

# SMARTPHONE & VIDEO GAME ADDICTION: POSSIBLE RISKS AND BENEFITS. A PILOT STUDY ON A POPULATION OF UNIVERSITY STUDENTS

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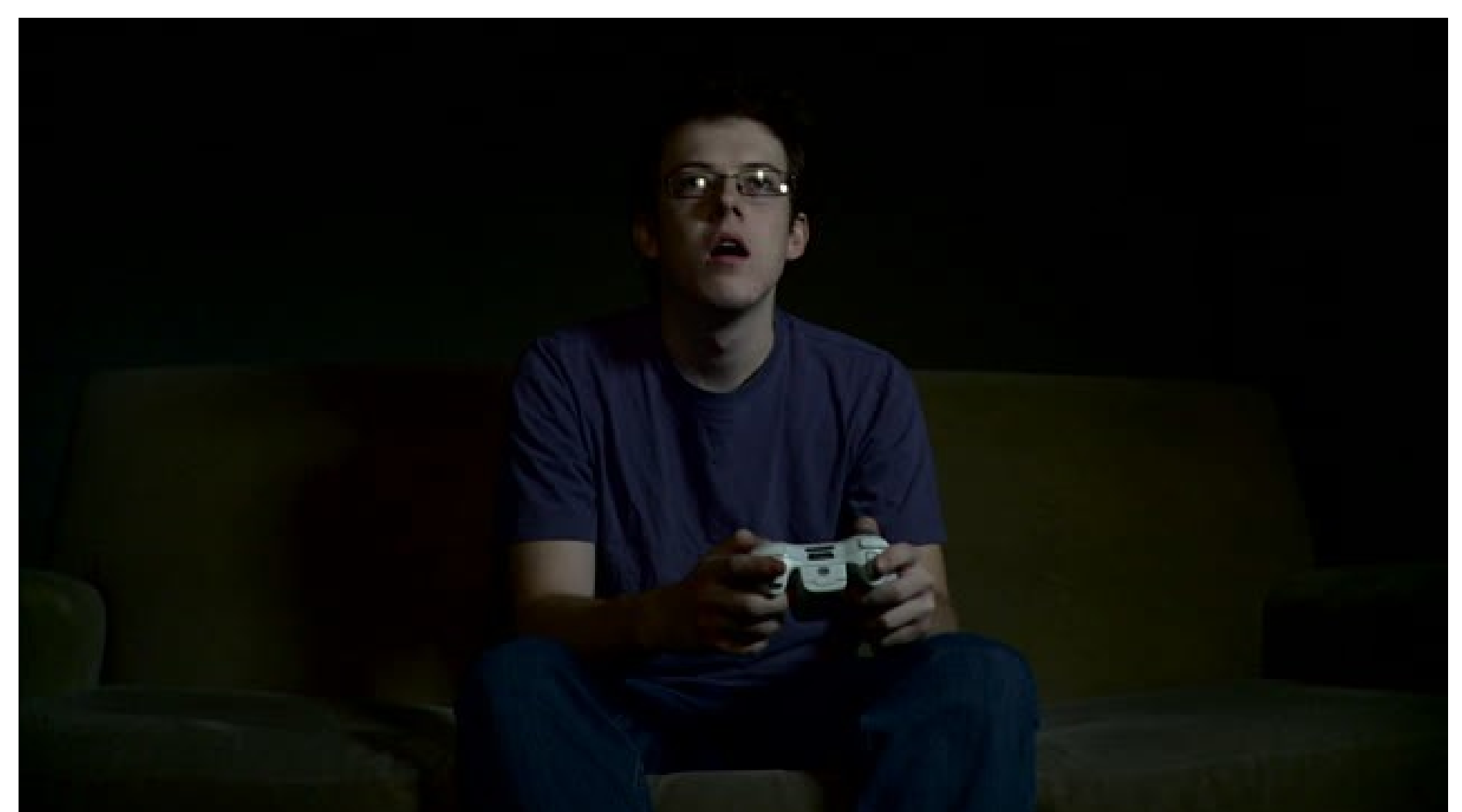
**Objective:** The Internet addiction disorder (IAD) is considered to be a significant problem in the most advanced societies, such as to be equated to gambling addiction (Moreno MA, et al. (2011), "Problematic internet use among US youth: A systematic review". Archives of Pediatrics and Adolescent Medicine 165:797-805. DOI: 10.1001/archpediatrics. 2011.58.) The intensive use of smartphones in the youth population prompted us to consider whether the way the students use this modern technology can affect their academic performance and physical activity by representing it as a true addiction, and whether and to what extent their use is related to specific personality variables.

**Materials and Methods:** The research of the University of Catania included 100 students, aged between 20 and 25 years (average  $1.45 \pm 22.5$  SD). Of these, 75 were women with an average age of 22.6 ( $\pm 1.45$  SD) and 25 were men with an average age of 22.2 ( $\pm 1.44$  SD). Participants were called to take part to the study after an interview where the research objectives and the methodologies used were outlined, and at the end of which they signed an informed consent form. All participants were administered some psychological tests.

**Results:** The students in our sample surfed the net for an average time of 50.5 minutes per day ( $\pm 11.91$  SD) and used the smartphone for an average period of 31.3 minutes per day ( $\pm 11.52$  SD); 85% of them used video games, with a strong preference for a game called Candy Crush, a puzzle game of the "align three pieces" kind, in which more than three combinations serve to create sweet "bonus" to quickly solve the game and proceed to the next one.

**Discussion:** The above data indicate that our sample group of students shows a significant dependence from both the Internet and from their own Smartphones. The growth of Internet and the smartphone use is associated with a parallel decrease in the time dedicated to physical activity. This dependence seems to be linearly related to certain characteristics of the individuals such as a low agreeableness, low stamina, high anxiety, low persuasiveness and finally a high Digit ratio.

**Conclusions:** We can conclude that in the population of college students the growth of Internet addiction is associated with the dependence on the Smartphone; this addiction is more likely to be seen in a specific category of individuals.



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