,36	,84	2,839	0,04*	a>b
	b.4-6year	29	2,60	1,12			
	c.7-9year	20	2,80	,86			
	d.10 and above	43	3,15	1,02			
Discrimination	a.1-3year	17	3,40	,92	1,074	0,36	
	b.4-6year	29	3,53	1,40			
	c.7-9year	20	3,74	1,48			
	d.10 and above	43	3,13	1,40			
Working hours	a.1-3year	17	3,54	1,12	,543	0,65	
	b.4-6year	29	3,16	1,22			
	c.7-9year	20	3,11	1,47			
	d.10 and above	43	3,04	1,56			
Percieved Barriers	a.1-3year	17	3,46	,85	,820	0,48	
	b.4-6year	29	3,38	1,04			
	c.7-9year	20	3,49	1,15			
	d.10 and above	43	3,09	1,27			

When Table 5 was examined, a significant difference was found in the dimensions of Coaching Self-efficacy and Role modeling (p<.05). When the differences were examined, it was found that the self-efficacy perceptions of the athletes who did sports for 10 years or more were higher than those who had sports experience between 1-3 years, 4-6 years and 7-9 years. It has been observed that the role model perceptions of athletes with 1-3 years of sports experience are higher than those with 4-6 years of sports experience. No significant difference was found in the dimensions of discrimination, working hours, and perceived hindrances (p>.05).

Table 6
Results of Anova Analysis According to Athlete-Student to Sports Branch Variable

Dimensions	Sports Branch	N	$\bar{x}$	SD	F	p	Diff.
Coaching Self-efficacy	a.Basketball	22	3,48	,45	2,510	0,04*	
	b.Volleyball	23	3,16	,51			
	c.Football	20	3,14	,39			a>b,c,d,e
	d.Tennis	16	3,15	,49			
	e.Table tennis	28	3,11	,43			
Role Model	a.Basketball	22	3,36	,99	2,436	0,05*	
	b.Volleyball	23	3,20	1,00			
	c.Football	20	2,87	1,01			a,,>,c,d,,e
	d.Tennis	16	2,98	,93			
	e.Table tennis	28	2,55	1,01			
Discrimination	a.Basketball	22	3,02	1,31	2,831	0,02*	
	b.Volleyball	23	3,21	1,33			

	c.Football	20	3,56	1,60		e>a,b,d
	d.Tennis	16	2,86	,68		
	e.Table tennis	28	4,01	1,34		
Working hours	a.Basketball	22	2,98	1,59	2,115	0,08
	b.Volleyball	23	3,67	1,73		
	c.Football	20	3,53	1,25		-
	d.Tennis	16	3,05	,96		
	e.Table tennis	28	2,69	1,06		
Percieved Barriers	a.Basketball	22	3,00	1,23	1,261	0,29
	b.Volleyball	23	3,39	1,20		
	c.Football	20	3,55	1,31		-
	d.Tennis	16	2,94	,66		
	e.Table tennis	28	3,48	1,03		

According to Table 6, a significant difference was found in the perceptions of Coaching Self-Efficacy (F=2,510;p=0,04), Role Model (F=2,436;p=0,05) and Discrimination (F=2,831;p=0,02) of female athlete students for sports branches. As a result of these comparisons, it was found that basketball player students had higher coaching self-efficacy perceptions than volleyball, football, tennis and table tennis players. When the role model perceptions were examined, it was found that basketball and volleyball players were in a higher role model perception than table tennis players. At the same time, when the discrimination sub-dimension averages were examined, it was found that the athletes playing table tennis were in a higher perception than other branches. There was no difference in the working hours (F=2,115; p=0,08) and perceived barriers (F=1,261; p=0,29) dimensions of the athletes according to the sports branch variable.

Table 7
Means, Standard Deviations, and Correlations

Variable	Mean	sd	1	2	3	4	5
1.Coaching Self-efficacy	3,21	,47	1				
2.Role Model	2,97	1,02	,019	1			
3.Discrimination	3,39	1,35	-,094	-,256**	1		
4.Working hour	3,16	1,39	-,080	-,137	,339**	1	

Note. *p < .05, ** p < .01.

According to the results of the correlation analysis shown in Table 7, the coaching self-efficacy averages of the athletes and the role model (r=.019; p>0.01), discrimination (r=.-094; p>0.01) working hours (r=-.080); p>0.01) no significant relationship was found between the dimensions. A negative and low-level significant relationship was found between the perception of being a role model and the perception of discrimination (r=-.256; p<0.01). According to this result, as the role model perception of the athletes increases, the perception of discrimination decreases. At the same time, a positive and significant relationship was found between the working hours of the athletes and the discrimination averages (r=-.339¸ p<0.01). According to this result, as the perception of working time, which is one of the perceived disability dimensions, increases, the perception of discrimination also increases positively

Discussion and Conclusion, Recommendations

Within the scope of the research, coaching self-efficacy, perceived barriers and role model perceptions of the Faculty of Sports Sciences students were examined on the basis of social cognitive career theory. At the same time, in this study, it was aimed to adapt the Perceived Barriers Scale developed by Everhart and Chelladurai (1998) and the Role Model Effect Scale developed by Nauta and Kokaly (2001), and to examine their validity and reliability in athlete students. In this context, two separate studies, pilot and final, were carried out; item analysis, reliability and construct validity analyzes were carried out. CFA and validity and reliability results for perceived barriers and role model effect show that the scale is a valid and reliable measurement tool. As a result, it can be said that the Turkish version of the Perceived Barriers and Role Model Effect scales for athlete students is a valid and reliable scale and its applicability (see Table 1 and Table 2).

According to the results, the gender of the coachs of the university athletes-students; It was concluded that there was a difference in coaching self-efficacy, role model and discrimination perceptions. Athletes working with female coaches have high self-efficacy and role modeling perceptions; It was observed that the discrimination perception of the athletes working with male coach was high (Table 3). This result can be interpreted as the fact that the coaches are female and the athletes take them as role models, while the perceived discrimination perceptions are low and their coaching self-efficacy increases. These results show how important the number of female coach is for female athletes. This finding is particularly important given that some sports have significantly fewer female coaches than other sports, for example, compared to branches such as basketball, volleyball, and football. Therefore, a single female coach role model can positively influence female athletes' perceptions of career opportunities. Previous research also supports the importance of female coaching role models. Gysbers et al., (2003) stated in their study that female role models positively affect the coaching self-efficacy beliefs of female athletes. Lee (1999) argued in his research that female role models can encourage women to pursue a career in sports.

According to the results of the research, it was found that as the age and years of doing sports (experience) of the athletes increased, their perception of coaching self-efficacy, role modeling and discrimination increased (see Table 4 and Table 5). It was seen that the coaching self-efficacy perceptions of the coaches of the female athletes aged 30 and over were higher than the athletes in the younger age group. Same time coaching self-efficacy perceptions of female athletes with 10 or more athletic experience were found higher than those with less experience.

This result is thought to be due to the fact that female athletes in this age group develop themselves in the best way based on their experiences in the relevant field and are better equipped to prepare themselves for the future compared to other age groups. When the literature is examined, Mentiş, Köksoy (2011) concluded in his study on pre-service teachers' self-efficacy levels that the

Self-efficacy of students in the 21-24 age group is higher than that of students in the 19-21 age group. This result is in parallel with our research. In addition, Koçak (2019) examined the self-efficacy levels of coach candidates and concluded that there was no statistically significant difference according to the age variable. According to the results of his study on football coaches, Kowalski (2007) stated that the age variable has no effect on the self-efficacy of the coaches. These findings do not show parallelism with our research.

Basketball players in our sample indicated significantly more coaching role modeling and self-efficacy than volleyball, football, tennis and table tennis players, according to the sports branch of the athlete-students (see Table 6). According to sports branches, table tennis players were found to perceive more discrimination than students in other sports branches. When the literature is examined, Koçak (2019) in his study examining the coaching self-efficacy levels of the coach candidates, concluded that the type of sport that is coached positively affects the self-efficacy levels of the coach candidates. In the literature, the results supporting the findings of this study could not be reached.

Specifically, a positive correlation was found between the coaches gender, coaching self-efficacy and role modeling (see Table 7). These findings suggest that the gender of female coaches may be important in formulating coaching self-efficacy beliefs and role models. Because the self-efficacy perceptions and role modeling situations of the athletes increase positively according to their working status with a female coach. These findings can be considered as a very important finding, especially considering that some sports have significantly fewer female coaches than others (eg football [33%] basketball [59%] and volleyball [55%] (Acosta & Carpenter, 2008). Therefore, a single female coach role model can positively affect female athletes' perceptions of coaching career opportunities and increase their self-efficacy. Career research has shown that role models positively influence women's self-efficacy beliefs, especially those related to non-traditional careers (Quimby and DeSantis, 2006) and the sports literature have suggested that female role models can encourage women (Nelson, 1991). Findings suggest that the absence of women in coaching positions is a major reason why more women are not participating in coaching, both voluntarily and career-wise.

As a result of the research, discrimination as a perceived barrier was found to be negatively related to role modeling. In other words, as the discrimination perception of the student athletes increases, their perception of role modeling decreases. Based on these results, it can be interpreted that the female athletes in the sample have had direct experiences with discrimination, and therefore they see this as a strong obstacle to a possible coaching career, and therefore their level of role modeling of their coaches is low. Alternatively, the athletes in this sample may not be able to overcome any perceived discrimination and therefore may have viewed it as a barrier to their interest in a coaching career.

In addition to discrimination, working hours and perceived barriers perception were found to be positively related. As the perception of discrimination increases, the perception of working hours barrier also increases. When the literature is examined, it is seen that one of the most important barrier affecting both men and women who continue their coaching career is working hours (Barber, 1998; Everhart and Chelladurai, 1998). There are studies suggesting that he quit coaching because he had a role conflict (Hart et al, 1986).

The extraordinary time and effort required to be a successful coach can be seen as a barrier to normal social life. Since it is possible for some people to refrain from coaching due to time, social and family constraints, the participants' perception of working hours as an barrier can be evaluated as a negative effect on the choice of coaching as a profession and coaching self-efficacy. Working hours as a barrier are a function of either the individual (ie, having strong family and social ties and associated time commitments) or the profession (ie, requiring stressful long hours of work in the evenings and weekends).

As a result of the regression analysis conducted to determine the variables affecting the coaching self-efficacy in the study, it was seen that the years of doing sports of the athletes effectively predicted the coaching self-efficacy. It was found that other variables (role model, discrimination, working hours) did not have a significant effect. When the literature is examined, Koçak (2019) found that the duration of the athlete's experience positively affects the self-efficacy levels in his study in which he examined the coaching self-efficacy levels of nominees coaches. Similarly, Feltz et al. (2009) stated that past sportsmanship experiences positively affect the level of coaching self-efficacy. These findings show parallelism with our study. These results; may indicate that the information learned during the sportsmanship period creates a readiness for the coaching profession. On the other hand, Duarte et al. (2014) concluded in their study that there was no significant relationship between professional sports experience and coach efficacy. When the literature is examined, the number of female coaches, working hours and perceived discrimination are the factors affecting coaching self-efficacy (Imeson, 2017).

The results of this research show that the perception of female coach role models and working hours as barriers for athletes is an important predictor of coaching self-efficacy. Although there are many studies on female athletes in sports, there are very few studies examining the perceptions of female athlete-student coach candidates. This study aimed to identify some factors that affect female athletes' interest in coaching as a career. By trying to better understand how this interest is generated, we can create better strategies for recruiting and retaining qualified female coaches for athletes and move one step closer to closing the gender gap in coaching.

Ethical Approval

Ethics evaluation committee: Çukurova University Faculty of Medicine Non-Invasive Clinical Research Ethics Committee

Ethics evaluation document issue number: 21/05/2021

Ethics evaluation document issue number: 111

Authors' Contribution

The first author contributed 60% and the second author contributed 40%.

Conflicts of Interest

The authors declare no conflict of interest.

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