Turkish Journal of Sport and Exercise /
Türk Spor ve Egzersiz Dergisi
http://dergipark.gov.tr/tsed
Year: 2021 - Volume: 23 - Issue: 3 - Pages: 328-333
DOI: 10.15314/tsed.901117

Turkish Journal of Sport and Exercise
Türk Spor ve Egzersiz Dergisi
ISSN: 2147-5652
https://dergipark.org.tr/tr/pub/tsed

An Examination of Cultural Intelligence Changes of University Students Participating in Sport-Based Erasmus Plus Youth Projects

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(Received): 22/03/2021 / (Accepted): 30.12.2021

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Abstract

This research aims to evaluate the changes in the cultural intelligence among those students who participate in Erasmus Plus Youth Projects based on sport. The group of the research consists of 39 students who study different departments in Nevşehir Hacı Bektaş Veli University and have not been abroad by any reason before. Cultural Intelligence Scale, developed by Ang et al. and adapted into Turkish by Gökhan Arastaman, has been implemented on the research group through a pre-test before their participation in the projects and a post-test after their participation in the project. For the analysis of the data collected during the research, SPSS 21.0 has been used. In the analysis of the data such descriptive statistics as arithmetic mean, frequency, standard deviation and percent values have been taken into consideration. Whether the data of the both scale distributed normally has been evaluated in order to determine if parametric analyses would be implemented. The research data have been observed to distribute normally. Accordingly, parametric analyses have been decided to be implemented to see if the data vary according to the demographic traits of the participants. T test has been implemented for the evaluation between two groups. Data of the analysis has revealed that participation in the Erasmus Plus Youth Project based on sport has a positive impact on the cultural intelligence, with all its subdimensions, of the university students.

Keywords: Sport, Erasmus Plus, Cultural Intelligence.

INTRODUCTION

In a world that is becoming more and more global with each passing day, the coexistence of different cultures, the designs of the era, emerges as a system that is expected to be realized (8). All of the cultural features that distinguish individuals and societies that differ from each other with different dimensions can be expressed as cultural differences.

Individuals with different cultural backgrounds always try to stay in touch, live together, work under one roof and create common values. In this respect, there are many methods for managing cultural differences and for individuals to perceive cultural variables and keep up with the communication that emerges within these variables. One of these is cultural intelligence. Cultural intelligence enables individuals to accept and adapt

to cultural diversity, to communicate with individuals from different cultures, and to develop appropriate reaction skills against different cultural behaviors. A high level of cultural intelligence is required to adapt to a variety of cultural environments. Thanks to cultural intelligence, individuals can easily adapt to multicultural life and lead a high quality of life.

Cultural intelligence can be expressed as a type of intelligence discovered as a result of different studies on social intelligence. Cultural intelligence is a kind of intelligence that is respectful, understanding, tolerant and non-prejudiced towards different cultures and individuals in these cultures, and provides the opportunity to make sense of different states and movements caused by cultural diversity. Cultural intelligence has four main components: cognitive, metacognitive, motivational and behavioral cultural intelligence. Thanks to cultural intelligence, people and societies can easily attribute meaning to the behaviors of individuals from different cultures (8). Cultural intelligence is a mechanism that facilitates individuals' adaptation to different cultures (9). Strong cultural intelligence creates facilitating effects on individual and organizational issues such as increasing mutual communication and interaction in different cultural situations, eliminating conflict between individuals from different cultures, creating a functional teamwork environment and expanding the capacity for mutual understanding (11). In this context, it can be stated that the ability of individuals from different cultures to communicate effectively with each other has become one of the most important skills of today.

Erasmus Plus Programs are carried out in order to increase intercultural communication and interaction and establish cooperation between countries in education, social, health, sports, technology and many other issues to realize these elements at a young age, and to increase the capacity of tolerance to differences within the framework of mutual understanding (3). Erasmus Plus Program includes the fields of education, training, youth and sports. With the Erasmus Plus Program, activities are offered to individuals to acquire new intercultural skills, to strengthen their self-development (13) and to continue their future lives in different countries, different cultures and different societies. During the program, learning spaces do not consist only of classrooms; young people continue to learn while looking for a place to shelter themselves, trying to understand the language of the country they are in, making new friendships, getting lost on the street, exploring libraries. In this regard, the program has high social content (12). The program keeps all participants in intercultural communication and interaction, even if not at the same level. Individuals participating in the program are in a learning process in which they are constantly active and in an uninterrupted intercultural communication throughout the program.

In this study, "the positive and negative effects that may arise in the cases of cultural intelligence of students studying at university level" has been examined with the purpose of examining the changes in the cultural intelligence phenomenon as a result of the participation of undergraduate students studying at Nevşehir Hacı Bektaş Veli University (NHBVÜ) in the 2018-2019 academic year in the sports-based Erasmus Plus youth project and revealing whether the students differ according to some personal variations.

MATERIALS AND METHODS

This research is structured using quantitative research methods and techniques. The research group consists of 39 students who studied at NHBVU who went to Croatia, Portugal and Greece with the sports-based Erasmus Plus youth project in 2018 and who have not traveled abroad for any reason before. The personal information form presented by the researcher includes information about the students' gender and known foreign language variables.

Within the scope of the research, the cultural intelligence scale was applied to the students. Cultural Intelligence Scale was developed by Ang et al. (1) and adapted to Turkish by Gökhan Arastaman (2). The scale originally contains 20 items. The scale has four sub-dimensions: Metacognitive, Cognitive, Motivational and Behavioral. Items 1, 2, 3, 4 measure Metacognitive Cultural Intelligence, Items 5, 6, 7, 8, 9, 10 measure Cognitive Cultural Intelligence, Items 11, 12, 13, 14, 15 measure Motivational Cultural Intelligence, Items 16, 17, 18, 19, 20 measure Behavioral Cultural Intelligence. 5-Likert type scale was answered by the participants. The average of the answers given by the participants is planned to reflect the level of ability they have in the relevant dimension of cultural intelligence. Higher scores will indicate higher related skill.

The data collection tools used in the study were applied to the university students who constituted the research group. The questionnaire applied before going abroad was evaluated as pre-test, and the questionnaire applied after going abroad was evaluated as the post-test.

SPSS 21.0 program was used to analyze the data collected in the study. In the analysis of the research data, descriptive statistics such as arithmetic mean, frequency, standard deviation and percentage values were examined. In order to determine whether parametric analysis will be performed for this study, it was first examined whether the data of both scales showed normal distribution. As a result of the analysis, kurtosis value was found as -0.437 and skewness value as -0.374.

The skewness and kurtosis values obtained for the cultural intelligence scale as a result of the normal distribution analysis are found to be between -2 and +2. Accordingly, we can say that the research data show a normal distribution (7). According to these results, parametric analysis was deemed appropriate to determine whether the research data differ according to the demographic characteristics of the participants. T test was applied for the evaluations between the two groups.

RESULTS

Table 1. Demographic Information

		f	%
Gender	Female	16	41,0
	Male	23	59,0
Faculty	Literature	2	5,1
	Education	3	7,7
	Nursing	1	2,6
	Law	1	2,6
	English Teaching	7	17,9
	Management	3	7,7
	Engineering	8	20,5
	Sports Sciences	3	7,7
	History	3	7,7
	Medicine	2	5,1
	Tourism	2	5,1
	International Relations	4	10,3

41.0% of the students participating in the study are women and 59.0% are men. 20.5% of the students study in engineering, 17.9% in English teaching, 10.3% in international relations and 7.7% in sports sciences. Students of other departments are less distributed.

Table 2. Metacognitive Dimension Mean and Standard Deviation Values

	N	PRE-TEST		POST-TEST	
		$\bar{X}$	SS	$\bar{X}$	SS
1. I am aware of the cultural information I use when interacting with people from different cultural backgrounds.	39	2,77	0,48	3,67	0,48
2. I adjust my cultural knowledge when interacting with people from a culture unfamiliar to me.	39	2,87	0,52	3,59	0,55
3. I am aware of my cultural knowledge that I use in cross-cultural interactions.	39	2,77	0,48	3,67	0,53
4. I check the accuracy of my cultural information when interacting with people of different cultures.	39	2,95	0,46	3,77	0,54
Total		**2,84**	**0,49**	**3,67**	**0,52**

For the metacognitive dimension consisting of 4 items, the pre-test average x = 2.84 ± 0.49, while the post-test average was x = 3.67 ± 0.52. Accordingly, we can say that the cultural intelligence of the students belonging to the metacognitive dimension significantly increased after going abroad.

Table 3. Cognitive Dimension Mean and Standard Deviation Values

	N	PRE-TEST		POST-TEST	
		$\bar{X}$	SS	$\bar{X}$	SS
5. I know the legal and economic systems of other cultures.	39	2,95	0,72	3,92	0,53
6. I know the rules of other languages (e.g. vocabulary, grammar).	39	3,36	0,96	4,13	0,70
7. I know the religious beliefs and cultural values of other cultures.	39	3,05	0,65	4,05	0,39
8. I know the marriage structures of other cultures.	39	2,26	0,59	2,36	0,58
9. I know the arts and crafts of other cultures.	39	2,97	0,71	3,90	0,55
10. I know the way other cultures express non-verbal behavior (gestures and facial expressions).	39	3,03	0,90	3,95	0,69
Total		**2,94**	**0,76**	**3,72**	**0,57**

The pre-test average for the cognitive dimension of cultural intelligence, which consists of 6 items, was x = 2.94 ± 0.76, while the post-test average was x = 3.72 ± 0.57. Accordingly, it can be said that there is a significant increase in the cultural intelligence of the students participating in the study belonging to the cognitive dimension after going abroad.

Table 4. Motivational Dimension Mean and Standard Deviation Values

	N	PRE-TEST		POST-TEST	
		$\bar{X}$	SS	$\bar{X}$	SS
11. I enjoy interacting with people from different cultures.	39	4,15	0,63	4,64	0,54
12. I feel confident to mingle with people of a culture foreign to me.	39	3,46	0,79	4,28	0,69
13. I am confident in dealing with the stress I will experience in the process of adapting to a new culture.	39	3,26	0,99	4,13	0,70
14. I like to live in a culture that I am a foreigner to.	39	3,62	0,81	4,31	0,57
15. I am confident in getting used to shopping conditions in a different culture.	39	3,26	0,68	3,92	0,77
Total		**3,55**	**0,78**	**4,26**	**0,65**

For the motivational dimension of cultural intelligence, which consists of 5 items, the pre-test average is x = 3.55 ± 0.78, while the post-test average is x = 4.26 ± 0.65. We can say that there is a significant increase in the cultural intelligence of the students belonging to the motivational dimension after they go abroad.

Table 5. Behavioral Dimension Mean and Standard Deviation Values

	N	PRE-TEST		POST-TEST	
		$\bar{X}$	SS	$\bar{X}$	SS
16. I use my speaking behavior (e.g. tone of voice, accent, etc.) according to the needs of intercultural communication.	39	3,08	0,77	4,08	0,70
17. I pause or remain silent depending on the situation to adapt to different intercultural situations.	39	2,38	0,85	2,00	0,73
18. I can change my speaking rate according to the needs of intercultural interaction.	39	3,08	0,74	3,92	0,66
19. I can change my non-verbal behavior according to the requirements of intercultural interaction.	39	3,13	0,73	3,92	0,70
20. I can change my facial expressions according to the needs of intercultural interaction.	39	3,18	0,68	4,03	0,71
Total		**2,97**	**0,76**	**3,59**	**0,70**

For the behavioral dimension of cultural intelligence, which consists of 5 items, the pre-test mean is x = 2.97 ± 0.76, while the post-test average is x = 3.59 ± 0.70. We can say that there is a significant increase in the cultural intelligence of the students belonging to the behavioral dimension after they go abroad.

Comparison of Pre-Test and Post-Test Results of Cultural Intelligence Scale

Table 6. T Test Analysis Results Showing Pre-Test and Post-Test Comparison of Students' Cultural Intelligence Level

	Abroad	N	$\bar{X}$	SS	P
Metacognitive	Yes	39	3,67	0,46	0,000 **
	No	39	2,84	0,43	
Cognitive	Yes	39	3,72	0,35	0,000 **
	No	39	2,94	0,61	
Motivational	Yes	39	4,26	0,53	0,000 **
	No	39	3,55	0,68	
Behavioral	Yes	39	3,59	0,51	0,000 **
	No	39	2,97	0,53	

According to the results of the t test analysis, the levels of the metacognitive cultural intelligence dimension (x = 2.84), the levels of cognitive cultural intelligence dimension (x = 2.94), the levels of motivational cultural intelligence dimension (x = 3, 55), the levels of cultural intelligence dimension (x = 2.97) showed a significant increase after coming from abroad (x = 3.67) (x = 3.72) (x = 4.26) (x = 3.59).

Reliability Analyses

The alpha coefficient (Cronbach α) varies between 0 and 1 and values of 0.80 and above are satisfactory internal consistency reliability.

Table 7. Cronbach A Internal Consistency Values Obtained In This Study For The Cultural Intelligence Scale

	Cronbach α	N of Items
Cultural Intelligence Scale	0.946	20
Metacognitive dimension	0.948	4
Cognitive dimension	0.881	6
Motivational dimension	0.918	5
Behavioral dimension	0.778	5

The Cronbach α internal consistency value of the cultural intelligence scale consisting of 20 items used in this study was determined as 0.946. The values obtained show that the reliability of the scale is quite high.

DISCUSSION

In this study, it can be said that there is a high level of positive correlation between the cultural intelligence of the students who are subject to the research before participating in an Erasmus Plus youth project abroad and their level after participating in the project. Similarly; In various studies conducted by Ang and Van Dyne (1), Eisenberg et al. (5), Engle and Crown (6), Wood (15) and Köse (10), it was also concluded that the experience abroad was positively associated with cultural intelligence level. Through this project, it can be stated that the students' presence abroad improves their capacity to recognize and understand different cultures, and increase their competence to respect different cultural values and live with these values at the same time.

Yağcı et al. (14) stated that student and youth exchange programs abroad, such as the Erasmus Program, directly contribute to the development of cultural intelligence. Köse (10) stated that the time period spent abroad with the Erasmus Program did not affect metacognitive and motivational cultural intelligence, but negatively affected cognitive and behavioral cultural intelligence. The reason for this negative change is thought to be that the longer the time spent abroad, the less the ability to recognize and understand cultural differences. It can be said that a positive significant change occurred in all sub-dimensions of the cultural intelligence of the students participating in the study, since this research includes youth projects that are among the shorter-time programs compared to the studies involving programs with longer periods. In the study by Demirel and Demir (4); A positive and significant relationship has emerged in the cultural intelligence levels of all university students abroad with the Erasmus Program learning mobility, however, considering the gender variable, it is seen that the level of development in all sub-dimensions of cultural intelligence in women has a higher average score than the level of development in men. When an overall assessment is made; although various results have been obtained in similar studies, we can state that the results of the studies in this field are in parallel with our research.

As a result of our research, it is easier to develop and actively use cultural intelligence as a result of intercultural interactions. Individuals with cultural intelligence will be able to overcome the problems they may encounter in multicultural environments and see cultural diversity as a beneficial factor both personally and socially. Since individuals can easily adapt to societies that are foreign to them, thanks to their cultural intelligence, it can be predicted that they will gain added values such as education, finding a job and establishing a new life. Individuals with high levels of cultural intelligence are generally thought to be more successful, more social, more understanding and more intellectual throughout their lives. For this reason, participation in youth projects carried out within the scope of Erasmus Plus Program is of great importance to the development of cultural intelligence and studies are carried out to increase this participation.

In the context of the importance of coexistence with people from different cultures in the development of the phenomenon of cultural intelligence, environments and opportunities with more international programs and projects can be created at universities, especially for university students.

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