

Sports College Students and Entrepreneurship: An Investigation into Entrepreneurship Tendencies

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Abstract

The purpose of this research is to examine the relationship between the entrepreneurship tendencies and self-efficacy of sports college students and whether there is a difference in terms of some demographic variables. The research is a quantitative study based on a relational survey model. The sample of the study consists of 495 participants who continue their education as active students in sports colleges affiliated to the Directorates of National Education in Konya and Kahramanmaraş in Turkey. The data of the research were analysed using a statistical software program. The arithmetic mean and standard deviation values were determined for the data analysis, and the t-test and One-Way Analysis of Variance (ANOVA) tests were used to determine the differentiation of the scores obtained for the variables. In addition, a correlation analysis was used to determine the relationship between variables, and a regression analysis was used to test whether the independent variables predict the dependent variable or not. As a result of the research, it was observed that the entrepreneurship and self-efficacy mean scores of the participants were at a moderate level and that the scores of the participants regarding entrepreneurship and self-efficacy levels differed significantly in terms of the variables of the province, the gender, and the grade level. It was also concluded that as the entrepreneurship perception of the students of sports college increases, their self-efficacy increases and the sub-dimensions “self-confidence, innovativeness, control focus, risk-taking and desire to accomplish” are significant predictors of students’ general self-efficacy while the dimension of “making difference and determination” is not a significant predictor of their general self-efficacy.

Keywords: sports college, student, entrepreneurship, self-efficacy

1. Introduction

Those pursuing a career in the field of sports are mainly regarded as individuals who are agile and physically and mentally strong as well as eager and competitive. However, it should also be noted that these individuals should possess the capacity of using these abilities and skills in the field of other industries related to sports such as economy, business, education, and management. Thus, it is expected that they should also have the entrepreneurial spirit, the power of decision-making as well as self-efficacy and the power of taking risks to go through the processes that are required to achieve their goals in the relevant fields.

In this context, it is possible to consider the notion of entrepreneurship as a perspective as well as a characteristic feature. Among the important parameters of entrepreneurship in today’s world are creating strategies by combining innovations with developments in the economy, developing new management approaches, making a difference, having a solution-oriented approach instead of a problem-oriented one, keeping up with and improving the speed of technology change (Aksoy & Yalçınsoy, 2017).

Self-efficacy reflects a situation where one enjoys a good mental health and a certain amount of knowledge without feeling a significant self-deficiency psychologically, physically, or biologically, or feels self-sufficient at a minimum level, or has the capacity of acting. Whether self-efficacy is low or high varies from individual to individual. Individuals with low self-efficacy are not expected to have an entrepreneurial spirit; whereas, individuals with moderate and high levels of self-efficacy are expected to have an entrepreneurial spirit.

It should be noted that self-efficacy and the entrepreneurship tendency may differ according to gender, the region in the context of the countries of residence and also the education levels due to cultural differences. The sports history of the individual may be the most important factor to explain the relevant difference, while factors such as economic, geographical, cultural life and development level should also be taken into consideration.

1.1 Entrepreneurship

Though entrepreneurship is viewed as a concept of economy or business, it is a characteristic feature of an individual or a society in essence. More clearly, entrepreneurship is a natural feature of an individual (Aksoy & Yalçınsoy, 2017). “Entrepreneurship” has been the focus of debate in recent years and is widely mentioned by policymakers as one of the ways of wealth in the future with cross-country entrepreneurship comparisons becoming widely popular. However, the concept of entrepreneurship is often used without a precise definition, and it is not fully obvious how various related criteria are used (Iversen et al., 2008).

Apart from the general use of the concept of entrepreneurship, it is possible to conceptualize it in terms of various sectors including sports, business, economy, tourism, industry, and service, etc. One of these concepts is known as sports entrepreneurship, one of the concepts of which is sports entrepreneurs. According to Ratten (2019), sports entrepreneurship literature defines the concept of sports as “any physical activity aimed at improving fitness or mental health” (Ratten, 2019, p. 2). Entrepreneurs with backgrounds in sports and generally having a certain experience in the industry are known as sports entrepreneurs (Hemme et al., 2017). Sports entrepreneurs are different from other entrepreneurs in that they start many sports businesses solely based on interest (Crick & Crick, 2016). Although not all sports entrepreneurs are athletes or former athletes, they are often people who use physical and typically concrete knowledge of sports (e.g. a hobby) to start and run a business (Hemme et al., 2017). It can be concluded that the majority of sports entrepreneurs are from the sports community, athletes, or former athletes. For example, Malcolm Lemmons began his entrepreneurial career after retirement from being a professional athlete. As stated by this professional athlete-turned entrepreneur, “the skills that athletes use on the playing field are also the same skills that are needed to be successful in any aspect of life” (Lemmons, 2020). He further suggests that without having a certain mindset combined with the right skills, the entrepreneurial world can be an emotional rollercoaster that will more than likely lead to failure and thus, athletes ideally can be great entrepreneurs as they possess this type of mentality and a skill set that is perfect for achieving success in the business world. In fact, the relationship between being an athlete and an entrepreneur based on common basic traits shared by both parties is essential as it gives clues about how athletes and entrepreneurs affect each other. In this sense, Deep Patel (2020), pays attention to lessons that entrepreneurs can learn from athletes and lists 7 such lessons as follows: to know exactly what one is trying to achieve, not to fear pressure, to have grit, to be in the moment, to use competition to push one further, to learn from losing (and winning), and to stop comparing oneself. Thus, it can be thought that athletes are more prone to be entrepreneurs just as entrepreneurs have too many things in common with athletes.

Considering all the above mentioned information, this study was conducted to answer the question “Can sports college students become sports entrepreneurs in the future since they also provide sports infrastructure to a certain extent with the education they receive?” The researchers attempted to determine the entrepreneurship score average levels to learn the entrepreneurship tendencies of the students. One of the hypotheses points to a significant relationship between the demographic characteristics of sports college students and their entrepreneurial tendency.

1.2 Self-Efficacy

As a term first coined by Albert Bandura (1977), who is an acknowledged psychologist from Stanford University, in 1977, in the paper titled “Self-efficacy: Toward a Unifying Theory of Behavioural Change”, self-efficacy was defined as a personal judgment of how well one can execute courses of action required to deal with prospective situations. The concept of self-efficacy is defined as a personal judgment of successfully organizing and conducting activities to carry out a certain performance (Bandura, 1997). According to Kear (2000; from Köse & Uzun, 2018), self-efficacy belief is related to how individuals perceive themselves about a certain issue.

The concept of self-efficacy involves elements such as planning an action, being aware of and organizing the necessary skills, and the level of motivation resulting from the revision of challenging acquisitions (Yıldırım & İlhan, 2010). Bandura (1997) has stated that the most important feature that distinguishes those with high self-efficacy from those with low self-efficacy is that they recover as quickly as possible in the face of their failures and insist on their actions without giving up.

H1: There is a significant difference between the entrepreneurship tendencies of the Sports College students in terms of their gender.

H2: There is a significant difference between the entrepreneurship tendencies of the Sports College students in terms of the province of participation (region of residence).

H3: There is a significant difference between the entrepreneurship tendencies of the Sports College students in terms of their grade levels.

H4: The entrepreneurship tendency perceptions of the Sports College students positively affect their general self-efficacy levels.

H5: Sports College students' perceptions of self-confidence, innovativeness, control focus, risk-taking, making a difference, determination and desire to succeed are all predictors of general self-efficacy.

2. Method

2.1 Research Model

The research is a quantitative study and has been carried out in a relational survey model. Relational survey models are used to determine whether there is a relationship between two or more variables and if so, the degree and level of the relationship (Karasar, 2014). In this study, the opinions of students in sports colleges about their self-efficacy and entrepreneurship tendencies were determined along with the examination of the differentiation of participants' opinions in terms of some demographic variables. The relationship between the participants' self-efficacy and entrepreneurial tendencies and whether the perception of their self-efficacy predicts their entrepreneurial tendencies were revealed. Necessary approvals were obtained from all students participating in this study via the "Informed Voluntary Consent Form".

2.2 Population and Sample

According to Karasar (2015), the survey model refers to the arrangements made on a sample, using the whole of the population or a group from the population consisting of many members to make a general judgment about the population. In this context, the population of the study consists of 629 participants who continue education in Kahramanmaraş Sports College, Konya Sports College, and Doğanhisar Şehit Ahmet Baş Sports College within the Directorates of National Education in the provinces of Konya and Kahramanmaraş. Since all participants were included in the research sample, no further sample selection was made. The scale forms were distributed to the participants under the supervision of a counsellor, and applicable feedback was obtained from 495 participants. The return rate of the scales was 78.69%. While 62.2% (n = 308) of the participants included in the research sample are from Konya, 37.8% (n = 187) are from Kahramanmaraş and while 33.3% (n = 165) of the participants are female, 67.7% (n = 330) are male. 31.5% (n = 156) of the participants are 9th-grade students, 30.5% (n = 151) 10th-grade students, 19.6% (n = 97) 11th-grade students, and 18.4% (n = 91) 12th-grade students.

2.3 Data Collection Tools

2.3.1 Self-Efficacy Scale

The original form was developed by Sherer et al. (1982) to determine the self-efficacy levels of physical education and sports college students. The researchers used the General Self-Efficacy Scale, which was translated into Turkish and whose validity and reliability study was conducted by Yıldırım and İlhan (2010). The researchers calculated the internal consistency coefficient of the scale as .80, while the internal consistency coefficient of the scale was found to be .87.

A Confirmatory Factor Analysis was conducted within the scope of this study to validate the single factor structure of the scale. As a result of the analysis, it was observed that the single-factor structure of the scale was confirmed and the fit indices of the model were at acceptable levels ($\chi^2/df = 3.41$, CFI = .90, TLI = .89, RMSEA = .068, SRMR = .055).

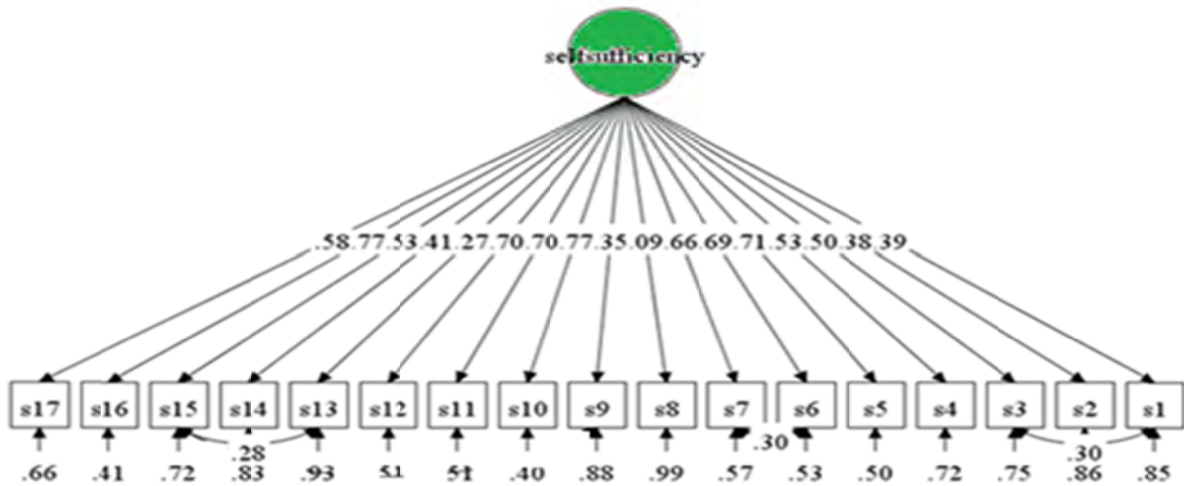


Figure 1. Self-efficacy scale diagram model

2.3.2 Entrepreneurship Scale

The “Entrepreneurship Scale” was employed to determine the entrepreneurship skills of the participants. The scale, which was developed as unidimensional by Yılmaz and Sünbül (2009), was later transformed into a seven-factor form by Aksoy and Yalçınsoy (2017). In this study, the form of the scale prepared by Aksoy and Yalçınsoy (2017) was used. The researchers calculated the internal consistency coefficient as .96 for the overall scale. They determined the sub-dimensions of the scale as ‘self-confidence’, ‘innovation’, ‘control focus’, ‘risk taking’, ‘making a difference’, ‘determination’ and ‘desire to succeed’. In this study, the internal consistency coefficient was found to be .94 for the overall scale and .87, .72, .76, .76, .66, .64, and .76 for the sub-dimensions, respectively.

A Confirmatory Factor Analysis was conducted within the scope of this study to validate the seven-factor structure of the scale. As a result of the analysis, it was seen that the seven-factor structure of the scale was confirmed and the fit indices of the model were at acceptable levels ($\chi^2 / sd = 3.52$, CFI = .90, TLI = .89, RMSEA = .070, SRMR = .062).

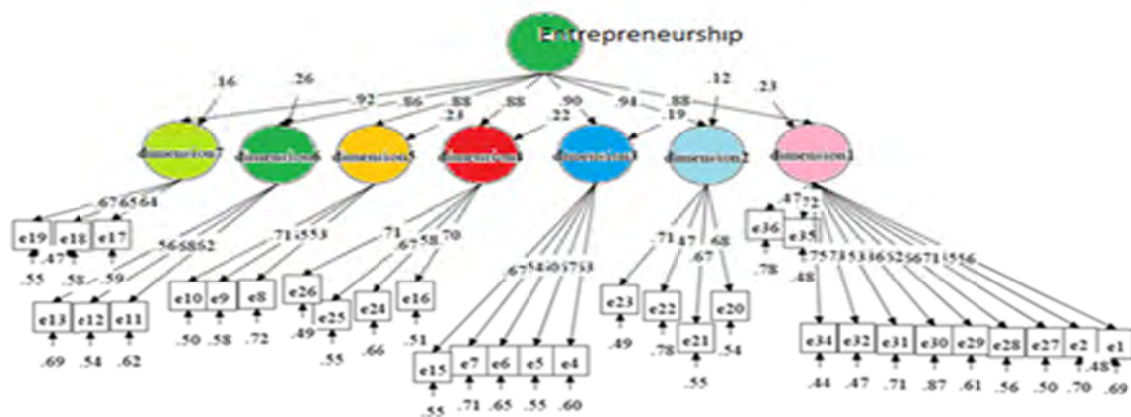


Figure 2. Entrepreneurship scale diagram model (Dimension rank: 1=‘self-confidence’, 2=‘innovation’, 3=‘control focus’, 4=‘risk taking’, 5=‘making a difference’, 6=‘determination’ and 7=‘desire to succeed’)

2.4 Data Analysis

The data of the study were analysed via the SPSS package program. Whether the scores of the scales showed normal distribution was evaluated by examining the skewness and kurtosis coefficient method (Büyüköztürk,

2018). The skewness coefficients obtained as a result of the analysis were calculated as ‘-.050’ for the general of the ‘Entrepreneurship Scale’, and as “-.024”, “-.084”, “-.153”, “-.145”, “-.305”, “-.105”, and “-.183”, respectively, for ‘self-confidence’, ‘innovativeness’, ‘control focus’, ‘risk taking’, ‘making a difference’, ‘determination’, and ‘desire to succeed’ as the sub-dimensions of the scale. The self-efficacy scale was calculated as “-.359”, and all values ranged between +1 and -1, and the distribution was accepted to be within the normal range for all dimensions. For this reason, arithmetic mean and standard deviation values were determined for data analysis. In addition, t-test and One-Way Analysis of Variance (ANOVA) tests and Scheffe and LSD tests were used to determine the source of the difference in groups with significant differences.

3. Results

Table 1. Table of the entrepreneurship level scale

36-64	Very low entrepreneurship
65-92	Low entrepreneurship
93-123	Moderate entrepreneurship
124-151	High entrepreneurship
152-180	Very high entrepreneurship

Source: Yılmaz and Sünbül (2009).

The level of entrepreneurship that emerged according to the answers given by the sports college students to the statements on the scale is given in Table 2.

Table 2. Total entrepreneurship levels of the participants

	-n-	Arithmetic mean	S. Deviation
Entrepreneurship level	495	111.79	20.38

It is clear from the entrepreneurship score distributions of the participants in Table 2, the entrepreneurship score average is 111.79. Since this value is in the score range of 93-123, the entrepreneurship average of participants is at a moderate level.

Table 3. Arithmetic mean and standard deviation of the self-efficacy and entrepreneurship scale scores of the participants

Scales	N	Min-Max	\bar{x}	SS
Self-efficacy	495	1.71 – 4.94	3.65	.11
Entrepreneurship	495	1.70 - 4.79	3.39	.62

According to Table 3, the mean scores of the participants’ self-efficacy and entrepreneurship scales are at a moderate level.

Table 4. Independent group t-test results in factor dimensions of entrepreneurship and self-efficacy scale scores of Sports College students according to the variable regarding the province of participation

Scales	Factors	Province	N	\bar{x}	SS	sd	t	p
Entrepreneurship Scale	Self-confidence	Konya	308	3.29	.64	493	-7.10	.000*
		Kahramanmaraş	187	3.72	.69			
	Innovativeness	Konya	308	3.08	.73	493	-2.78	.006*
		Kahramanmaraş	187	3.28	.83			
	Control Focus	Konya	308	3.39	.69	493	-.846	.398
		Kahramanmaraş	187	3.45	.76			
	Risk Taking	Konya	308	3.40	.83	493	-.758	.449
		Kahramanmaraş	187	3.46	.77			
	Making a difference	Konya	308	3.55	.74	493	-1.36	.175
		Kahramanmaraş	187	3.65	.92			
	Determination	Konya	308	3.18	.75	493	-1.39	.166
		Kahramanmaraş	187	3.28	.91			
	Desire to succeed	Konya	308	3.24	.79	493	-2.28	.023*
		Kahramanmaraş	187	3.42	.93			
Self-efficacy Scale	General Self-efficacy	Konya	308	3.57	.61	493	-3.90	.000*
		Kahramanmaraş	187	3.78	.54			

* $p < 0.05$.

According to Table 4, statistically significant differences were found in the dimensions of self-confidence $t(493) = -7.10$; $p < 0.05$, innovativeness $t(493) = -2.78$; $p < 0.05$, desire to succeed $t(493) = -2.28$; $p < 0.05$, and general self-efficacy $t(493) = -3.90$; $p < 0.05$ in terms of the province of participation variable. On the other hand, no statistically significant differences were found in their dimensions of control focus $t(493) = -.846$; $p < 0.05$, risk taking $t(493) = -.758$; $p < 0.05$, making a difference $t(493) = -1.36$; $p < 0.05$, and determination $t(493) = -1.39$; $p < 0.05$. It was revealed that the sports students who participated in Kahramanmaraş had significantly higher scores than those in Konya in terms of sub-dimensions of general self-efficacy and self-confidence, innovativeness and desire to succeed.

Table 5. Independent group t-test results in factor dimensions of entrepreneurship and self-efficacy scale scores of Sports College students according to the variable regarding the gender

Scales	Factors	Gender	N	\bar{x}	SS	sd	t	p
Entrepreneurship Scale	Self-confidence	Female	165	3.09	.66	493	-8.73	.000*
		Male	330	3.63	.63			
	Innovativeness	Female	165	2.80	.72	493	-7.77	.000*
		Male	330	3.34	.73			
	Control Focus	Female	165	3.10	.66	493	-7.19	.000*
		Male	330	3.57	.69			
	Risk Taking	Female	165	3.02	.75	493	-8.42	.000*
		Male	330	3.63	.76			
	Making a difference	Female	165	3.27	.74	493	-6.32	.000*
		Male	330	3.74	.80			
	Determination	Female	165	2.87	.77	493	-6.88	.000*
		Male	330	3.38	.78			
	Desire to succeed	Female	165	2.95	.84	493	-6.76	.000*
		Male	330	3.48	.80			
Self-efficacy Scale	General Self-efficacy	Female	165	3.48	.63	493	-4.62	.000*
		Male	330	3.73	.56			

* $p < 0.05$.

Table 5 reveals that statistically significant differences were found in the sub-dimensions of self-confidence

$t(493)=-8.73$; $p<0.05$, innovativeness $t(493)=-7.77$; $p<0.05$, control focus $t(493)=-7.19$; $p<0.05$, risk taking $t(493)=-8.42$; $p<0.05$, making a difference $t(493)=-6.32$; $p<0.05$, determination $t(493)=-6.88$; $p<0.05$, desire to succeed $t(493)=-6.76$; $p<0.05$, and general self-efficacy $t(493)=-4.62$; $p<0.05$ in terms of the gender variable. Male participants had significantly higher scores than female participants in terms of self-efficacy and all other sub-dimensions.

Table 6. One-way analysis of variance (ANOVA) results in the factor dimension of entrepreneurship and self-efficacy scale scores of sports college students according to the grade level variable

Factors	Grade level	N	\bar{x}	SS	F	p	Groups with a difference (Scheffe and LSD Tests)
Self-confidence	9th-grade (a)	156	3.45	.71	3.13	.026*	d - b
	10th-grade (b)	151	3.34	.66			
	11th-grade (c)	97	3.46	.71			
	12th-grade (d)	91	3.62	.67			
Innovativeness	9th-grade (a)	156	3.06	.78	2.92	.033*	d - a
	10th-grade (b)	151	3.12	.70			
	11th-grade (c)	97	3.19	.82			
	12th-grade (d)	91	3.35	.79			
Control Focus	9th-grade (a)	156	3.34	.75	6.00	.001*	d - a, b
	10th-grade (b)	151	3.28	.68			
	11th-grade (c)	97	3.55	.69			
	12th-grade (d)	91	3.62	.69			
Risk Taking	9th-grade (a)	156	3.28	.82	6.01	.001*	d - a, b
	10th-grade (b)	151	3.34	.79			
	11th-grade (c)	97	3.56	.76			
	12th-grade (d)	91	3.67	.80			
Makin A Difference	9th-grade (a)	156	3.50	.82	2.86	.037*	d - a, b
	10th-grade (b)	151	3.53	.83			
	11th-grade (c)	97	3.61	.78			
	12th-grade (d)	91	3.79	.79			
Determination	9th-grade (a)	156	3.00	.81	9.06	.000*	d - a, b
	10th-grade (b)	151	3.24	.70			
	11th-grade (c)	97	3.23	.88			
	12th-grade (d)	91	3.54	.80			
Desire To Succeed	9th-grade (a)	156	3.17	.87	5.39	.001*	d - a, b, c
	10th-grade (b)	151	3.33	.80			
	11th-grade (c)	97	3.21	.88			
	12th-grade (d)	91	3.59	.81			
General Self-efficacy	9th-grade (a)	156	3.69	.60	4.18	.006*	d - b
	10th-grade (b)	151	3.52	.60			
	11th-grade (c)	97	3.65	.57			
	12th-grade (d)	91	3.78	.56			

* $p<0.05$.

Table 6 reveals that as a result of the analysis, there were statistically significant differences at $p < 0.05$ significance level between the 9th, 10th, 11th, and 12th-grades according to the grade level variable. As a result of the Scheffe test conducted to determine among which groups the differences occurred, it was found that 12th-grade students had higher “self-confidence” factor values than 10th-grade students, 12th-grade students had higher “innovation” factor values than 9th-grade students, 12th-grade students had higher control focus factor values than 9th and 10th-grade students, 12th-grade students had higher risk taking factor values than 9th and 10th-grade students, 12th-grade students had higher differentiation factor values than 9th and 10th-grade students, 12th-grade students had higher determination factor values than 9th and 10th-grade students, 12th-grade students had higher desire to succeed factor values than 9th, 10th, and 11th-grade students, and 12th-grade students had higher self-efficacy factor values than 10th-grade students.

Table 7. Correlation results between general self-efficacy and entrepreneurship scale factors

Variable/s	Self-confidence	Innovativeness	Control focus	Risk taking	Making a difference	Determination	Desire to succeed
General self-efficacy	.509*	.436*	.417*	.437*	.358*	.300*	.242*

N=495, * $p < .05$

Table 7 reveals that there was a positive and moderate level relationship between the general self-efficacy scores of the participants and self-confidence ($r=.51$), innovativeness ($r=.44$), control focus ($r=.42$), risk taking ($r=.44$), making a difference ($r=.36$), and determination ($r=.30$), while this relationship was a positive and low one regarding the desire to succeed ($r=-.24$). It can be stated that as the perceptions of participants regarding self-confidence, innovation, control focus, risk taking, making a difference, determination, and desire to succeed increase, their self-efficacy increases.

Table 8. Standard multiple regression analysis results regarding the prediction of general self-efficacy of entrepreneurship scale factors

Variable	B	Sh	B	T	<i>p</i>
Fixed	1.976	0.127		15.615	.000
Self-confidence	.317	.053	.368	6.055	.000
Innovativeness	.141	.046	.183	3.029	.003
Control focus	.109	.049	.131	2.434	.015
Risk taking	.086	.041	.117	2.104	.036
Making a difference	.003	.038	.004	.087	.931
Determination	-.005	.038	-.006	-.124	.901
Desire to succeed	-.160	.038	-.229	-4.161	.000

$R = 0.563$, $R^2 = 0.317$, $F(7.487) = 32.347$, $p = .000$.

According to Table 8, the variables of entrepreneurship scale factors together had a moderate and significant relationship with the general self-efficacy scores of the participants ($R = 0.563$, $R^2 = 0.32$, $p < 0.05$). Together with the entrepreneurship scale factors, the general self-efficacy of the participants explained approximately 32% of the total variance. When the results regarding the significance of the regression coefficients are examined, it is seen that in the dimensions of 'self-confidence, innovativeness, control focus, risk taking and desire to succeed', participants were a significant predictor of their general self-efficacy, while they were not a significant predictor of the participants' general self-efficacy in the dimensions of 'making a difference and determination'.

4. Discussion

In this study, which focuses on the relationship between the levels of self-efficacy and entrepreneurship tendency of the students who continue their education in sports high schools and the differences in terms of some variables, it was concluded that the self-efficacy and entrepreneurship mean scores of the sports high school students were in the moderate level entrepreneurship score range. It can be said that being open to learning and development in line with individual abilities in the education process increases the self-efficacy and entrepreneurship of individuals. For this reason, sports high school students have the opportunity to do physical activity regularly, either individually or by actively participating in sports branch lessons included in the school curriculum. Studies have shown that there is a positive relationship between physical activity and self-efficacy (Huang et al., 2018; Downs & Strachan, 2016). Another source of self-efficacy for potential entrepreneurs is the belief that the individual has the ability to learn and adapt (Potosky & Ramakrishna, 2002). The results of this study overlap the results of Çelik and Kısa (2020) in terms of self-efficacy score average and the results of Tükel et al. (2020) in terms of entrepreneurship mean scores.

In terms of the province variable, it was revealed that those from Kahramanmaraş had significantly higher self-confidence, innovativeness, desire to accomplish, and self-efficacy, which means results were in favour of those whose province was Kahramanmaraş. It can be said that the students studying in Kahramanmaraş have positive attitudes and behaviors towards entrepreneurship as well as belief in achieving their goals. This suggests that there may be differences in the context of the countries where cultural differences may pose a potential effect. Bretones and Silva (2009) stated in their research on culture and entrepreneurial behaviour that such behaviour

includes social and economic aspects related to certain values and beliefs that could affect behaviour. However, researchers have pointed out that high human performance is the basis of self-efficacy (Bandura et al., 1999; Bandura, 1999). Cultural norms have been found to affect students' entrepreneurial intent in different studies (García et al., 2018; Shook & Britanu, 2010; Solesvick et al., 2012; Fisbein & Ajzen, 1975).

It was found that male sports high school students had significantly higher self-efficacy and entrepreneurship scale in all sub-dimensions than female students. This is possible because of the general cultural structure of Turkish society, in which socio-cultural factors are effective depending on the social role of men, and men take a more active role in social life. The literature review shows that the results of Özkara (2019), Atasoy and Aktaş (2020), and İrmiş and Barutçu (2012) overlap the results of this study in terms of entrepreneurship while the results of Wang et al. (2020) overlap the results of this study in terms of self-efficacy

According to the grade level variable of sports college students, it was found out that

- 12th-grade students had higher 'self-confidence' and 'self-efficacy' factor values than 10th-grade students,
- 12th-grade students had higher 'innovation' factor values than 9th-grade students,
- 12th-grade students had higher 'control focus', 'risk taking', 'making a difference', and 'determination' factor values than 9th and 10th-grade students,
- 12th-grade students had higher 'desire to accomplish' factor values than 9th, 10th and 11th-grade students.

As the grade level of sports high school students generally increases, their entrepreneurship and self-efficacy levels increase. However, it can be thought that students have discovered their entrepreneurial potential and their self-efficacy of forward planning, risk taking and thinking have developed cognitively. Krueger (2000) stated that the discovery of entrepreneurship involves searching, evaluating, and cognitively creating entrepreneurship opportunities. Physical activities performed at different intensities have a significant effect on self-efficacy as shown in a study conducted on high school students (Zhao et al., 2019). Unlike the findings of our study, Wang et al. (2020) found that the self-efficacy of senior university students is low, adding that the reason for this is the anxiety of finding a job after graduation.

There was a positive, low-level, and significant relationship between the general self-efficacy scores of the participants and their desire to accomplish while there was a positive, moderate, and significant relationship among other dimensions. It can be stated that the self-efficacy of the participants increases as the perceptions of self-confidence, innovativeness, control focus, risk-taking, making a difference, determination, and desire to accomplish increase.

Together with the entrepreneurship scale factors, the general self-efficacy of the participants explained approximately 32% of the total variance. The results regarding the significance of the regression coefficients reveal that the dimensions of "self-confidence, innovativeness, control focus, risk taking and desire to accomplish" are significant predictors of the general self-efficacy of the participants while the dimensions of "making difference and determination" are not significant predictors of the general self-efficacy. As a result, belief in the ability of an entrepreneur in terms of 'self-confidence, innovation, control focus, risk taking and desire to accomplish' plays an important role in determining overall self-efficacy. Findings reveal that as the entrepreneurship perceptions of students increase, they tend to have self-efficacy. It is recommended to investigate the self-efficacy levels of students studying at different levels in the field of sports in terms of 21st century skills in the context of today's technological developments.

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