

## The Effect of Sport Participation on Anger Control in Hearing Impaired Adolescents<sup>1, 2</sup>

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**Abstract:** The aim of this study was to research the effect of sport on hearing impaired individuals in the case of permanent anger and anger expression. Totally 62 hearing-impaired individuals (age range from 15 to 20) participated in the study, 35 of them were athlete students from Konya Vocational Hearing Impaired High School and 27 of them were the hearing impaired people who were non-athletes. The "State-Trait Anger Scale" was applied to the sample group. In the comparison of hearing-impaired people who are athletes and non-athletes, in the case of anger, statistically significant difference, in the size of permanent anger, was appeared in favor of individuals who were engaged in sport ( $p < 0.05$ ); while no difference was observed in the size of inside, outside and control anger ( $p > 0.05$ ). In conclusion, it is suggested that hearing impaired adolescents should easier control their anger through participation to sport activities.

**Key words:** Hearing Impaired • Sports • Anger • Adolescent

### INTRODUCTION

By definition, the hearing impaired, is the one who has some problems in his/her sensitivity of the personal development, adaptation and especially in communication. A hearing impaired is the one who cannot communicate with others healthfully [1].

The studies about handicapped people have been carried out especially since 2000. Governments, municipalities, private organizations, associations and private educational institutions have begun to make serious works related to handicapped people. Sporting activities have an important place in these studies. Sporting activities, as one of the most important factors of healthy life, evaluates physical, mental, psychological and social structure of one who has lost his/her function partly or as a whole. It is clearly known that sporting activities make handicapped people live in peace with society and him/herself. So sports are very important for handicapped individuals [2]. Because nowadays sport is used as a means of therapy in disabled people's training and rehabilitation. The positive effects of sport that disabled individuals do, is reflected to him/herself, family,

work environment and the community directly. Sport for disabled people means to improve interpersonal communication and to improve initiative and integration. Planned work and training, draws attention as an element by which disabled individuals can recover their health, enhance the joy of life, linking them to life and promote self-reliance [2-4].

Like every age group, one of the most important emotional expressions which adolescents exhibit is anger and the way of expressing anger is so important. If the anger revealed or expressed in inappropriate ways, it can be caused some physical, psychological and social problems in adolescents [5].

Anger, in childhood period in which feelings started to be recognized and become varied, is so important. Likewise, in every age periods the way of taking anger under the control in order to have a positive relationship, in many ways is also so important. Adolescence is a period in which a lot of emotional tides occur and those tides associate with the development phase. During this period, the recognition of feelings of anger and controlling, will provide a healthy and benefit way of being social to adolescents [1].

Sport activities for disabled people have been neglected for many years, because, they have been offered to healthy individuals to be saved from physical and mental stresses of life. Activities like games, sports and competition are the easiest way for disabled rehabilitation and to connect them to society [6].

Sport activities, provide a way to disabled people to control their mood and emotions such as jealousy, aggression and anger [7]. Therefore the purpose of this study is also to try to explore the effect of sport participation on the anger state of hearing impaired adolescents.

## MATERIALS AND METHODS

**The Sample Group:** Descriptive method is used in this study. The study population consists of individuals with hearing loss in the province of Konya. The sample group is consisted of totally 62 hearing-impaired individuals, while 35 of them are hearing-impaired athletes (18 football players, 11 wrestlers, 6 judoka) and 27 of them are hearing-impaired who do not do any sport. The age range of subjects is 15-20 years. All subjects voluntarily participated in the study.

**Method:** The anger and anger expression of hearing impaired adolescents who are engaged in sports activity as a competitor and those hearing impaired individuals who are not engaged in any kind of sport, is determined with "Continuous Anger-Trait Anger Scale" adapted in Turkish by Ozer [8]. The scale is consisted of 34 items while the first 10 items measure the level of the continuous anger and the other 24 items indicate anger style of individuals (anger-inside, anger outside and anger control sub-dimensions). Each sub-group consists of 8 questions. High scores taken from continuous anger scale, show that the level of anger is high. High scores taken from anger-inside scale, show that anger is suppressed. High scores in anger-outside scale, show that anger is expressed easily. High scores of anger control show that anger can be controlled. Scale's reliability and validity is examined in this study. According to this scale, scores are as following: for continuous anger. 79, for the size of anger-inside. 62, for the size of anger-outside. 78 and for under control anger. 84 [9].

The reliability coefficients of this study as a whole taken from Cronbach's alpha and are as follow: Cronbach's alpha coefficient  $\alpha = 0.75$ , for the size of

continuous anger  $\alpha = 0.69$ , for the size of anger-inside  $\alpha = 0.68$ , for the size of anger-outside  $\alpha = 0.80$  and for the size of anger control  $\alpha = 0.71$ .

**Statistical Analysis:** The scale used in the study, was applied on hearing impaired individuals who are students in Konevi Hearing Impaired Vocational High School and engaged in sport and hearing impaired individuals who do not sport in the classroom under the supervision of physical education teachers. Some of these students are also engaged in sports in hearing disability sports club. Hearing impaired group who was not engaged in sports, is one part of the students studying in the same school.

**Data Analysis:** SPSS 13.00 software program, mean, standard deviation, percentage expressions and t tests were used to analyze the data. Statistical calculations of significance level was determined as ( $p < 0.05$ ).

## RESULTS

Table 1 has given the comparison of continuous anger states of athlete hearing impaired and hearing impaired individuals who do not sport. According to the table, the continuous anger mean score of hearing impaired individuals who engage in sports is as  $22.20 \pm 3.53$ , while the continuous anger mean score of hearing impaired individuals who do not sport is as  $28.40 \pm 5.87$ . T value obtained from the comparison of different scores was found as 5,163 and this result statistically reflects significant difference in favor of experimental group.

Table 2 has given the comparison of anger-inside states of athlete hearing impaired and hearing impaired individuals who do not sport. According to the table, the anger-inside mean score of hearing impaired individuals who engage in sports is as  $16.08 \pm 3.40$ , while the anger-inside mean score of hearing impaired individuals who do not sport is as  $15.77 \pm 3.36$ . T value obtained from the comparison of different scores was found as 5,163 and this result is not statistically significant.

Table 3 has given the comparison of anger-outside states of athlete hearing impaired and hearing impaired individuals who do not sport. According to the table, the anger-outside mean score of hearing impaired individuals who engage in sports is as  $21.31 \pm 4.69$ , while the anger-inside mean score of hearing impaired individuals who do not sport is as  $20.25 \pm 4.15$ . T value obtained from the comparison of different scores was found as 0.048 and this result is not statistically significant.

Table 1: Comparing the state of continuous anger of athlete hearing impaired and hearing-impaired adolescents who do not sports

Group	N	Mean	SD	t	P
Hearindg Impaired Who Do Sport	35	22.20	3.53	5.163	.000*
Hearing Impaired Who Don't Sport	27	28.40	5.87		

\*p&lt;0,05

Table 2: Comparing the state of anger-inside of athlete hearing impaired and hearing-impaired adolescents who do not sports

Group	N	Mean	SD	t	P
Hearindg Impaired Who Do Sport	35	16.08	3.40	.355	.724
Hearing Impaired Who Don't Sport	27	15.77	3.36		

P&gt;0.05

Table 3: Comparing the state of anger-outside of athlete hearing impaired and hearing-impaired adolescents who do not sports

Group	N	Mean	SD	t	P
Hearindg Impaired Who Do Sport	35	20.31	4.69	.048	.962
Hearing Impaired Who Don't Sport	27	20.25	4.15		

P&gt;0.05

Table 4: Comparing the state of anger-control of athlete hearing impaired and hearing-impaired adolescents who do not sports

Group	N	Mean	SD	t	P
Hearindg Impaired Who Do Sport	35	19.94	4.93	.269	0.789
Hearing Impaired Who Don't Sport	27	20.25	4.10		

P&gt;0.05

Table 4 has given the comparison of anger-control states of athlete hearing impaired and hearing impaired individuals who do not sport. According to the table, the anger-outside mean score of hearing impaired individuals who engage in sports is as  $19.94 \pm 4.93$ , while the anger-inside mean score of hearing impaired individuals who do not sport is as  $20.25 \pm 4.10$ . T value obtained from the comparison of different scores was found as 0.269 and this result is not statistically significant.

## DISCUSSION

The aim of this study was to determine the effect of sport on hearing impaired individuals' continuous anger-anger states. According to the result of independent t test examined in this study, in the size of continuous anger there is a significant result in favor of experimental group. In the states of anger-inside, anger-outside and anger control sub-scales, there is no, statistically, significant result between the experimental and control groups. According to this result, it can be

said that; participating in sporting activities is useful for hearing-impaired adolescent in order to control continuous anger.

Previous researches also researched to similar findings. Gokdogan [10], in his research found that participating in sportive activities has a positive effect on adolescents' psychological and social development. Kınalı [7], stated that physical education and sport activities are effective to control feelings such as aggression, anger and jealousy of individuals with disabilities. Similarly, Tiryaki [11] indicated that athletes are extroverted and emotionally stable more than non-athletes. Therefore, it can be affirmed that, extroverted and emotionally stable individuals can more easily control their feelings of anger.

In another study, individuals with disabilities have shown a remarkable success in sports activities, with the support of appropriate educational programs and physical education teachers. Physical education programs are the important components of sports activities. Sport activities and programs should be placed in educational programs, in order to support the programs. Sport activities have a great importance to the integration and adaptation of hearing impaired adolescents in society [12]. If individuals perceived any states as a preventive state in their social lives, anger and rage behavior can be occurred [13, 14].

The behaviors come up from different reasons and adversely affect individuals' lives, can be eliminated by sport activities. Therefore, the sport activities carry a great importance in this field [4, 6]. What disabled people behave in a preventive state such as anger and resentment are more than what healthy individuals behave in the same conditions [6]. In other words, the probabilities of experience anger for hearing impaired individuals, due to being in a preventive state throughout their. Therefore, individuals with disabilities who develop negative behaviors such as anger and rage should benefit from sporting activities.

It has been thought for many years that what healthy individuals do as sport activities in order to be saved from physical and mental stresses, can be done by disabled individuals. But today, gaming, sports and competition activities are done as the easiest for rehabilitation of disabled people and connect them to society [6]. Sport activities are accepted as the most important factor of healthy life. Sport activities evaluate individuals' physical, mental, psychological and social structure as a whole provide a situation in which the disabled people can live in peace with him/herself and society. So sports are very important for individuals with disabilities [2].

In general, hearing-impaired adolescents, due to limited understanding and limited explaining and lack of healthy communication with people may be tense and angry. Sporting activities, referred for hearing impaired individuals to control negative emotions and change them into positive. As a matter of fact, according to [8], sport provides a possibility to be in connect with both healthy and disabled individuals. Therefore, sport activities play a great role in special education which aims "integration".

Since 2000, various studies related to disabled people have been carried out. Governments, municipalities, private organizations, associations and private educational institutions have begun to make serious work related to disabilities. Sporting activities have also an important place in these studies, because individuals with disabilities will make a positive impact of sports directly on themselves, family and their business environment. Sport for disabled people means to improve interpersonal communication and integration [8].

### CONCLUSION

In the light of these findings and evaluations, it was observed that sporting activities are effective in reducing the continuous anger in the state of anger of hearing impaired individuals in adolescence period. According to the results, in order to gain economic independence, hearing impaired adolescents should be directed to vocational training. In addition it can be said that doing regular sport activities can be useful in reducing continuous anger and provide adaptation with society.

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