

# An Investigation of Mental Toughness Skills in Athletes Snowboard and Ski

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## ABSTRACT

**Aim:** The aim of this research; The aim of this study is to investigate the mental toughness skills of athletes in ski and snowboard.

**Methods:** For data collection, "Mental Toughness Scale" was used which was developed by Sheard et al. <sup>8</sup> and was adapted to Turkish by Altıntaş and Koruç <sup>9</sup> to 212 participants in total consisting of 74 female and 138 male For data analysis, SPSS statistical packet program was used for frequency analysis, and independent t-tests, one-way anova and tukey test were run to find out the source of the difference among different groups of participants

**Results:** Significant differences were found when comparing the mental toughness of the participants according to their branches ( $p < 0.05$ ).

**Conclusion:** According to this; It is seen that skiers have more mental endurance skills than snowboarders.

**Keywords:** Snowboard, Ski, Mental Toughness, Sport

## INTRODUCTION

Individuals may encounter many negative situations throughout their lives. These negative situations are; It can create many negative emotions such as stress and anxiety on individuals. These problems can lead to the development of adaptation to the same type of situations over time and to develop resistance to these negative emotions. To ensure this durability; Individuals need to spend time and effort mentally. This phenomenon is called mental toughness. mental toughness; It is the positive psychological capacity of individuals to help them recover from negative situations.

In the literature, there are different studies related to mental toughness ability, whether it is genetic or a condition that can be developed. Block and Block <sup>1</sup> suggested that individuals with mental toughness are born resistant according to their genetic characteristics. Beardslee and Podorefsky <sup>2</sup> argued that mental toughness is a skill that can be acquired later. In the light of two different basic approaches, we see that mental resilience is a talent that can be innate and can also be acquired later.

Mental toughness, which has an important place among the subjects that sports psychologists have fallen on recently; especially during competition periods.<sup>3,4,5,6</sup> Athletes need to develop their physical and mental sports skills in order to display their talents <sup>7</sup>. mental stamina; It can be examined in 3 sub-dimensions as trust, control and continuity. Trust; It is the mental belief of the individual in his/her abilities in difficult situations that require struggle. Control; is to remain calm in pressures and strains and demonstrate their abilities. Continuity; mental struggle in a sustainable way by focusing on the goal.

The aim of this study is to investigate mental toughness skills in skiers and snowboarders.

## MATERIAL & METHODS

The purpose of this research; The aim of this study is to investigate the mental toughness skills of athletes in ski and snowboard.

For data collection, "Mental Toughness Scale" was

used which was developed by Sheard et al. <sup>8</sup> and was adapted to Turkish by Altıntaş and Koruç <sup>9</sup> to 212 participants in total consisting of 74 female and 138 male.

For data analysis, SPSS statistical packet program was used for frequency analysis, and independent t-tests, one-way anova and tukey test were run to find out the source of the difference among different groups of participants

SPSS statistical packet programme was used to evaluate the acquired data and meaningfulness level is accepted as ( $p < 0,05$ ).

## RESULTS

Table 1. Participants' Information in terms of Demographical Features

Gender	N	%
Men	138	65.1
Women	74	34.9
Age	N	%
Between 18- 28 ages	72	34
Between 29-39 ages	96	45.3
Age 40 and over	44	20.7
Branch Type	N	%
Ski	147	69.3
Snowboard	65	30.7
Status	N	%
Coach	96	45.3
Athlete	116	54.7
Working Field	N	%
Hotel	68	32.1
Club	144	67.9
Total	212	100

When the table 1 is analyzed in terms of gender, it is seen that % 65.1 of the participants are men, %34.9 are women; in terms of branch type %69.3 are ski, %30.7 are snowboard; in terms of age %34 are between 18-28 ages, %45.3 are between 29-39 ages,%20.7 are 40 age and over; in terms of status, it is seen that %45.3 are coach 1, %54.7 are athlete; in terms of working field %32.1 are hotel, %67.9 are club.

Table 2. Comparison Between the Participants Level of Mental Toughness Depending on Gender

Sub Dimension	Gender	Mean	s.d	t	p
Confidence	Women	3,66	,176	-,374	,000*
	Men	3,11	,217		
Continuity	Women	3,53	,167	-1,139	,321
	Men	3,48	,138		
Control	Women	3,24	,384	-,267	,000*
	Men	3,72	,362		

\*(p&lt;0,05)

When the datas are analyzed, there are meaningful dissimilarities in sub-dimension of confidence (p=,000) and control (p=,000) in mental toughness depending on gender (p<0,05)

higher confidence than men participants ( $x=3.11\pm.217$ ); It is seen that men ( $x=3.72\pm.362$ ) have a higher control than women ( $x=3.24\pm.384$ ).

According to this data, women ( $x=3.66\pm.176$ ) have a

Table 3. Comparison Between the Participants Level of Mental Toughness Depending on Ages

Sub Dimension	Age	Mean	s.d	f	p
Confidence	Between 18-28 ages	3,49	,721	,221	,165
	Between 29-39 ages	3,52	,753		
	Age 40 and over	3,37	,796		
Continuity	Between 18-28 ages	3,64	,312	,314	,143
	Between 29-39 ages	3,53	,356		
	Age 40 and over	3,58	,244		
Control	Between 18-28 ages	3,49	,412	,421	,271
	Between 29-39 ages	3,51	,456		
	Age 40 and over	3,55	,444		

\*(p&lt;0,05)

When table 3 is analyzed, there is no meaningful dissimilarity in the participants' level of confidence (p=,165), continuity (p=,143) and control (p=,271) in mental

toughness depending on ages (p>0,05)

Table 4. Comparison Between the Participants Level of Mental Toughness Depending on Branch Type

Sub Dimension	Branch Type	Mean	s.s	t	p
Confidence	Ski	3,78	,771	,331	,000*
	Snowboard	3,31	,654		
Continuity	Ski	3,55	,378	,512	,192
	Snowboard	3,58	,295		
Control	Ski	3,43	,456	,459	,000*
	Snowboard	3,73	,543		

\*(p&lt;0,05)

When the datas are analyzed, there are meaningful dissimilarities in sub-dimension of confidence (p=,000) and control (p=,000) in mental toughness depending on branch type (p<0,05)

higher confidence than snowboard participants ( $x=3.31\pm.654$ ); It is seen that snowboard ( $x=3.73\pm.543$ ) have a higher control than ski ( $x=3.43\pm.456$ ).

According to this data, ski ( $x=3.78\pm.771$ ) have a

Table 5. Comparison Between the Participants Level of Mental Toughness Depending on Status

Sub Dimension	Status	Mean	s.d	t	p
Confidence	Coach	3,38	,131	,262	,000*
	Athlete	3,69	,157		
Continuity	Coach	3,55	,143	,234	,239
	Athlete	3,58	,129		
Control	Coach	3,63	,181	,377	,178
	Athlete	3,73	,164		

\*(p&lt;0,05)

When the datas are analyzed, there are meaningful dissimilarities in sub-dimension of confidence (p=,000) in mental toughness depending on status (p<0,05)

( $x=3.69\pm.131$ ) have a higher confidence than coach participants ( $x=3.38\pm.157$ )

According to this data, It is seen that athlete

Table 6. Comparison Between the Participants Level of Mental Toughness Depending on Status

Sub Dimension	Working Field	Mean	s.d	t	p
Confidence	Hotel	3,48	,345		
	Club	3,41	,354		
Continuity	Hotel	3,45	,372		
	Club	3,42	,325		
Control	Hotel	3,49	,399		
	Club	3,53	,384		

\*(p<0,05)

When table 6 is analyzed, there is no meaningful dissimilarity in the participants' level of confidence (p=,145), continuity (p=,176) and control (p=,122) in mental toughness depending on working field (p>0,05)

### DISCUSSION AND CONCLUSION

The following results were obtained in our study, which was conducted to compare the mental toughness skills of ski and snowboard athletes in Erzurum.

It is seen that women have a higher level than men participants in confidence sub-dimension. This may be due to the fact that women are less competitive in these sports.

It is seen that men have a higher level than women participants in control sub-dimension. This may be due to the fact that male athletes do this sport on slopes with a higher difficulty level than women.

It is seen that skiers have a higher level than snowboarders' participants in confidence sub-dimension. This may be due to the fact that ski athletes do this sport on less variable tracks than snowboarders.

It is seen that snowboarders have a higher level than skiers' participants in confidence sub-dimension. This situation may have arisen because snowboarders do this sport in more difficult conditions and on variable tracks.

It is seen that athlete have a higher level than coach participants in confidence sub-dimension. This is due to the fact that they do not shift in performance for educational purposes; It may be due to the fact that the athletes do this sport on slopes with a higher level of difficulty compared to the coaches.

Skiing is an extreme sport. In addition to the technical skills of the athletes in this field, their mental skills are also important. Studies should be carried out to increase the mental skills of both coaches and athletes. Their free time should be used to develop these skills. This will reduce the

risk of injury and accident. For this, seminars can be given in the presence of experts

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