

# Povezanost između razine tjelesne aktivnosti i doživljaja općeg stresa u studenata medicine, dentalne medicine i farmacije

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Master's thesis / Diplomski rad

2019

Degree Grantor / Ustanova koja je dodijelila akademski / stručni stupanj: **University of Split, School of Medicine / Sveučilište u Splitu, Medicinski fakultet**

Permanent link / Trajna poveznica: <https://um.nsk.hr/um:nbn:hr:171:660007>

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Download date / Datum preuzimanja: **2024-04-19**



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UNIVERSITY OF SPLIT



**SVEUČILIŠTE U SPLITU  
MEDICINSKI FAKULTET**

**Vladimir Huić**

**POVEZANOST IZMEĐU RAZINE TJELESNE AKTIVNOSTI I  
DOŽIVLJAJA OPĆEG STRESA U STUDENATA MEDICINE,  
DENTALNE MEDICINE I FARMACIJE**

**Diplomski rad**

**Akadska godina:  
2018./2019.**

**Mentor:  
Izv. prof. dr. sc. Ivana Kolčić**

**Split, srpanj 2019.**

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*Hvala mentorici Izv. Prof. dr. sc. Ivani Kolčić, dr. Adi Kirn, cijeloj mojoj obitelji i djevojci Elli na potpori tijekom izrade diplomskog rada i cijelog školovanja.*

## **SADRŽAJ:**

### **1. UVOD**

## **1. UVOD**

## **1.1. Tjelesna aktivnost**

Tjelesna aktivnost definirana je kao bilo koja tjelesna kretnja nastala kontrakcijom skeletnog mi

### **1.1.3. Anaerobna tjelesna aktivnost**

To je naj

aktivnost niskog intenziteta ili kratkotrajna tjelovje

epidemiolo

vaskularne bolesi (15). Tjelesna aktivnost pove

oksidaciju, sli

## **1.2. Stres**

Stres ili napetost ozna

tlak i pove

ima vremena za

kortizola (u serumu i slini), hormona rasta (GH), prolaktina kao i zna

Podaci upu

## **2. CILJ ISTRAŽIVANJA**

Cilj istra

### **3. MATERIJALI I METODE**

### **3.1. Ustroj istraživanja**

Prema epidemiolo

cilj procijeniti intenzivnu tjelesnu aktivnost, umjerenu tjelesnu aktivnost, hodanje i sjedenje (32). Treba naglasiti da se odgovori trebaju odnositi samo na aktivnosti koje se provode bez prekida u trajanju od najmanje 10 minuta. Intenzivna tjelesna aktivnost podrazumijeva aktivnosti koje uzrokuju te

### **3.3.2. Upitnik o doživljavanju stresa**

U na

## **4. REZULTATI**

U analizu je uklju

**Tablica 1.** Osobine ispitanika s obzirom na studijski program

|             | Medicina HR<br>N = 380 | Medicina<br>ENGL<br>N = 123 | Dentalna<br>medicina<br>N = 161 | Farmacija<br>N = 106 | <i>P</i> |
|-------------|------------------------|-----------------------------|---------------------------------|----------------------|----------|
| Spol; N (%) |                        |                             |                                 |                      | <0,001*  |
| Mu          |                        |                             |                                 |                      |          |

(Tablica 2). Nije pokazana statisti

hrvatskom jeziku iznosio je 18 (IKR=8,0), a najvi

**Tablica 4.** Razina tjelesne aktivnosti i do

**Tablica 5.** Razina tjelesne aktivnosti i do

**Tablica 6.** Razina tjelesne aktivnosti i do

**Tablica 7.** Korelacija izme

**Tablica 8.** Razina do



U ovom istra

razinu tjelesne aktivnosti (7,4%) nego

razli

## **6. ZAKLJUČCI**

Kratki prikaz rezultata postignutih u ovom istra

## **7. POPIS CITIRANE LITERATURE**

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## **8. SAŽETAK**

**Cilj istraživanja:** Cilj istra

**Zaključak:** U ovom istra

## **9. SUMMARY**

**Diploma thesis title:** Association between level of physical activity and experience of general stress in medical students, dental medicine students and pharmacy students

**Objective:** The aim of the study was to examine the association between physical activity and the level of general stress in medical students, dental medicine and pharmacy students at the University of Split, School of Medicine.

**Materials and Methods:** This cross-sectional study included 902 students at the University of Split Medical School, with a high response rate (79.7%). The study included 380 medical students in Croatian studies, 123 medical students in English studies, 161 dental medicine students and 106 pharmacy students during May and June 2018. In order to examine the physical activity of students, we used the International Physical Activity Questionnaire - Short Form (IPAQ-SF). The questions related to physical activity in the last 7 days lasting for at least 10 minutes, separately assessing intense level of physical activity, moderate physical activity and walking. To assess stress levels, we used the Perceived Stress Scale (PSS) questionnaire. The questionnaire consists of 10 questions and examines the feelings and thoughts in the last month. Subjects were divided into groups according to the study program (medicine in Croatian language, English medicine, dental medicine and pharmacy), sex and years of study (pre-clinical and clinical studies). We used chi-square test, Mann-Whitney U test and Kruskal-Wallis test, and Spearman's correlation test in data analysis.

**Results:** Students with a high level of physical activity more frequently reported lower level of stress (69% vs. 51% in low-level physical activity students). Statistically significant negative correlation was obtained for the level of stress perception and the MET-minutes for intensive physical activity ( $r=-0.144$ ,  $P<0.001$ ) and total physical activity ( $r=-0.128$ ,  $P<0.001$ ). Male students reported higher level of physical activity than female students (63.6% vs 51.3%). There was no statistically significant difference in the level of physical activity according to the study program ( $P=0.215$ ) and the study year group ( $P=0.267$ ). A statistically significant difference according to the study program was found for intensive physical activity expressed in MET-minutes per week ( $P=0.003$ ), but not for moderate physical activity level ( $P=0.420$ ) and walking ( $P=0.358$ ). There was no difference in the level of perceived stress according to the study program ( $P=0.522$ ). Male students less frequently reported high level of stress compared to female students (21.2% versus 39%). There was a statistically

significant difference in perception of stress compared to the years of study ( $P=0.006$ ), with students in their later, clinical study years reported lower perceived stress levels.

**Conclusion:** We confirmed the association between the level of physical activity and stress experience in medical students, dental medicine and pharmacy students, and high level of physical activity was associated with a lower level of perceived stress. This result should be used to motivate students to achieve higher levels of physical activity.

## **10. ŽIVOTOPIS**

**Osobni podaci:**

Ime i prezime: Vladimir Hui