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ORIGINAL RESEARCH

The Students of The School of Physical Education and Sports' Examination of The Social Intelligence Levels According to Different Variables

Abstract

The aim of this research is to investigate the social intelligence levels of individuals studying at Kyrgyzstan Turkey Manas University, College of Physical Education and Sports. In the research, a descriptive screening model has been used. The study group consists of 77 male and 25 female participants studying in the 2019-2020 academic year at Kyrgyzstan Turkey Manas University, College of Physical Education and Sports. For the data of the research, "Personal Information Form", prepared by the researcher, was used, and to determine the social intelligence levels of the participants, Tromso Social Intelligence Scale (TSIS), developed by Silvera et al. (2001) was used. This scale is prepared to reveal the level of social intelligence and consists of 21 items. The analysis of the data was done in SPSS 21.0 statistics package program. Normality analyses have been performed to determine whether the data obtained showed a normal distribution. Independent samples t-test has been used for binary group comparisons and one way Anova test was used for group comparisons of more than two. p significance level was accepted as 0.05 (p < 0.05). As a result, it has been confirmed that there has been no significant difference in gender, age, department and location.

Keywords: Social intelligence, communication, physical education, education.

INTRODUCTION

To be able to produce right and effective solutions to the challenges faced in life and to develop solutions are important skills for human psychology and social competence. In addition, it is important to establish an effective communication with other individuals in the environment in which they interact and to be able to manage the feelings and thoughts of the other person by anticipating them, to facilitate social life and to influence the environment. Communication is a dynamic process. Internal and external factors affect this process. As internal factors affecting the communication process, curiosity, ambition for success, jealousy, anger and feeling of exclusion occurring in the inner world of the individual can be counted. In addition to all these, elements such as the past life of the individual, the culture he/she is in, the level of intelligence, the level of knowledge, and personal characteristics are also internal factors that affect communication. External factors affecting communication are a set of events and phenomena that occur in the external world of the individual. These can be listed as the sounds that exist or suddenly develop in the environment where the communication takes place, the temperature of the environment, the words chosen in the content of the message and the body language used (Dumangöz, 2019). Social intelligence, being one of these concepts, has been examined under three sub-headings, social information processing (ability of understanding feelings, thoughts, expectations and body language), social awareness (ability of being adapted to social environments) and social skills (mastery in human relations). This integrity is called as the social intelligence (Silvera, Martinussen and Dahl, 2001).

People have to be social entities in order to survive throughout their lives. As a natural result of this, both emotionally and socially, people constantly interact with each other. According to Dumangöz (2021), a relationship is a mutual bond, contact, relationship and relevance between at least two people. In the case of a long-term mutual relationship, we can talk about a relationship. Therefore, social intelligence plays a major role in managing interpersonal relationships well. The study of social intelligence began with Thorndike (1920) 's description of social intelligence as the ability to understand people and the ability to act wisely in relation with people. This definition covers both the cognitive dimension and the behavioral dimension. Cognitive dimension is the ability to understand people. Behavioral dimension means the ability to act wisely in human relationships (Doğan et al., 2009).

Intelligence includes the ability to plan logically, solve problems, think abstractly, understand complex ideas, learn quickly, and benefit from experience. Social intelligence, on the other hand, is a person's capacity to understand, discern, and meet the emotions, wants, and needs of the people around him/her, such as a teacher, a therapist, or a marketer (Tural, 2009). Moss and Hunt (1927) described social intelligence as the ability to get along well with others. Extending the scope of social intelligence, Vernon (1933) defined social intelligence as the ability of individual to get along well with others and to understand the moods of others, and stated that social intelligence covers one's level of comfort in social environments, understanding others, and how much information one has about social issues (İlhan and Çetin, 2014).

Recently, the most popular approach to the concept of social intelligence is the approach put forward by Goleman (1999). The origin of this approach is the four skills that Hatch and Gardner describe as parts of interpersonal intelligence. The first of these is social analysis. Social analysis means that the person is aware of his / her problems, knows his / her feelings and has insight. Understanding what other people feel and acting in harmony with other people also play an important role in the functionality of social intelligence. In this way, the person can establish intimacy with others around. In addition, Goleman (1999) also emphasized that people with high social intelligence also use body language very well. The second skill is to organize groups. The leader should have the ability to motivate and energize his/her colleagues. The third skill is to establish a personal connection. This skill includes the ability to build positive relationships with others and to respond appropriately to others by recognizing their point of view. In this way, the person will be able to communicate with others easily and properly in social settings. The final skill is to find solutions by discussing. This includes peacekeepers' ability of preventing conflicts. They are the ones who lead the way in resolving the conflict by preventing it (Günaydın, 2017).

If the individual is capable of analyzing the character of people the right way, he or she may be called an individual with a high level of social intelligence. In addition, individuals with high levels of social intelligence have the ability to make sense of the changes in other people's instant moods, desires and desires, happiness and anger, and the behavior of others and adjust their own behavior accordingly. On the other hand, individuals with low levels of social intelligence are not able to communicate with other people adequately and effectively.

These individuals cannot demonstrate their performance that exists potentially. Therefore, the social life of the individual is negatively affected by this deficiency (Kaya et al., 2016). As a result of Phipps's (2007) research, the concept of social intelligence was significantly associated with the concepts of communication and innovation (Akman and Akman, 2017).

People have to be social entities in order to survive throughout their lives. As a natural result of this, both emotionally and socially, people constantly interact with each other. Therefore, it is aimed to examine the social intelligence levels of individuals involved in university education, which has an important place in one's life.

Determining the dominant and non-dominant intelligence areas of the students helps them to know themselves better, to realize their strengths, weaknesses and developmental aspects, and to make the right choice of special occupation or profession (Çeliköz, 2016).

METHOD

Research Design

The research is in descriptive method, and social intelligence levels of individuals studying at the university are examined.

The research is in the screening model. Screening models are research approaches made on a selected sample group from the universe that includes large groups, aiming to examine a situation that exists in the past or in the present as it exists. The event, individual or object that is the subject of research, is tried to be defined in its own conditions and as it exists (Karasar, 1994).

Research Group

The study group of this research consists of 77 male and 25 female students, the total number of participants being 102, studying in 2019-2020 academic year at Kyrgyzstan Turkey Manas University, College of Physical Education and Sports, the department of Physical Education Teaching and Coaching.

Data Collection Tools

The "Personal Information Form" prepared by the researcher has been used to determine the demographic characteristics of the College of Physical Education and Sports

students participating in the study. This form consists of questions about gender, age, department of education and place of residence.

The Tromso Social Intelligence Scale (TSIS), developed by Silvera et al (2001), has been used to determine the social intelligence levels of participants in the study. This scale is prepared to reveal the level of social intelligence and consists of 21 items. It is a Likert-type scale of 5. The Tromso Social Intelligence Scale assesses social intelligence in three separate areas. The first of these is Social Information Processing, the second one is Social Skills, and the third is Social Awareness. In addition, it reveals the total level of social intelligence. The 2, 4, 5, 8, 11, 12, 13, 15, 16, 20 and 21. Articles of the scale have been reversely encoded.

Analysis of Data

Frequency distributions have been made to provide descriptive information about the individuals involved in the study. Normality analyses have been performed to determine whether the data obtained showed a normal distribution. Independent Samples T Test has been used for binary group comparisons and One Way Anova test was used for group comparisons of more than two.

FINDINGS

Table 1. Analysis results by gender variable of the research group

Gender	N	Avg.	SD	t	P
Male	77	65.6753	8.80407		
				1.015	0.312
Female	25	63.6800	7.62518		

According to Table 1, there is no statistically significant difference in social intelligence score averages according to the gender variable of the research group (p<0.05).

Table 2. Analysis results by department variable of research group

Department	N	Avg.	SD	t	P
Teaching	54	66.3704	7.59169		
				1.495	0.138
Coaching	48	63.8542	9.39214		

According to Table 2, there is no statistically significant difference in social intelligence score averages according to the department variable of the research group ($p < 0.05$).

Table 3. Analysis results by age variable of the research group

Age	N	Avg.	SD	F	P
19	21	63.3333	10.19967		
20	27	66.2593	9.82380	1.467	0.228
21	25	63.2400	5.93914		
22	29	67.2069	7.57995		

According to Table 3, there is no statistically significant difference in social intelligence score averages according to the age variable of the research group ($p < 0.05$).

Table 4. Analysis results by department variable of the place of residence

Place of Residence	N	Avg.	SD	F	P
Dormitory	9	64.5556	1.94365		
Student House	11	68.3636	6.03776		
Family	43	65.4419	9.53515	0.893	0.472
Home Alone	12	66.5833	6.77507		
Other	27	63.0741	9.57129		

According to Table 4, there is no statistically significant difference in social intelligence score averages according to the place of residence variable of the research group ($p < 0.05$).

DISCUSSION AND CONCLUSION

The research has been tried to be evaluated according to the variables taken to be evaluated in the light of literature information.

It has been concluded that social intelligence score averages do not differ according to the variable of gender. Indeed, as a result of a study conducted by Doğan, Totan and Sapmaz (2009) to evaluate the relationship between self-esteem and social intelligence of university students, no significant differences in social intelligence levels between female and male participants were found. However, Saxena and Jain (2013) found in their study that female students had a higher social intelligence than male students. Doğan (2006), Doğan and Çetin (2008) examined the differences in social intelligence according to gender and found that the

averages were high in favor of male students, but they concluded that it was nonsensical at the level of 0.05. When the literature was examined, it has been also found that the social intelligence averages of females were higher than the social intelligence averages of males (Silvera et al., 2001). According to the results of the research conducted by Sivrikaya et al. (2017) on a total of 117 elite shooters, a significant difference was found between the gender variable and interpersonal social intelligence.

Our study concluded that there has been no significant difference in social intelligence score averages according to the age variable of the participants. In the research conducted by Ülker (2016) to analyze social intelligence and communication skills of vocational high school students from the point of different variables, it was found that there was no significant relationship between age and social intelligence, social information processing, social skills and social awareness.

It has been concluded that social intelligence score averages do not differ according to the variable of department being studied. Likewise, as a result of the research conducted in 2015, Kadakal Dölek concluded that there was no significant differentiation between sex and communication skills of university students, and that the scores of TSIS did not differ significantly according to the department studied. In the research conducted by Ülker (2016), it has been found out that the levels of social intelligence, social information process, social skills and social awareness did not differ according to the faculty and department studied. In their study Naseri, Badriazarin and Najafzade (2014) found that there was a relationship between the skills and abilities of high school first-and second-grade teachers and their social intelligence. They also concluded that there is an important relationship between the skills and abilities of physical education teachers in all aspects of their social intelligence. Nagra (2014) conducted a study to determine secondary school students' levels of social intelligence in relation to school and gender varieties. As a result of her research, it was observed that the social intelligence levels of the students were average, and there were meaningless differences in their levels of social intelligence in relation to type of school and gender.

It has been concluded that social intelligence score averages do not differ according to the variable of place of residence. This can be interpreted as, the fact that most of the participants reside in dormitories within the university's facility in terms of residence, these

participants come from the same social environment, and live inside the same school culture could cause this situation.

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ORIGINAL RESEARCH

Adaptation of The Nomophobia Scale to The Field of Physical Education and Sports: Alternative Models Strategy Measurement Model Test

Abstract

This research is; It is the testing of measurement models with the alternative models' strategy of the Nomophobia Scale, which was developed by Yildirim and Correia. For this purpose, data obtained from a sample of 303 physical education and sports undergraduate students in the fall semester of the 2020-2021 academic year. Exploratory and confirmatory factor analysis was applied for the construct validity of the scale. Cronbach Alpha internal consistency and CR coefficients were calculated for reliability. The decomposition and convergence validities of the scale were tested with three alternative models with 3, 2 and 1 factors, using the X^2 difference tests of the predicted four-factor model (inability to access four-item information, losing five-item connection, inability to communicate with six items, not feeling comfortable with five items). The fact that the AVE values of the factors are lower than the CR values and the AVE values above .5 indicate that the factors have a combined validity. The fact that the AVE values of the factors are higher than the MSV and ASV values means that the factors have discrimination validity. In addition, the fact that the AVE scores of the factors are higher than the inter-factor correlations indicate that there is discrimination validity. From these results, the assumed four-factor model is the model that provides the best fit with the data and the scale can be used as a highly valid and reliable tool for the physical education and sports undergraduate student stage.

Keyword: Nomophobia, physical education, alternative models' strategy, construct validity.

INTRODUCTION

During the troubled pandemic days, we live in, the place of technology in our lives is not a matter of discussion and has taken its place among our obligations. Communication technologies have become inevitable with the increase of hours spent in homes. The impact of smart mobile phones on this development is undoubtedly the highest. When we look at the age range of users, it is seen that the young population's acceptance of new technologies and the rate of using mobile devices is relatively higher than older individuals (Brickfield,1984; Charness and Bosman, 1992; Kennedy, Judd, Churchward, Gray, and Krause, 2008). School years are the most intensive periods of this use, but university years have a large share. Nomophobic (fear of mobile phone deprivation) behaviors can be observed in students who are afraid of being separated from education and communication. Nomophobia, which is called the new phobia of the modern age, comes from the English word nomophobia (NO MObile PHOBIA) and is defined as the irrational fear experienced by the individual when he / she cannot access or communicate on a mobile device in clinical psychology (King, 2013; Yıldırım and Correia, 2015).

It is stated that psychological imbalances suffered by mobile device addicts carry similar symptoms to other psychosocial disorders such as anxiety disorders or unstable mood. In nomophobia, the individual becomes anxious when he forgets to take his phone with him, when his phone is out of charge or out of range. This anxiety negatively affects the concentration of the individual on daily work (Dixit, 2010). Also expressed as the fear of being deprived of mobile phones, nomophobia has increased in parallel with the increase in the prevalence of smartphones (Akıllı, 2016). By testing the measurement model with the alternative models' strategy, with the Nomophobia scale, which we conduct comprehensive validity and reliability studies; During the pandemic, the department of physical education and sports was chosen due to the assumption that it could make effective determinations on undergraduate university students. It is important to consider that the results obtained from the study can be used in studies about the fears of mobile phone deprivation on physical education and sports. The aim of this study is; To test the Nomophobia Scale, which measures mobile phone deprivation fears, to a comprehensive validity and reliability test with alternative models' strategy. In addition, it was aimed to adapt the data obtained from physical education and sports undergraduate students by revealing the evidence for compliance with the original Nomophobia Scale (NMP-Q).

METHODS

Research Model

This study, which examines the adaptation of the nomophobia scale for physical education and sports undergraduate students and its structural validity and reliability features, is basically a screening study. The screening model aims to describe the current situation as it is, and it is a research approach in which the views of the participants about a subject or an event or their characteristics such as interests, skills, abilities and attitudes are determined (Şata, 2016). Approval for the study was obtained from Trakya University Social and Human Sciences Research Ethics Committee with number 2020.08.06.

Universe and Sample

It was used as a model in the research. The research was carried out using the descriptive survey model. The universe of the study was composed of 1290 undergraduate students studying at Trakya University Kırkpınar Faculty of Sport Sciences. For the sample group, 303 students were chosen based on chance and represented the universe of the study. For sample selection, 95% confidence interval ($\alpha = 0.05$) was taken as the margin of error. According to Yazıcıoğlu and Erdoğan (2004); At least 218 elements are considered sufficient to represent a universe with 1290 elements at ± 0.05 sampling error. The gender, department and grade variables of the students in the sample are presented in Table 1.

Table 1. Demographic Information of the Research Sample

Demographic Variables	n=303	Frequency	Percent (%)
Gender	Female	144	47,5
	Male	159	52,5
Major	Teaching	112	37
	Coaching	98	32,3
	Management	66	21,8
	Recreation	27	8,9
Class	1.Class	89	29,4
	2.Class	92	30,4
	3.Class	41	13,5
	4.Class	81	26,7

Data Collection Tool

The Nomophobia Scale (NMP-Q) developed by Yildirim and Correia (2015) and translated into Turkish by Yildirim, Sumuer, Adnan, and Yildirim (2015) was used as a data collection tool in the study. The Nomophobia Scale (NMP-Q) consists of a total of 20 items in 7-point Likert form. The Cronbach's alpha reliability coefficient of the original of the scale was reported as .95 and the reliability coefficient of the scale translated into Turkish was reported as .92. If this value is above .80, it shows that the scale is of high reliability (Field, 2005).

The scale consists of four sub-dimensions: Loss of Connection (5 items), Inability to Access Information (4 items), Not Feeling Comfortable (5 items), and Inability to Communicate (6 items). The sub-dimensions of the original scale are respectively. 94, .87, .83 and. Reliability coefficients were calculated as 81.

The reliability coefficients of the sub-dimensions of the scale translated into Turkish are 90, .74, .94 and. It has been reported as 91.

Data Collection and Analysis

The data collection process of the research was carried out with the voluntary participation of physical education and sports undergraduate students. In order to test the

construct validity of the nomophobia scale, the DFA was applied to the data set containing the views of 303 students.

Before CFA, mean, standard deviation and item total correlation values for the items of the scale were calculated. In CFA, factor load values, path coefficients between items and dimensions, item statistics, goodness of fit values were calculated (Table 2). As good fit statistics, chi-square good fit ratio (2 (CMIN) / df≤3), goodness fit index (GFI≥0.85), comparative fit index (CFI≥0.92), standard mean square error (SRMR). ≥0.08) and the mean square root of the approximate errors (RMSEA≥0.09) were accepted based on the acceptance limits specified in the literature (Hair, 2010; Meydan and Şeşen, 2015).

In order to test the reliability of the scale, the Cronbach's Alpha (α) reliability coefficients of four sub-dimensions and the whole scale were determined. Cronbach's Alpha (CA≥0.70), average explained variance (AVE≥0.50) and integrated reliability (CR≥0.70) values (Hair, 2010) were taken. As a result of the findings obtained, the scale alternative models strategy was tested with the measurement model test with 4, 3, 2 and 1 factors.

Table 2. Goodness of Fit Indices

Criteria	Acceptable level	Comment	Differentiation in literature
Kay-square	X^2/sd < 2-5	If the ratio of X^2 to degrees of freedom (df) is two or less, the model is a good model, and between two and five shows that the model has an acceptable goodness of fit.	
RMSEA (Root Mean Square Error of Approximation)	< 0.08	A value less than 0.08 indicates a good fit.	A value less than 0.08 indicates a good fit, but values up to 0.10 can be accepted (Kline, 2005).
SRMR (Standardized Root Mean Square Residaul)	< 0.08	A value less than 0.08 indicates a good fit.	
GFI (Goodness of Fit Index)	0 is not compatible, 1 fully compatible	A value greater than .90 indicates acceptable compliance.	Although a value greater than 0.90 is an indicator of good fit, there is no definite limit value (Hair, 1998).
AGFI (Adjusted Goodness of Fit Index)	0 is not compatible, 1 fully compatible	A value greater than .90 indicates acceptable compliance.	Although a value greater than 0.90 is an indicator of good fit, there is no definite limit value (Hair, 1998).
NFI (Nomed Fit Index)	0 is not compatible, 1 fully compatible	A value greater than .90 indicates acceptable compliance.	Although a value greater than 0.90 is an indicator of good fit, there is no definite limit value (Hair, 1998).

| NNFI (Nonnomed Fit Index) | 0 is not compatible, 1 fully compatible | A value greater than .90 indicates acceptable compliance. | Although a value greater than 0.90 is an indicator of good fit, there is no definite limit (Hair, 1998). |
| CFI (Comparative Fit Index) | 0 is not compatible, 1 fully compatible | A value greater than .90 indicates acceptable compliance. | Although a value greater than 0.90 is an indicator of good fit, there is no definite limit value (Hair, 1998). |

Source: Jöreskog (1993), Kline (2011), Loehlin (2004)

FINDINGS

Second Level Construct Validity

The model has been expanded by adding a super latent variable. Confirmatory factor analysis (CFA) was applied by associating the others under a single latent variable that was assumed to include four sub-dimensions. The second-level factorial structure of the fear of mobile phone deprivation (Nomophobia) scale consisting of four sub-dimensions and a total of 20 items (inability to access information with four items, loss of five-item connection, inability to communicate with six items, and inability to feel comfortable with five items) was tested using the AMOS 23 program (Figure 1). Due to the normal distribution of the data, the maximum likelihood calculation method was used (Gürbüz and Şahin, 2018).

The factor load values calculated for the scale items are the ability of those indicators to represent the relevant structure. In this direction, items with a factor load value lower than 0.30 should be removed from the scale in studies (Kline, 2011). No item was removed from the scale since there was no item less than 0.30 as a result of the analysis.
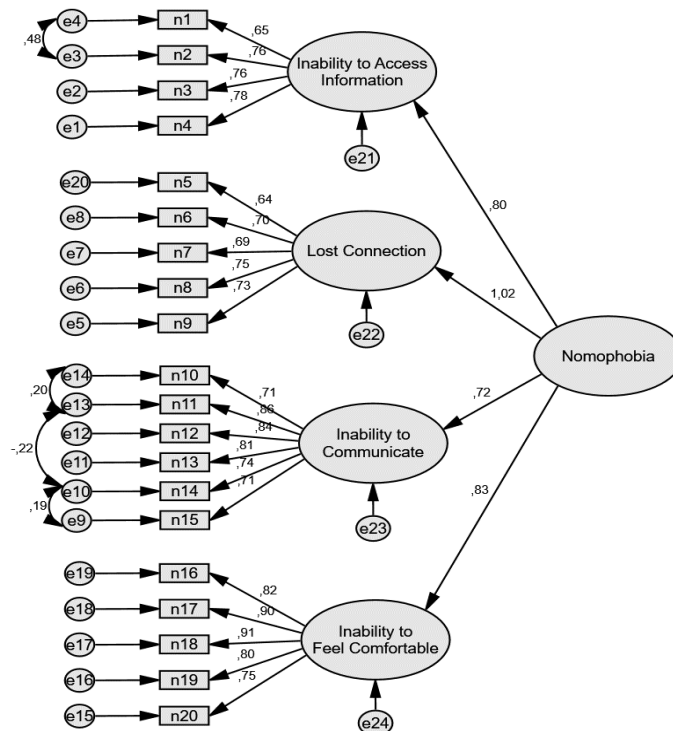

Figure 1. Second-level confirmatory factor analysis diagram.

The obtained goodness of fit values (X2 (N = 303) = 439.744; df = 167; p <0.01; X2 / df = 2.633; RMSEA = 0.074; CFI = 0.932; GFI = 0.86) are the data of the proposed four-factor model. It shows that it is well compatible and acceptable. These results showed that the data obtained from the study were consistent with the predicted theoretical structure of the fear of mobile phone deprivation scale (four-factor model). DFA diagram for the analysis is as above (Figure 1).When the reliability of the scale is examined; Cronbach's Alpha value was calculated separately for each factor. Not being able to access information 0.85; losing connection 0.83; failure to communicate, 0.90; not feeling comfortable was calculated as 0.92. These values show that the scale has a high level of reliability.

Measurement of Decomposition and Union Validity with Alternative Models Strategy

Cronbach's Alpha test, which is a reliability analysis, was applied to the scale of the study by first dividing it into alternative models. The data obtained from the test result showed that the scale has high reliability in all alternative models and are tabulated below (Table 3).

Table 3. Reliability Analysis Table

Reliability Analysis	**Sub-Dimensions**			
Models	Inability to Access Information	Inability to Communicate	Lost Connection	Inability to Feel Comfortable
Four factor model	0,85	0,90	0,83	0,92
Three factor model	0,91	0,90	0,83	
Two factor model	0,91	0,91		
Single factor model	**One Dimension** 0,95			

Explanation: Numerical data are the values of Cronbach's Alpha test, which is a reliability analysis

Afterwards, the measurement model used in the study was tested with confirmatory factor analysis (Arbuckle, 2016). In this context, using the maximum likelihood method, it was analyzed whether the predicted structures of the scales were supported by the collected data or not with the alternative models' strategy (Gürbüz, 2019). The predicted four-factor model (inability to access four-item information, losing five-item connection, not communicating with six items, not feeling comfortable with five items) was compared with three alternative models using the X² difference tests. While creating the alternative model, new design factors were created according to the factor loads of the items. As shown in Table 4, the assumed four-factor model was found to be the model that provided the best fit with the data (X² (N = 303) = 433.508; p <.001; X²/ df = 2.643; CFI = 0.93; SRMR = 0.06; RMSEA = 0.07).

Table 4. Model comparison chart

Models	X²	df	X²/df	CFI	SRMR	RMSEA	Model Comparison	ΔX²	Δdf	p (ΔX²)
1.Four-factor model[a]	433,508	164	2,643	0,93	0,057	0,07		-	-	-
2.Three factor model[b]	737,772	167	4,418	0,857	0,77	0,1	2 and 1	304,264	3	0,000*
3.Two factor model[c]	988,353	169	5,848	0,79	0,98	0,12	3 and 1	554,845	5	0,000*
4.Single factor model[d]	1213,24	170	7,137	0,7	0,88	0,14	4 and 1	779,732	6	0,000*

Description: N = 264; * p <.001; CFI = Comparative fit index; SRMR = Standardized Root Mean Square Residual; RMSEA = Root mean square error of approximation. a = The proposed model, b = The model in which the factors of not feeling comfortable and the inability to access information are combined c = The model in which the factors of not feeling comfortable, not being able to access information and losing connection are combined, d = The model in which all variables are one factor.
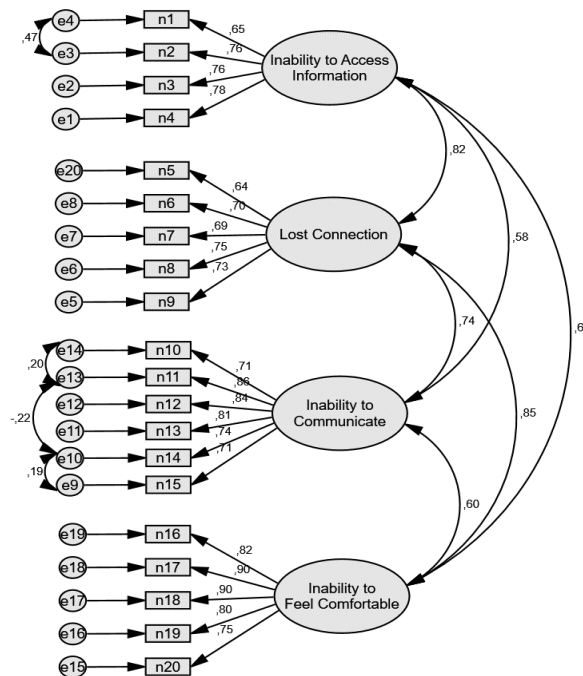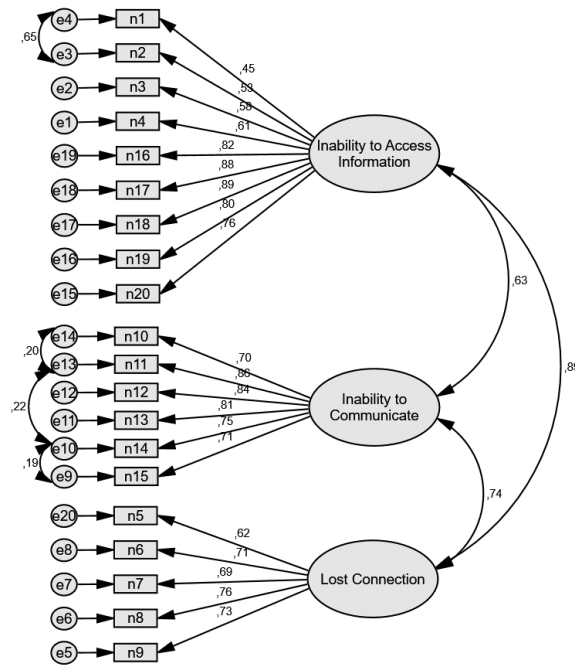

Figure 2. 4 Factor CFA Analysis Diagram

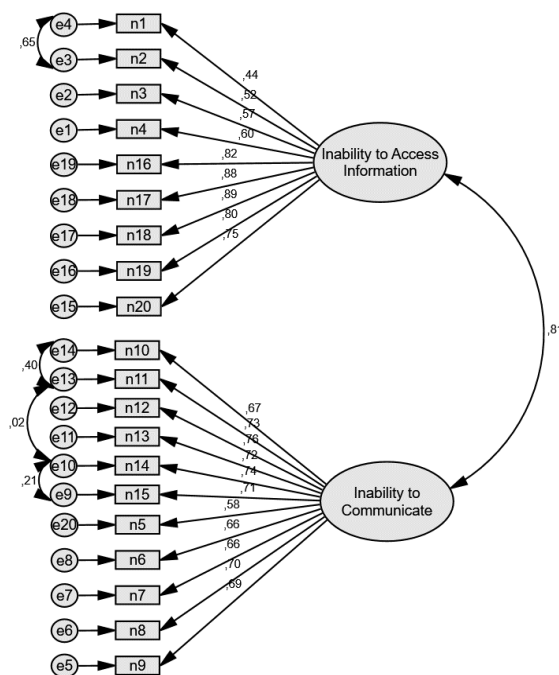Figure 3. 3 Factor CFA Analysis Diagram

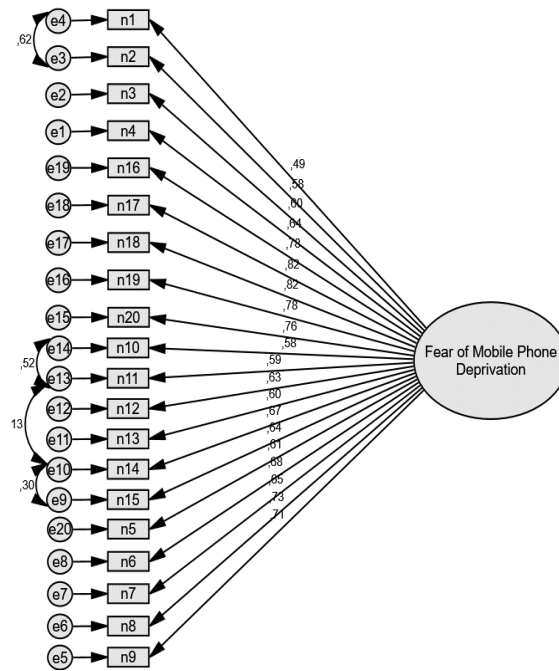Figure 4. 2 Factor CFA Analysis Diagram

Figure 5. Single Factor CFA Analysis Diagram

CR values were calculated for the reliability of the factors of the nomophobia scale. AVE, MSV and ASV values of the factors were calculated for the combination and decomposition validity. For join validity, AVE> .5; It is recommended to have CR> .7 and CR> AVE, and to have a correlation between MSV <AVE, ASV <AVE and -√AVE> factors for discrimination validity (Gürbüz, 2019; Hair, 2014).

Table 5. Connection and Decomposition Validity

Factors	CR	AVE	MSV	ASV	1	2	3	4
Inability to Communicate	.91	.61	.55	.417	(.78)			
Inability to Access Information	.85	.56	.44	.424	.58	(.77)		
Lost Connection	.93	.71	.64	.49	.59	.76	(.84)	
Inability to Feel Comfortable	.91	.71	.64	.54	.67	.59	.80	(.84)

Note: Values in parentheses indicate √AVE scores.

These results show that all factors have high reliability (All CR values are above .70). The fact that the AVE values of the factors are lower than the CR values and the AVE values above .5 indicate that the factors have a combined validity. The fact that the AVE values of the factors are higher than the MSV and ASV values means that the factors have discrimination validity. In addition, the fact that the AVE scores of the factors are higher than the inter-factor correlations indicate that there is discrimination validity.

CONCLUSIONS

It is very important to obtain valid and reliable measurements for physical education and sports undergraduate students regarding the level of negative effects of the fear of mobile phone deprivation in terms of developing social programs in order to prevent the negative effects of mobile phone deprivation. It is seen that mobile phones are widely used in almost every age group. By using the confirmatory factor analysis, the factor structure of the undergraduate students of the nomophobia scale was compared with the factor structure of the original, and evidence for the construct validity of the relevant measurements was obtained.

The calculated reliability coefficients, fit indices, factor load and error values for the scale adapted for physical education and sports undergraduate students, as in the original of the scale, four-factor sub-dimensions of "inability to access information, losing connection, not communicating, not feeling comfortable" shows that the model fits well with the data set. In this study, an adaptation study of the "Fear of Mobile Telephone Deprivation Scale" by creating alternative models for undergraduate students of physical education and sports was carried out in order to help new researches.

It was aimed to develop an alternative measurement test by transforming the 4 sub-dimensions that make up the nomophobia scale into a 3-factor model, then a 2-factor model, and finally a 1-factor model. It was determined that the best values (CR, AVE, MSV and ASV) obtained by testing the unity and decomposition validity of each individual model belong to the 4-factor model.

As a result, it is thought that the 4-factor nomophobia scale can make highly valid and reliable measurements on physical education and sports undergraduate students. The scale culturally adapts to physical education and sports undergraduate students, and contributes to the literature as a resource measurement tool for researchers at different universities studying in this department.

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Investigation of Corporate Social Responsibility in Sports within The Scope of Corporate Sustainability

Abstract

The idea of corporate social responsibility dates back nearly a century, but it is not long ago that the concept was put into action by organizations and studied by researchers. While the first official examination of the concept dates back to the 1950s, it was in the 1980s that people began to question and expect social responsibility practices from organizations. It was the early 2000 that the concept was examined in the field of sports and attracted the attention of researchers. When the corporate social responsibility studies carried out within the scope of sustainability in the field of sports are examined, it is seen that the importance of such practices in terms of organizations is mostly investigated topic. In the research papers, it was also examined how the corporate social responsibility activities carried out by professional sports organizations were received by sports fans and stakeholders. In our study, the place of corporate social responsibility in the field of sports was investigated within the scope of corporate sustainability. When examining studies in the field, it is seen that sport are a valuable tool for sustainable development and corporate sustainability, and that sports organizations should include corporate social responsibility activities in their strategic plans. Considering it's power to reach the society, it is thought that corporate social responsibility in the field of sports is an important field that needs to be worked on in order to ensure sustainable development and corporate sustainability.

Keyword: Corporate social responsibility, sports, sustainable development, corporate sustainability.

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INTRODUCTION

The concept of social responsibility is explained as "Institutions and organizations considering the benefits of the society while performing their economic activities". The concept of corporate social responsibility is defined as "The ways in which a business tries to align its values and behaviors with those of its various stakeholders" (Mallin, 2009). In this definition and in the concept of corporate social responsibility, the expression of stakeholder is explained as institutions and individuals who are affected by all actions taken by the institution, such as partners, associations, company employees and the customers (Keinert, 2008). It is thought that the definition of the concept of corporate social responsibility may vary according to the period of age it is in, it is highly influenced by the social values of the period and geographical locations. (Özüpek, 2013). The idea of corporate social responsibility first emerged in the early 20th century with business people who started donating to improve the welfare of society (Sheth & Babiak, 2010). It is thought that corporate social responsibility is compulsory for all organizations and that every organization should carry out a social responsibility activities when its strategic aspect is considered (Lantos, 2001).

The concept of sustainable development, which is examined within the scope of our study, is defined as taking into account all the consequences that it may create in the future when deciding to carry out an activity. (Sarıkaya & Kara, 2007). On the other hand, the concept associated with all these terms is corporate sustainability, can be defined as "Balancing the social, environmental and economic needs of both the company and society" (Epstein & Roy, 2001). Today, organizations are expected not only to produce products but also to carry out effective corporate social responsibility studies on social and environmental issues (De Witte & Jonker, 2006).

The aim of this study is to give information about corporate social responsibility studies in the field of sports by mentioning the importance of corporate social responsibility in the field of sports. For this purpose, first of all, the effects of sustainable development and corporate sustainability concepts on the sports field within the scope of corporate social responsibility practices were examined. In the next section, the importance of the concept of corporate social responsibility for professional sports organizations is emphasized, and the corporate social responsibility studies carried out by professional sports organizations are evaluated. In the last section, the studies carried out within the scope of corporate social responsibility in sports literature are investigated.

Sustainable Development and Corporate Sustainability

Sustainability is defined as the use of all resources belonging to humanity without wasting, in accordance with its purpose and in the most efficient way (Gladwin et al., 1995). Sustainability practices are to make conscious changes in the way of living without changing the quality of life (Özmehmet, 2008). The idea of sustainability has been a concept that constantly changing as a result of research and political breakthroughs over many years, and the importance of the concept is constantly repeated by international organizations (Herzig & Schaltegger, 2011). Although the concept of sustainability is discussed in different fields of study, the concept actually has a single common purpose, which is use and protect all natural and artificial resources within the framework of ethical values (Tıraş, 2012).

The concept of sustainable development was defined for the first time in the report called Our Common Future (Brundtland Report), published by the United Nations, as "process of change in

which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs." (WCED, 1987). It has been emphasized that while carrying out sustainable development activities, organizations feel necessity by different reasons such as financial gain or reputation (Engin & Akgöz, 2013), but sustainable development is now an important concept not only for economic benefit but also for the potential results that may occur in the society and environment (Gür, 2012). Kuşat (2012) stated that the purpose of existence of organizations is profit, and when considered their purpose of existence, it should be accepted as a very natural way of behavior for organizations to feel necessity to perform the responsible behaviors expected by the society.

Harris (2000) explained and listed three different features that need to be protected in order to ensure sustainable development:

- Economic: In order to ensure economic development, it is stated that the all resources should be used in the most efficient way, unpredictable behaviors that may cause harm should be avoided, and the management in the financial area should be continuous.

- Environmental: Consuming the natural resources of the world to carry out production activities by using methods that may lead to negative consequences, can cause destruction, and as a result, major ecological problems may occur in the environment. It has been explained that when the production is carried out by keeping the environmental dimension in the foreground, the damage to the nature will be reduced and in this way the future generations can also be provide from natural resources.

- Social: It emphasizes the full provision of all the fundamental rights that people need in order to ensure a sustainable social life.

Sustainable development is related with the concept of corporate sustainability on the basis (Engert & Baumgartner, 2016). For many years, organizations have determined many corporate sustainability policies in order to keep environmental pollution minimal, to improve their relations with society, and to engage in positive exchanges with stakeholders (Crane, 2000). The concept of corporate sustainability has gained importance as companies realize the negative environmental and social effects they cause (Starik & Marcus, 2000). While creating a corporate sustainability strategy, all the benefits and harms of the planned activity are should determine (Baumgartner & Ebner, 2010). Kuşat (2012) explained the benefits that can be gained through corporate sustainability as decreases in production costs and financial relief, increase in competition level, increase in natural productivity, more efficient use of resources, positive developments in corporate reputation and increase in innovative activities.

It is believed that the concept of sustainability has a valuable position in the sports projects all over the world (Özbey et al., 2019). The important position of sports in society is an indisputable fact, and this position gains more value when evaluated together with the modern society (Stolyarov, 2011). The concept of sustainable development in the field of sports has been explained as allowing people to benefit from all sports facilities, maintaining their suitability for them many years and manage all responsibilities as a whole (Koçak, 2013; Koçak et al., 2013). Today, professional sports organizations are aware of their obligations and increasingly taking their place in corporate social responsibility projects (Babiak & Wolfe, 2006). Countries now support sustainable development projects planned by the government, in addition to goals such as elite athlete development or encourage the public to sport (Balcı et al., 2018).

Social Responsibility and Corporate Social Responsibility

When the concept of social responsibility is examined in terms of organizations, it is explained as acting fairly, in accordance with business ethics and morals, and not displaying behaviors that will deceive the consumer or harm their rights (Lee & Kotler, 2008). In the study conducted by Engin and Akgöz (2013), it was emphasized that it is important for institutions to act responsive in order to have a positive reputation in the eyes of the society, especially to carry out sustainable social responsibility activities related to the environment. The concept of corporate social responsibility is explained as an institution's attempt to use its own resources to improve the welfare of society through the execution of necessary business actions (Crampton & Patten, 2008). The inclusion of corporate social responsibility in the books was take place for the first time with Howard Bowen's "Social Responsibilities of Businessmen". In the book, he explained the concept as ""It refers to the obligations of businessmen to pursue those politics, to make those decisions, or to follow those lines of actions which are desirable in terms of the objectives and values of society" (Bowen, 1953).

Archie Carroll (1991) developed one of the most important descriptions in the field and named The Corporate Social Responsibility Pyramid

Source: (Carroll, 1991).

The pyramid created by Archie Carroll (1991) consists of four sections, and at each section, there are four different components that constitute corporate social responsibility. Economic responsibilities are at the first section of the pyramid. According to Carroll, "All other job responsibilities are based on the economic responsibility of the firm". In the second section, there are legal responsibilities of institutions, businesses are expected to perform their economic duties in accordance with the rules of law. When it comes to the third section, companies are expected to behave in accordance with ethical responsibility. At the top of the pyramid there are philanthropic (voluntary) responsibilities. It is believed that institutions want to help people through voluntary works. At each section in the pyramid, there are responsible behaviors that society expects from businesses. In the modern world, it is believed that companies cannot survive only by maintaining their economic stability, but if they also fulfill the duties imposed on them by the society, they will

provide corporate sustainability. In this context, the obligation valid for all other fields is also considered to be valid for organizations operating in the field of sports.

The Importance of Corporate Social Responsibility

The concept of corporate social responsibility has gained increasing importance for organizations and managers from different fields (Walters & Tacon, 2010). With the recognition of the increasing importance of the concept by the organizations, the way it is usage has also diversified. Corporate social responsibility defines the roles and rules between organizations and the society, as well as explains the responsibilities that organizations have towards society (Keinert, 2008). In the past, corporate managers had to deal only with the economic outcomes of the actions they took (Anderson, 1989), but in today's management approach, if organizations want to maintain their existence, they need to constitute a successful corporate social responsibility strategy (Martín-Gaitero & Escrig- Tena, 2018). It is important for organizations to create the most efficient project that can be carried out simultaneously with the field in which they operate. Only profit-oriented behaviours are not sufficient for institutions to protect and maintain their place in society (Moyo et al., 2020). If it is planned to achieve corporate sustainability, it is thought that not only economic gains, but also breakthroughs that will increase the corporate reputation in the eyes of the society should be created.

Moyo et al. (2020), it is explained that institutions should pay attention to three basic factors in order to create a successful and sustainable corporate social responsibility strategy. First, internal factors were explained, it was said that all resources within the organization are important for institutions to create a sustainable social responsibility strategy. The second factor is external factors, all elements that cannot be controlled by the organization affect sustainability and should be taken into account when creating plans. All uncontrollable events such as the interest and awareness of the societies to corporate social responsibility, economic conditions, natural disasters can be given as examples of external factors. The third of the main factors is expressed as stakeholder participation. Projects carried out by different partners in the market, all acquisition and partnership plans, competitor investments can be given as examples of this factor. It is believed that stakeholder engagement is an element to be considered during the project creation phase. It is thought that corporate social responsibility projects developed by considering these three characteristics will contribute to corporate development.

Every social responsibility work carried out by organizations will create a different idea about the organization in the eyes of the society. Organizations will benefit from the concept of corporate social responsibility in the most real sense if they are aware of their position in the society, know the characteristics of the consumer group they address, and can foresee what the project they plan will bring them basically.

Corporate Social Responsibility in Sports

Sport, with its superior unifying power, has managed to become one of the valuable elements of the national and international market today (Cappato & Pennazio, 2006). The main reason why governments and stakeholders support sports models can be explained as the acceptance of sports as a social and economic development tool for years (Schulenkorf et al., 2016). The acceptance of sport in the society continues to increase, due to relationship between corporate social responsibility and its unique role and the way it approaches problems in society (Walters, 2009). Corporate social

responsibility studies carried out in the field of sports started in the early 2000s, and with the acceptance of the changes that sports can create, the interest to the field has increased. Corporate social responsibility in sports is seen as a method to reach large stakeholders, a tool to improve the quality of social life, and a form of incentive to close economic gaps (Smith & Westerbeek, 2007). With all these features, sports have become a valuable tool for organizations.

Walker and Kent (2009) explained that the relationship between corporate social responsibility and sports has two basic themes. According to the first theme, corporate social responsibility enables organizations that produce commercial business in the field of sports to connect with their target audience through sports, and this theme contributes brand image and good reputation on the public, and as a result, it provides an increase in internal financial performance outputs. The second theme explains the relations between small groups that occur in the sports environment and larger stakeholder groups. With corporate social responsibility, it is said that all sports groups in the society, easily explain their existence and their obligations to the society.

Smith and Westerbeek (2007) presented seven important criteria to encourage the use of corporate social responsibility within sports organizations.

- Due to the global power and popularity of sports, it is believed that all corporate social responsibility activities carried out within the field of sports will easily take place in the mass media and will reach large masses.

- If the target audience of the corporate social responsibility project is determined as children, it is stated that a sports organization or a project with a popular athlete will always help attract children's attention more easily.

- One of the ways to achieve state of being healthy in the society can be through sportive corporate social responsibility activities.

- Activities done through sports will increase people's group participation and thus create social interaction.

- Sportive corporate social responsibility will enable to develop cultural awareness among people, to understand and adapt to different cultures more easily.

- Some sports events that include corporate social responsibility will increase awareness of the environment and environmental sustainability.

- Participation in sports activities will motivate people and therefore corporate social responsibility activities through sports can create well-being.

Sports clubs and organizations are aware of the importance of social responsibility activities and show an intense work in the field. When the studies carried out by sports clubs in the world are examined, it is seen that the FC Barcelona (2021) sports club carries out projects on solidarity, democracy, social integration. Real Madrid (2021), which is also a big club, carries out social responsibility activities in the fields of education and cultural activities, social assistance and sports activities. Paris Saint-Germain (2021) sports club stated in the annual report they published on their websites that they provided support to refugees and donated to charities. The NBA, on the other hand, carries out social responsibility studies in the fields of health, education and family

development, along with projects to increase the participation of young people in basketball (NBA, 2021).

When the corporate social responsibility studies in the field of sports are examined, it is seen that how social responsibility projects are perceived by the fans is mostly investigated (Walker & Kent, 2009; Lacey & Kennett-Hensel, 2016; Ullah et al., 2021; Kim et al., 2017; Morrison et al., 2020). In addition, the researchers focused on environmental protection-oriented social responsibility projects carried out by sports organizations in their studies (Trendafilova et al., 2013; Moyo et al., 2020; Trendafilova et al., 2014). Another focused research area is the corporate social responsibility studies carried out in professional sports (Sheth & Babiak, 2010; Babiak & Wolfe, 2009; Heinze et al., 2014; Chen et al., 2015). When the literature is examined, it can be said that studies in the field are carried out around limited subject. Considering the potential of corporate social responsibility in the field of sports, it is important to diversify and multiply the studies.

Professional Sports and Corporate Social Responsibility

Due to the increasing popularity of sports and its professional business position that it has gained over the years, sports organizations, like all other organizations, are now expected to be institutions that perform beneficial activities for the society, beyond being a business that only works for their economic interests (Moyo et al., 2020). Professional sports clubs, which are aware of this valuable position, have been doing volunteer work for many years in order to keep the society physically active and to create a healthy lifestyle over the whole of society (Extejt, 2004). Sports organizations aim to provide benefits such as corporate reputation, emotional bonds and loyalty with fans, economic return, popularity and positive impact on society through social responsibility activities (Walker & Kent, 2009). Professional sports organizations provide many benefits to the society with their work.

It is stated that it will be beneficial for sports clubs to keep star athletes who have embraced their club and who are integrated with the club in the fan's point of view, in order to get the most efficient result from corporate social responsibility activities (Breitbarth & Harris, 2008). Professional sports organizations carry out responsibilities to benefit society in various fields. For example, the team named Charlotte Hornets was purchased by NBA (National Basketball Association) famous basketball player Michael Jordan in 2010, and the team foundation carries out social responsibility activities in the fields of education, fight against hunger, health and military care in America and also, they explain their work in their annual reports every year (NBA, 2021). Another example is the responsibilities carried out by UEFA (Union of European Football Associations) and presented under the title of "Creating positive social impact through football". UEFA carries out corporate social responsibility studies on environmental protection, health, peace, solidarity, human rights and child safety in order to increase social responsibility awareness by using football as a tool. (UEFA, 2021). Through all these projects, institutions both gain reputation and benefit the society in the same time.

Hamil and Morrow (2011) stated that sports clubs are one of the most convenient elements to create and develop a corporate social responsibility strategies. One of the most important reasons why sports is a very important concept for corporate social responsibility activities is the fact that there is an invisible link between professional sports clubs and society and through this bond, organizations get the benefits they want to achieve more easily (Walker & Kent 2009). When creating corporate social responsibility projects, the sport fans should be allowed to benefit from the project.

For example, investments focused on the renovation of sports facilities used by the community will be an important type of responsibility project (Porter & Kramer 2006).

In addition to its financial returns, corporate social responsibility is now used by institutions in order to ensure sustainability in terms of social and environmental protection (Hennigfeld et al., 2006). The commitment of sports to the environment is an indisputable fact, and based on this commitment, sports have responsibilities on the environment that cannot be denied (Smith & Westerbeek, 2007). Being aware of this responsibility, sports organizations have started to direct their attention to environmental sustainability projects in recent years. For example, in the sustainability report published in 2020 by the International Olympic Committee, which runs one of the largest organizations in the world, five important sustainability work plans were announced under the headings of infrastructure and natural areas, resource finding and resource management, mobility, workforce and climate. Implemented or planned practices such as creating appropriate stakeholder partnerships, using more sustainable materials when creating Olympic fields, creating special projects to raise awareness of sustainability over the athletes in order to reduce the damage to the environment are explained in the report (IOC Sustainability Report, 2020).

Organizations have accepted that every social responsibility work they do for the society will provide positive feedback to them (Margolis & Walsh, 2003). It is believed that sports contribute to a unifying and sustainable power on society. It can be said that both organizations and society gain profits through corporate social responsibility.

Sports Organizations and Corporate Social Responsibility

When the literature in the field is examined, it is seen that sports organizations that include corporate social responsibility practices in their strategic planning can create a positive image if they reflect the performance and projects they produce to the society in harmony, regardless of the size and audience they appeal to. Many researchers have concluded that corporate social responsibility activities carried out in the field of sports have a positive effect on the fans. Nyadzayo et al. (2016) examined the role of corporate social responsibility in establishing relationship quality in the context of sports organizations. In the study, a questionnaire was applied to the season ticket holders of a professional sports club, consisting of approximately 6,000 participants. According to the results of the survey, it was determined that corporate social responsibility activities created a positive increase in the quality of the relationship between the fans and the club. Another study by Anşin and Şentürk (2020) examined the effect of corporate social responsibility practices on club and brand reputation on Beşiktaş Gymnastics club professional football team. Within the scope of the research, 460 fans were selected by random sampling method. A questionnaire was applied with three different scales. As a result, it was determined that the social responsibility activities carried out by the club has a significant effect on the fans. In a similar study, Güneş and Koçyiğit (2018) examined the effect of corporate social responsibility activities on club and brand reputation in the context of sports marketing by conducting a face-to-face survey method on Konyaspor fans (Professional sports club). As a result, it was determined that the activities carried out made a positive contribution to the club and brand reputation. In another study related to the field, Kim et al. (2018) examined how the corporate social responsibility activities carried out by the American National Baseball League (MLB) were viewed by the society, and as a result, it was found that the social responsibility projects of the teams in the league had a positive impact on the public. Kargün et al., (2017) investigated the reasons affecting the corporate reputation of sports clubs. As a result of the study

conducted with the survey method, they concluded that the factors that make up the reputation can vary according to the demographic differences of the individuals. In addition, they found that social responsibility projects, carried out by sports organizations, have a positive effect on club reputation.

Within the scope of corporate sustainability, the study subjects about how the corporate social responsibility practices in sports are determined by the managers and which goals they are focused on are also seen as a scope area by the researchers. François and Bayle (2015) examined the corporate social responsibility activities and practice methods of organizations on French professional sports clubs. Within the scope of the study, a total of 30 professional sports club managers and club stakeholders were interviewed. As a result of the collected data, it has been determined that the factors that lead the clubs to implement corporate social responsibility practices are the pressure felt by the rival clubs and the demand from the local authorities. Sönmezoğlu et al. (2013), the corporate social responsibility practices of Fenerbahçe Sports Club (Professional sports club) were examined. In the study, a semi-structured interview form was created, and data were collected by interviewing the president of the club and the manager of the club associations. As a result of the study, it can be said that Fenerbahçe sports club has effects such as creating a positive image on the society, increasing the fan base and loyalty, and improving the brand profile.

Due to the high number of people reached within the scope of mega sports events, it is thought that it is important to plan and manage corporate social responsibility activities more carefully while a large-scale event is being held. Dowling et al. (2013) investigated how organizations carry out their corporate social responsibility practices through sports, in the context of mega sports events, in particular for the 2012 London Olympics. In the study method, semi-structured interviews were conducted with the national governing bodies and with the managers of the organizations. As a result of the research, it is seen that attention is paid to innovative, creative, harmonious, right timing and right activity selection while managing the relationship between corporate social responsibility and sports.

Another subject of corporate social responsibility studies carried out in the field of sports is the comparison of how social responsibility is perceived and used in management systems in different countries. François et al. (2019), a multi-level analysis of the implementation and execution of corporate social responsibility on professional sports clubs in France and the United Kingdom was carried out. Within the scope of the research, mixed methods approach was used to analyze the social responsibility practices of 66 professional football and rugby clubs in the 2017-2018 season with qualitative and quantitative methods. As a result, differences were determined between the activities carried out by the two countries. It has been concluded that while the practices carried out by the United Kingdom are aimed at praising and highlighting social responsibility behaviors, the activities carried out by French sports clubs are aimed at increasing the value of sports.

Fifka and Jaeger (2020) analyzed 72 academic articles examining the relationship between football and sports social responsibility in order to strategically integrate corporate social responsibility studies into professional European football. As a result, the researchers emphasized that the concepts of community, human capital, fans and stakeholders, commercial space, harmony and nature are all phenomena that organizations should consider when creating a corporate social responsibility strategy in football.

CONCLUSION

It is emphasized that corporate social responsibility activities carried out in the field of sports have a more advantageous position compared to other fields. Sport is thought to be one of the most efficient tool for corporate social responsibility activities within the scope of corporate sustainability, with its ability to reach people of all ages, and its ability to offer different options compatible with everyone's needs and interests. In our study, a literature review was carried out on the articles investigating sports and corporate social responsibility activities within the concept of corporate sustainability.

In this age, organizations are more aware of the importance of corporate social responsibility activities (Breitbarth et al., 2015). Researches explain that corporate social responsibility practices have a difficult planning phase and that the targeted profit may vary in parallel with the level of the organization (Maon et al., 2010). When planning corporate social responsibility activities, sports organizations should determine and evaluate different parameters (e.g., organization size, budget, development goals) that may affect the implementation outputs. Every sports organization that carries out a social responsibility project creates stakeholder participation at the same time. With stakeholder participation, sports organizations can get in touch with organizations from different segments and find the opportunity to create different business potentials. For this reason, every corporate social responsibility project is important because it will benefit the participating stakeholders, the sports organization and the society. In line with all these effects, it can be said that corporate social responsibility activities benefit the corporate sustainability of sports organizations. Appropriate and consistent management of corporate social responsibility activities is important to create a sustainable corporate entity.

When the literature is examined, it is seen that the number of studies comparing the perspectives of different cultures on corporate social responsibility activities is insufficient, and it is noteworthy that the number of researches in this field needs to be increased. Another determined study area is that the number of studies investigating the planning stages and objectives of corporate social responsibility activities, which organizations include in their sustainability strategies, is insufficient in the literature. It is thought that increasing studies on this subject can create new perspectives for both sports managers and researchers. Similarly, another subject of study, is corporate social responsibility studies that will contribute to environmental sustainability. It is important to raise awareness of institutions on the subject by increasing the number of studies on this field.

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The Effect of Effective Communication Skills of Academicians in Faculties of Sports Sciences on Organizational Culture Type

Abstract

The purpose of this study is to reveal the effect of communication skills evaluation levels of academicians working in Sports Sciences Faculties on organizational culture types and to determine the relationship between them. In this study correlational survey model was used. The research group consisted of 230 academicians working at the Faculty of Sports Sciences. In this study, the data was collected using Communication Skills Evaluation Scale developed by Korkut (1996) and Organizational Culture Inventory developed by Deshpande, Farley, and Webster (1993), which was adapted into Turkish culture by Erdem, Adıgüzel and Kaya (2011). simple linear regression analysis, Pearson's correlation analysis, independent samples t-test analysis, One-Way ANOVA were used for the analysis of the data. It has been determined that the relations between the communication skills evaluation levels of academicians and the scores of organizational culture types and the scores obtained for the general organizational culture, and the communication skills evaluation levels of academicians have a positive effect on organizational culture. It was determined that there was a significant difference between the title and management styles according to the communication skills evaluation levels of the academicians, but there was no significant difference between the gender and the status of administrative duties. While there was no significant difference between the cultural levels of the organizational culture types of the academicians and the culture levels of the general organizational culture, there was no significant difference between gender, but a significant difference was found according to the title and management style.

Note: This study was completed as a master's thesis in 2019.

INTRODUCTION

Culture, organization, and communication are inseparable parts (Mumby and Stohl, 1996). The relationship of these concepts with each other positively affects the continuity and success of the organization. Culture and communication also affect organizational behavior and act as a window to understand the organizational culture in more detail thanks to communication (Kowalski, 2000).

Today is called the age of communication and information, and in this context, organizations must find solutions to their basic and common problems and to reveal innovations that will enable their organizations to make a breakthrough to achieve competitive advantage and keep up with the change and development brought by globalization. The most important way to deal with this is to conduct a healthy communication between the members of the organization. For managers to be successful in organizations, they must interact with different levels of management, and subordinates must have the qualities that will support healthy and effective communication upwards with superiors and downwards with subordinates (Güllü and Yenel, 2015). Universities are the top organizations among educational institutions. The communication system in their institutions is very important for the development of academics working in these organizations, both for their own development and for the development of the students they train. In addition to communication, organizational culture is created and developed to ensure integrity, coordination, efficiency, and effectiveness in universities, as in every organization (İplikçi and Topsakal, 2014).

The concept of effective communication and organizational culture in universities are inseparable parts and affect each other. Organizational culture in universities is the meaning and symbols of the organization formed by the sharing and acceptance of the values, symbols, heroes, norms, beliefs, myths, attitudes, ceremonies, rituals, and technology elements of the members of the organization and their transformation into different belief and target patterns completely belonging to that university. can be expressed as a system. The effectiveness and success of the organization is directly related to effective communication. When the literature is examined, it is seen that there are not many studies on the effect of the effective communication skills of the academicians working at the university on the type of organizational culture. For this reason, it is thought that the findings obtained as a result of the research will contribute to the researches and literature on this subject and will guide future studies.

It is aimed to reveal the effect level of the effective communication skills of the academicians working in the Faculties of Sport Sciences in different universities on the type of organizational culture and to determine the relationship between them. At the same time, it was aimed to determine difference between effective communication skills and organizational cultures according to the demographic characteristics of academicians. When we look at the literature, there are not many studies related to the subject. For this reason, it is thought that the findings obtained because of the research will shed light on the future research on this subject and contribute to the literature.

METHOD

Research Model

The research is a correlational survey model. Correlational survey model is a model established to determine the existence and degree of co-variance among more than one variable and to detect differences according to variables (Büyüköztürk et al., 2012; Karasar, 2012).

Population and Sample

The population of the research consists of 531 academicians working in the faculties of sports sciences in the 2019-2020 academic year. The convenient sampling method was used to reach 230 (50 female, 180 male) academicians whose sample was determined for the study.

Data Collection Tools

Within the scope of the research, questions were prepared to reveal the demographic characteristics of academicians in sports sciences faculties. Information showing the demographic characteristics of the academicians was obtained by preparing an 8-item personal information form, including gender, age, marital status, having a child, title, length of service in the institution, the status of the administrative position in the institution, and the management style of the institution.

A 25-item 5-point Likert scale developed by Korkut (1996) was used to reveal the level of evaluation of the communication skills of academics working in the faculties of sports sciences. The high score obtained from the scale without the reverse items means that individuals evaluate their communication skills positively. As a result of explanatory factor analysis, the validity study of the scale on students proved to be one-dimensional. The test-retest reliability of the scale was 0.76 and the Cronbach Alpha reliability of 0.80 was calculated as proof that it is an acceptably reliable scale.

Within the scope of the research, a 16-item scale developed by Deshpande, Farley, and Webster (1993) was used to reveal the organizational culture types and cultural levels of the academicians working in the faculties of sports sciences. The scale consists of four sub-dimensions called clan, adhocracy, hierarchy, and market. The scale was adapted into Turkish by Erdem, Adıgüzel and Kaya (2011). It is seen that factor loadings vary between 0.60 and 0.82, and Cronbach Alpha internal consistency coefficients vary between 0.80 and 0.89.

Data Analysis

The data in the study were analyzed by Package for the Social Sciences (SPSS) 25.0 software. When the distribution of the data was examined, no data that would create an extreme value problem was found. It is seen in Table 1 that the skewness and kurtosis values examined for testing the normality assumption vary between -1 and +1. It is stated that as a measure of the assumption of normality, it is acceptable for the skewness and kurtosis coefficients to be in the range of -1 to +1 (Morgan et al., 2004).

Table 1. Skewness, Kurtosis and Levene Homogeneity Test Results Regarding the Normality of the Scores Acquired by Academics from the Scales

N=230		Skewness	Kurtosis	Levene Homogeneity	p
				Homogeneity Test	
Organizational Culture Scale	Clan Culture	-0,178	-0,762	1,70	,168
	Adhocracy Culture	-0,383	-0,321	1,90	,131
	Hierarchy Culture	-0,543	-0,003	1,55	,202
	Market Culture	-0,462	-0,410	1,57	,197
	General Organizational Culture	-0,381	-0,518	2,14	,096

*p<,05

Simple linear regression analysis was performed to measure the effect of academicians' communication skills evaluation levels on organizational culture. The relationship between the scores of the academicians from the scales was examined by Pearson correlation analysis. Independent-Samples t-test analysis was used to test the difference between the scores obtained from the scales according to the demographic characteristics of the academics in two categories. One-Way ANOVA was used to test the difference between the scores obtained from the scales according to the demographic characteristics of the academics with more than two categories. Tukey test, which is one of the multiple comparison tests, was used to test the difference between the categories in which there is a difference between the score distributions of the academics according to the variables that have more than two categories among the demographic characteristics.

FINDINGS

Table 2. Demographic information of the participants

	Categories	F	%
Gender	Female	50	21,7
	Male	180	78,3
Title	Professor	36	15,7
	Associate Prof.	54	23,5
	Assistant Prof.	56	24,3
	Lecturer	38	16,5
	Research Assistant	46	20,0
Administrative Position Status	Yes	57	24,8
	No	173	75,2
Management Style of the Institution	Democratic	137	59,6
	Autocratic	50	21,7
	Releaser	43	18,7

Analyzing the data provided on the Table 2, the frequency and percentage distributions of the academicians working in the faculties of sports sciences were examined according to their demographic characteristics.

Table 3. Pearson correlation analysis results of the relationship between academicians' communication skills evaluation levels and organizational culture types

N=230		Clan Culture	Adhocracy Culture	Hierarchy Culture	Market Culture	General Organizational Culture
Communication Skills Evaluation Level	r	,52*	,50*	,40*	,51*	,55*
	p	,000	,000	,000	,000	,000

*p<,05 Categories: 0-0,30=Low Correlation; 0,40-0,60= Medium Correlation; 0,70-1,00= High Correlation

Analyzing the data displayed on the Table 3, There is a difference between the communication skills evaluation levels of academics and organizational culture types such as "Clan Culture" (r=0.52), "Adhocracy Culture" (r=0.50), "Hierarchy Culture" (r=0.40) and "Market Culture" (r =0.51) According to p=.000<.05, it is seen that there is a moderately significant positive correlation. It is seen that there is a positive and moderately significant relationship between academicians' communication skills evaluation levels and organizational cultures in general (r=0.55).

Table 4. Simple linear regression analysis results on the effect of academicians' communication skills evaluation levels on organizational culture

Variable	B	Standard Hata ʙ	β	t	P	double r
Constant	-48,77	10,22		-4,77	,000*	
Communication Skills Evaluation Scale	0,94	0,10	0,55	9,89	,000*	0,55
R= 0,55 R²=0,30						
F= 97,88 p=,000*						
Equation: Organization Culture =-48,77+0,94* Communication Skill Assessment Level						

Analyzing the data displayed on the Table 4, It is seen that the communication skills evaluation levels of academicians working in faculties of sports sciences are a significant predictor of organizational culture according to F=97.88, p=.000<.05. It is seen that the effect of academicians' communication skills evaluation levels on organizational cultures is significant according to t=9.89, p=.000<.05, that is, it has a significant effect. It is seen that the bilateral correlation value between the two variables is at a moderate level with a positive direction of 0.55.

Table 5. Independent-Samples t-Test results regarding the difference between academicians' communication skills assessment levels by gender

	Gender	N	$\overline{X}$	S	t	sd	p
Communication Skills Evaluation Level	Female	50	108,40	6,39	0,84	228	,404
	Male	180	107,49	6,87			

Analyzing the data displayed on the Table 5, It is seen that there is no significant difference between the communication skills evaluation levels of the academicians working in the faculties of sports sciences according to their gender, according to t=0.84, p=.404>.05.

Table 6. Independent-Samples t-Test results on the difference between the types of organizational culture according to the gender of the academicians

	Gender	N	$\overline{X}$	S	t	Sd	p
Clan Culture	Female	50	13,12	3,61	0,90	228	,372
	Male	180	12,59	3,74			
Adhocracy Culture	Female	50	13,72	3,02	1,68	228	,094
	Male	180	12,82	3,48			
Hierarchy Culture	Female	50	14,08	2,22	1,71	228	,089
	Male	180	13,29	3,04			
Market Culture	Female	50	13,16	2,23	0,52	228	,602
	Male	180	12,91	3,16			
General Organizational Culture	Female	50	54,08	9,80	1,34	228	,182
	Male	180	51,61	11,99			

Analyzing the data displayed on the Table 6, It is seen that there is no statistically significant difference due to the closeness of the organizational culture types and general scores of male and female academics.

Table 7. One-Way ANOVA results on the difference between academicians' communication skills assessment levels according to their titles

	Title	N	$\overline{X}$	S	F(4-225)	p	Post Hoc (Tukey)
Communication Skills Evaluation Level	Professor	38	111,14	6,24			
	Associate Prof.	54	106,09	6,90			
	Assistant Prof.	56	107,21	6,41	3,52	,008*	1>2, 1>5
	Lecturer	38	108,29	6,71			
	Research Assistant	44	106,96	6,76			

*p<,05 Categories: Professor =1; Associate Prof.=2; Assistant Prof.=3; Lecturer =4; Research Assistant=5

Analyzing the data displayed on the Table 7, it is seen that there is a significant difference between the communication skills evaluation levels of the academicians working in the faculties of sports sciences according to their titles ($F_{(3-226)}$=3,52, p=,008<,05).

Table 8. One-Way ANOVA results on the difference between organizational culture types by academics' titles

	Title	N	$\overline{X}$	S	F(4-225)	p	Post Hoc (Tukey)
Clan Culture	Professor	38	14,08	3,48			
	Associate Prof.	54	11,31	4,12			
	Assistant Prof.	56	12,95	3,33	3,97	,004*	1>2, 5>2
	Lecturer	38	12,18	3,93			
	Research Assistant	44	13,39	3,12			
Adhocracy Culture	Professor	38	14,53	3,17			
	Associate Prof	54	11,76	3,46			
	Assistant Prof.	56	13,29	3,37	3,98	,004*	1>2, 3>2
	Lecturer	38	12,76	3,53			
	Research Assistant	44	13,15	2,99			
Hierarchy Culture	Professor	38	14,47	3,20	3,56	,008*	1>4, 1>2
	Associate Prof.	54	12,69	2,99			

		N	$\overline{X}$	S			
	Assistant Prof.	56	13,64	2,42			
	Lecturer	38	12,63	3,47			
	Research Assistant	44	14,07	2,11			
	Professor	38	13,92	3,38			
Market Culture	Associate Prof.	54	12,22	3,01			
	Assistant Prof.	56	13,16	2,83	2,51	,043*	1>2
	Lecturer	38	12,34	2,91			
	Research Assistant	44	13,37	2,64			
General Organizational Culture	Professor	38	57,00	12,17			
	Associate Prof.	54	47,98	12,08			
	Assistant Prof.	56	53,04	10,53	4,29	,002*	1>2, 1>4
	Lecturer	38	49,92	12,69			
	Research Assistant	44	53,98	8,83			

*p<,05 Categories: Professor =1; Associate Prof.=2; Assistant Prof.=3; Lecturer =4; Research Assistant=5

Analyzing the data displayed on the Table 8, it is seen that there is a significant difference between "Clan Culture" ($F_{(4-225)}$=3,97), "Adhocracy Culture" ($F_{(4-225)}$=3,98), "Hierarchy Culture" ($F_{(4-225)}$=3,56) and "Market Culture" ($F_{(4-225)}$=2,51) According to p=.000<.05, it is seen that there is a moderately significant positive correlation. It is seen that there is a positive and moderately significant relationship between academicians' titles and organizational cultures in general ($F_{(4-225)}$=4,29).

Table 9. Independent-Samples t-Test Results on the difference between academicians' communication skills assessment levels according to their administrative duties

	Administrative status	N	$\overline{X}$	S	T	sd	p
Communication Skills Evaluation Level	Yes	57	108,35	6,68	0,85	228	,397
	No	173	107,47	6,80			

Analyzing the data displayed on the Table 9, It is seen that there is no significant difference between the communication skills evaluation levels of the academicians working in the faculties of sports sciences according to their administrative duties (t=0,85, p=,397>,05).

Table 10. Independent-Samples t-Test results on the difference between organizational culture types according to academicians' administrative duties

	Administrative Status	N	$\overline{X}$	S	t	Sd	p
Clan Culture	Yes	57	13,09	3,87			
	No	173	12,58	3,66	0,90	228	,370
Adhocracy Culture	Yes	57	13,63	3,33			
	No	173	12,80	3,41	1,60	228	,111
Hierarchy Culture	Yes	57	13,82	3,15			
	No	173	13,35	2,80	1,08	228	,280
Market Culture	Yes	57	13,65	2,79			
	No	173	12,74	3,01	2,01	228	,046*
General Organizational Culture	Yes	57	54,19	11,57	1,55	228	,123
	No	173	51,47	11,52			

*p<,05

Analyzing the data displayed on the Table 9, It is seen that there is no significant difference between the organizational culture types "Clan Culture" (t=0,90; p=,370>,05), "Adhocracy Culture" (t=1,60; p=,111>,05), "Hierarchy Culture" (t=1,08; p=,280>,05) and General Organizational Culture (t=1,55; p=,123>,05) according to the administrative duties of the academicians working in the faculties of sports sciences. It is seen that there is a significant difference between the "Market Culture", which is one of the organizational culture types, according to the administrative duties of the academicians (t=2,01; p=,046<,05).

Table 11. One-Way ANOVA results on the difference between the communication skills assessment levels of the academicians according to the management style of the institution where academics work

	Management Style	N	$\overline{X}$	S	F(2-227)	p	Post Hoc (Tukey)
Communication Skills Evaluation Level	Democratic	137	109,30	6,27	11,65	,000*	1>2, 1>3
	Autocratic	50	104,36	6,57			
	Releaser	43	106,44	7,00			

*p<,05 Categories: Democratic =1; Autocratic =2; Releaser=3

Analyzing the data displayed on the Table 11, It is seen that there is a significant difference between the communication skills evaluation levels of the academicians working in the faculties of sports sciences according to the management style of the institution (F$_{(2-227)}$=11,65, p=,000<,05). This significant difference differs from the communication skills evaluation levels of the academicians whose management style is democratic (=109.30), the communication skills assessment levels of the academicians whose management style is autocratic (=104,36) and the communication skills of the academicians whose management style is liberating. This is because it is higher than the evaluation levels (=106,44).

Table 12. One-Way ANOVA results on the difference between organizational culture types according to the management style of the institution where academics work

	Management Style	N	$\overline{X}$	S	F(2-227)	P	Post Hoc (Tukey)
Clan Culture	Democratic	137	14,15	3,22	34,86	,000*	1>2, 1>3
	Autocratic	50	10,00	3,08			
	Releaser	43	11,26	3,58			
Adhocracy Culture	Democratic	137	14,27	2,92	30,41	,000*	1>2, 1>3
	Autocratic	50	10,72	3,32			
	Releaser	43	11,65	3,03			
Hierarchy Culture	Democratic	137	14,37	2,60	21,13	,000*	1>2, 1>3
	Autocratic	50	11,68	2,92			
	Releaser	43	12,65	2,55			
Market Culture	Democratic	137	13,83	2,75	18,84	,000*	1>2, 1>3
	Autocratic	50	11,12	2,92			
	Releaser	43	12,35	2,65			
General Organizational Culture	Democratic	137	56,62	9,89	35,06	,000*	1>2, 1>3
	Autocratic	50	43,52	10,67			
	Releaser	43	47,91	10,40			

*p<,05 Categories: Democratic =1; Autocratic =2; Releaser=3

Analyzing the data displayed on the Table 12, It is seen that there is a significant difference between the organizational culture types "Clan Culture" ($F_{(2-227)}$=34,86, p=,000<,05), "Adhocracy Culture" ($F_{(2-227)}$=30,41, p=,000<,05), "Hierarchy Culture" ($F_{(2-227)}$=21,13, p=,000<,05), "Market Culture" ($F_{(2-227)}$=18,84, p=,000<,05) and General Organizational Culture ($F_{(2-227)}$=35,06, p=,000<,05) according to the management style of the institution where the academicians working in the faculties of sports sciences work.

DISCUSSION

When the literature is examined within the scope of research variables, both theoretical and finding-based studies can be found. When we look at the studies on the subject in general, the two variables of this research are communication and organizational culture. It is understood that the focus is on the communication skills and self-efficacy of coaches in the field of sports, the communication skills of handball coaches, the stress perceptions and communication skills of individuals who are interested in team sports and individual sports, and the communication skills of secondary school students who do and do not do sports (Buğdaycı, 2018; Kabadayı, 2010; Mohammed, 2019; Özbalta, 2018).

Clustering academic organizations according to performance indicators and determining the types of organizational culture in clusters, the regulatory role of openness to development in the relationship between organizational culture and organizational change perception in universities, the effect of organizational culture on employee behavior, field research on the effect of organizational culture on organizational trust, organizational culture in which academic staff associate their institutions It is noteworthy that there are studies such as the effects of school administrators' leadership styles on organizational culture (Aıtımbetov, 2019; Gürbüz, 2020; Özokutucu, 2019; Polat, 2015; Şahin, 2018; Tuncer, 2020).

It has been determined that as the academicians' communication skills evaluation levels increase, their organizational culture scores show a positive change. This result has the same result with both communication (Buğdaycı, 2018; Ceylan, 2019; Kabadayı, 2010; Mohammed, 2019; Özbalta, 2018; Polat, 2015; Şahin, 2018) and organizational culture (Aıtımbetov, 2019; Gürbüz, 2020; Özokutucu, 2019; Tuncer, 2020) studies in the literature.

It has been determined that the communication skills evaluation levels of the academicians working as professors are higher than the communication skills evaluation levels of the academicians who have other titles, especially associate professor, and research assistant titles. Since people with the title of professor have been working in the same environment for many years, it can be said that they can create more effective communication environments by experiencing how their relations with people with other titles will be. The results of the studies prepared by Şahin (2018) and Tuncer (2020) and the results of the research show similarities based on variables. Basically, it is noteworthy that there is a great deal of similarity between the studies and the results of this study.

CONCLUSION

In the results of the study, it has been determined that the relations between the communication skills evaluation levels of academicians and the scores of organizational culture types and the scores obtained for the general organizational culture, and the communication skills evaluation levels of academicians have a positive effect on

organizational culture. According to the communication skills evaluation levels of academicians, there is a significant difference between being a child, title, and management styles; It was determined that there was no significant difference between gender and administrative duty status. While there was no significant difference between the cultural levels of the organizational culture types of the academicians and the culture levels of the general organizational culture, there was no significant difference between gender and being a child, but a significant difference was found according to the title and management style. At the same time, while there was a significant difference according to the adhocracy culture type in terms of working hours in the institution, no significant difference was found in other culture types. In terms of administrative duties, there was a significant difference according to the market culture type, but no significant difference was found according to other culture types.

As a result, it is seen that the more effective the communication between the academicians working in the faculties of sports sciences, the more developed, understandable, and shared the concept of culture in the organization. Again, thanks to the academicians who have effective communication skills, it can be thought that the balance between organizational culture types can be easily established and that it can affect the success of the organization in general and help prevent conflicts.

In this direction, in the light of research systematics and findings, the suggestions presented to researchers, especially academicians, are given below:

1. It can be suggested that the idea that the formation of effective communication environments depends on creating and maintaining the corporate culture is accepted by the managers.

2. To create effective communication environments, it is recommended that institutions design various platform activities by organizing sports competitions. This type of organizations can also provide the opportunity for managers to come together with academic and administrative staff, as well as providing the formation of corporate culture.

3. Based on the findings of this research, researchers can be offered the most basic proposal research models, first qualitative research, and then the types of research that they will design in a mixed model.

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ORIGINAL RESEARCH

Examination of Mental Toughness and Emotional Intelligence of The Turkish and American Professional Basketball Players

Abstract

The purpose of this study was to investigate the relationship between mental toughness (MT) and emotional intelligence (EI) of Turkish and American professional basketball players in Turkish Professional Leagues. The population target was 156 participants ($\bar{x}$age=24,35±5,48) from Turkey, and 42 participants ($\bar{x}$age =27,69±3,15) from the USA - a total of 198 professional basketball player from 17 professional teams. Participants completed "Sports Mental Toughness Questionnaire (SMTQ)" developed by Scheard et al. (2009) and "Emotional Intelligence Scale for use in Sport (EISS)" developed by Lane et al. (2009). One-Way ANOVA test was utilized in order to examine the influence of an independent variable (citizenship) on dependent variables. The relation between emotional intelligence (EI) and mental toughness (MT) was analyzed through Pearson Product-Moment Correlation Coefficient technic ($p < 0.05$). According to the results, significant differences were observed between citizenship variable in terms of EI and MT. In addition, a linear positive correlation was found while examining the relationship between the EI and MT subscales, EI social skills subscales and the MT constancy subscales. As a result of research, Turkish athletes have a higher social skills score in terms of citizenship variables, while American players have a better score in appraisal of others' emotions. In addition, American citizens showed higher mean in terms of constancy and control subscales. The results also showed that the increase in MT constancy subscale scores causes the increase in EI social skills subscale scores.

Keyword: Psychological skills, mental toughness, emotional intelligence, professional basketball players

INTRODUCTION

The concept of mental toughness and emotional intelligence, which remains a largely dormant framework for explaining performance aspects, continues to draw the interest of sport psychology researchers.

Mental toughness is an undiscovered key to quality in athletes' performance (Jones, 2002). Jones (2002) investigated the mental toughness framework with elite athletes to develop a definition and a deeper understanding of the concept. The researchers reported 12 dimensions, such as self-belief, desire/motivation, dealing with pressure and anxiety, focus (performance-related), focus (lifestyle-related), and pain/hardship factors. These findings support the idea that mental toughness is a multi-dimensional concept. Recent research in psychological sub-disciplines has also focused on emotional control which has been associated with specific skills, such as imagery, self-talk, and goal setting (Fletcher and Hanton, 2001; Thelwell and Greenlees, 2003). In turn, emotional control is an essential part of emotional intelligence and mental toughness, and thus, has a direct connection with athletic performance. Findings demonstrate that athletes can improve these psychological skills in both training and competition (Lane et al., 2009a). In addition, Nicholls et al. (2015) demonstrated that mental toughness and emotional intelligence have an extremely strong positive correlation. Therefore successful athletes' common psychological features are high mental toughness and emotional intelligence skills which makes a difference during the performance.

According to Newland et al. (2013) reported, mental toughness was a predictor of basketball team starter players. Moreover, their findings demonstrated that male basketball starter players' mental toughness is higher than a non-starter, but female participants did not significantly differ between starter and non-starters. Crombie et al. (2009) findings illustrated that emotional intelligence scores are positively associated with the team sport's performance. There was evidence that the average team ability of EI was positively related to team performance of cricketers (Crombie et al., 2009), or Zizzi et al. (2003) found that EI components were moderately associated with pitching performance of baseball. Laborde et al. (2014) also demonstrated that trait EI was non-associative to tennis serve performance. According to sport psychology literature, there was no higher number of studies regarding professional basketball players, MT or EI. High-performance adolescent athletes' common psychological feature was effectively coping skills against stressors during the performance. According to Cowden (2016), study findings demonstrated that emotional intelligence was a significant predictor of athletes' mental toughness. Moreover, mental toughness had a mediated role between emotional intelligence and coping effectiveness. The American players were chosen due to the fact that the USA is the biggest producer of basketball players in the world. Most of the players have been playing overseas and can be seen in almost every country. In Turkey, teams' management brings American players to their leagues in order to achieve success. Therefore, most of the players in local leagues do not play as much as their American teammates. This could be explained by the differences in psychological or athletic skills between local and American players, which could affect performance. In this context, the study is aimed to investigate the psychological characteristics that may cause American players to take more time on the field than Turkish players, and, therefore, try to reverse this trend.

This study aimed to investigate the relationship between emotional intelligence and mental toughness in the difference between Turkish and American professional basketball players.

METHODS

Research design

A descriptive survey model was used in the research. Survey models are a suitable model for studies aiming to describe a past or current situation in its current form (Karasar, 2006).

Population and sample of the study

The universe of this study is constituted by 926 professional players from different teams in Turkish Basketball Federation Leagues. The sample of the research consists of a total of 198 professional basketball players, table 1. shows that 63 of whom are women ($\bar{X}age$ = 23.58 ± 4.64), 135 are male ($\bar{X}age$ = 25.74 ± 5.39) from 17 teams in these leagues. As a population and sample rate, a minimum of 15% is targeted. The rate seen among male basketball players is 28%, and the rate seen among female basketball players is 16%. Because of these rates, it was assumed that the sample rate represents the targeted population. In addition, 156 of these participants ($\bar{X}age$ = 24.35 ± 5.48) are Turkish citizens, while 42 ($\bar{X}age$= 27.69 ± 3.15) are American citizens. Descriptive statistics of the basketball players participating in the study according to their positions in the game were given in Table 2. According to the results of the analysis, 38 (19.2%) players point guard, 45 (22.7%) shooting guard, 36 (18.2%) small forward, 50 (25%) power forward and 29 (14.6%) center from 198 players participated the study (Table 3.).

Table 1. Gender information

Gender	N	%
Male	135	68.2
Female	63	31.8
Total	198	100

Table 2.Citizenship information

Citizenship	N	%
Turkish	156	78.8
American	42	21.2
Total	198	100

Table 3.Players position information

Players Position	N	%
Point Guard	38	19.2
Shooting Guard	45	22.7
Small Forward	36	18.2
Power Forward	50	25.3
Center	29	14.6
Total	198	100

Personal information form

A personal information form consisting of some questions was prepared by the researchers in order to reveal the demographic information of the athletes.

Sports Mental Toughness Questionnaire (SMTQ)

The SMTQ was developed by Sheard et al. (2009) to measure the mental toughness of athletes. The questionnaire included 14 items and three subscales (confidence, constancy, and control). SMTQ was adapted to the Turkish population by Altıntaş and Koruç (2016). According to the subscales, confidence measures athletes' beliefs in their own abilities to achieve goals, constancy indicates performance responsibility and concentration skills during the performance, control is the ability of the athletes to control their emotions in internal and external negative conditions.

Emotional Intelligence Scale for use in Sport (EISS)

Based on the emotional intelligence scale developed by Shutte et al. (1998), it was adapted for the athlete population by Lane et al. (2009b) to measure the emotional intelligence abilities of athletes. Turkish athletes' population adapted by Adiloğulları and Görgülü (2015). In addition, the scale has a total of 19 items in 5 subscales (social skills, appraisal of ow emotions, appraisal of others emotions, emotional regulation, utilization of emotions).

Data collection

In the study, scales and demographic form were used as the data collection tool. The study was granted ethical approval from the Graduate School of Health Sciences Ethics Committee at Gazi University. Additionally, every participant signed a "voluntary consent form." The first part of the data collection was a personal information form that would descriptively reveal the demographic information of athletes, the second part was a sport mental toughness questionnaire, and the last part was an emotional intelligence scale for use in sport. Each and every single of the measures used English and Turkish. Data was collected before training, and the researcher used the protocol of individual or group face-to-face survey method procedure (Büyüköztürk et al., 2016). Before the data collection, the researcher explained information about the study process to the participants separately, in Turkish for Turkish athletes and in English for American athletes. The athletes who voluntarily accepted and participated in the application answered the personal information form, the emotional intelligence inventory in sports, and the mental endurance inventory in sports. Participants who did not want to continue working during the application were free to leave.

Data analysis

Statistical analysis of the data set obtained from the research was made in the IBM SPSS 21.0. (SPSS Inc., Chicago, IL, USA) package program. Frequency and percentage calculations were made for the demographic characteristics of the research group. In addition, the distributions of the variables were examined, evaluating the normality and homogeneity of the distributions, it was concluded that the distributions showed parametric value. Therefore,

in addition to descriptive statistics, inferential statistics were also used. One Way ANOVA was used to compare between groups, and Pearson Correlation was used to explore the relationship between parameters in each group. The analysis of the data was evaluated at 95% confidence interval and $p < 0.05$ significance level.

FINDINGS

The correlation between emotional intelligence and mental toughness subscale scores were shown in Table 4. According to Table 4, a significant relationship was found between emotional intelligence, social skills, and the constancy of mental toughness (r =, 158; p <0.05*). This relationship was positively, linearly and weakly correlated. According to results, data demonstrated that while one of the variables increases, while another increase. According to Table 5, there was no significant difference in terms of the citizenship variable in the subscales of emotional intelligence, appraisal of own emotions, emotional regulation, and utilization of emotions. However, there was a significant difference according to the appraisal of others' emotions and social skills by the citizenship variable [(F = 21.0), (F = 7.29); p <0.05)]. According to arithmetic averages of results demonstrated that American citizen players had a higher average in the subscale of the appraisal of others' emotions than the Turkish citizen players. Additionally, Turkish citizen players have had a higher average than the American participants in social skills. According to Table 5, the confidence subscale was significantly different in terms of the citizenship variable. Moreover, findings provide that was positively significant differences that constancy and control of mental toughness. [(F = 10.1), (F = 11.9); p <0.05)]. Arithmetic averages demonstrated that American participants have a higher mean constancy and control subscales than Turkish participants.

Table 4. Correlation between emotional intelligence and mental toughness (n=198)

Subscales	1	2	3	4	5	6	7
1. Appraisal of others' emotions							
2. Appraisal of own emotions	.40**						
	.00						
3. Emotioal regulation	.09	.20**					
	.20	.00					
4. Social skills	.30**	.32**	.33**				
	.00	.00	.00				
5. Utilization of emotions	.28**	.42**	.47**	.35			
	.00	.00	.00	.00			
6. Confidence	-.02	-.02	.05	.04	-.01		
	.72	.82	.46	.61	.13		
7. Constancy	.11	-.03	.06	.16*	.14	.42**	
	.11	.68	.41	.03	.06	.00	
8. Control	.10	-.04	-.10	.01	.04	.31**	.55**
	.15	.56	.16	.92	.53	.00	.00

*p<0,05. **p<0,01. ***p<0,001 p>0,05

Table 5. Means, standart deviations and One-Way Anova Test results for citizenship variable

	Subscales	Citizenship	N	Mean	Std. deviation	F
Emotional Intelligence	Appraisal of others emotions	Turkish	156	14.6	.190	21.0***
		American	42	16.4	.365	
	Appraisal of own emotions	Turkish	156	11.8	.150	.010
		American	42	11.8	.288	
	Emotional Regulation	Turkish	156	7.58	.121	.592
		American	42	7.78	.234	
	Social Skills	Turkish	156	11.3	.158	7.29**
		American	42	10.4	.304	
	Utilization of emotions	Turkish	156	22.7	.268	2.15
		American	42	23.5	.517	
Mental Toughness	Confidence	Turkish	156	3.22	.031	.074
		American	42	3.32	.060	
	Constancy	Turkish	156	3.18	.037	10.1**
		American	42	3.44	.072	
	Control	Turkish	156	2.62	.045	11.9***
		American	42	2.95	.086	

*p<0,05. **p<0,01. ***p<0,001 p>0,05

DISCUSSION AND CONCLUSION

This study aimed to investigate the relationship between EI and MT in the difference between Turkish and American athletes in terms of citizenship variable. Sport psychology literature supported a significant relationship between athletes' performance, emotional intelligence, and mental toughness (Cowden, 2016; Newland, 2009; Kopp and Jekauc, 2018).

According to Kopp and Jekauc (2018), the conceptualization of EI (ability model, trait model, or mixed-model model), encouraged regarding the value of EI as a possible predictor in sports performance. Moreover, studies demonstrated that MT is one of the predictors of athletes' psychological performance (Yazıcı, 2019). These features support the vital concept of emotional control of athletes.

In our study, it was found that constancy skill, which is a decisive factor of mental toughness, has a significant relationship with social skills, which are also a vital factor of emotional intelligence. Accordingly, it is revealed that as the level of constancy increases, the level of social skills also increase. According to Sheard (2013), mental toughness constancy is defined as "taking responsibility, concentrating and struggling in line with the determined goals". According to Goleman (1998), social skills help to manage emotions in relationships properly and perceive relationship networks and social situations correctly. To explain, this means to be in fluent interaction, to use these skills to persuade and lead people, to provide consensus and resolution in conflicts, to cooperate and teamwork. In addition, findings by Cowden et al. (2014) demonstrated that EI was a predictor of athletes' mental toughness.

In literature, the relationship between emotional intelligence and ethnicity was examined by Van Rooy et al. (2005) in a study involving 50 African Americans, 135 Latin Americans, 60 Caucasian, and 30 participants from other ethnic origins. According to the findings, a significant difference was observed between ethnic origins, and Latin American descent was reported to have higher emotional intelligence scores (Van Rooy, Alonso, and

Viswevaran, 2005). We cannot provide clear information that the study conducted by Van Rooy, Alonso, and Viswevaran (2005) demonstrates the parallelism with our study because the sample group was not athletes, and the ethnic origin variable was examined in their research. Therefore, it is difficult for us to comment due to the limited data we have on the subject. According to the results of our study, it shows that American participants have higher scores for the constancy, and control than Turkish participants. When the related literature was examined, there were no findings supporting our study results. However, mental toughness has a structure that interacts positively with the development of psychological skills, and psychological skills can be developed with mental training (Altıntaş and Akalan, 2008; Erdoğan and Kocaekşi, 2015). Slack et al. (2015) subjected the Mental Toughness Education and Training Program (MTETP) to early career professional referees. Referees' self-reported mental toughness and external referee performance ratings were higher after the intervention compared to baseline scores. After that, intervention program showed that participants had higher psychological performance scores. Besides, athletes in the sports system in the USA might have support by psychological performance specialists, which may be related to their high results. As a matter of fact, the concept of mental toughness is in a structure that can be affected by different dynamics (Gucciardi and Gordon, 2009; Bull, Shambrook, James, and Brooks, 2005). Although there is no significant difference in the confidence subscale, American athletes have a higher mean than Turkish athletes. Therefore, American athletes had a higher belief in their individual performance, both in training and game. The main reason why American athletes had taken more time during entire games than other players in European and World basketball leagues may be the contribution of individual performance skills to team performance. Moreover, Newland et al. (2013) reported that basketball game starter players had higher mental toughness scores than non-starters. In the study, American players had significantly different constancy and control components scores in comparison to Turkish players. Thus, psychological performance skills could be the reason that almost all American players were starter players in their teams. Therefore, our results support that effective players of basketball (such as starters) had differences in mental toughness. Cowden (2017) reviewed the literature on mental toughness, competitive standard, achievement level, and performance in sport. According to findings of achievement level, one study revealed that mentally tough tennis athletes were ranked higher using athlete-rated mental toughness (Cowden, 2016), but another study by Cowden et al. (2014) did not report any relationship achievement and mental toughness. Recent studies still did not explain performance relation of emotions and mental toughness. Besides, Kopp and Jekauc's (2018) meta-analytical research results illustrated there was not much research to explain the nature of EI differences on the court because there were few studies on professional basketball components.

Coaches or trainers must receive education about improving the athletes' EI and MT components that could help athletes develop in long and short term (Cowden, et al., 2020) because psychological performance is one of the criteria that differentiates athletes from one another.

Finally, psychological components such as the appraisal of the emotions of others, social skills such as constancy and emotional control skills might vary between domestic and international players. Thus, there has to be research on these emotional and mental skills and court performance, which might be interrelated as American players' game time is in general

higher than Turkish players'. Therefore, future research is needed to examine these performance differences and their relationship with psychological performance or any other components.

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Declarations

Ethics

Ethics Committee of Gazi University consent number of '2016-604.01.02' received to perform the study.

Conflict of Interest

All authors of the article declare that there is no conflict of interest

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