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Evaluation of Awareness Levels Towards Winter Sports in Secondary School Students Studying in Different Climatic Conditions

Farklı İklim Koşullarında Öğrenim Gören Ortaöğretim Öğrencilerinin Kış Sporlarına Yönelik Farkındalık Düzeylerinin Değerlendirilmesi

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ABSTRACT

This study aimed to evaluate the awareness levels of secondary school students studying in different climatic conditions toward winter sports by employing a descriptive scanning model, a quantitative research method. The SPSS 22.0 package program was used to analyze the data, while normality was assessed using the Kolmogorov and Smirnov tests. One-way analysis of variance (ANOVA) and t-tests were performed for normally distributed data. In addition, the homogeneity of the variances was examined to determine between which groups the statistically significant differences occurred; since the variances did not exhibit homogeneous features, Tamhane's T2 test, a post-hoc multiple comparison technique, was used. A significance level of $p<.05$ was accepted for the findings obtained from the analyses. In order to test the reliability of the scales, internal consistency coefficients (Cronbach's alpha) were calculated, with the results presented in table format. Based on our findings, certain demographic and socioeconomic variables were observed to affect the awareness levels of secondary school students with regard to winter sports. Comparing students living in different climatic conditions, a greater awareness of winter sports was found among those residing in regions with low snowfall, where winter conditions are unsuited to winter sports. The level of awareness concerning winter sports was thus determined to vary according to education, socioeconomic situation, and demographic characteristics rather than climatic conditions

Keywords: Climate, secondary education, student, winter sports, awareness

ÖZ

Bu araştırma, farklı iklim koşullarında öğrenim gören ortaöğretim öğrencilerinin kış sporlarına yönelik farkındalık düzeylerinin değerlendirilmesi amacıyla yapılmıştır. Bu çalışmada nicel araştırma yöntemlerinden betimsel nitelikte tarama modeli kullanılmıştır. Verilerin analizinde SPSS 22.0 paket programı kullanılmış, verilerin normallik dağılımı kolmogorof ve smirnov testi ile incelenmiştir. Normallik dağılımı sağlayan veriler Tek Yönlü Varyans Analizi (ANOVA) ve t-Testi kullanılmıştır. Ayrıca istatistiksel olarak anlamlı farklılığın hangi gruplar arasında meydana geldiğini tespit etmek için varyansların homojenliği incelenmiş ve varyanslar homojen özellikler taşımadığı için Post-Hoc çoklu karşılaştırma tekniklerinden Tamhane's T2 Testi kullanılmıştır. Analizlerden elde edilen bulguların anlamlılık düzeyi $p<,05$ olarak kabul edilmiştir. Ayrıca ölçeklerin güvenirliğini test etmek için iç tutarlılık katsayıları (Cronbac‟h Alpha) hesaplanmış ve elde edilen bulgular tablolar halinde düzenlenmiştir. Araştırma sonuçlarına göre, ortaöğretim öğrencilerinin kış sporlarına yönelik farkındalık düzeylerinde bazı demografik ve sosyoekonomik değişkenlerin etkili olduğu belirlenmiştir. Farklı iklim koşullarında ikamet eden öğrencilerden kar yağışının çok az olduğu ve kış mevsimi koşullarının kış sporları için uygun olmadığı bölgelerde ikamet eden öğrencilerin kış sporları farkındalık düzeylerinin daha yüksek olduğu tespit edilmiştir. Bu durumda kış sporları ile ilgili farkındalık düzeyinin iklim koşullarından çok eğitim, sosyoekonomik durum ve demografik özelliklere göre değişkenlik gösterdiği söylenebilir.

Anahtar kelimeler: İklim, ortaöğretim, öğrenci, kış sporları, farkındanlık

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Introduction

Based on fundamental principles of social, economic, and cultural development, sport mediates individuals' physical and psychological development, personality formation, character development, and adaptation to the environment. Furthermore, it involves activities aimed at ensuring international solidarity and peace while fostering a competitive spirit in which to participate and strive to prevail within the rules of the competition. Thus, sport incorporates various dimensions and has become universally aligned with functional and useful objectives. As a meaningful component in people's lives in modern societies, participation in sports has progressively increased in recent years (Yetim, 2006).

Numerous branches of sports exist; one of these, namely winter sports, is gaining popularity with every passing year. Tournaments involving these sports (such as the Olympic Games) are widely held and broadcast live on television, reaching the entire world, thus further increasing their popularity. Enjoyed by professional and amateur athletes alike, the most prominent winter sports include ice skating, snowboarding, skiing, and sledding (Tetik et al., 2002).

The development of winter sports has developed because of skiing and sledding efforts based on actions reflecting physical needs such as transportation and shipping from the struggle of man with nature on the by means of vehicles in history. On the other hand, it has taken its place in sports as a sports-based field after developing as transportation and shipping only in certain areas because of the negative forces of geographical conditions (Fişek, 1998).

The Turks living in the mountainous regions of the north and north-west of China, covered with forests, used sleds and skis to move easily on the ice in order to adapt to the struggle against negative weather conditions and nature due to the early arrival of the winter season, the snow falling a lot, and the ice on the rivers due to the long duration of this season. Thus, we learn the knowledge of the Turks about skiing from the Chinese (Tanyeri, 2000).

The Gokturks ran and played on the ice, riding horses made of wood. When they ran, they pushed a tree branch that they took in their hands against them while ski racing, causing them to ski faster. According to the records of the Tang 8 dynasty, it was reported that the Gokturks practiced skiing for sporting purposes as well as transportation and hunting activities (Güven, 1992).

Skiing, formerly used for transportation and hunting, became a sport after the mid-18th century and the first competition was held in Christiana in 1866. The California La Porte Association organized a major ski race in 1867. The first ski club was founded in Christiana in 1877 with the participation of Telemarkans (Urartu, 1986).

Skiing which has spread from Scandinavia to Europe started to develop in 1890 (Eski, 2010). Climate represents a major variable affecting human societies. Its impact on human life is observed in regions with winter seasons, whereby activities such as skiing and sledding, which meet needs such as public transport as well as the movement of goods, have over time evolved into discrete branches of sport. Winter sports, based primarily on sledding and skiing, have emerged as a universal culture, while winter games contribute to the development of participating countries by uniting all interests under the banner of sports. Within this context, winter games constitute a phenomenon that brings together individuals with different languages, religions, and races. The growing number of ski resorts in our country and the fact that we have hosted international tournaments have led to a rapid increase in interest in winter sports.

Awareness, which is an emotional and cognitive activity, creates a set of schemas when the process of becoming aware is completed in our minds. Awareness is also known as the expansion of the field of consciousness. Through the new schemas we establish in our minds, we realize an awareness of the universe, the environment and ourselves (Dökmen, 2002).

Being aware is one of the basic elements of how the individual-environment relationship can be realized in our lives. Awareness provides the regulation and necessary feedback between us and our environment. If the interaction between us and the environment is lacking, it is very difficult to realize an effective individual-environment relationship. This individual-environment relationship plays an important role in the growth and development of people (Akkoyun, 2005).

Mindfulness, which is translated in different ways in Turkish, is defined as 'wise awareness' by Karacaoğlan and Şahin (2016), 'awareness' by Uzun (2019), 'conscious mindfulness' by Özyeşil (2011), and 'mindfulness' by Çatak and Ögel (2010).

The concept of consciousness includes the elements of attention and awareness. Individuals notice internal and external stimuli without a focal point, but focus on a conscious awareness in limited moments such as high sensitivity and attention (Deci & Ryan, 1980; as cited in Brown & Ryan, 2003). The concept of mindfulness comes from the meditation philosophies of Buddhists in the historical process. The word Sati, which is frequently used in Pali, an ancient Buddhist written language, is known as mindfulness (Stahl & Goldstein, 2010). The word Sati also means attention and recollection (Alidina, 2010).

It is known that mindfulness, which is frequently used in many fields today, comes from Asian traditions of thought (Zelazo & Lyons, 2012).

The basic element required for people to interact with others is awareness, defined as the process of being cognizant of oneself, extending into the future, that also expresses the individual's selectivity at that moment in his or her life (Polat, 2019). In our country,

where all four seasons are experienced, introducing winter sports at an early age and raising awareness in this context will contribute to the development of winter sports domestically, which in turn will advance our country athletically as well as promote winter tourism. The present study aimed to examine the awareness of secondary school students living under different climatic conditions in our country regarding winter sports in terms of certain demographic characteristics.

Methods

This study was performed using a descriptive survey model, a quantitative research method that aims to describe a past or present situation as it exists/existed. This approach involves endeavoring to define the subject of the research, whether human or not, as is, within its own context; no effort is made to alter or otherwise influence the subject in any way (Karasar, 2017). Our research was carried out on a strictly voluntary basis, with consent forms obtained from the study participants.

Research Ethics

Prior to the start of our study, ethical approval was granted by the Scientific Research and Publication Ethics Board of Muş Alparslan University, as the 18th decision of meeting number 5 dated, 06.04.2021.

Study Participants

The study population was comprised of a total of 628 secondary school students residing in different provinces in the regions of Thrace and Eastern Anatolia, all of whom participated in the research voluntarily.

Data Collection

The present study employed the Winter Sports Awareness Scale developed by Eski and Yıldıran as a data collection tool (Eski and Yıldıran, 2020). The data analyzed in the study was obtained via Google Forms.

Data Analysis

For this study, the IBM SPSS 22.0 package program was used to analyze the data and its distribution. Descriptive statistical methods (percentage/frequency) were employed and one-way analysis of variance (ANOVA) and t-tests were performed. In addition, the homogeneity of the variances was examined in order to determine between which groups statistically significant differences occurred; since the variances did not exhibit homogeneous features, Tamhane's T2 Test, a post-hoc multiple comparison technique, was used. A significance level of $p < .05$ was accepted for the findings obtained from the analyses. Furthermore, to test the reliability of the scales, internal consistency coefficients (Cronbach's alpha) were calculated, with the findings presented in table format.

Results

Table 1.
Statistical distributions of participants based on demographic characteristics

Variable	Group	n	%
Gender	Female	481	76.6
	Male	147	23.4
	Total	628	100.0
Family Member(s) Participating in Sports	Yes	234	37.3
	No	394	62.7
	Total	628	100.0
Type of High School	Sports High School	166	26.4
	Vocational High School	229	36.5
	Anatolian High School	233	37.1
	Total	628	100.0
Grade Level	9th Grade	250	39.8
	10th Grade	102	16.2
	11th Grade	127	20.2
	12th Grade	149	23.7
	Total	628	100.0
Maternal Education Level	Illiterate	164	26.1
	Primary Education	264	42.0
	High School	135	21.5
	College or higher	65	10.4
	Total	628	100.0
Paternal Education Level	Illiterate	46	7.3
	Primary Education	301	47.9
	High School	180	28.7
	College or higher	101	16.1
	Total	628	100.0
Household Income Level	3,000 TL or less	341	54.3
	3,001 to 6,000 TL	178	28.3
	6,001 TL or more	109	17.4
	Total	628	100.0

Table 1 shows the statistical distribution of the participants according to their demographic characteristics.

Table 2.
Comparison of participants' winter sports awareness scale scores by gender

Variable	Gender	n	$\overline{X}$	St. Dev.	*t* -Test		
					t	Sd	*p*
Cognitive Subdimension	Female	481	2.02	0.85	0.21	626	.84
	Male	147	2.00	0.76			
Affective Subdimension	Female	481	3.15	1.39	-0.28	626	.53
	Male	147	3.23	1.33			
Psychomotor Subdimension	Female	481	1.97	0.89	0.73	626	.90
	Male	147	1.96	0.92			

*$p<.05$

An examination of Table 2 reveals that the participants' subdimension scores on the Winter Sports Awareness Scale did not show statistically significant differences with respect to gender.

Table 3.
Comparison of participants' winter sports awareness scale scores based on the presence of an athlete in the family

Variable	Family Member(s) Participating in Sports	n	$\overline{x}$	St. Dev.	*t* -Test		
					t	Sd	*p*
Cognitive Subdimension	Yes	234	2.30	0.88	6.98	626	.00*
	No	394	1.84	0.74			
Affective Subdimension	Yes	234	3.40	1.35	3.35	626	.00*
	No	394	3.02	1.37			
Psychomotor Subdimension	Yes	234	2.12	1.01	3.38	626	.00*
	No	394	1.87	0.81			

*p<.05

As shown in Table 3, the cognitive, affective, and psychomotor subdimensions scores on the Winter Sports Awareness Scale exhibited statistically significant differences in favor of those participants with at least one family member who engages in sports.

Table 4.
Comparison of participants' winter sports awareness scale scores based on type of high school

Variable	Type of High School	n	$\bar{x}$	St. Dev.	F	*p*	Significant Difference
Cognitive Subdimension	Sports (A)	166	2.08	0.82	25.45	.00*	A-B
	Vocational (B)	229	1.72	0.74			B-C
	Anatolian (C)	233	2.25	0.83			
	Total	628	2.01	0.83			
Affective Subdimension	Sports (A)	166	3.25	1.38	31.17	.00*	A-B
	Vocational (B)	229	2.65	1.41			A-C
	Anatolian (C)	233	3.61	1.15			B-C
	Total	628	3.16	1.37			
Psychomotor Subdimension	Sports (A)	166	2.07	0.97	3.96	.02*	A-B
	Vocational (B)	229	1.84	0.86			
	Anatolian (C)	233	2.02	0.86			
	Total	628	1.97	0.89			

*p<.05

The data in Table 4 indicate that the cognitive, affective, and psychomotor subdimension scores on the Winter Sports Awareness Scale displayed statistically significant differences according to the type of high school attended by the participants

In order to determine between which groups the statistically significant differences occurred, the homogeneity of the variances was evaluated. Since the variances did not exhibit homogeneous characteristics, Tamhane's T2 Test, a post-hoc multiple comparison technique, was performed. In the cognitive subdimension, statistically significant differences were observed between the participants attending sports and vocational high schools as well as between those in vocational and Anatolian high schools. As for the affective subdimension, statistically significant differences occurred between the participants in sports and vocational high schools, between those in sports and Anatolian high schools, and between the groups in Anatolian and vocational high schools. For the psychomotor subdimension, a statistically significant difference was only found between the groups of participants attending sports and vocational high schools.

Table 5.

Comparison of participants' winter sports awareness scale scores based on grade level

Variable	Grade Level	n	$\bar{x}$	St. Dev.	F	*p*	Significant Difference
Cognitive Subdimension	9th Grade (A)	250	1.85	0.76	6.15	.00*	A-B
	10th Grade (B)	102	2.22	0.80			A-D
	11th Grade (C)	127	2.06	0.79			
	12th Grade (D)	149	2.09	0.93			
	Total	628	2.01	0.83			
Affective Subdimension	9th Grade (A)	250	2.88	1.39	6.75	.00*	A-B
	10th Grade (B)	102	3.50	1.20			A-C
	11th Grade (C)	127	3.32	1.47			A-D
	12th Grade (D)	149	3.28	1.29			
	Total	628	3.16	1.37			
Psychomotor Subdimension	9th Grade (A)	250	1.79	0.84	5.88	.01*	A-B
	10th Grade (B)	102	2.11	0.86			A-D
	11th Grade (C)	127	2.03	0.87			
	12th Grade (D)	149	2.12	0.98			
	Total	628	1.97	0.89			

*p<.05

According to the data presented in Table 5, statistically significant differences based on grade level were found for the cognitive, affective, and psychomotor subdimensions scores of the Winter Sports Awareness Scale.

The homogeneity of the variances was analyzed to identify the groups between which the statistically significant differences were observed. The variances did not display homogeneous characteristics, so Tamhane's T2 Test, a post-hoc multiple comparison technique, was employed. For both the cognitive and psychomotor subdimensions, there were statistically significant differences between the 9th and 10th grades as well as between the 9th and 12th grades. The statistically significant differences for the affective subdimension occurred when comparing the 9th-grade students with those in the 10th, 11th, and 12th grades.

Table 6.

Comparison of participants' winter sports awareness scale scores based on maternal education level

Variable	Maternal Education Level	n	$\bar{x}$	St. Dev.	F	*p*	Significant Difference
Cognitive Subdimension	Illiterate (A)	164	1.69	0.78	18.93	.00*	A-B
	Primary Education (B)	264	1.98	0.78			A-C
	High School (C)	135	2.30	0.84			A-D
	College or higher (D)	65	2.35	0.78			B-C
	Total	628	2.01	0.83			B-D
Affective Subdimension	Illiterate (A)	164	2.67	1.47	12.60	.00*	A-B
	Primary Education (B)	264	3.20	1.31			A-C
	High School (C)	135	3.43	1.27			A-D
	College or higher (D)	65	3.69	1.21			B-C
	Total	628	3.16	1.37			B-D
Psychomotor Subdimension	Illiterate (A)	164	1.89	0.94	1.63	.18	
	Primary Education (B)	264	1.99	0.83			
	High School (C)	135	2.09	0.96			
	College or higher (D)	65	1.85	0.88			
	Total	628	1.97	0.89			

*p<.05

Based on the data in Table 6, the cognitive and affective subdimension scores of the Winter Sports Awareness Scale showed statistically significant differences with respect to the mother's educational level, whereas the psychomotor subdimension scores did not.

As before, to determine between which groups the statistically significant differences occurred, the homogeneity of the variances was examined, and, as they lacked homogeneous characteristics, Tamhane's T2 Test, a post-hoc multiple comparison technique, was used. In both the cognitive and affective subdimensions, statistically significant differences were detected between the groups whose mothers were either illiterate compared with those who had received primary education, high school, and college or higher, as well as between those with mothers with only primary education versus the high school and college or higher groups.

Table 7.
Comparison of participants' winter sports awareness scale scores based on paternal education level

Variable	Paternal Education Level		n	x̄	St. Dev.	F	*p*	Significant Difference
Cognitive Subdimension	Illiterate	(A)	46	1.51	0.86	17.22	.00*	A-B
	Primary Education	(B)	301	1.91	0.75			A-C
	High School	(C)	180	2.08	0.80			A-D
	College or higher	(D)	101	2.43	0.89			B-D
	Total		628	2.01	0.83			C-D
Affective Subdimension	Illiterate	(A)	46	1.97	1.35	19.91	.00*	A-B
	Primary Education	(B)	301	3.09	1.34			A-C
	High School	(C)	180	3.26	1.32			A-D
	College or higher	(D)	101	3.76	1.21			B-D
	Total		628	3.16	1.37			C-D
Psychomotor Subdimension	Illiterate	(A)	46	1.60	0.81	2.84	.03*	A-B
	Primary Education	(B)	301	1.98	0.86			A-C
	High School	(C)	180	2.01	0.89			
	College or higher	(D)	101	2.01	0.99			
	Total		628	1.97	0.89			

*p<.05

As shown in Table 7, statistically significant differences with respect to the father's educational level were observed for the cognitive, affective, and psychomotor subdimensions scores of the Winter Sports Awareness Scale.

To identify the groups between which the statistically significant differences occurred, first an analysis of the homogeneity of the variances was performed. Tamhane's T2 Test, a post-hoc multiple comparison technique, was then employed since the variances did not possess homogeneous characteristics. In both the cognitive and affective subdimensions, there were statistically significant differences between the participants whose fathers were illiterate versus those with primary education, high school, and college or above, as well as between those with fathers with only primary education compared with the high school education and college or higher groups. Regarding the psychomotor subdimension, statistically significant differences were found between the groups with illiterate fathers and those with primary education and high school education.

Table 8.
Comparison of participants' winter sports awareness scale scores based on household income

Variable	Household Income Level		n	x̄	St. Dev.	F	*p*	Significant Difference
Cognitive Subdimension	3,000 TL or less	(A)	341	1.81	0.75	24.79	.00*	A-B
	3,001 TL to 6.000 TL	(B)	178	2.23	0.85			A-C
	6,001 TL or more	(C)	109	2.30	0.83			
	Total		628	2.01	0.83			
Affective Subdimension	3,000 TL or less	(A)	341	2.87	1.39	17.68	.00*	A-B
	3,001 TL to 6.000 TL	(B)	178	3.53	1.25			A-C
	6,001 TL or more	(C)	109	3.48	1.32			
	Total		628	3.16	1.37			
Psychomotor Subdimension	3,000 TL or less	(A)	341	1.94	0.89	0.81	.44	
	3,001 TL to 6.000 TL	(B)	178	2.04	0.91			
	6,001 TL or more	(C)	109	1.94	0.88			
	Total		628	1.97	0.89			

*p<.05

Table 8 shows the statistically significant differences found between the various household (family) income level groups in the cognitive and affective subdimension scores of the Winter Sports Awareness Scale, while such differences were not observed for the psychomotor subdimension scores.

The homogeneity of the variances was examined to determine between which groups the statistically significant difference occurred; since the variances did not exhibit homogeneous characteristics, Tamhane's T2 Test, a post-hoc multiple comparison technique, was performed. Statistically significant differences were determined to exist between the participants in the lowest income group (3,000 TL or less) and the middle (3,001 to 6,000 TL) and highest levels (6,001 TL or more) in both the cognitive and affective subdimensions.

Table 9.

Comparison of participants' winter sports awareness scale scores based on the region of residence

Variable	Region of Residence	n	$\overline{X}$	St. Dev.	*t* Test		
					t	Sd	*p*
Cognitive Subdimension	Eastern Anatolia	276	1.80	0.81	-5.80	626	.00*
	Thrace	352	2.18	0.80			
Affective Subdimension	Eastern Anatolia	276	2.74	1.43	-7.07	626	.00*
	Thrace	352	3.50	1.23			
Psychomotor Subdimension	Eastern Anatolia	276	1.89	0.93	-1.95	626	.05*
	Thrace	352	2.03	0.86			

*p<.05

According to Table 9, the cognitive, affective, and psychomotor subdimension scores of the Winter Sports Awareness Scale were all determined to have statistically significant differences with respect to the region in which the participants resided, in favor of Thrace.

Discussion

According to our findings, no statistically significant differences based on gender were detected in any of the subdimensions of the Winter Sports Awareness Scale. By contrast, Polat (2019), in his study examining recognition and awareness levels of winter sports facilities among university students, reported that the participants differed according to gender, finding that men's awareness exceeded that of women. In his study on the same topic, Küçük (2020) reported the opposite results, observing higher levels of awareness levels among women than men. A study conducted by Er et al. (2020) determined that there was a significant difference in favor of male participants in the subdimensions of students' awareness levels of winter sports. Eski (2010) also observed a significant difference in favor of male participants when analyzing the data by gender, as did Ünal (2017) in his study. The discrepancy between the results reported in the literature and those of the present study may be due to the different study populations.

Our results showed statistically significant differences in favor of students with family members participating in sports for the cognitive, affective, and psychomotor subdimensions of the Winter Sports Awareness Scale. According to a study conducted by Hasbrook, Greendolfe, and Mc Mullen (1981), the main factors determining individuals' attitudes towards sports are their family's attitude towards sports, their environment, economic and social situations, participation in sports activities in childhood and the social status history of the parents (cited in Hergüner and Seraslan, 2000). In Eski's (2010) study, the cognitive awareness averages of students reporting family members who engage in sports were significantly higher. However, contrary to the results of our study, there were no significant differences in the psychomotor and affective subdimensions between the students with respect to this particular criterion. Kılcıgil (1998) and Onay Özkaya and Güzel (2006) reported that having family members actively take part in sports positively influences other members of the family. A review of the literature reveals that the presence of individuals interested in winter sports increases the interest of other family members in winter sports, by including them in their visits to winter sports facilities, encouraging them, and accompanying them, thus contributing to the development of their awareness of and involvement in winter sports.

Regarding the type of high school, the present study detected statistically significant differences in favor of the participants attending sports high schools in the cognitive, affective, and psychomotor subdimensions. Eski (2010) reported statistically significant differences in the cognitive, affective, and psychomotor subdimension scores of the participants based on the type of school. Duman et al. (2020), in their study to determine the attitudes of students at Anatolian and sports high schools towards physical education and sports, found that students attending the latter displayed higher levels of awareness levels concerning sports. In their study, Hazar, Demir, and Can (2018) examined the motivations of high school students to engage in sports according to different variables, reporting statistically significant differences between the variables of active participation in sports and school type. Upon reviewing the literature, it is possible to conclude that the findings of the studies conducted are generally consistent with our results.

The present study found that for the cognitive, affective, and psychomotor subdimension scores, the level of awareness concerning winter sports increased statistically significantly as the grade level increased. Eski (2010) reported statistically significant differences in favor of the upper grade levels for the cognitive, affective, and psychomotor subdimensions. In his study, Küçük (2020) stated that there was a statistically significant difference in favor of the higher grade levels in the cognitive and psychomotor subdimensions, while Polat (2019) observed a statistically significant difference in the cognitive awareness subdimension in favor of the upper grade levels. The latter study detected no statistical differences between grade levels in the affective and psychomotor subscales. The literature generally supports our research findings.

In our study, the cognitive and affective subdimension scores were determined to increase to a statistically significant degree as the mother's educational level increased, whereas no statistically significant differences occurred in the psychomotor subdimension. Polat (2019) detected statistically significant differences in favor of students with high maternal education levels in the cognitive and psychomotor subdimensions but discovered no such differences for the affective subdimension. Eski (2010) reported statistically significant differences in favor of students with high maternal education levels in the cognitive and affective subdimensions, while there were no statistically significant differences in the psychomotor subdimension. The present study found that increases in the father's education level corresponded to statistically significant increases in the cognitive, affective, and psychomotor subdimensions scores. Eski (2010) observed statistically significant differences in favor of students whose fathers were more educated in the cognitive and affective subdimensions but found no statistically significant differences in the psychomotor subdimension based on that variable. In the study conducted by Polat (2019), there were statistically significant differences in favor of students whose fathers had a higher educational level for the cognitive subdimension, while there were no statistically significant differences in the affective and psychomotor subdimensions. Studies in the literature have reported similar findings.

The present study determined that with a rise in family income, cognitive and affective subdimension scores exhibited a statistically significant increase, while there was no statistically significant difference in the psychomotor subdimension based on the mother's educational level. Polat (2019) reported finding a statistically significant difference in favor of students with high household income levels in the cognitive subdimension but found no statistically significant differences in the affective and psychomotor subdimensions with respect to that same variable. Orçanlı et al. (2018) concluded that an increase in family income was positively correlated with the formation of awareness of winter sports centers in people living in the Erzurum city center. Reviewing the literature on this topic, it is possible to encounter studies whose findings do not overlap with our own, although studies with similar results also exist. We hypothesize that the diverse geographical, cultural, and social lives of the study participants may result in different research outcomes.

According to the findings of our study on students living in different climatic regimes, those residing in regions with low snowfall and winter conditions unsuited to winter sports exhibited higher levels of awareness regarding winter sports. In a sense, the level of winter sports awareness among secondary school students appeared to emerge with the influence of social media and other social communication tools, regardless of the season.

In conclusion, upon examination of secondary school students' awareness of winter sports, no significant difference with respect to gender was detected in the three subdimensions of the scale, whereas there were significant differences based on having a family member engaged in sports, type of school, grade, maternal and paternal education levels, and household income. With regard to climatic conditions, there was a difference in favor of students living in regions that do not experience winter weather. In this case, the level of awareness concerning winter sports was determined to vary according to education, socioeconomic status, and demographic characteristics more so than climatic conditions.

Suggestions

- Developing sports awareness in society appears to increase the level of sports participation.
- Considering that a family's interest in sports boosts the level of encouragement for engaging in sports, we believe that parents who emphasize sports will be productive in raising children who are drawn to sports and can succeed as athletes.
- Due to the ever-increasing popularity of winter sports, it is possible to train more successful athletes by encouraging students to participate in these sports at the secondary school level.
- We believe that it is vital to develop sports awareness in children beginning at school in order to raise healthy future generations.

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Katılımcı Onamı: Çalışmaya katılan tüm katılımcılardan sözlü onam alınmıştır.
Hakem Değerlendirmesi: Dış bağımsız.
Yazar Katkıları: Fikir- S.K., M:F.B; Tasarım S.K., Ö.F.B; Denetleme-S.K; Kaynakla-D.E.; Veri Toplanması ve/veya İşlemesi S.K., S.O., S.A., T.İ., M.F.B. ; Analiz ve/ veya Yorum- Ö.F.B; Literatür Taraması-S.K., S.A.; Yazıyı Yazan-S.K., M.F.B.; Eleştirel İnceleme-S.K., Ö.F.B., D.E., S.O., S.A., T.İ., M.F.B.
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