SPORTS AND LEVEL OF DEPRESSION IN YOUNG SPORTSMEN

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Abstract
In the beginning of the 21th century, many circumstances took place in Kosovo which were very disturbing and had terrible impacts among people here. War, social crisis, changing and at the end transition, led to a permanent tension state and the same is meant to be considered as normal until reaching a certain degree. In these situations the level of depression among adolescents can be higher. The intention of this research has been to verify the level of depression among adolescents and young sportsmen, precisely sport influence on the level of depression. In this research are included total of 130 respondents, 65 disciples and 65 young sportsmen from Kosovo. Survey was anonymous, and included disciples and sportsmen respondents, were 17-18 years of age. Descriptive statistics and procedures for determination of the importance of diversity between arithmetical average (t-test and variable analysis) are the statistical analyses that were used. The final results after statistical processing show that, young sportsmen have lower level of depression than their colleagues that do not do sports. We can conclude that, by doing sports we can contribute toward decreasing the level of depression.

***Key words**: adolescents, disciples, young sportsmen, depression, BDI-II*

Introduction

Definition of a man as a dynamic system and organized integrated system is seen as such, because this system contains certain subsystems which while functioning are fully depending to each other (Malacko, 1986).In the field of anthropology various conative factors that are responsible for modalities human's behavior, depending on age and gender, and have a significant influence on normal functioning of these subsystems and also influence normal development of general human health. From conative factors that are many, depression is a big worldwide problem which is one of the disease not only as the oldest disease prescribed from medicine but also as one of the most frequent nowadays health disorder. Depression is a frequent mental disorder, lost of interest and satisfaction, decreased energy, sense of guiltiness or lack of values, sleeping disturbance or appetite and weak focusing (Novovic et.al.2009). According to World Health Organization assessments until 2020 depression will become the second largest health problem in the world, but if we look at females only, it will be number one health problem in the world (WHO, 2012). Some researchers have concluded that, people that permanently do physical and sport activities Can improve their general and health condition, and have more internal power and amenity, which is positively reflected in all their life fields (Stone and Klein, 2004 according to (Sharkey & Gaskill, 2008). It is truly obvious that people who frequently perform sport activities realize numerous benefits which reflect in their quality of life. For physical activities benefits have written (Hadzikadunic, 2004; Gayton & Hall, 2008) as many other authors did, by looking at physical activity from social, psychological and physiologic aspects, that show the impact of physical activity on human's general health aspects. Psychometric characteristics according to last assessment version, known as The Beck Depression Inventory (BDI-II) have been confirmed on numerous and various samples, especially samples with clinical depression (Beck, et.al.1996; Steel, et.al.1997) and adolescents on depression (Kumar, et.al.2002: Steer, et.al.1998). It has been confirmed that through BDI-II successfully were determined adolescents with depression and adolescents without it. The intention of this research is to confirm the difference among two groups of adolescents: the group that does sport activities and the group that doesn't do sport activities, in level of depression according to BDI-II.

Methods

In this research participated 130 adolescents, students of 17-18 years of age of Gjilan municipality high schools, precisely 65 young students who regularly play football, basketball, handball and volleyball, and 65 young students who doesn't regularly do sport activities. For measuring the level of depression amongst both groups, a testing according to Beck has been applied, Instrument Beck Depression Inventory –second edition (BDI-II: Beck et.al. 1996), that is a test for measuring the level of depression. Assessment of the level of depression is made for last two weeks.

The Beck Depression Inventory (BDI-II) also contains 21 questions, each answer being scored on a scale value of 0 to 3. Te highest possible total for whole test would sixty three and the lowest possible score for the test would be zero. The standardized cutoffs used differ from the original. The depression level is evaluated according to the following alignment: 0-13 minimal depression, 14-19 mild depression, 20-28 moderate depression, 29-63 severe depression (Beck et.al. 1996). Instrument has been translated and applied with the editor's permit. Participation in research of the adolescents was in volunteer basis. For processing of the data, basic statistical parameters were applied, minimum score (Min) maximum score (Max) arithmetical mean (Mean) standard deviation (Std.Dev), measure of asymmetry distribution (Skewness) degree of homogeneity of distribution (Kurtosis). For the assessment of the difference between two independent groups in arithmetical averages has been applied t-testing (Independent Sample Test).

Results

In table 1 are shown basic statistical parameters of depression level according to Beck: minimum score (Min) maximum score (Max) arithmetical mean (Mean) standard deviation (Std.Dev), measure of asymmetry distribution (Skewness) degree of homogeneity of distribution (Kurtosis). Among sportsmen minimum result is Min=2 level of depression, while maximum result Max=14 level of depression. Arithmetical average Mean=6.18 level of depression, whereas standard deviation Std.Dev=3.20.

Measure of asymmetry distribution Skewness=0.638, is positive which show that the arithmetical average is higher and most of results are with low values. Degree of homogeneity of distribution Kurtosis=-0.232, shows that height of curve is platocurtical. Amongst students non sportsmen minimal result is Min=3 level of depression, whereas maximum result is Max= 21 level of depression.

Arithmetical average is Mean=10.03 level of depression, whereas standard deviation Std.Dev=3.83. Measure of asymmetry distribution Skewness=0.760, is positive (epicurtical) which shows that arithmetical average is higher and most of other results is lower. Degree of homogeneity of distribution Kurtosis = 0.447 shows that height of curve is mezocurtical.

Table 1. Basic statistic indicators

Variables	N	Min	Max	Mean	Std. Dev	Skewness	Kurtosis
Sportsman BDI-II	65	2.00	14.00	6.1846	3.20104	.638	-.234
Schoolboy BDI-II	65	3.00	21.00	10.0308	3.83638	.760	.447

In table 2 and Chart 1, are shown differences in arithmetical averages between sportsmen and adolescents in level of depression according to Beck. The outcome results after statistical processing through variability analysis show that we have an important statistical difference between young sportsmen (late adolescence) and students of the same age on level of depression according to Beck. This is confirmed with the height of the test's coefficient F=38.51 that is important on level p=0.01 (P<0.000). Coefficient of probability shows that sportsmen have lower values of depression level than students who are not involved on sports or physical activities.

Table 2. Variance analysis

ANOVA						
Groups-Variables		Sum of Squares	df	Mean Square	F	Sig.
1. Sportsman BDI-II 2. Schoolboy BDI-II	Between Groups	480.769	1	480.769	38.516	.000
	Within Groups	1597.723	128	12.482		
	Total	2078.492	129			

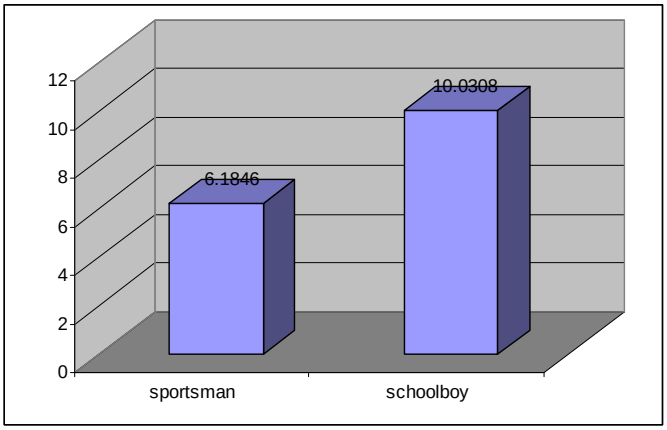


Figure 1. The difference between sportsmen and schoolboy

Discussion

This research of transversal meaning as other researches shows that all problems in kinesiology are m multidisciplinary. It is not possible to treat a kinesiology problem without treating all anthropologic factors. In framework of anthropologic factors, pathologic conative factors are characteristics of a personality in where exists a tight and important connection in between them, distributed in continuative meaning. Its characteristic consists on that in where their increased intensity decreases the adoptive degree, precisely as higher as pathologic conative factor is the adoptive ability is lower (Momirovic. 1971). Having in mind that increased conative factors intensity decreases the adoptive degree, especially in adolescence phase; our efforts in this research were to find out if it can be influenced by applying sports on these factors. Instrument Beck Depression Inventory-second edition (BDI-II:

Beck.et.al.1996). The outcome difference between adolescents students who actively do sports and those who don't in level of depression, tested by Beck Depression Inventory (BDI-II), (P<0.000)show that physical activity has significantly influenced on decreasing the level of depression, that complies with many opinions that sport has great positive effect on curing the depression(Cascua. 2002). The review of the potential of sports in the fight against depressive disorders calls into play many sports, practiced in appropriate places, depending on specific programs and under the supervision of specialized and professional sports figures, which can become real tools to help depression.

These include dance especially practiced with freedom and creativity, recovering the playful spirit that often gets lost in the development and operation of a group or team sport like volleyball or basketball (Amorosi. 2006). The average result of level of depression on population that are non active in sports, in this research is average, compared to results that are taken from other countries on population of late adolescence. The average of points from Beck Depression Inventory (BDI-II) in our sample of students who belong to medium adolescence is higher compared with some other countries, Mean = 10.03, compared with Serbia students in where the arithmetical average is lower, Mean=8.02, (Novovic. Et al.2011), among the students from Iceland arithmetical average of level of depression is Mean = 8.80 (Amarson et.al.2008) students from Canada, arithmetical average is Mean=9.11 (Dozois.et.al.1998), whereas the highest value of the level of depression is found amongst American students in where the arithmetical average is Mean=11.03 (Storch et.al., 2004) and amongst students from Kuwait in where the arithmetical average is Mean=15.50 (Al-Turkait.et.al. 2010).

Conclusion

In the annual report of year 2002, WHO 2002, it is stated that the improper way of feeding and the lack of sports activities are the crucial factors for development of many non-transmittable chronically diseases and are considered being as cause of death up to 60% of cases in whole world. Based on the actual findings that state that the influence of sports activities in preventing and curing the psychic disorders are important, this is considered to be the basement of this research too. The intention of this research was to confirm the influence of sports activities on level of depression tested with instrument The Beck Depression Inventory (BDI-II). The research shows that we have an important statistical difference between students who belong to medium adolescence that do sports activities and those who don't. The results also show that physical activity has influenced significantly on decreasing the level of depression and we can conclude that it is the best and most efficient therapy on preventing and curing the depression. Therefore physical activity and sport should be considered also as one of the important changes of the life style, which can influence on level of depression. To understand in a better way the influence of physical activities in decreasing the level of depression, the researches should be of longitudinal character and the treatment of physical activities should be at least of 6-12 months time period.

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*** http://www.who.int/dietphysicalactivity/strategy /eb11344/ strategy_english_web.pdf

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SPORT I STUPANJ DEPRESIJE KOD MLADIH SPORTAŠA

Sažetak

Na početku 21. stoljeća na Kosovu dogodile su se mnoge okolnosti koje su uznemirujuće ili potresno djelovale na ljude. Rat, društvena kriza, promjene, a najzad i tranzicija, doveli su do toga da se razvije jedno stalno stanje napetosti i da se to stanje u izvesnoj mjeri smatra normalnim. U tim situacijama stupanj depresije kod mladih ljudi može biti veći. Cilj rada je bio potvrditi stepen depresivnosti kod mladih ljudi i mladih sportista, odnosno utjecaj sporta na stupanj depresije. Istraživanjem je obuhvaćeno 130 ispitanika, 65 učenika i 65 mladih sportaša sa područja Kosova. Ispitivanje je bilo anonimno, a raspon godina učenika i mladih sportaša obuhvaćenih uzorkom je od 17 do 18 godina. Od statističkih metoda korištene su mjere deskriptivne statistike i postupci utvrđivanja značajnosti razlika između aritmetičkih sredina (t-test i analiza varijanse). Dobiveni rezultati nakon statističke obrade pokazuju da mladi sportaši imaju niži tupanj depresivnosti od svojih vršnjaka nesportaša. Možemo zaključiti da bavljenjem sportom možemo utjecati na smanjenje razine depresije.

Ključne riječi: *adolescenti, učenici, mladi sportaši, depresivnost, BDI-II*

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