

**PR02 Etičnost korištenja stimulansa u svrhu poboljšanja akademskih rezultata među studentima**Paola Negovetić<sup>a</sup>, Tin Šklebar<sup>b</sup>, Lorena Karla Rudež<sup>c</sup><sup>a</sup> Sveučilište u Zagrebu<sup>b</sup> Dom Zdravlja Zagreb Zapad<sup>c</sup> Specijalistička Ordinacija Obiteljske Medicines "Martina Anić"DOI: <https://doi.org/10.26800/LV-143-supl3-PR02> Paola Negovetić (0000-0002-2658-5938), Tin Šklebar (0000-0002-2228-0766), Lorena Karla Rudež (0000-0003-4332-3769)

Ključne riječi: uporaba stimulansa, etika, kognitivno poboljšanje

**UVOD I CILJ:** U populaciji studenata primjećujemo trend sve učestalijeg korištenja različitih stimulansa u svrhu poboljšanja akademskih rezultata. Neke stimulanse, kao što je kofein, moguće je nabaviti legalno, a neke, kao što su lijekovi za ADHD, ilegalno, na medicinski recept. Cilj ovog rada je pružiti kratki pregled literature te se fokusirati na etičku dvojbu korištenja spomenutih stimulansa u svrhu unaprjeđenja akademskog uspjeha.

**MATERIJALI I METODE:** Provedena je pretraga literature PubMed-a kako bi se identificirale studije koje pokazuju povezanost pojmova stimulant usage (eng. uporaba stimulansa), ethics (eng. etika) i cognitive enhancement (eng. kognitivno poboljšanje).

**REZULTATI:** Istraživanja pokazuju kako sve veći broj studenata rabi stimulanse u nadi da će im olakšati akademski posao te omogućiti da budu korak ispred kolega. Uporaba stimulansa kao što je kofein nije novost, no u zadnje vrijeme prisutan je porast korištenja lijekova koji se dobivaju na recept za liječenje ADHD-a. Rezultati provedene studije pokazuju kako je vodeći razlog korištenja stimulansa među studentima postizanje bolje koncentracije tijekom učenja. Kofein se, s druge strane, većinski koristi kako bi se izbjegao umor tijekom učenja.

**ZAKLJUČAK:** Korištenje lijekova za poboljšanje kognitivne sposobnosti može se smatrati „varanjem“ u akademskom smislu riječi. Prvobitno, uporaba lijekova na recept ilegalno u ne-medicinske svrhe je neetička u svakom pogledu. Također, korištenje stimulansa koji se ilegalno nabavio i samim time nije dostupan svima te izaziva razliku između studenata može se smatrati neakademskim i neetičkim. Kao zaključak, ostaje otvoreno pitanje, može li se uspjeh dobiven korištenjem stimulansa zaista prepisati studentu koji u njemu uživa?

**Ethics of using stimulants to improve academic performance among students**

Keywords: stimulant usage, ethics, cognitive enhancement

**INTRODUCTION AND GOAL:** In the student population, we are seeing a trend toward the increasing use of different stimulants with intention of improving academic performance. Some stimulants, such as caffeine, can be obtained legally, and some, such as ADHD medications, illegally, with a medical prescription. The aim of this paper is to provide a brief overview of the literature and focus on the ethical dilemma of using these stimulants in order to improve academic success.

**MATERIALS AND METHODS:** A search of PubMed's literature has been conducted to identify studies showing the association between the terms stimulant usage, ethics and cognitive enhancement. **RESULTS:** Research shows that an increasing number of students are using stimulants in the hope of facilitating their academic work and allowing them to be one step ahead of their peers. The use of stimulants such as caffeine is not new, but recently there has been an increase in the use of prescription drugs to treat ADHD. The results of the study show that the leading reason for using stimulants among students is to achieve better concentration during learning. Caffeine, on the other hand, is overwhelmingly used to avoid fatigue during learning.

**CONCLUSION:** The use of drugs to improve cognitive ability can be considered "cheating" in the academic sense of the word. Originally, the use of prescription drugs illegally for non-medical purposes is unethical in all respects. Also, the use of a stimulant that was obtained illegally and therefore is not available to everyone, causing an inequality between students, can be considered non-academic and unethical. As a conclusion, the open question remains, can the success obtained by using a stimulant really be awarded to the student in question?

Reference: Narayanan A, Gill M, Leem C, Li C, Mein Smith F, Shepherd B, Ting S, van Bart K, Green JA, Samaranyaka A, Ergler C, Macmillan A. Students' use of caffeine, alcohol, dietary supplements, and illegal substances for improving academic performance in a New Zealand university. *Health Psychol Behav Med.* 2021 Oct 22;9(1):917-932. doi: 10.1080/21642850.2021.1990763. PMID: 34712515; PMCID: PMC8547821 Herman L, Shtayermman O, Aksnes B, Anzalone M, Cormerais A, Liodice C. The use of prescription stimulants to enhance academic performance among college students in health care programs. *J Physician Assist Educ.* 2011;22(4):15-22. doi: 10.1097/01367895-201122040-00003. PMID: 22308929 James Butcher (2003). Cognitive enhancement raises ethical concerns. , 362(9378), 0–133. doi:10.1016/s0140-6736(03)13897-4