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University students’ changes in mental health status and determinants of behavior during the COVID-19 lockdown in Greece

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ABSTRACT
Introduction: The aim of the study was to investigate mental health in university students in Greece, during lockdown due to COVID-19.

Material and Methods: The data were collected online and anonymously, during lockdown; they included 1104 females (aged 22.08 ± 4.96) and 431 males (aged 22.35 ± 3.11). The analysis included transformation of the data with post-stratification method, descriptive statistics, Chi-square tests, Factorial Analysis of Variance and Relative Risk ratios.

Results: The results suggest that during, lockdown major depression was present in 12.43% with 13.46% experiencing severe distress. Risk factors were female sex, history of self-injury, suicidal attempts and following theoretical studies (RR=2–5.71). Conspiracy theories were accepted by 20–68%, with students of theoretical studies manifesting higher rates.

Discussion: The results of the current study confirmed that students are at high risk to develop depression and suicidality in relation to the COVID-19 outbreak. They also identified specific risk factors and pointed to the role of believing in conspiracy theories in coping with stress. They also identified populations with higher prevalence of these beliefs. Further targeted research is necessary as well as targeted intervention in vulnerable groups but concerning mental health as well as the reduction of believing in conspiracy theories.
Results

The complete results can be found in the webappendix

Discussion

There is not much in the literature concerning the effect of lockdown on university students' mental health, but initial reports suggest that students constitute a vulnerable population (Kaparounaki et al. 2020).

Concerning the effect of lockdown on the general population, previous research has shown the presence of anxiety and depression in 8.3% and 14.6% in unaffected persons in China (Lei et al. 2020), while another study suggested a prevalence of depression or anxiety as high as 20.4% (Li et al. 2020). Again in China, moderate-to-severe stress, anxiety and depression were noted in 6.5–8.1%, 28.8% and 16.5%, respectively (Wang et al. 2020a), while there were no significant longitudinal reductions (Wang et al. 2020b). A study from Turkey reported 23.6% depression and 45.1% anxiety (Ozdin, Bayraktar & Ozdin 2020).

The high rates of believing in conspiracy theories are in accord with findings from other countries (Ahmed et al., 2020; Anonymous, 2020; Uscinski et al., 2020) and are a worrying manifestation. It is of particular importance and it is both disturbing and worrying, the finding that students of those studies leading to professions which will staff the public administration, the political system and, even more importantly, the education system in social, political and ideological/moral topics, manifest the highest rates concerning beliefs in conspiracy theories.

Another finding regarding the beliefs in conspiracy theories was that the latter were related to the presence of depression or distress, and were in accord with the literature (Freyler et al., 2019; Tomljenovic et al., 2020). As correlation does not imply causation, conspiracy theories could be either the cause of depression or on the contrary a copying mechanism against depression. The authors are inclined to propose that the beliefs in conspiracy theories are a copying mechanism against the emergence of distress and depression rather than their cause.

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Author contributions

All authors contributed equally to the paper

KNF conceived and designed the study. The other authors participated formulating the final protocol, designing and supervising the data collection and creating the final dataset. KNF did the data analysis and wrote the first draft of the paper. All authors participated in interpreting the data and developing further stages and the final version of the paper.

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Declaration of Competing Interests

None pertaining to the current paper

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.psychres.2020.113298.

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