

Preventative Emergency Response (PER) Covid-19 Project 2021: Annotated bibliography (revisited)

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Introduction

The literature review presented here was undertaken in April 2021. At that time, many students across the UK were returning to their universities during the Covid-19 coronavirus pandemic but in many cases only virtually. The review provides a snapshot account of the academic literature available at the time of writing and made available since the earlier work of Sharp (2021) in October 2020 (also published in IMPact). Most sources reflect a quantitative, survey-based approach using online questionnaires across different countries. The 11 journal sources described here were obtained via a Google Scholar keyword search (e.g. *student behaviours, knowledge, attitudes, practices, Covid-19, pandemic, online learning, academic, achievement, mental health, well-being and experience*), with inclusion merited following a reading and assessment of titles and abstracts.

Overview of selected works

Abbasi S. (and 3 others) (2020) Perceptions of students regarding E-learning during Covid-19 at a private medical college. *Pakistan Journal of Medical Sciences* [Online: doi.org/10.12669/pjms.36.COVID19-S4.2766].

Location: College of Medicine and Dentistry in Pakistan.

Sample: 382 medicine and dentistry students, 137 males and 245 females. No ages or ethnicities provided.

Method: Descriptive cross-sectional study, self-administered questionnaire, 23 items on a 5-point Likert scale.

Findings: Large majority of students had negative perceptions towards e-learning. Students did not prefer e-learning over face-to-face teaching during Covid-19 pandemic. Found that students were not ready for e-learning.

Adnan, M. and Anwar, K. (2020) Online learning amid the Covid-19 pandemic: Students' perspectives. *Journal of Pedagogical Sociology and Psychology*, 2(1), 45-51.

Location: Pakistan University higher education students.

Sample: 126 higher education students, 84 female and 42 male, 64 undergraduate and 62 postgraduate students.

Method: Online survey, 38-item questionnaire.

Findings: Online learning could not produce desired results in underdeveloped countries like Pakistan, majority of students were unable to access the Internet due to technical and monetary issues. Lack of face-to-face interaction with the instructor, and absence of traditional classroom socialisation, were some issues highlighted by students.

Asselmann, E. (and 3 others) (2020) The role of personality in the thoughts, feelings, and behaviors of students in Germany during the first weeks of the Covid-19 pandemic. *PLoS ONE*, 15(11), 1-14.

Location: Research and Applied Science Universities in Germany.

Sample: 6,957 German University students ranged 15 to 34 years (mean 23.93 years), 4,267 (61.3%) female, 2,641 (38.0%) male and 49 (0.7%) identified as diverse.

Method: Repeated cross-sectional study conducted twice a year, March and September. Questionnaires.

Findings: More conscientious and more agreeable students kept up with the news more. More agreeable students were also more likely to wash their hands more often/intensively, use public transport less, avoid crowds, and restrict meetings with family and friends. Less emotionally stable students more often bought more supplies than usual, felt insecure in public spaces, and expected financial losses. Suggests that more agreeable individuals tend to comply with governmental rules and recommendations to fight Covid-19.

Ding, Y. (and 7 others) (2020) Risk perception of coronavirus disease (Covid-19) and its related factors among college students in China during quarantine. *PLoS ONE*, 15(8).

Location: Various provinces in China.

Sample: College students in China (including junior college student, undergraduate, postgraduate and doctoral student). 1,461 students consisting of 639 (43.7%) males and 822 (56.2%) females. Mean age 20.7 years. 1,390 junior and undergraduate students, and 1,390 postgraduate and doctoral students.

Method: Internet questionnaire.

Findings: College students in China have high risk perception of Covid-19. Female college students, non-medical students, college students whose schools were in Hubei and college students with higher knowledge level have higher risk perception.

Hatabu, A. (and 7 others) (2020) Knowledge, attitudes, and practices toward Covid-19 among university students in Japan and associated factors: An online cross-sectional survey. *PLoS ONE*, 15(12), 1-19.

Location: Japan.

Sample: 362 university, college, and junior college students who lived in Japan, consisting of 52.8% female and 47.2% male (mean age 20.8 years).

Method: Cross-sectional questionnaire study.

Findings: Overall knowledge, attitudes and practices of university students in Japan was high. All respondents showed they possessed knowledge on avoiding enclosed spaces, crowded areas, and close situations. Most respondents showed a moderate or higher frequency of washing their hands or wearing masks. 68.5% of participants showed a positive attitude toward early drug administration.

Khattar, A., Jain, P. R. and Quadri, S. M. K. (2020) Effects of the disastrous pandemic Covid-19 on learning styles, activities and mental health of young Indian students: A machine learning approach. *4th International Conference on Intelligent Computing and Control Systems (ICICCS)*, 1190-1195.

Location: India.

Sample: 583 students across India, 56.3% female and 43.7% male.

Participants included undergraduate, postgraduate and school students. 95.5% were staying at home with family.

Method: Online questionnaire.

Findings: 41.0% of students faced bandwidth and speed limitations. Nearly 50.0% were spending more than six hours a day in front of the screen, whilst 27.7% were plugged in for more than eight hours a day. About 26.7% of students spent more than four hours a day on social media for non-academic activities. Most popular activities amongst students included spending time with family, watching movies, sleeping, cooking, and playing online games. 69.8% of students report that lockdown has considerably affected their social life. Only 19.8% of students felt connected as a group while attending online classes. 42.9% felt frustrated, bored, anxious, overworked and depressed during lockdown.

Mahdy, M. A. (2020) The impact of Covid-19 pandemic on the academic performance of veterinary medical students. *Frontiers in Veterinary Science* [Online: doi.org/10.3389/fvets.2020.594261].

Location: Online; colleges and universities across 92 countries.

Sample: 1,392 veterinary medical students; 63.0% male, mean age 24 years. 80.7% were undergraduates, 55.7% in urban areas.

Method: Online questionnaire, 18 items, mixed design, some items open and some closed, data collected April – August Likert scale: 5 = greatly affected, 1 = not affected.

Findings: Covid-19 subjectively appraised as having affected academic performance (mean = 4.02, SD = 1.11), 47.5% reported being considerably affected. Online learning described as convenient, allowing more time for self-study and other activities. However, issues identified included loss of interest, availability of Internet and computers, poor integration of practical lessons, decreased motivation, lost interaction between students and professors/animals, increased loneliness. Recommendations included providing students with computer devices, better training for lecturers on e-learning, live stream directly from lab or provide virtual tools to mimic lab, increase time for online tests, practical learning through interactive tools (e.g. animations) as opposed to text materials (e.g. pdf or MS PowerPoint).

Nambiar, D. (2020) The impact of online learning during Covid-19: Students' and teachers' perspective. *The International Journal of Indian Psychology*, 8(2), 783-793.

Location: Bangalore city, India.

Sample: 70 teachers and 407 students from colleges and universities in Bangalore city. 7 (10.0%) male and 63 (90.0%) female for teachers, and 49 (12.0%) male, 338 (83.1%) female and 20 (4.9%) non-disclosures for students.

Method: Two online short surveys, one for teachers and one for students.

Findings: The following areas were considered important for teacher and student satisfaction with online classes: Quality and timely interaction between student and professor, technical support availability, structured online class modules, and modifications to accommodate conduction of practical classes.

Noreen, K. (and 5 others) (2020) Knowledge, attitudes, and practices against the growing threat of Covid-19 among medical students of Pakistan. *PLoS ONE*, 15(12), 1-12.

Location: Pakistan.

Sample: 1,474 medical students in Pakistan, 576 (39.1%) male and 898 (60.1%) female.

Method: Cross-sectional questionnaire.

Findings: 71.7% of students had adequate knowledge, and almost all students had positive attitudes (92.5%) and good practices (95.4%) towards Covid-19. 69.0% believed that the Covid-19 outbreak had affected their social, mental, and psychological wellbeing. The female students were 2.5 times and 4.4 times more likely to have positive attitudes and good practices toward Covid-19 compared to males.

Santiago, I. P. (and 3 others) (2021) Emergency remote teaching and students' academic performance in Higher Education during the Covid-19 pandemic: A case study. *Computers in Human Behavior*[Online: doi.org/10.1016/j.chb.2021.106713].

Location: Spain, institution blinded for review.

Sample: 43 courses and 43 module coordinators, number of students and demographics not identified.

Method: Qualitative survey supplied to module coordinators asked about instructional decisions during transition; secondly, data retrieved regarding student achievement 2 years before pandemic and current year relative to their class sizes (pass rates, % achieving each grade etc.).

Findings: There was an increase in students' academic performance in emergency remote teaching. Analysis did not find differences across courses with different class sizes or delivery modes.

Schiff, M. (and 3 others) (2020) Covid-related functional difficulties and concerns among university students during Covid-19 pandemic: A binational perspective. *Journal of Community Health: The Publication for Health Promotion and Disease Prevention* [Online: doi.org/10.1007/s10900-020-00930-9].

Location: Israel and Ukraine.

Sample: Two samples of university students, one from Israel and the other from Ukraine. 4,156 Israeli students, 66.0% female and 34.0% male (mean age 27.2 years). 554 Ukraine students, 67.4% female and 32.6% male (mean age 20.9 years).

Method: Cross-sectional questionnaire.

Findings: Students' main functional difficulties in both countries were worries about their family health status and their learning assignments. In both countries, Covid-related functional difficulties and stress associated with exposure to the media added a significant amount of the explained variance of Covid-related concerns. Repeated exposure to media coverage about a community threat can lead to increased anxiety.

Zeballos Rivas, D. R., (and 6 others) (2021) Social media exposure, risk perception, preventive behaviors and attitudes during the Covid-19 epidemic in La Paz, Bolivia: A cross sectional study. *PLoS ONE*, 16(1), 1-12.

Location: Bolivia.

Sample: 886 participants, most between 18-25 years old (73.4%). 577 (65.1%) were female.

Method: Cross-sectional online questionnaire.

Findings: Week before the survey 43.7% reported exposure to social media Covid-19 information as either almost always or always. 34.3% of participants were categorised as with a high-risk perception. Multivariable analyses show that females and having high exposure to Covid-19 information on social media were associated with a higher risk perception for Covid-19. SEM results indicated that risk perception is associated with the adoption of preventative behaviours and attitudes including the acceptance of a vaccine if one were available.