



## Health Survey

### 1- Effects of COVID-19 on College Students' Mental Health in the United States: Interview Survey Study

**By:**

[Son, C](#) (Son, Changwon) [1]; [Hegde, S](#) (Hegde, Sudeep) [1]; [Smith, A](#) (Smith, Alec) [1]; [Wang, XM](#) (Wang, Xiaomei) [1]; [Sasangohao, F](#) (Sasangohao, Farzan) [1], [2]

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**Abstract**

**Background:** Student mental health in higher education has been an increasing concern. The COVID-19 pandemic situation has brought this vulnerable population into renewed focus.

**Objective:** Our study aims to conduct a timely assessment of the effects of the COVID-19 pandemic on the mental health of college students.

**Methods:** We conducted interview surveys with 195 students at a large public university in the United States to understand the effects of the pandemic on their mental health and well-being. The data were analyzed through quantitative and qualitative methods.

**Results:** Of the 195 students, 138 (71%) indicated increased stress and anxiety due to the COVID-19 outbreak. Multiple stressors were identified that contributed to the increased levels of stress, anxiety, and depressive thoughts among students. These included fear and worry about their own health and of their loved ones (177/195, 91% reported negative impacts of the pandemic), difficulty in concentrating (173/195, 89%), disruptions to sleeping patterns (168/195, 86%), decreased social interactions due to physical distancing (167/195, 86%), and increased concerns on academic performance (159/195, 82%). To cope with stress and anxiety, participants have sought support from others and helped themselves by adopting either negative or positive coping mechanisms.

**Conclusions:** Due to the long-lasting pandemic situation and onerous measures such as lockdown and stay-at-home orders, the COVID-19 pandemic brings negative impacts on higher education. The findings



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of our study highlight the urgent need to develop interventions and preventive strategies to address the mental health of college students.

### Keywords

#### Author Keywords

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## Health Survey

### 2- Investigating Mental Health of US College Students During the COVID-19 Pandemic: Cross-Sectional Survey Study

**By:**

[Wang, XM](#) (Wang, Xiaomei) [1]; [Hegde, S](#) (Hegde, Sudeep) [1]; [Son, C](#) (Son, Changwon) [1]; [Keller, B](#) (Keller, Bruce) [1]; [Smith, A](#) (Smith, Alec) [1]; [Sasangohar, F](#) (Sasangohar, Farzan) [1], [2]

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**Abstract**

**Background:** Evidence suggests that the COVID-19 pandemic has generally increased levels of stress and depression among the public. However, the impact on college students in the United States has not been well-documented.

**Objective:** This paper surveys the mental health status and severity of depression and anxiety of college students in a large university system in the United States during the COVID-19 pandemic.

**Methods:** An online survey was conducted among undergraduate and graduate students recruited from Texas A&M University via email. The survey consisted of two standardized scales—the Patient Health Questionnaire-9 and the General Anxiety Disorder-7—for depression and anxiety, and additional multiple-choice and open-ended questions regarding stressors and coping mechanisms specific to COVID-19.

**Results:** Among the 2031 participants, 48.14% (n=960) showed a moderate-to-severe level of depression, 38.48% (n=775) showed a moderate-to-severe level of anxiety, and 18.04% (n=366) had suicidal thoughts. A majority of participants (n=1443, 71.26%) indicated that their stress/anxiety levels had increased during the pandemic. Less than half of the participants (n=882, 43.25%) indicated that they were able to cope adequately with the stress related to the current situation.

**Conclusions:** The proportion of respondents showing depression, anxiety, and/or suicidal thoughts is alarming. Respondents reported academic-, health-, and lifestyle-related concerns caused by the pandemic. Given the unexpected length and severity of the outbreak, these concerns need to be further understood and addressed.



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## Health Survey

### 3- Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population

**By:**

[Pierce, M](#) (Pierce, Matthias) [[1](#)], [[3](#)]; [Hope, H](#) (Hope, Holly) [[1](#)], [[3](#)]; [Ford, T](#) (Ford, Tamsin) [[6](#)]; [Hatch, S](#) (Hatch, Stephani) [[7](#)], [[8](#)]; [Hotopf, M](#) (Hotopf, Matthew) [[7](#)], [[9](#)]; [John, A](#) (John, Ann) [[10](#)]; [Kontopantelis, E](#) (Kontopantelis, Evangelos) [[2](#)]; [Webb, R](#) (Webb, Roger) [[3](#)], [[4](#)], [[5](#)]; [Wessely, S](#) (Wessely, Simon) [[7](#)]; [McManus, S](#) (McManus, Sally) [[11](#)], [[12](#)];

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**Abstract**

**Background** The potential impact of the COVID-19 pandemic on population mental health is of increasing global concern. We examine changes in adult mental health in the UK population before and during the lockdown.

**Methods** In this secondary analysis of a national, longitudinal cohort study, households that took part in Waves 8 or 9 of the UK Household Longitudinal Study (UKHLS) panel, including all members aged 16 or older in April, 2020, were invited to complete the COVID-19 web survey on April 23-30, 2020. Participants who were unable to make an informed decision as a result of incapacity, or who had unknown postal addresses or addresses abroad were excluded. Mental health was assessed using the 12-item General Health Questionnaire (GHQ-12). Repeated cross-sectional analyses were done to examine temporal trends. Fixed-effects regression models were fitted to identify within-person change compared with preceding trends.

**Findings** Waves 6-9 of the UKHLS had 53 351 participants. Eligible participants for the COVID-19 web survey were from households that took part in Waves 8 or 9, and 17452 (41.2%) of 42330 eligible people participated in the web survey. Population prevalence of clinically significant levels of mental distress rose from 18.9% (95% CI 17.8-20.0) in 2018-19 to 27.3% (26.3-28.2) in April, 2020, one month into UK lockdown. Mean GHQ-12 score also increased over this time, from 11.5 (95% CI 11.3-11.6) in 2018-19, to



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12.6 (12.5-12.8) in April, 2020. This was 0.48 (95% CI 0.07-0.90) points higher than expected when accounting for previous upward trends between 2014 and 2018. Comparing GHQ-12 scores within individuals, adjusting for time trends and significant predictors of change, increases were greatest in 18-24-year-olds (2.69 points, 95% CI 1.89-3.48), 25-34-year-olds (1.57, 0.96-2.18), women (0.92, 0.50-1.35), and people living with young children (1.45, 0.79-2.42). People employed before the pandemic also averaged a notable increase in GHQ-12 score (0.63, 95% CI 0.20-1.06).

Interpretation By late April, 2020, mental health in the UK had deteriorated compared with pre-COVID-19 trends. Policies emphasising the needs of women, young people, and those with preschool aged children are likely to play an important part in preventing future mental illness. Copyright (C) 2020 Elsevier Ltd. All rights reserved.



## Health Survey

### 4- Acceptance of the COVID-19 vaccine based on the health belief model: A population-based survey in Hong Kong

**By:**

[Wong, MCS](#) (Wong, Martin C. S.) [1]; [Wong, ELY](#) (Wong, Eliza L. Y.) [1]; [Huang, JJ](#) (Huang, Junjie) [1]; [Cheung, AWL](#) (Cheung, Annie W. L.) [1]; [Law, K](#) (Law, Kevin) [1]; [Chong, MKC](#) (Chong, Marc K. C.) [1]; [Ng, RWY](#) (Ng, Rita W. Y.) [2]; [Lai, CKC](#) (Lai, Christopher K. C.) [2]; [Boon, SS](#) (Boon, Siaw S.) [2]; [Lau, JTF](#) (Lau, Joseph T. F.) [1];  
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**Abstract**

**Background:** Vaccines for COVID-19 are anticipated to be available by 2021. Vaccine uptake rate is a crucial determinant for herd immunity. We examined factors associated with acceptance of vaccine based on (1). constructs of the Health Belief Model (HBM), (2). trust in the healthcare system, new vaccine platforms and manufacturers, and (3). self-reported health outcomes.

**Methods:** A population-based, random telephone survey was performed during the peak of the third wave of COVID-19 outbreak (27/07/2020 to 27/08/2020) in Hong Kong. All adults aged  $\geq 18$  years were eligible. The survey included sociodemographic details; self-report health conditions; trust scales; and self-reported health outcomes. Multivariable regression analyses were applied to examine independent associations. The primary outcome is the acceptance of the COVID-19 vaccine.

**Results:** We conducted 1200 successful telephone interviews (response rate 55%). The overall vaccine acceptance rate after adjustment for population distribution was 37.2% (95% C.I. 34.5-39.9%). The projected acceptance rates exhibited a "J-shaped" pattern with age, with higher rates among young adults (18-24 years), then increased linearly with age. Multivariable regression analyses revealed that perceived severity, perceived benefits of the vaccine, cues to action, self-reported health outcomes, and trust in



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healthcare system or vaccine manufacturers were positive correlates of acceptance; whilst perceived access barriers and harm were negative correlates. Remarkably, perceived susceptibility to infection carried no significant association, whereas recommendation from Government (aOR = 10.2, 95% C.I. 6.54 to 15.9,  $p < 0.001$ ) was as the strongest driving factor for acceptance. Other key obstacles of acceptance included lack of confidence on newer vaccine platforms (43.4%) and manufacturers without track record (52.2%), which are of particular relevance to the current context.

Conclusions: Governmental recommendation is an important driver, whereas perceived susceptibility is not associated with acceptance of COVID-19 vaccine. These HBM constructs and independent predictors inform evidence-based formulation and implementation of vaccination strategies. (C) 2021 The Author(s). Published by Elsevier Ltd.

### Keywords

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### Keywords

#### Author Keywords

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## Health Survey

### 5- Gender difference in the relationship between lipid accumulation product index and pulse pressure in nondiabetic Korean adults: The Korean National Health and Nutrition Examination Survey 2013-2014

By:

[Sung, HH](#) (Sung, Hyun Ho) [1]; [Gi, MY](#) (Gi, Mi Young) [2]; [Cha, JA](#) (Cha, Ju Ae) [3]; [Cho, HE](#) (Cho, Hye Eun) [4]; [Moon, AE](#) (Moon, Ae Eun) [5]; [Yoon, H](#) (Yoon, Hyun) [6]

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#### Abstract

The present study was conducted to assess the association between the lipid accumulation product index (LAP) and pulse pressure (PP) by gender in nondiabetic Korean adults. This study used the data of 8,240 nondiabetic adults (3,577 men and 4,663 women) aged  $\geq 20$  years from the Korean National Health and Nutrition Examination Survey 2013-2014. Key findings from the study were as follows: first, the mean values of age for the overall population, men, and women were 49.59  $\pm$  15.73 years, 49.26  $\pm$  16.04 years, and 49.85  $\pm$  15.47 years, respectively. Second, in women ( $n = 4,663$ ), after adjustment for related variables and with quartile 1 of LAP as a reference, the odds ratios (ORs) of high PP (PP > 60 mmHg) were significantly higher in quartile 3 [1.735 (95% confidence interval [CI], 1.064-2.831)] and quartile 4 of LAP [2.271 (95% CI, 1.325-3.893)]. Third, high PP in men ( $n = 3,577$ ) was not associated with the quartiles of LAP. Fourth, after adjustment for related variables, the PP level was positively associated with the quartiles of LAP in women ( $p < .001$ ) but not in men ( $p = .400$ ). PP was positively associated with LAP in nondiabetic Korean women but not in men.

**Keywords**

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[Pulse pressure](#)[aortic stiffness](#)[lipid accumulation product index](#)[non-diabetic](#)[gender difference](#)

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LEFT-VENTRICULAR HYPERTROPHYCORONARY-HEART-DISEASEBLOOD-PRESSURECARDIOVASCULAR-DISEASEVISCERAL ADIPOSITYRISKFATADIPONECTINMASSEX