

Risk and protective factors for psychological distress among Italian university students during the COVID-19 pandemic: The beneficial role of health engagement

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We read with great interest the study by Torales et al. (2020) and colleagues on the impact of COVID-19 on the global and mental health of citizens across countries. They stated that global health initiatives should be employed to manage psychosocial stressors, particularly those related to the experience of isolation and quarantine among the general population. There have been reports on the psychological impact of the epidemic on citizens, patients, medical workforce, children, and older adults (Barello et al., 2020; Dubey et al., 2020; Garnier-Crussard et al., 2020; Li et al., 2020; Lima et al., 2020). However, few studies on the mental health status of Italian university students facing the epidemic has been conducted to date. At this regard, university students should be considered as a potentially higher risk population for mental health disorders related to the COVID-19 pandemic, as they were asked to deeply reframe their daily habits. The continuous spread of the epidemic, strict isolation measures, being often far from home and lack of interpersonal relationships across Italy, may have hugely affected the mental health of university students. Furthermore, university students, more than others social groups, had to tackle the ‘infodemic’ of misinformation about COVID-19, due to their higher social media exposure (Rovetta & Bhagavathula, 2020). The re-organization of learning activities and of their habits could represent a challenging demand for students, which requires adequate institutional responses to make them able to manage anxiety and stress. Therefore, we believe that a wider understanding of those factors that might contribute in exacerbating anxiety and poor mental health outcomes in university students is warranted to address this issue to provide high-quality, timely crisis-oriented psychological services to this vulnerable population (Tang et al., 2020). Specifically, further studies should encompass positive and negative determinants of students’ Covid-19-related distress.

Therefore, we conducted a cross-sectional online survey involving 934 Italian university students to investigate risk and protective factors of post-traumatic stress disorder symptoms

during the peak of COVID-19 in Italy (March–April, 2020), adopting the lenses of the Job-Demand Resource Model (Bakker et al., 2004), that is an occupational stress model that suggests psychological strain and distress is a response to imbalance between job demands on the individual and the resources he or she has to deal with those demands.

Risk factors were assessed by ad hoc items on risk perception and concerns referred to COVID-19 pandemic, while protective factors were assessed by ad hoc items on positive attitudes and trust about the role of public institutions in managing the epidemic. Moreover, we measured the level of students’ health engagement by the Patient Health Engagement scale-revised (Barello & Graffigna, 2015; Graffigna et al., 2015, 2020), that assesses the level of people consciousness about their role and responsibility in managing their own health. Finally, the participants responded to the Impact of Event Scale – Revised (IER-R) (Craparo et al., 2013) that assesses subjective distress caused by traumatic events (in this case, the COVID-19 pandemic). Data were analyzed using SPSS, version 22.0. An analysis of descriptive statistics was conducted to describe the demographic and other characteristics of the respondents. Nursing students represented approximately 70% of the sample, and females were the majority (79.6%); their mean age was 23.6 ($SD = 4.9$).

We explored the associations between post-traumatic stress disorder and risk and protective factors through

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generalized liner models. The model, without adding the interaction of health engagement, showed that students' concerns increased by 30% the likelihood (the odds) of post-traumatic stress disorder; on the contrary, students' positive beliefs decreased by roughly 10% the odds of exhibiting post-traumatic stress disorder. When adding into the model the interaction of health engagement with risk and protective factors, the association between concerns and post-traumatic stress disorder decreased by roughly 20%; likely the significance of the positive beliefs as protective factor increased (narrower confidence interval), maintaining the mitigation by 10% of post-traumatic stress disorder. Accordingly, the students' level of health engagement seems to mitigate the effects of negative risk factors and to amplify the ones of the protective factors on their reported mental health status. This result is in our perspective meaningful as health engagement is a modifiable determinant of mental health. This might suggest the need to promote sensitizing campaign aimed to sustain students' awareness about their own role in protecting their mental health during emergencies like the COVID-19 one.

Basing on these preliminary results, we may confirm that the mental health of university students is significantly affected when confronting with public health emergencies like the COVID-19 pandemic, and they require careful attention and dedicated support of the society, families and university leaders. Further cross-national research is needed to effectively engage the broader scientific community on the issue of university students' mental health and to provide timely action to lessen the COVID-19-related psychological consequences and improve long-term capacities for mental health services for students. Lessons for public institutions include the need to systematically monitor the mental health status of students and to promote educational campaign for positive public health behaviors and health engagement among them.

Conflict of interest

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