



Examination Of Hearing-Improved Students' Exam Anxiety Levels For Physical Education Lesson

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ABSTRACT

The purpose of this study was to examine hearing-improved students' exam anxiety levels for physical education lesson. Survey method was used for this study. The sample of the study consists of 200 hearing-impaired students who were determined by the convenience sampling method and agreed to participate voluntarily. Data were collected with "personal information form" and "Revised Test Anxiety and Regulatory dimension of anxiety in Physical Education scale (RTAR-PE)". SPSS 26.0 package programme was utilized for statistical calculation. Descriptive statistics and Manova test were used in the analysis. Results showed that there was a significant difference between gender and physical symptoms which was one of the sub-dimensions of test anxiety for physical education lesson. Follow-up test indicated that girls had higher text anxiety for physical education lesson than boys. Results also demonstrated that there was no significant difference between participating sportive facilities variable and all sub-dimensions of test anxiety for physical education lesson.

Keywords: *Hearing Impaired, Physical Education, Exam Anxiety, Student*

INTRODUCTION

The development of technology, the spread of health and human definitions, and the emergence of human rights have been the most important developments affecting the status of the disabled people in society. Nowadays in some countries and regions, the difference in lifestyle and living standards between the disabled and the non-disabled has closed, and social exclusion has not been overcome (Aykurt, 2021; Genç, 2016; Misener et al., 2018, Ilkim et al.2018, Ilkim et.al.2021). Regardless of the discipline (education, health, sociology, psychology, engineering...) all studies aim to improve the lives of people with disabilities.

The ability of disabled people to participate in society depends on their ability to live independently. For this reason, the most basic element is to give disabled people the right to education with special arrangements so that they can have the same opportunities as non-disabled people (Çaha, 2016; İlhan, 2009; Karahan & Kuru, 2015, Duyan et al.2022). Sport is important for all people to ensure a healthy and happy life. Starting sports at a young age contributes to the social and psychological development of the individual (Teke & Karakuş, 2022) On the other hand, sport has a different meaning for the disabled people.

The authors, who philosophically evaluate the benefits of participating in physical activity in disabled people, highlight its contribution to emotional and psychomotor development. It is stated that sport is extremely valuable for both physically and mentally healthy people and as well as the disabled people, but the disabled people need sport more than healthy people (Hazar & Koç, 2020; Kiuppis, 2018; Yılmaz et al., 2014). Sports is an important variable to meet the needs of disabled people which are enjoy activities, have fun and achieve. Sports teach disabled people to manage and reduce their disabilities, to have fun, to communicate and to share, to increase their life motivation, and to gain positive personality traits such as honesty, tolerance and cooperation (Çevik and Kabasakal, 2013; Dursun et al., 2019; Smith & Bundon, 2018).

Studies showed that physical education classes were the first place where many disabled people met with sports (Esatbeyoğlu & Karahan, 2014). Disabled children's participation in sports activities can be supported or guided by school physical education lessons which they attend (Yetim, 2014; Esatbeyoğlu & Karahan, 2014). Physical education, which is partly given according to the national education program but with some arrangements according to the type of disability, is also very important in terms of helping disabled students socialize and do sports in the future, in terms of being more independent and social (Demir & İlhan, 2020; Karadaş & Çetiner, 2022; Smith & Sparkes, 2019).

Studies in literature indicated the benefits of physical activity and sports for disabled people at a young age, such as increased bone density in adulthood, thinning of muscle tissue, better weight control and a lower risk of high blood pressure (Gürsel, 2006). It is important that physical education lessons affect the psychology of disabled people positively so that they can adapt to society (Jaarsma et al., 2014; Shihui et al., 2007). Since the physical development of the individual through sports facilitates the meeting of individual needs in daily life, this situation also produces a positive psychological effect on the individual. In addition, the integration of disabled people with the society through physical activity significantly accelerates the process of adaptation

to social life and socialization (Karadaş & Çetiner, 2022). Sports are important for the protection of physical and mental health in individuals with disabilities. However, the balance problem is especially important in hearing impaired individuals, unlike other disability situations. Sport is important for hearing impaired individuals to maintain balance. The most difficult issue for hearing-impaired individuals in their daily lives and sports activities is balance (Akyüz et al., 2016; Karakoç et al., 2012; Şirinkan, 2011). In the control of balance, sports activities and exercises that can be done at an early age gain importance. Physical education classes are the place for hearing impaired individuals to meet sports at a young age. For this reason, compliance with physical education classes is important. Attitudes towards the lesson and test anxiety are important in achieving adaptation to physical education.

Students frequently encounter exams and various measurement and evaluation elements throughout their education life. Exams can be intimidating and daunting as well as reflecting the academic status of the student within the framework of the applied education and training program (Putwain et al., 2010). Exams applied in physical education class, as in other lessons, can create pressure on students (Danthony vd., 2020). Students' test anxiety is related to how motivated they are to learn. However, the severity of test anxiety can have an impact on the student's success in the exam. Although test anxiety is seen as an obstacle in the academic success of the individual, it affects the cognitive, social and affective competences of the individual against the situation related to the exam (Nelson & Knight, 2010; Sarason & Sarason, 1990). The problems experienced by the hearing-impaired in physical education classes may have an impact on their exam anxiety. The aim of this research is to examine the level of physical education lesson exam anxiety in hearing impaired students.

METHOD

Research Design

Descriptive survey model was used to measure the level of physical education exam anxiety in hearing impaired students.

Sampling

The population of the research consists of hearing impaired students. In the research, analyzes were made by reaching 200 students with the convenience sampling method.

Data Collection Tool

Data were collected from a questionnaire in the study. The questionnaire consists of two personal questions about gender and sport participation, and the Physical Education Lesson Exam Anxiety Inventory (Participants answered questions about the scale with the support of a sign language translator).

Physical Education Lesson Exam Anxiety Inventory is a 19-item scale developed by Danthony, Mascet, and Cury (2019) and adapted

into Turkish by Devrilmez, Çiy, Bilgiç, and Dervent (2021). The inventory consists of 5 sub-dimensions: anxiety (4 items), self-focus (3 items), somatic symptoms (4 items), physical tension (4 items), and perceived control (4 items). The Cronbach's Alpha coefficient was found to be .81 and the test-retest value of .88 was found to be sufficient.

Data Analysis

Data analysis was applied with SPSS 26 package program. Descriptive statistics and MANOVA test were used in the analysis.

RESULTS

Result section was constituted as descriptive and MANOVA results.

TABLE 1: Table of Descriptive Results

	Anxiety		Self-focus		Somatic symptoms		Tension		Control	
	M	SD	M	SD	M	SD	M	SD	M	SD
Gender										
Male	2.46	.80	2.42	.86	2.25	.76	2.20	.86	3.09	.80
Female	2.37	.87	2.37	.86	2.42	.79	2.15	.98	3.07	.81
Sport Status										
Yes	2.33	.88	2.38	.93	2.30	.81	2.10	.96	3.12	.80
No	2.51	.78	2.41	.77	2.38	.73	2.33	.86	3.03	.80

When the physical education lesson test anxiety level of the participants was examined according to the gender variable, it was determined that the highest value was in the control sub-dimension. The lowest value was found to be the tension sub-

dimension. Similarly, when the variable of doing sports was examined, the highest values were reached in the control sub-dimension and the lowest values in the tension sub-dimension.

TABLE 2: MANOVA Results

		F	Hypothesis SD	Error SD	Sig.
Gender	Pillai's Trace	1.06	5.00	191.00	.39
	Wilks' Lambda	1.06	5.00	191.00	.39
	Hotelling's Trace	1.06	5.00	191.00	.39
	Roy's Largest Root	1.06	5.00	191.00	.39
Sport Participation	Pillai's Trace	1.48	5.00	191.00	.20
	Wilks' Lambda	1.48	5.00	191.00	.20
	Hotelling's Trace	1.48	5.00	191.00	.20
	Roy's Largest Root	1.48	5.00	191.00	.20
	Pillai's Trace	1.46	5.00	191.00	.21

Gender * Participation	Sport	Wilks' Lambda	1.46	5.00	191.00	.21
		Hotelling's Trace	1.46	5.00	191.00	.21
		Roy's Largest Root	1.46	5.00	191.00	.21

p= .05

Table 2 indicated that no significant interaction was found in the independent variables of gender and sport participation ($F(5,191)=1.46, p>.05$). The main effects table was examined due to the

lack of significant interaction. Since there are two independent variables (gender and doing sports) in the MANOVA analysis, the p value is divided by the number of variables ($p=.05/2= p=.025$).

TABLE 3: Table of Main Effects

	Dependent Variables	SD	M2	F	Sig.
Gender	Anxiety	1	.08	.12	.74
	Self-focus	1	.06	.08	.78
	Somatic symptoms	1	1.68	2.82	.01
	Tension	1	.00	.00	.96
	Control	1	.04	.06	.80
Sport Participation	Anxiety	1	1.23	1.79	.18
	Self-focus	1	.03	.04	.85
	Somatic symptoms	1	.37	.61	.43
	Tension	1	3.42	4.07	.05
	Control	1	.41	.63	.43
Error	Anxiety	195	.69		
	Self-focus	195	.74		
	Somatic symptoms	195	.60		
	Tension	195	.84		
	Control	195	.65		
Total	Anxiety	199			
	Self-focus	199			
	Somatic symptoms	199			
	Tension	199			
	Control	199			

p=.025

When Table 3 is examined, a statistically significant difference was found between the gender variable and physical symptoms, which is one of the physical education lesson test anxiety sub-dimensions ($F(1,199)= 2.82, p<.05$). As a result of the Bonferonni follow-up test, it was determined that the physical symptoms of female students were significantly higher than male students. It was observed that there was no significant difference between the anxiety ($F(1,199)= .12, p>.05$), focus ($F(1,199)= .08, p>.05$), tension ($F(1,199)= .00, p>.05$) and control variables ($F(1,199)= .06, p>.05$), which are the other sub-dimensions of physical

education exam anxiety, and gender. According to the variable of doing sports, the physical education lesson exam anxiety sub-dimensions are anxiety ($F(1,199)= 1.79, p>.05$), focus ($F(1,199)= .04, p>.05$), somatic symptoms ($F(1,199) = .61, p>.05$), tension ($F(1.199)= 4.07, p>.05$) and control ($F(1.199)= .63, p>.05$) variables.

DISCUSSION

Physical education classes have an important place in increasing the physical, social and cognitive gains of disabled individuals. Physical

education classes have an important place in gaining balance, as well as cognitive and social support, especially for individuals with hearing impairment. According to Jaarsma et al. (2014), physical education lessons are important in terms of positively affecting the psychology of disabled individuals so that they can adapt to society. In the study of Karadaş and Çetiner (2022), it was mentioned that while the disabled individuals provide physical development through sports, it facilitates the meeting of their individual needs in daily life, and this situation creates a positive psychological effect on the individual. Integration of disabled individuals with the society through physical activity significantly accelerates the process of adaptation to social life and socialization. Şirinkan (2011) determined in his study that sports were important in terms of maintaining balance in hearing-impaired individuals. The issue that hearing-impaired individuals have the most difficulty in their daily lives and sportive activities is stated as balance, and the importance of physical education lessons in the development of this is emphasized. There are studies in the literature that examine test anxiety in terms of different variables and associate it with physical education and sports.

In the study conducted by Erdoğan and Sural (2021), by collecting cross-sectional data, it was revealed that the physical education and sports lesson test anxiety levels of high school students did not differ according to the grade level and sports status, but differed according to gender. In addition, the physical education and sports course exam anxiety levels of female students were found to be higher than male students. In addition, it was concluded that high school students' perceived control levels were high and physical tension levels were low.

Çiy et al. (2022), in another study, it was determined that class and gender variables were effective on test anxiety. When the gender variable was examined, it was seen that the physical education lesson exam anxiety level of female students was higher than that of male students. Looking at the class variable, it is seen that the students studying in 7th grade, 5th-6th grade. It was determined that the test anxiety levels were higher than the students studying in the 8th and 8th grades. According to the data

obtained as a result of the study, it has been determined that the physical education exam anxiety of secondary school students is slightly above the medium level.

In this study, exam anxiety of hearing impaired students for physical education lessons was examined according to their gender and sports status. In the study, it was determined that the physical education test anxiety of the hearing impaired students did not differ according to their sports status, however, it was determined that the somatic symptoms, which are the test anxiety sub-dimension, differed according to their gender. It was determined that the physical symptoms of female students were significantly higher than male students.

Öğretir and Türker (2021) determined that female students have a higher perception of somatic symptoms than males. In another study, Koparan (2019) determined that female students' perceptions of somatic symptoms were higher than males in the perception of test anxiety.

CONCLUSION

Sports have an important place in improving the social and psychological conditions of disabled people and supporting them positively. One of the most important places where disabled students can do sports is physical education and sports classes. Sports and exercise have an important place in the improvement of balance problems, especially in hearing-impaired students. However, as with every student, hearing impaired students may experience anxiety about physical education lesson due to various reasons.

In this study on hearing-impaired students, when exam anxiety is evaluated according to the variable of doing sports, it is seen that control has the highest values and tension sub-dimension has the lowest values. Hearing-impaired students who do sports have more control and less anxiety in their exam anxiety than those who do not. This shows that doing sports positively supports the physical education exam anxiety of hearing impaired students.

In the study, physical education test anxiety of hearing impaired students was evaluated according to gender and it was determined that

the physical symptoms of female students were significantly higher than male students. Female students give more physical symptoms of test anxiety.

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