

International Journal of Educational Methodology

Volume 6, Issue 3, 603 - 612.

ISSN: 2469-9632 http://www.ijem.com/

The Relationship between Effective Communication Skills and Verbal **Intelligence Levels of Faculty of Sport Sciences Students**

Bijen Filiz*

Afyon Kocatepe University, TURKEY

Received: February 27, 2020 • Revised: June 5, 2020 • Accepted: August 10, 2020

Abstract: The purpose of this study was to examine the relationship between effective communication skills and verbal intelligence levels of Faculty of Sports Sciences students according to variables such as gender, department, age, academic grade point average (GPA), and way of taking the Effective Communication Skills (ECS) course. The correlational survey model was used in the research. The subjects were 230 volunteer university students, chosen by simple random sampling method. The Multiple Intelligence Areas Inventory and The Effective Communication Skills Scale were used. The result showed that there was a significant difference in favor of female students in terms of effective listening by gender. A significant difference was found in favor of the Recreation Department in terms of self-recognition/self-disclosure, I-language, and verbal intelligence sub-dimensions. A significant difference was found in favor of 21-23 age in self-recognition/self-disclosure sub-dimension by age variable. According to academic GPA, a significant difference was found in the verbal intelligence sub-dimension in favor of those whose academic GPA was 3.15-3.57. In addition, according to way of taking the ECS course, a significant difference was found in favor of the compulsory course in the subdimensions of ego supportive language, self-recognition/self-disclosure, and I-language. Besides, it was determined that there is a positive and significant relationship between students' effective communication skills and verbal intelligence levels. As a result, it has been determined that, in terms of the development of communication skills, it is important that the ECS course is included in the curriculum as part of the compulsory course.

Keywords: Active-participative listening, ego supportive language, empathy, physical education and sports, self-recognition.

To cite this article: Filiz, B. (2020). The relationship between effective communication skills and verbal intelligence levels of faculty of sport sciences students. International Journal of Educational Methodology, 6(3), 603-612. https://doi.org/10.12973/ijem.6.3.603

Introduction

In order for people to communicate with each other and to express their wishes, they must be in verbal or written communication. Contact, while it is provided by speaking and using language skills in normal individuals, it is done in different ways (sign language, etc.) in individuals with disabilities. However, regardless of the conditions, intelligence and communication are important elements for expressing positive or negative emotions, solving problems, ensuring environmental compatibility, and interpersonal agreement. When the education dimension is taken into consideration, it is expected that the verbal intelligence and effective communication skills of the university students will be developed so that they can develop in all aspects and shed light on the future.

While intelligence is defined as the capacity of living things to adapt to the environment (Piaget, 1952); it can also be defined as the ability to adapt to the environment in different situations, to think abstractly, and to solve problems (Patton et al., 1986). Multiple Intelligence Theory, which has recently increased in popularity with the fields of education and psychology and developed by Howard Gardner in 1983, is a theory that argues that there are different intelligence areas and these intelligence areas are innate (Gardner & Hatch, 1989). In Gardner's theory, he defines intelligence as the ability to solve problems (Gardner, 1993). In theory, there were eight different intelligence fields: verbal/ linguistic, logical-mathematical, musical, bodily-kinesthetic, naturalist, visual/ spatial, interpersonal, and intrapersonal (Gardner, 1997), but he added the existential intelligence in 2011. There are nine types of intelligence in total (Gardner, 2011). According to Gardner, one or more of these types of intelligence can be more effective in the individual (Gardner & Hatch, 1989).



Correspondence:

Bijen Filiz, Afyon Kocatepe University, Afyonkarahisar, Turkey. 🖂 bijenfiliz@gmail.com

Looking at Gardner's intelligence fields; verbal/ linguistic intelligence is the ability to understand, use, and manipulate written or spoken words productively. Logical-mathematical intelligence involves the elevated skill of manipulating and understanding numbers and the ability to reason effectively. Musical intelligence is the ability to appreciate, distinguish, compose, and perform in various musical forms. Bodily/ kinesthetic intelligence is the proficiency of using the entire body to express ideas and feelings and the competence of using the body to produce or transform things. Naturalistic intelligence is the ability to appreciate, categorize, classify, explain, and connect to things encountered in nature. Visual/ spatial intelligence is characterized by being able to see an image or situation and quickly assess areas that could be changed to transform or improve the appearance. Interpersonal intelligence is the proficiency of an individual in perceiving the moods, aims, motivations, and emotions of others. Intrapersonal intelligence is having a positive self-concept and life direction which is intrinsically grounded. Existential intelligence is the appreciation of spirituality and understanding questions about life (Gardner, 1983; 1999; 2011).

In the research, the verbal/ linguistic intelligence field in the Multiple Intelligence Theory was discussed. The competencies of individuals with verbal intelligence, such as reading, writing, and speaking, are at a higher level than the competencies they have developed in other fields. Individuals with high verbal intelligence can use words more effectively in oral or written form (Armstrong, 2009). It is thought that individuals with verbal/ linguistic intelligence can gain their communication skills afterward. Intelligence is anticipated to be a basic requirement for effective and healthy communication.

Communication is defined as the transfer of emotions and thoughts between at least two people with features such as written, verbal or visual information exchange, perception and thinking skills, and receiving the received message by the recipients (Obamiro, 2011; Taylor, 2005; Yetim & Cengiz, 2012). According to Anderson-Butcher et al. (2003), communication is a process enabling us to understand others and enabling others to understand us. Communication skills are expressed as the effective listening of individuals, the sensitivity of the receiver to the messages transmitted and the response (Baker & Shaw, 1987; Egan, 1994). In the literature, different types of communication are mentioned verbally and non-verbally (Taylor, 2005), it is mentioned that communication skills can be acquired later (Ersanli & Balci, 1998), but it is not seen that a consensus definition has been made regarding the concept of effective communication (Korkut-Owen & Bugay, 2014). Effective communication skills in line with the studies conducted; it can be defined as having effective listening, empathy, and having the ability to express yourself correctly. Korkut (2005) stated that effective communication skills can facilitate the lives of every person regardless of their profession and feature. Gulbahar and Aksungur (2018) emphasized that teachers play an active role in solving problems depending on their communication. Therefore, it can be said that having sufficient communication skills facilitates the lives of individuals and increases the quality in bilateral agreements and social context.

It is obvious that it is important for university students to express themselves to another person, considering that they will lead future generations in education, economy, culture, art, sports, and many other fields. As a matter of fact, due to the socialization and socialization dimensions, especially verbal intelligence and communication skills of the Faculty of Sport Sciences (FSS) students gain importance. In this study, it was aimed to examine the relationship between effective communication skills and verbal intelligence levels of the FSS students. According to the variables of academic GPA and the way of taking the Effective Communication Skills course, there is no study on communication skills and verbal intelligence and it is aimed to shed light on other studies to be conducted.

Research Goal

The purpose of this study was to examine the relationship between effective communication skills and verbal intelligence levels of Faculty of Sports Sciences students according to variables such as gender, department, age, academic grade point average (GPA), and the way of taking the Effective Communication Skills course. According to the purpose of the research, the research questions are as follows:

- 1. Is there a difference between students' effective communication skills and verbal intelligence levels by gender?
- 2. Is there a difference between students' effective communication skills and verbal intelligence levels by department?
- 3. Is there a difference between students' effective communication skills and verbal intelligence levels by age?
- 4. Is there a difference between students' effective communication skills and verbal intelligence levels by academic GPA?
- 5. Is there a difference between students' effective communication skills and verbal intelligence levels by the way of taking the Effective Communication Skills course?
- 6. Is there a relationship between students' effective communication skills and verbal intelligence levels?

Methodology

In this section, the research model, participants, data collection procedure, data collection tools, and data analysis are included.

Research Model

In the research, the correlational survey method, one of the quantitative survey methods, was used. In the correlational survey method, it is aimed to determine the presence or degree of coexistence between two and more variables (Karasar, 2009).

Participants

The research group consisted of a total of 230 volunteer students, 111 (48.3%) female and 119 (51.7%) male, selected according to the simple random sampling method, studying at the Faculty of Sport Sciences (FSS) of the Afyon Kocatepe University during the fall semester of the 2019-2020 academic year. The demographic information of the students is shown in Table 1.

Variable	Level	Ν	%
Gender	Female	111	48.3
Genuer	Male	119	51.7
	18-20	94	40.9
Age	21-23	103	44.8
-	24 and over	33	14.3
	Teaching	91	39.6
Department	Coaching	64	27.8
	Recreation	75	32.6
	3.58- 4.00 (90-100)	4	1.7
	3.15-3.57 (80-89)	16	7.0
Academic GPA	2.72-3.14 (70-79)	80	34.8
	2.29 -2.71 (60-69)	101	43.9
	1.86-2.28 (50-59)	29	12.6
The way of taking Effective	Compulsory	49	21.3
Communication Skills	Elective	19	8.3
course	I did not take it	162	70.4

Table 1. Demographic information of the students participating in the research

When Table 1 is examined, A total of 230 FSS students, 111 female (48.3%) and 119 male (51.7%), participated in the study. 94 (40.9%) of students are 18-20 years old, 103 (44.8%) are 21-23 years old, and 33 (14.3%) are 24 and over years old. 91 (39.6%) of the students are in Physical Education and Sports Teaching, 64 (27.8%) in Coaching Education, and 75 (32.6%) in Recreation Department. 4 (1.7%) of the students have 3.58-4.00, 16 (7.0%) 3.15- 3.57, 80 (34.8%) 2.72- 3.14, 101 (43.9%) 2.29 -2.71, and 29 (12.6%) 1.86-2.88 academic GPA. Effective Communication Skills course takes 49 (21.3%) of students as compulsory, 19 (8.3%) of students as elective, and 162 (70.4%) of students as did not take it.

Data Collection Procedure

Scale use permissions were obtained from the authors prior to the study. Before collecting data, students were informed about the purpose of the research and data collection tools. It was reported to the students that the participation in the study was voluntary and that the results of this study would be used only for scientific purposes.

Data Collection Tools

In the research, "The Effective Communication Skills Scale" developed by Bulus et al. (2017) and "The Multiple Intelligence Areas Inventory" developed by Armstrong (1993) and adapted into the Turkish language by Saban (2002) were used.

The Effective Communication Skills Scale (ECS-S)

The scale consisting of a total of 34 questions and five sub-dimensions (Ego supportive language, active-participative listening, self-recognition/self-disclosure, empathy, and I-language) is a 5-point Likert type. Cronbach's Alpha values of the sub-dimensions of the scale were reported between .72 and .85, and the total was reported as .82.

In this current research, Cronbach's Alpha values for the sub-dimensions of the scale; it was found to be .65 for ego supportive language, .68 for active-participative listening, .61 for self-recognition/self- disclosure, .70 for empathy, and .65 for I-language. Cronbach's Alpha value of all sub-dimensions was calculated as .79.

The Multiple Intelligence Areas Inventory

It consists of eight sub-dimensions (verbal, logical/mathematical, visual/spatial, musical/rhythmic, bodily/kinesthetic, naturalist, interpersonal, and intrapersonal intelligence) and a total of 80 questions. Cronbach's Alpha value for all subdimensions of the scale was found as .83 by Saban (2002). In this current study, ten items were used related to verbal intelligence. The Cronbach's Alpha value of the verbal intelligence sub-dimension was calculated as .90.

Data Analysis

In the evaluation of the data obtained from the research, frequency and percentage analysis was used for the findings of the demographic characteristics of the students, and Variance analysis (One-Way ANOVA, independent t-test) was used to compare the mean scores in unrelated measurements. In addition, Tukey test was used to determine the significant difference, and Pearson Correlation Multiplication analysis was used to examine the relationship between the relationship effective communication skills and verbal intelligence.

In the study, there is a possibility of a common method variance (CMV) tendency because the variables are evaluated with the same scale, at the same time and by the same people. One of the most common methods of determining whether this trend is in question is Harman's single-factor test (Podsakoff et al., 2003). In this context, all items used to measure effective communication skills and verbal intelligence levels were subjected to non-rotation factor analysis. In this case, in order to speak of the common method hypothesis, (a) the first factor should explain a significant part of the variance alone or (b) a single factor should come out as a result of the analysis (Podsakoff et al., 2003).

In this context, a total of 44 statements related to two variables were subjected to non-rotation factor analysis. As a result of the analysis, a total of 10 sub-dimensions with eigenvalues higher than 1 were determined. The total variance explained by all sub-dimensions is 64.720%. The variance of the first sub-dimension is 23.832%, the variance of the second sub-dimension is 8.395%, the variance of the third sub-dimension is 7.372%, the variance of the fourth sub-dimension is 5.721%, the variance of the fifth sub-dimension is 4.444%, the variance of the sixth sub-dimension is 4.143%, the variance of the second sub-dimension is 2.651%, the variance of the tenth sub-dimension is 2.372%. The results obtained show that there is no CMV problem in the study.

Before using the parametric tests in the study, when histogram and distribution graphs were examined, it was seen that the curve showed a symmetric distribution, and the Skewness and Kurtosis values were between -1.5 and +1.5 (Tabachnick & Fidell, 2013). In addition, the homogeneity of the sample was examined by Levene test according to gender, department, age, academic GPA, and the way of taking the Effective Communication Skills course, and p value was higher than .05. As a result of the analysis, it was seen that the data showed normal distribution and the group variances were equal. According to the results, it was decided that the data set is suitable for parametric tests.

Findings / Results

The students' t-test results regarding effective communication skills and verbal intelligence levels according to gender are given in Table 2.

			-	-	-	-
Sub-dimensions	Gender	Ν	$\overline{\mathbf{X}}$	SD	t	р
Ego supportive	Female	111	23.77	3.77	.657	.51
language	Male	119	23.40	4.55		
Active-participative	Female	111	33.86	4.62	3.061	.00*
listening	Male	119	31.65	5.99		
Self-recognition/self-	Female	111	17.48	3.70	.933	.71
disclosure	Male	119	17.30	3.72		
Empathy	Female	111	31.16	4.99	1.014	.31
	Male	119	30.38	6.31		
I-language	Female	111	25.15	5.33	.062	.95
	Male	119	25.10	5.56		
Verbal intelligence	Female	111	37.29	6.97	1.612	.10
-	Male	119	35.81	6.75		

Table 2. Effective communication skills and verbal intelligence levels of students according to gender

When Table 2 is examined, there was a significant difference between the effective communication skills and verbal intelligence levels of the students in the "active-participative listening" sub-dimension according to gender variable. There was no significant difference in other sub-dimensions (p <.05). It is seen that the significant difference in the active-participative listening (t = 3.061; p <.05) sub-dimension is in favor of female students.

The effect size value of the active-participative listening sub-dimension was calculated as .039. A significant difference was found in the medium effect value between the groups (n^2 = .039) (Cohen, 1988). The students' One-Way ANOVA results regarding effective communication skills and verbal intelligence levels according to department are given in Table 3.

Variables	Department	Ν	X	SD	df	F	Р	Eta ²	Tukey
Self-	Teaching	91	16.64	3.46	2				Recreation*
recognition/	Coaching	64	16.54	2.93	221	11.530	.00*	.368	Teaching /
self-disclosure	Recreation	75	19.02	4.06	223				Coaching
	Teaching	91	24.77	5.09	2				Recreation*
I-language	Coaching	64	23.85	4.96	221	4.871	.00*	.094	Coaching
	Recreation	75	26.64	5.94	223				_
Verbal	Teaching	91	34.78	6.32	2				Recreation*
intelligence	Coaching	64	36.12	6.57	221	7.797	.00*	.210	Teaching
_	Recreation	75	38.91	7.18	223				_

Table 3. Effective communication skills and verbal intelligence levels of students according to department

*p<.05

When Table 3 is examined, according to department variable of the students' effective communication skills and verbal intelligence levels, there was a significant difference in the sub-dimensions of "self-recognition/ self-disclosure" [F (2,221) = 11.530, p <.05], "I-language" [F (2,221) = 4.871, p <.05] and, verbal intelligence [F (2,221) = 7.797, p <.05]. There was no significant difference in ego supportive language, active-participative listening, and empathy sub-dimensions (p>.05). According to the results of multiple comparison test (Tukey), a significant difference was determined in favor of Recreation ($\overline{X} = 19.02$) in self-recognition/ self-disclosure sub-dimension, in favor of Recreation ($\overline{X} = 26.64$) in I-language sub-dimension and, in favor of Recreation ($\overline{X} = 38.91$) in verbal intelligence sub-dimension.

It was calculated a significant difference in very large value in self-recognition/ self-disclosure (Eta²= .368) and verbal intelligence (Eta²= .210) sub-dimensions, and in large value in I-language (Eta²= .094) sub-dimension between groups (Cohen, 1988). The students' One-Way ANOVA results regarding effective communication skills and verbal intelligence levels according to age are given in Table 4.

Variables	Age	Ν	$\overline{\mathbf{X}}$	SD	df	F	р	Eta ²	Tukey
Self-	18-20	94	16.64	3.33	2				
recognition/	21-23	103	18.03	4.07	221	3.522	.03*	.051	18-20*
self-disclosure	24 and over	33	17.51	3.15	223				21-23

^{*}p<.05

When Table 4 is examined, according to age variable of the students' effective communication skills and verbal intelligence levels, there was a significant difference in the sub-dimension of the "self-recognition/ self-disclosure" [F (2,221) = 11.530, p <.05]. There was no significant difference in ego supportive language, active-participative listening, empathy, I-language, and verbal intelligence sub-dimensions (p> .05). According to the multiple comparison test (Tukey) results, a significant difference in favor of 21-23 age ($\overline{X} = 18.03$) was determined in the self-recognition/ self-disclosure sub-dimension.

It was calculated a significant difference in medium effect value in self-recognition/ self-disclosure (Eta²= .051) subdimension between groups (Cohen, 1988). The students' One-Way ANOVA results regarding effective communication skills and verbal intelligence levels according to academic GPA are given in Table 5.

Table 5. Effective communication skills and verbal intelligence levels of students according to academic GPA

Variables	Academic GPA	N	X	SD	df	F	р	Eta ²	Tukey
	3.58- 4.00 (90-100)	4	34.25	2.62					
Verbal	3.15-3.57 (80-89)	16	41.35	6.27	4				1.86-2.28*
intelligence	2.72-3.14 (70-79)	80	36.60	6.86	219	2.665	.03*	.030	3.15-3.57
-	2.72-3.14 (60-69)	101	36.47	6.91	223				
	1.86-2.28 (50-59)	29	34.31	6.61					

608 | FILIZ / The Relationship between Effective Communication Skills and Verbal Intelligence Levels

When Table 5 is analyzed, a significant difference was found in the sub-dimensions of the "verbal intelligence" [F (4,219) = 2,665, p <.05] according to academic GPA of the students' effective communication skills and verbal intelligence levels. There was no significant difference in ego supportive language, active-participative listening, selfrecognition/ self-disclosure, empathy, and I-language sub-dimensions (p>.05). According to the multiple comparison test results (Tukey), a significant difference was found in the verbal intelligence sub-dimension in favor of 3.15-3.57 academic GPA ($\overline{X} = 41.35$).

It was calculated a significant difference in medium effect value in verbal intelligence (Eta²= .030) sub-dimension between groups (Cohen, 1988). The students' One-Way ANOVA results regarding effective communication skills and verbal intelligence levels according to way of taking the Effective Communication Skills course are given in Table 6.

Table 6. Effective communication skills and verbal intelligence levels of students according to way of taking the Effective Communication Skills course

Variables	ECS course	Ν	$\overline{\mathbf{X}}$	SD	df	F	р	Eta ²	Tukey
Ego	Compulsory	49	25.06	3.03	2				Compulsory *
supportive	Elective	19	22.64	4.66	221	3.961	.02*	.064	I did not take it
language	I did not take it	162	23.24	4.36	223				
Self-	Compulsory	49	18.55	3.65	2				Compulsory *
recognition/	Elective	19	16.05	2.46	221	3.722	.02*	.057	Elective
self-	I did not take it	162	17.19	3.76	223				
disclosure									
I-language	Compulsory	49	26.74	5.23	2				Elective *
2 0	Elective	19	21.35	5.03	221	6.470	.00*	.118	Compulsory/
	I did not take it	162	25.05	5.36	223				I did not take it

*p<.05

When Table 6 is examined, a significant difference was found in the sub-dimensions of the "ego supportive language" [F (2,221) = 3.961, p <.05], "self-recognition/ self-disclosure" [F (2,221) = 3.722, p < .05] and, "I-language" [F (2,221) = 6.470, p <.05] according to way of taking the Effective Communication Skills course of the students' effective communication skills and verbal intelligence levels. There was no significant difference in active-participative listening, empathy, and verbal intelligence sub-dimensions (p>.05). According to multiple comparison test results (Tukey), a significant difference was determined in favor of compulsory ($\overline{X} = 25.26$) in ego supportive language sub-dimension, in favor of compulsory ($\overline{X} = 18.55$) in self-recognition/ self-disclosure sub-dimension, and in favor of compulsory $(\overline{X} = 26.74)$ in I-language sub-dimension.

It was calculated a significant difference in medium effect value in ego supportive language (Eta²= .064) and selfrecognition/ self-disclosure (Eta²= .057) sub-dimensions, and in large value in I-language (Eta²= .118) sub-dimension between groups (Cohen, 1988). The relationship between students' effective communication skills and verbal intelligence levels is given in Table 7.

Table 7. The relationship between students' effective communication skills and verbal intelligence levels

Sub-dimensions	1	2	3	4	5	6
1. Ego supportive language	1					
2. Active-participative listening	.54**	1				
3. Self-recognition/ self-disclosure	.40**	.34**	1			
4. Empathy	.42**	.46**	.42**	1		
5. I-language	.32**	.35**	.44**	.43**	1	
6. Verbal intelligence	.29**	.19**	.31**	.33**	.33**	1

**p<.01

According to Table 7, looking at the relationship between students' effective communication skills and verbal intelligence levels, it has been noted that there is a positive relationship between verbal intelligence sub-dimension and ego supportive language (r = $.29^{**}$), active-participative listening (r = $.19^{**}$), self-recognition/ self-disclosure (r = .31**), empathy (r = .33 **), I-language (r = .33**) sub-dimensions. In general, it seems that there is a low relationship between communication skills and verbal intelligence sub-dimensions (Buyukozturk, 2019).

Discussion

In this current study, the relationship between effective communication skills and verbal intelligence levels of FSS students participating in the study according to the variables of "gender, age, department, academic GPA, way of taking the Effective Communication Skills course" was investigated. The most striking result of this study is that the students who take the Effective Communication Skills course within the scope of the compulsory course are more open to

development and have awareness about themselves than the students who take the elective course. Therefore, considering how important it is to communicate effectively and correctly in vocational education and work environment; it is envisaged that the Effective Communication Skills course will be more effective and beneficial to take place in the curriculum as a compulsory course.

As a result of the findings obtained from the research, it has been determined that female students are more careful and motivated when listening to an individual they communicate with than male students, they care more about the individuals they communicate with and provide confidence in communication. This situation can be explained by the fact that women care about the details and they are more curious about their issues in life. While there are studies supporting the research findings in the literature, there is a significant difference in the level of communication skills in favor of female students in terms of gender variable (Amiri et al., 2013; Aydin et al., 2017; Lumma-Sellenthin, 2012; Pelit & Karacor, 2015, Shankar et al., 2013); in the study of Cavusoglu and Gunay (2014), there was no significant difference between men and women students.

According to the students of the Department of Physical Education and Sports Teaching and Coaching Education, it was found that the students of the Recreation Department have more awareness about themselves and can express their thoughts and feelings clearly. Accordingly, it can be stated that the students of the Recreation Department express the desired message better than other departments and have an impact on the listener. In the study conducted by Ceyhun and Malkoc (2015), it was reported that there was no difference between the communication skills levels of the Department of the Physical Education and Sport Teacher Teaching and Sports Management students. Similarly, in the study of Tepekoylu et al. (2009), there was no significant difference between FSS students' perception of communication skills. While these studies differ from the research findings; there are also studies in the verbal intelligence sub-dimension that are parallel to the research findings (Avci, 2018; Kemec, 2016).

According to the results of the research, it was determined that the students in the 21-23 age group reflect their feelings and thoughts more clearly, transparently than the students in the 18-20 age group, and are aware of what they can do. It can be thought that this situation may be due to the maturity levels and experiences of the elderly. In the study of Akyol (2019), when the communication skills of students in different faculties were compared, there was no significant difference in terms of age variable. In the study conducted by Sener and Koraltan (2019), it was observed that there was no significant difference between the communication competencies of FSS Sports Management students according to age variable.

As a result of the research, it is seen that students whose academic average is 3.15- 3.57 can express themselves better than those who are 1.86- 2.28 and have reasoning ability. Accordingly, it is an expected situation that individuals who can take, grasp and make sense of the information have a high average grade point. Therefore, it can be stated that individuals who can express themselves correctly and who have the capacity to convey their knowledge have a higher grade point average. In their study, Bingol and Demir (2011) stated that students with high academic success have high communication skills. Shan et al. (2014) found in their study that effective communication positively encouraged a positive classroom environment and academic success. Therefore, it can be stated that effective communication skills are important in promoting students' learning performance.

In the research, it was seen that students who took the Effective Communication Skills course as compulsory, could communicate more positively with people, I-language better, express themselves clearly and feel the feelings without blame, judgment, and criticism compared to students who take the course electively or not at all. In their study, Mendi and Oguz (2018) found that students who took the Effective Communication Skills course to improve their communication skills had higher cognitive and behavioral scores. In their study, Van der Molen et al. (2004) found that dentist candidate students who took a course about communication skills gained more communication skills in dealing with anxious patients and in determining anxiety.

In the research, a positive correlation was found between students' effective communication skills and verbal intelligence levels. In this context, it is thought that it will be more beneficial to have an Effective Communication Skills course in the departments within the curriculum. A study was conducted by Admire and Winnet (2019) on the perception of basic communication skills education of university students, and as a result of the study, it was observed that the module was perceived and the students' speaking and listening skills increased. In addition, in a study conducted from another point of view, it was reported that by organizing a certain environment for children in preschool age, critical motor skills can be developed while learning children's communication skills (Akamoglu et al., 2019).

Conclusion

Results from this research and other studies show that effective communication skills and verbal intelligence support each other. The fact that the students studying in the recreation department express themselves more easily reveals the importance of creating more social environments for the students. In addition, verbal intelligence seems to be related to academic success. As the most important result, it is considered will be effective that the Effective Communication Skills course in FSSs will be included in the scope of the compulsory course, in terms of the development of effective communication skills of students.

Suggestions

According to the results of the research, environments, where students studying in the Department of Physical Education and Sports Teaching and Coaching Education can express their feelings and thoughts more clearly and communicate more, can be provided. More time and opportunities can be provided for students to express themselves in lessons. Group activities can be done more in lessons. In these activities, more tasks can be given to male students to express themselves and their feelings. University students can be directed to various clubs in the university where they can communicate and express themselves from the moment they start school. Most importantly, it can be offered to program makers as a suggestion for the Effective Communication Skills course to be included in the curriculum of all parts of FSS.

All these suggestions will contribute to the development of students' communication skills. Even the most selfconfident or self-expressive people may have trouble communicating effectively with each other. Stress, emotions, and various external factors play a positive or negative role in people's communication with each other in the professional environment. Therefore, improving students' communication skills will enable students to establish a more comfortable, confident, and effective dialogue with other people in their professional life.

In future studies, other types of intelligence can be discussed and students' views on effective communication skills can be examined. The effective communication skills between other faculty students and FSS students can be compared. The causes of communicative differences between these students can be explored.

Limitations

This research is limited to a group of students studying at the FSS of a single university. In this research, effective communication skills and verbal intelligence levels of students were discussed.

References

- Admire, M., & Winnet, C. (2019). Students' perceptions of basic communication skills training at a selected State University in Zimbabwe. *International Journal of Linguistics, Literature and Translation, 1*(1), 10-17.
- Amiri, H., Sadeghi, S, M., Karimi, Z. A., Bahari, F., & Binesh, A. (2013) Effectiveness of solution-focused communication training (SFCT) in nurses' communication skills. *Journal of Military Medicine*, *14*(4), 271-278.
- Anderson-Butcher, D., Newsome, W. S., & Nay, S. (2003). Social skills intervention during elementary school recess: A visual analysis. *Children & Schools*, *25*(3), 135-146.
- Armstrong, T. (1993). 7 kinds of smart: Identifying and developing your multiple intelligences. Penguin Putnam Inc.
- Armstrong, T. (2009). Multiple intelligences in the classroom. ASCD Publication.
- Akamoglu, Y., Ostrosky, M. M., Cheung, W. C., Yang, H. W., Favazza, P. C., Stalega, M. V., & Aronson-Ensign, K. (2019). Move together, communicate together: Supporting preschoolers' communication skills through physical activities. *Early Childhood Education Journal*, 47, 677–685. https://doi.org/10.1007/s10643-019-00957-1
- Akbuga, B., & Gursel, F. (2007). Bilgilendirme yoluyla beden egitimi ve spor yuksekokulu ogrencilerinin engelli bireye yonelik degisen tutumlari [Changing college student physical education teacher's attitudes towards individuals with physical disability by knowledge]. Spormetre Journal of Physical Education and Sports Sciences/ Spormetre Beden Egitimi ve Spor Bilimleri Dergisi, 5(1), 5-8. https://doi.org/10.1501/Sporm_0000000119
- Akyol, P. (2019). Farkli fakultelerdeki ogrencilerin iletisim becerilerinin karsilastirilmasi [Comparison of communication skills of different faculty students]. *Journal of Sports Education/ Spor Bilimleri Dergisi, 3*(3), 71-77.
- Avci, P. (2018). Spor Bilimleri Fakultesi ogrencileri ile diger fakulte ogrencilerinin coklu zeka alanlari ve problem cozme becerilerinin cesitli degiskenler acisindan incelenmesi [Examining of multiple intelligence areas and problem solving skills of Faculty of Sports Sciences students and other faculty students in terms of various variables] [Unpublished master thesis]. Selcuk University.
- Aydin, E., Celik, A., & Bas, M. (2017). Beden egitimi ogretmen adaylarinin iletisim duzeylerinin bazi degiskenlere gore incelenmesi [Investigating communication skill levels of physical education teacher candidates according to some variables]. International Journal of Strategic and Social Research/ Uluslararasi Stratejik ve Sosyal Arastirmalar Dergisi, 1(1), 25-34. https://doi.org/10.30692/sisad.323536

Baker, S. B., & Shaw, M. C., (1987). Improving counseling through primary prevention. Merrill Publishing Company.

- Bingol, G., & Demir, A. (2011). Amasya Saglik Yuksekokulu ogrencilerinin iletisim becerileri [Communication skills of students of Amasya medical vocational school]. *Goztepe Medical Journal/ Goztepe Tip Dergisi, 26*(4), 152-159. https://doi.org/10.5222/J.GOZTEPETRH.2011.152
- Bulus, M., Atan, A., & Erten-Sarikaya, H. (2017). Etkili iletisim becerileri: Bir kavramsal cerceve onerisi ve olcek gelistirme calismasi [Effective communication skills: A new conceptual framework and scale development study]. *International Online Journal of Educational Sciences/ Uluslararasi Online Egitim Bilimleri Dergisi*, 9(2), 575-590.
- Buyukozturk, S. (2019). Sosyal bilimler icin veri analizi el kitabi istatistik, arastirma deseni SPSS uygulamalari ve yorum [Data analysis handbook for social sciences statistics, research design SPSS applications and interpretation]. Pegem.
- Ceyhun, S., & Malkoc, N. (2015). Karabuk Universitesi Beden Egitimi ve Spor Yuksekokulu ogrencilerinin iletisim beceri duzeyleri [Communication skills levels of Karabuk University School of Physical Education and Sports students]. International Journal of Social Sciences and Education Research/Uluslararasi Sosyal Bilimler ve Egitim Arastirmalari Dergisi, 1(4), 1296-1304. https://doi.org/10.24289/ijsser.279138
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Erlbaum.
- Cavusoglu, S. B., & Gunay, G. (2014). Istanbul Universitesi Beden Egitimi ve Spor Yuksekokulu ogrencilerinin iletisim becerileri algi duzeylerinin farkli degiskenler acisindan degerlendirilmesi [Perceptions of communication skills of students of School of Physical Education and Sports of Istanbul University]. Journal of *Organization and Management Sciences/ Organizasyon ve Yönetim Bilimleri Dergisi*, 6(1), 107-121.
- Egan, G., (1994). *Psikolojik danismaya giris* [Introduction to psychological counseling]. F. Akkoyun (Trans. Ed.). Form.
- Ersanli, K., & Balci, S. (1998). Iletisim becerileri envanterinin gelistirilmesi: Gecerlik ve guvenirlik calismasi [Development of communication skills inventory: Validity and reliability study]. *Journal of Turkish Psychological Counseling and Guidance/Turk Psikolojik Danisma ve Rehberlik Dergisi, 2*(10), 7-12.
- Gardner, H. (1983). Frames of mind: the theory of multiple intelligences. Basic.
- Gardner, H. (1993). Multiple intelligences: The theory in practice. Basic.
- Gardner, H. (1997). The first seven and the eighth. Educational Leadership, 55(1), 8-13.
- Gardner, H. (1999). Are there additional intelligences? The case for naturalist, spiritual, and existential intelligences. In J. Kane (Ed.), *Education, information and transformation* (pp. 111 131). Prentice Hall.
- Gardner, H. (2011) Truth, beauty, and goodness reframed: Educating for the virtues in the 21st century. Basic.
- Gardner, H., & Hatch, T. (1989). Multiple intelligences go to school educational implications of the theory of multiple intelligences. *American Educational Research Association*, *18*(8), 4-10. doi.org/10.2307/1176460
- Gulbahar, B., & Aksungur, G. (2018). Sinif ici etkili iletisim becerileri algi olceginin gelistirilmesi: Gecerlik ve guvenirlik calismasi [Developing the effective classroom communication skills perception scale: Reliability and validity study]. *Mehmet Akif Ersoy University Journal of Education Faculty/ Mehmet Akif Ersoy Universitesi Egitim Fakultesi Dergisi, 48,* 437-462.
- Karasar, N. (2009). Bilimsel arastirma yontemi [Scientific research method]. Nobel.
- Kemec, D. G. (2016). Comparison of multiple intelligence fields of physical education and Sports College students. *Turkish Journal of Sport and Exercise*, *18*(1), 153-159.
- Korkut, F. (2005). Yetiskinlere yonelik iletisim becerileri egitimi [Communication skills training for adults]. *Hacettepe University Journal of Education Faculty/ Hacettepe Universitesi Egitim Fakultesi Dergisi, 28,* 143-149.
- Korkut-Owen, F., & Bugay, A. (2014). Iletisim becerileri olceginin gelistirilmesi: Gecerlik ve guvenirlik calismasi [Developing a communication skills scale: Validity and reliability studies]. *Mersin University Journal of Education Faculty/ Mersin Universitesi Egitim Fakultesi Dergisi, 10*(2), 51-64.
- Lumma-Sellenthin, A. (2012). Students' attitudes towards learning communication skills: Correlating attitudes, demographic and metacognitive variables. *International Journal of Medical Education, 3,* 201-208. https://doi.org/10.5116/ijme.5066.cef9
- Mendi, B., & Oguz, G. (2018). Universite ogrencilerinin iletisim becerilerinin sosyal medyayi kullanim ozellikleri baglaminda incelenmesi: Bir vakif universitesindeki saglik bilimleri ogrencileri uzerinde degerlendirme [Analysis of communication skills of university students in the context of social media use: Assessment on health sciences students in a foundation university]. *Gumushane University Communication Faculty E-Journal/ Gumushane Universitesi Îletisim Fakultesi E-Dergi, 6*(1), 666-690.

Obamiro, J. K. (2011). Management principles and strategies. Pumak Nigeria Limited.

- Patton, J. R., Payne, J. S., & Beirne-Smith, M. (1986). Mental retardation. Merrill.
- Piaget, J. (1952). The origins of intelligence in children. International Universities Press, Inc.
- Pelit, E., & Karacor, M. (2015). Turizm ogrencilerinin iletisim becerileri uzerine bir arastirma: Afyon Kocatepe Universitesi ornegi [A study on tourism students' communication skills: Afyon Kocatepe University example]. *Gaziantep University Journal of Social Sciences/ Gaziantep Universitesi Sosyal Bilimler Dergisi*, 14(4), 847-872.
- Podsakoff, P. M., Mackenzie, S. B., Podsakoff, N. P., & Lee, J. Y. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Saban, A. (2002). Coklu zeka teorisi ve egitim [Multiple intelligence theory and education]. Nobel.
- Shan, S., Li, C., Shi, J., Wang, L., & Cai, H. (2014). Impact of effective communication, achievement sharing and positive classroom environments on learning performance. *Systems Research and Behavioral Science*, *31*, 471–482.
- Shankar, P. R., Dubey, A. K., Balasubramanium, R., & Dwivedi, N. (2013). Student attitude towards communication skills learning in a Caribbean medical school. *Australasian Medical Journal*, 6(9), 466-475.
- Sener, F., & Koraltan, A. (2019). Spor Bilimleri Fakultesi Spor Yoneticiligi bolumu ogrencilerinin iletisim yeterliliklerinin bazi degiskenler acisindan incelenmesi [Investigation of communication competencies of Sports Management students studying in Faculty of Sport Sciences in terms of some variables]. *International Journal of Contemporary Educational Research/ Uluslararasi Cagdas Egitim Arastirmalari Dergisi*, 5(1), 42-51.
- Tabachnick, B., & Fidell, L. (2013). Using multivariate statistics. Sage.
- Taylor, S. (2005). Communication for business. A practical approach (4th ed.). Education.
- Tepekoylu, O., Soyturk, M., & Camliyer, H. (2009). Beden Egitimi ve Spor Yuksekokulu ogrencilerinin iletisim becerisi algilarinin bazi degiskenler acisindan incelenmesi [Examining the levels of perception of communication skills in Physical Education and Sports College students in terms of pre-determined variables]. Spormetre Journal of Physical Education and Sports Sciences/ Spormetre Beden Egitimi ve Spor Bilimleri Dergisi, 7(3), 115-124. https://doi.org/10.1501/Sporm_0000000160
- Van der Molen, H. T., Klaver, A. A. M., & Duyx, M. P. M. A. (2004). Effectiveness of a communication skills training programme for the management of dental anxiety. *British Dental Journal*, *196*(2), 101-107.

Yetim, A. A., & Cengiz, R. (2012). Iletisim ve spor [Communication and sports]. Berikan.