

Enduring the COVID-19 Pandemic at a Major Research University

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This descriptive study provides insights into the perceptions associated with the handling of the COVID-19 pandemic, its impact on degree progression, and protocols that a major R2 research university community would like to see remain in place once the pandemic ends. A Qualtrics survey was used to draw responses from the community. Our research findings conclude that: 1) Responses were mixed concerning KSU doing a good job in handling the COVID-19 pandemic, 2) The majority of student responses felt that transitioning to online course delivery did not adversely impact their degree progression, 3) Whereas vaccine availability and testing were what most impressed respondents about KSU's handling of the pandemic, the discontinuation of a mask mandate after the Summer 2020 semester is what least impressed respondents, and 4) The ability to work remotely was the most popular protocol that respondents preferred to see remain in place after the pandemic ends.

Keywords: COVID-19 vaccine, Pfizer, Moderna, Kennesaw State University

INTRODUCTION

Reports of the COVID-19 coronavirus first surfaced in December 2019 (Borowiak, et al., 2020). On January 20, 2020, the World Health Organization (WHO) formally declared the COVID-19 outbreak a “public health emergency of international concern” (Kennedy, 2020). On March 11, 2020, the COVID-19 coronavirus was classified as a pandemic (WHO, 2020). The rapid spread of the COVID-19 virus caused an emergency shift for higher education institutions worldwide in their provision of education (Lanou, et al., 2021) and student support services from an on-campus learning environment to a virtual learning environment. Understandably, this presented numerous challenges to academic institutions, including uncertainty about the future, safety and well-being, teaching and learning, the psychology of all stakeholders, and the impending impact on research activities.

LITERATURE REVIEW

When campuses shut down and transitioned to remote learning (Cahuas, et al., 2023), social activities, social interactions, and quality of life were severely impacted for students, faculty, and professional staff (Watermeyer, Knight, Crick, & Borrás, 2023), leading to an increase in psychological distress and substance use by many freshmen students recruited pre-pandemic vs. post-pandemic as reported in one study in Italy (Buizza, et al., 2023). Academic resources, such as tutoring, writing center assistance, study groups, (Pearman, Chang, & McLean, 2022) in addition to library resources, such as the library website, catalogs, and major databases (Connell, Wallis, & Comeaux, 2021) either saw a usage decline, suddenly became unavailable, or were curtailed.

In stark contrast, using semi-structured interviews in a study of 31 chief online officers from higher education institutions across the U.S., Bouchey et al. (Bouchey, Gratz, & Kurland, 2021) discovered a rapid expansion of student support services due to the COVID-19 pandemic, an increased emphasis to more access and equity in online student support services across participant institutions, and existing online student support services enable a more seamless shift to emergency remote delivery. The rapid worldwide spread of the COVID-19 virus, coupled with the emergency shift from on-campus to remote learning illuminated the importance of student support services, such as advising, tutoring, mental health, and the institution's capability of providing education in a virtual environment (Doyle, 2020) (Garrett, Legon, Fredericksen, & Simunich, 2020) in addition to the continued support of financial aid, particularly for marginalized students (Brown, Kush, & Volk, 2022).

Colclasure et al. (2021) discovered challenges related to remote learning in a study of predominantly undergraduate institutions, such as many students were not in the mindset to take classes virtually, students' lack of access to technology, the feeling of isolation while being away from other students, and anxiety with the remote learning experience (Colclasure, Marlier, Durham, Brooks, & Kerr, 2021). Gentles & Brown (2021) cite the reluctance and resistance among Latin American and Caribbean teachers to overcome technology challenges by learning and practicing digital literacy (Gentles & Brown, 2021). In a large study to evaluate the readiness for teaching online English education in Wuhan, China, Zou et al. (2021) conclude that, on the one hand, the biggest challenge for students was technical problems during online study, on the other hand, the biggest challenge for faculty was student disengagement during online classes (Zou, Li, & Jin, 2021). In a large cross-sectional study of seven state universities, Browning et al. (2021) concluded that challenges faced by students included a lack of motivation, anxiety, stress, and isolation in addition to social distancing, the change to remote learning, and going out less (Browning, et al., 2021). Student implications beyond academics include a decline in healthy habits such as exercise and proper nutrition, exhaustion, and cynical attitudes towards their studies (Gonzalez-Ramirez, et al.), distracted home environment and time management (Hickey, Hebert, & Webb, 2021).

An international survey of university language and communication teachers identified the need for effective methods of assessment that involve students in the assessment process, such as e-portfolios, online learning journals, blogs, online presentations, creative writing, open-book exams that build on students' creativity, collaboration, and self-reflection on their own learning and skills development (Koris & Pál, 2021).

Jung et al. (2021) concludes that the most significant effect of the COVID-19 pandemic in a study of Hong Kong's higher education institutions is that of uncertainty stemming from political, social, and cultural tensions and their impact on teaching practices and student learning (Jung, Horta, H., & Postiglione, 2021). Both positive and negative outcomes in transitioning to remote learning are reported by de Oliveira et al. (2021), such as providing training in psychology that could assist teachers in adapting to the "new normal" as a positive outcome and substantial concern about exclusion for students who either lack access or have limited access to the internet or computers as a negative outcome (de Oliveira W. , Andrade, Fonseca, de Andrade, & dos Santos, 2021).

Results of the impact of COVID-19 on research focus primarily on future funding of research activities or on research activities that cannot be conducted online (Hedding, Greve, Breetzke, Nel, & Jansen van Vuuren, 2020) (Servick, Cho, Guglielmi, Vogel, & Couzin-Frankel). In many cases where researchers had

planned to conduct their research in labs, conduct clinical trials, or perform fieldwork research, these research activities had to be delayed or redesigned (Hedding, Greve, Breetzke, Nel, & Jansen van Vuuren, 2020). In a small study evaluating student engagement in a lab class during the COVID-19 pandemic, students felt high levels of engagement in the research process. Still, students also felt discomfort and experienced emotional challenges when conducting highly relevant research during a global crisis (Freedman, Oates, & Kirk, 2021).

To keep students on track with their degree progressions, findings on the impact of the COVID-19 pandemic on teaching and learning include the need to rethink teaching practice, and whether online resources could include materials from top-tier universities to support the 'equalization of knowledge practices' (Walwyn, 2020). Dorsey-Elson et al. (Dorsey-Elson, et al., 2021) report many benefits for faculty regarding teaching and learning by shifting to remote learning for faculty at Morgan State University, including developing a new level of collegiality, the adoption of multiple roles by faculty, closing digital literacy gaps, and discovering the need to invest in faculty course design training, all with the assistance of CANVAS learning management system ambassadors and graduate technology teaching assistants. Effective instructor strategies include leniency and/or flexibility in course policies, being responsive and accessible to students, and the use of multiple tools for learning and student engagement (Pagoto, et al., 2021) and accommodating students' unpredictable study-life challenges (Greenland & Moore, 2022).

In a study of higher education in Slovenia during the COVID-19 lockdown, while online lectures contributed most to students' competence development, they were not perceived as very demanding due to the mostly passive role of students. In contrast, individual literature studying was perceived by students as the most demanding study method (Gradišek & Polak, 2021). They also discovered positive aspects regarding online exams, such as wearing comfortable clothes, saving time by not driving to the university, and having quiet time at home to take the exam. Students cited negative aspects as concern and stress about having a functioning internet connection, a student's ability to operate technical equipment and electronically submit an exam, as well as the feeling of being watched via the web camera and microphone while taking an online exam.

Results from a study at a major university indicate there was an abundance of prevailing uncertainty about whether students should return to campus amid the global COVID-19 pandemic even if safety measures such as mask-wearing, sanitizing high-touch surfaces and high-traffic areas, and vaccine recommendations were in place (Ogidigben, Rivera, & Keyser, 2021).

In three U.S. studies at a large research university, return-to-campus concerns include changes in stress levels, worry, limited student interaction, social distancing issues, poor planning, and a level of distrust of the university administration (Ogidigben, Rivera, & Keyser, 2021), faculty reported changes in relationships with students as class modalities changed (Ogidigben, Rivera, & Keyser, 2022), and unknown short-term and long-term side effects of receiving any of the available vaccines (Bellamy & Keyser, 2022) and the cleanliness and safety on campus (Ogidigben, Rivera, & Keyser, 2021). Pogue et al. (2023) discovered that positive vaccine attitudes were positively correlated with higher trust levels in the pharmaceutical industry and public safety measures such as wearing masks and public sanitation (Pogue, et al., 2023). In a cross-sectional study of two universities in Colorado, Clark et al. (2023) reports an overwhelming majority of respondents believe that mask-wearing can protect the health of others (Clark, et al., 2023).

For vaccine-hesitant students, Berry et al. (2023) reports the concern about spreading COVID-19 to others as a strong motivator for getting vaccinated (Berry, Walker, Baker, & Trevor-Wright, 2023). Results of a survey conducted by Kecojevic et al. (2021) found that non-vaccinated students who discussed COVID-19 vaccine information with others and exhibited positive attitudes towards vaccination were more likely to get vaccinated (Kecojevic, Basch, Sullivan, Chen, & Davi, 2021).

Brack et al. (Brack, Millard, & Shah, 2008) suggest that allowing students to assist in creating a healthy and safe culture helps educators to become successful role models both during and after school. A group of six residential institutions of higher education in Western North Carolina used a collaborative approach resulting in a deep impact by engaging Student Health Ambassadors in high-level roles with their Diffusions

to Innovations model to help mitigate COVID-19 infection rates and promote healthy and safe campus cultures (Lanou, et al., 2021).

van Schalkwyk (2021) reports the impact of the pandemic on post-doctoral appointments at a public university in South Africa curtailed collegial relations and left many post-docs in a communication vacuum with the university due to the shift to remote learning and meetings with time limits and agendas held via MS Teams or Skype (van Schalkwyk, 2021).

When schools closed due to lockdowns, clinical practice and student teaching experiences were severely impacted (Choate, Goldhaber, & Theobald, 2021). Ousey et al. (2021) posit that the hybrid approach to teaching will continue, particularly in healthcare courses, where prioritization will be given to face-to-face clinical activities combined with online delivery of much of the academic content (Ousey, Bullen, Hodgson, & Atkin, 2021). Further, the hybrid approach used in the converged classroom model, which combines on-campus and online sections simultaneously in a live class session is gaining popularity, particularly in engineering courses (Keyser, 2019) (Keyser & Parvathareddy, 2017) (Wiles & Keyser, 2016) (Stankovska, Memedi, & Grncarovska, 2022).

PURPOSE OF THE STUDY

This IRB-approved research aims to gain insights on perceptions of the COVID-19 pandemic and its impact at our home institution, Kennesaw State University (KSU). KSU is a fast-growing, predominantly undergraduate (90%), institution of higher education located in the metro Atlanta, Georgia area. A leader in innovative teaching and learning, KSU is one of the 50 largest public institutions in the country. KSU is a R2 Carnegie-designated doctoral research institution, placing it among an elite group of only 6 percent of U.S. colleges and universities in the country.

A descriptive research design was employed to explore the KSU community's reflections on the following four research questions:

Research Question #1: Did you feel that KSU did a good job in handling the COVID-19 pandemic?

Research Question #2: Did the online course delivery option help or hurt your degree progression?

Research Question #3: What impressed you the most/least in KSU's handling of the pandemic?

Research Question #4: What protocols would you like to see remain in place that came about during the pandemic once the pandemic is declared over?

METHODOLOGY

The data collection process was conducted using Qualtrics™, an online survey software, where a survey was created with a combination of thirteen multiple-choice and free-response questions. These questions were thoroughly evaluated to ensure that there was no intentional bias and that they flowed into each other surrounding the topic of interest, COVID-19 at Kennesaw State University. Once the survey and research questions were finalized, it was distributed to the KSU population via the daily electronic school newsletter KSU Today. It was administered for four consecutive days: a Thursday and Friday of one week followed by a Monday and Tuesday of the next week. This allowed participants the opportunity to complete the survey over the weekend.

The survey began with an informed consent form that included a brief introduction, a description of the research project, and the estimated time required to complete the survey. This section also informed individuals that their participation was purely voluntary, that no personally identifiable information would be collected in the survey, and that they were allowed to skip questions or opt out of the survey entirely at any point without consequence. Furthermore, all individuals were required to be at least 18 to participate.

If the individual declined consent or was below 18, the survey would terminate, and no information would be recorded.

Once consent was granted, the participant could respond to the research questions. The multiple-choice questions consisted of several detailed response options and an option for those who preferred not to answer. The free-response questions had no limits on word count, allowing for a wide variety of answers surrounding the research. Additionally, a demographics section was created to evaluate the gender, age, and ethnicities of those responding. The demographics section also sought information about each participant's role at KSU.

Through KSU Today, the survey reached all students, faculty, staff, and administrators. A 3-week period followed the survey distribution to allow survey responses to be flushed out. Convenience sampling was used in this study; all (anonymous) survey responses during the 3-week window were used in the analysis. Qualtrics then generated a descriptive statistics report where the data from each question was broken down and summarized. Qualtrics automatically created charts and tables for the multiple-choice research questions, but the free-response questions were analyzed manually. Major categories and their respective tallies were recorded using Excel software.

A total of 230 individuals responded to our survey, but some participants chose not to respond to one or more of the survey questions. In our analysis, the total number of responses will only include participants who selected an answer choice or wrote a free-response answer for that question. Non-responses were not included.

RESULTS

Research Question #1: Did you feel that KSU did a good job in handling the COVID-19 pandemic?

Perceptions of how well KSU handled the COVID-19 pandemic are shown in Figure 1.

FIGURE 1
RESPONSES TO THE UNIVERSITY'S HANDLING OF THE COVID-19 PANDEMIC

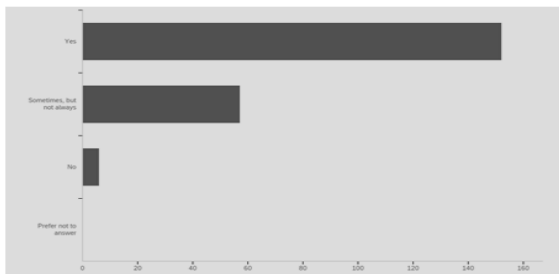


Figure 1a. Number of respondents who followed CDC guidelines by wearing a mask, hand sanitizing, and social distancing.

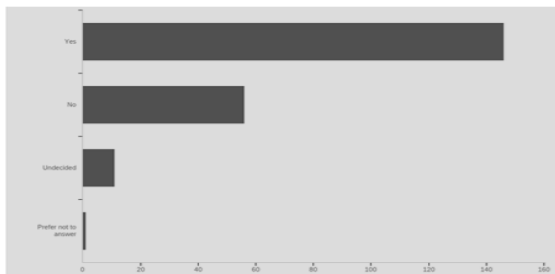


Figure 1b. Number of respondents who feel that mask wearing and social distancing should still be mandated after having received the vaccine.

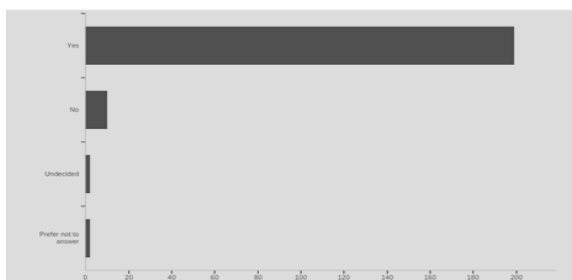


Figure 1c. Number of respondents who have, or will, receive a COVID-19 vaccine.

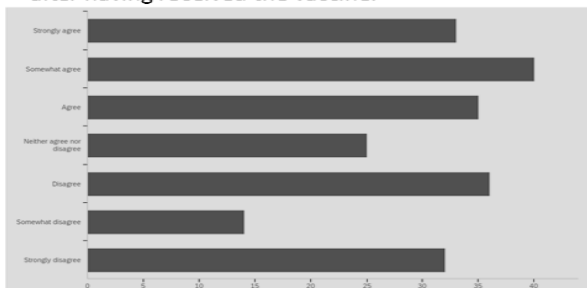


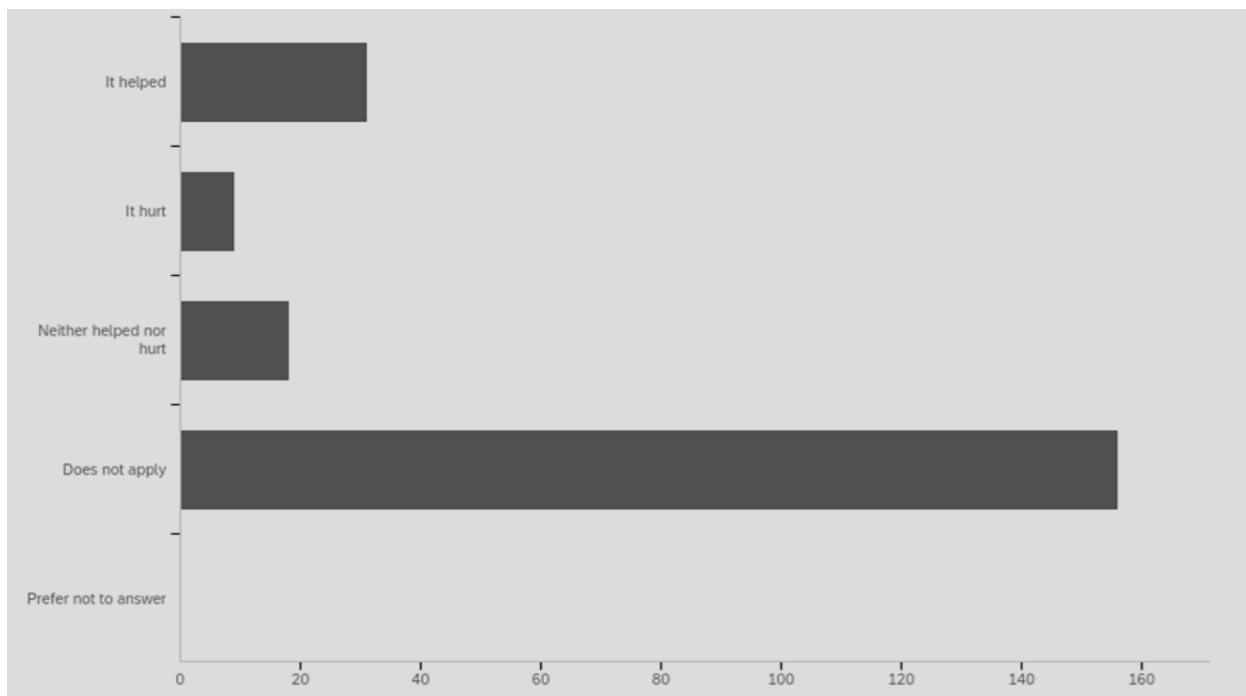
Figure 1d. Number of respondents who felt that the University has done a good job in handling the COVID-19 pandemic.

At the beginning of Fall 2020, the university followed the CDC guidelines and mandated mask-wearing, hand sanitizing, and social distancing of at least 6 feet. Figure 1a shows that nearly 71% (152/216) of respondents answered “Yes” to follow the CDC guidelines and university mandate. Another 26.85% (58/216) answered “sometimes, but not always” to this question. Figure 1b shows just over 2/3 of respondents (146/215, 68.2%) felt that mask-wearing and social distancing should continue to be mandated even after receiving the COVID-19 vaccine as opposed to 26.2% (56/215) of respondents who felt it was unnecessary. Figure 1c shows an overwhelming majority (200/214, 93.46%) of respondents have, or will, receive the COVID-19 vaccine. Figure 1d shows 50% (108/216) of the respondents “agree to strongly agree” that the university is doing a good job with handling the COVID-19 pandemic. In contrast, about 38% (82/216) of the respondents answered, “disagree to strongly disagree”. Roughly 12% (26/216) of respondents are neutral.

Research Question #2: Did the online course delivery option help or hurt your degree progression?

This research question aimed to find the impact of online learning on students’ degree progression, if any. The results are shown in Figure 2.

FIGURE 2
DID THE ONLINE COURSE DELIVERY OPTION HELP OR HURT IN YOUR DEGREE PROGRESSION?

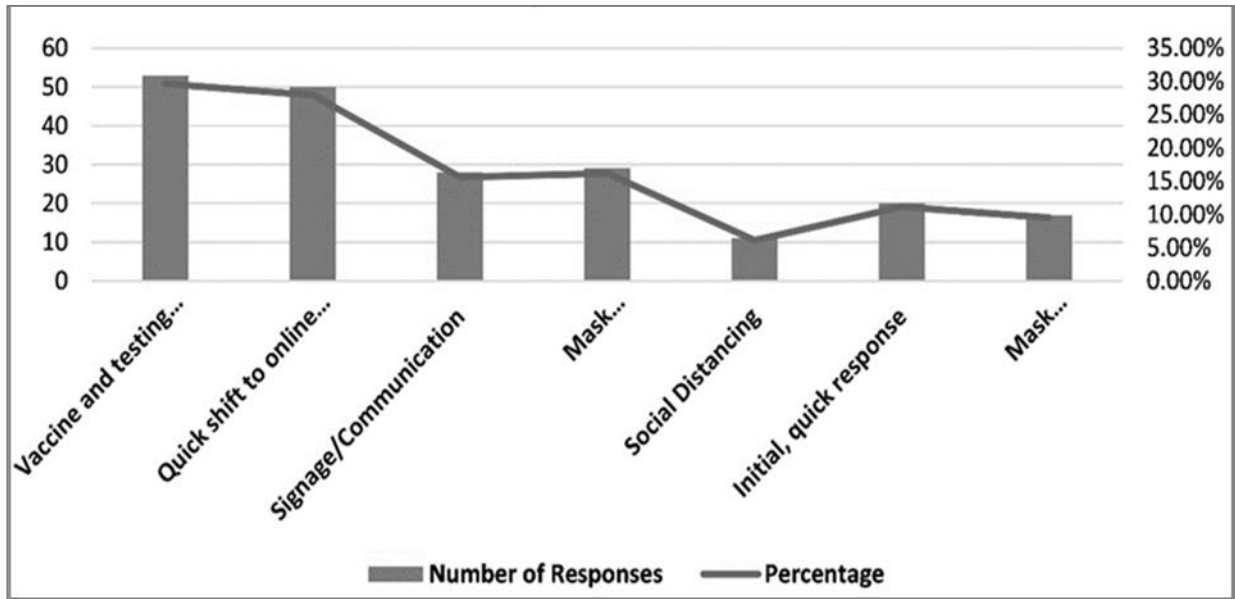


Of the 214 responses to this question, nearly ¾ of respondents (156/214, 72.9%) answered “Does not apply”, meaning “does not adversely impact” their degree progression. Whereas about 14.5% of respondents (31/214, 14.49%) answered with “It helped”, 4.2% (9/214, 4.21%) answered “It hurt” and 8.4% (18/214, 8.41%) answered “Neither helped nor hurt.”

Research Question #3 (A): What impressed you the MOST in KSU’s handling of the pandemic?

Results for this question are shown in Figure 3.

FIGURE 3
WHAT IMPRESSED YOU THE MOST WITH THE UNIVERSITY'S HANDLING OF THE PANDEMIC?

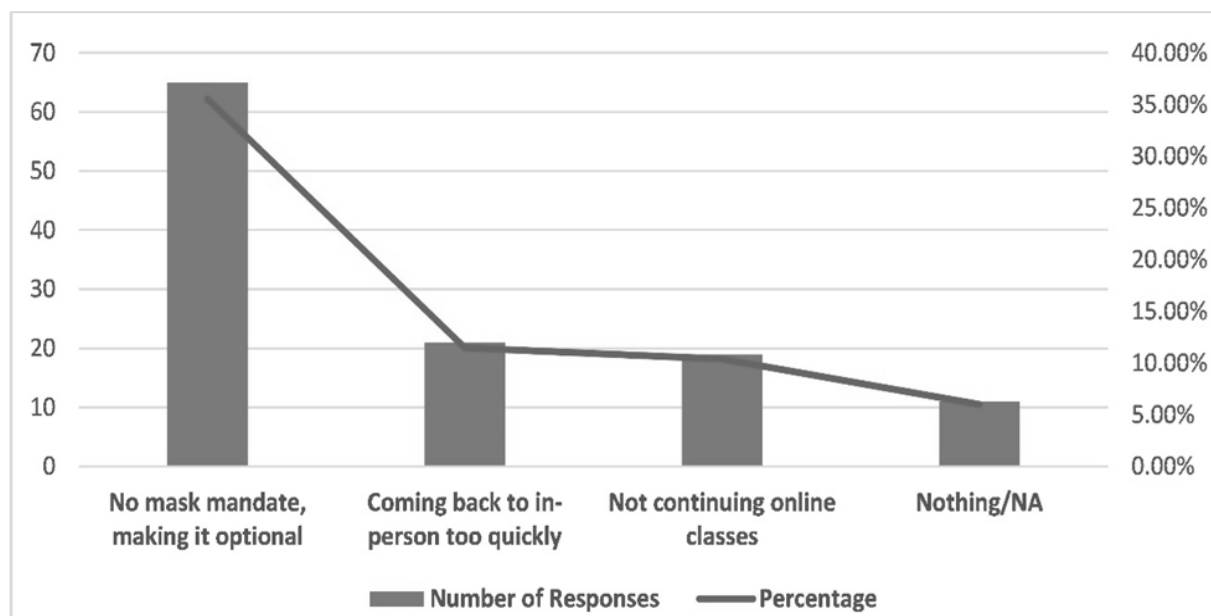


Over one hundred of the responses to this question expressed their approval of vaccine and testing availability and/or the ability to work online during the height of the pandemic (103/179, 57.5%). Nearly thirty of our respondents said they appreciated how KSU distributed masks and other PPE to faculty, staff, and students (29/179, 16.2%). Twenty-eight participants thought KSU did a good job of communicating during the pandemic (28/179, 15.6%); many of these responses showed their approval of signage placed around campus encouraging mask wearing, vaccination opportunities, and social distancing. Twenty people liked how quickly the university responded to the outbreak (20/179, 11.2%), and seventeen responses showed approval of the initial mask mandate KSU put in place (17/179, 9.5%). Finally, eleven individuals liked how KSU incorporated social distancing into their classrooms and other spaces across campus (11/179, 6.1%).

Research Question #3 (B): *What impressed you the LEAST about KSU's handling of the pandemic?*

Results for what impressed respondents the least about KSU's handling of the pandemic are shown in Figure 4.

FIGURE 4
WHAT IMPRESSED YOU THE LEAST ABOUT KSU'S HANDLING OF THE PANDEMIC?



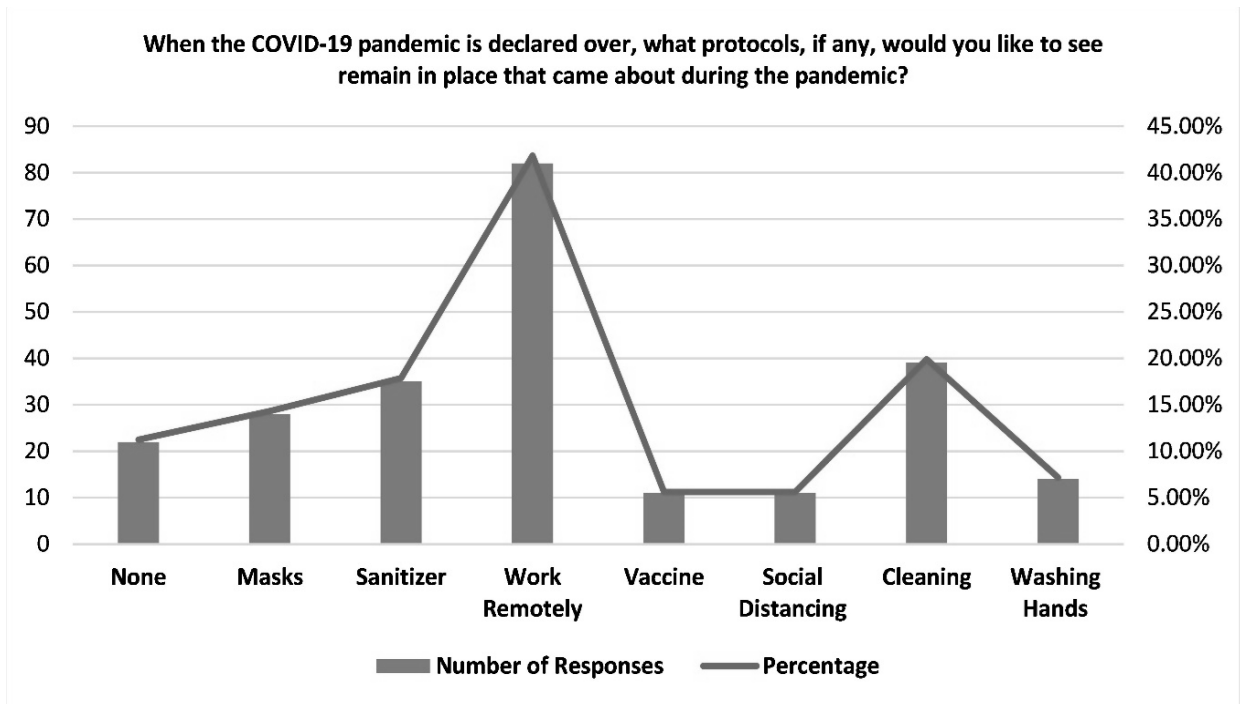
The most common response to this question was that KSU did not continue to implement a mask mandate after the Summer 2020 semester (65/183, 35.5%), although wearing masks was strongly recommended. On average, one out of every three survey responses included this topic. About sixteen percent (29/183, 15.8%) of responses addressed concerns regarding the school's lack of communication with its members. Twenty responses felt that KSU resumed "normal" activities too soon, such as the return to in-person classes and large-scale events (20/183, 10.9%). As mentioned previously, many individuals liked the online work options that came about during the pandemic. Nineteen responses were received (19/183, 10.4%) that indicated displeasure when those online options were removed. Eleven of 183 responses complained that KSU did not follow CDC guidance at one point or another (11/183, 6.0%), and seven people believed that political pressure potentially influenced their decisions (7/183, 3.8%).

When evaluating the free-response questions to RQ3, there was a clear difference in opinions of how KSU handled the pandemic. Responses varied from "Nothing was lacking. Job well done!" to a 267-word response on how poorly the school performed. Communication factors demonstrated another example of how varied the responses were. Whereas in question RQ3(A), 28 of 179 responses (15.6%) spoke highly of KSU's communication efforts, in question RQ3(B), 29 of 183 responses (15.8%) remarked on how *poorly* they believed KSU communication was.

Research Question #4: *What protocols would you like to see remain in place that came about during the pandemic once the pandemic is declared over?*

The results in Figure 5 show that the resounding answer from participants was the desire for remote learning options, with 82 of 196 responses (41.8%) indicating they would prefer to keep virtual options available such as attending classes online or working from home.

FIGURE 5
WHAT PROTOCOLS WOULD YOU LIKE TO SEE REMAIN IN PLACE ONCE THE PANDEMIC IS DECLARED OVER?

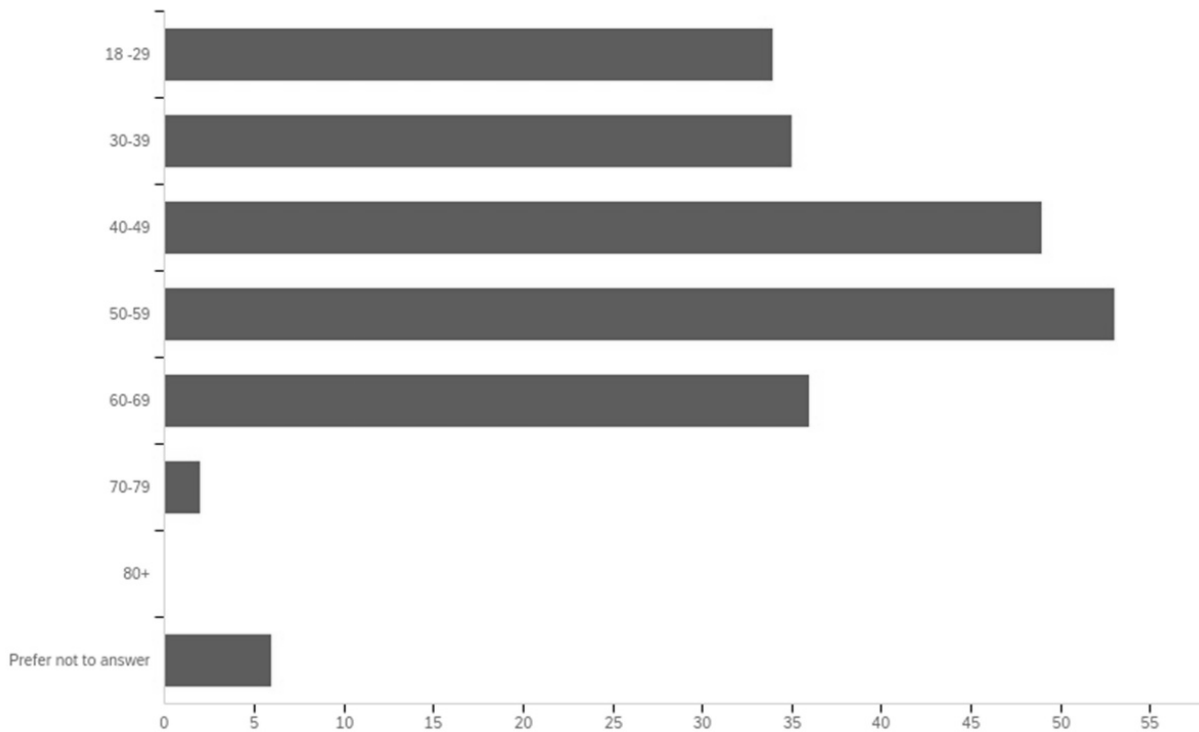


The second-most frequent response expressed desires to continue the extra cleaning of high-volume areas and surfaces (39/196, 19.9%) followed closely by hand sanitizer availability (35/196, 17.9%). Twenty-two out of the 196 respondents simply said “None” or stated that they did not want to see any protocols remain in place (22/196, 11.2%). Less-common responses included handwashing (13/196, 6.6%), vaccinations (10/196, 5.1%), and social distancing (10/196, 5.1%). Other ideas like paperless documents, use of plexiglass, and continuing to use contact tracing were also mentioned.

Demographics of Respondents

The ages of survey respondents varied widely, as shown in Figure 6.

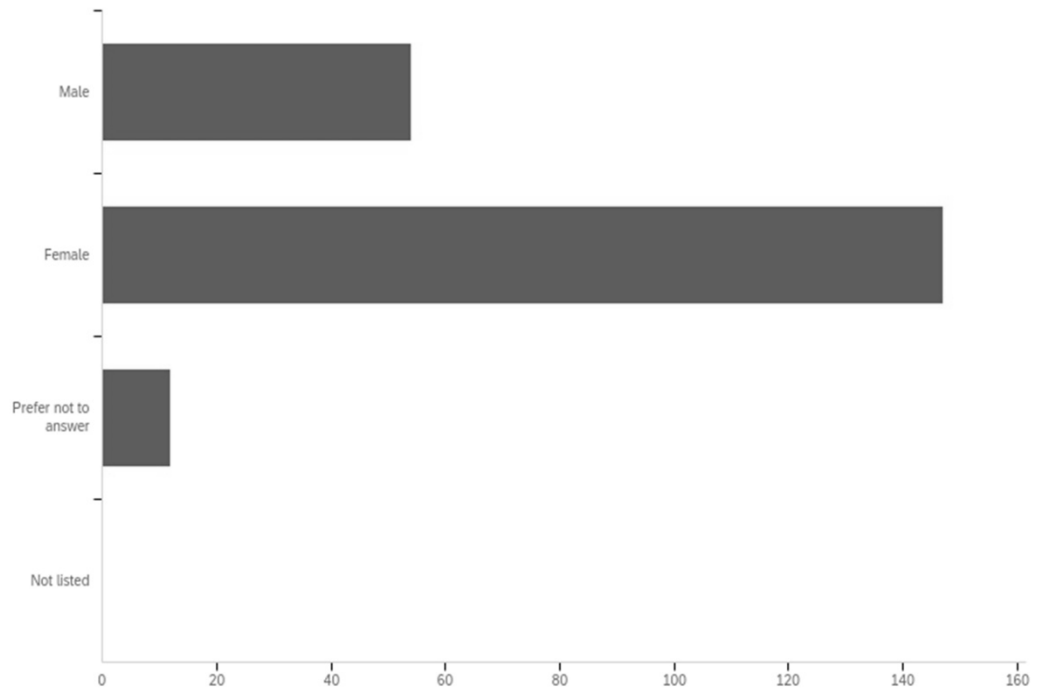
FIGURE 6
AGE OF RESPONDENTS



At least 30 individuals responded from each age group except for those above seventy. Thirty-four survey responses came from individuals aged 18 to 29 (34/230, 14.8%). This age group had the fewest responses besides those aged 70 to 79. There were 35 participants in their thirties (35/230, 15.2%) and 49 participants in their forties (49/230, 21.3%). The highest participation age group was between 50 and 59 years of age, which accounted for 53 responses (53/230, 23.0%). There were 36 individuals in the 60-69 age range (36/230, 15.7%), and two respondents were between the ages of 70 and 79 (2/230, 0.9%). Six individuals preferred not to provide their age (6/230, 2.6%).

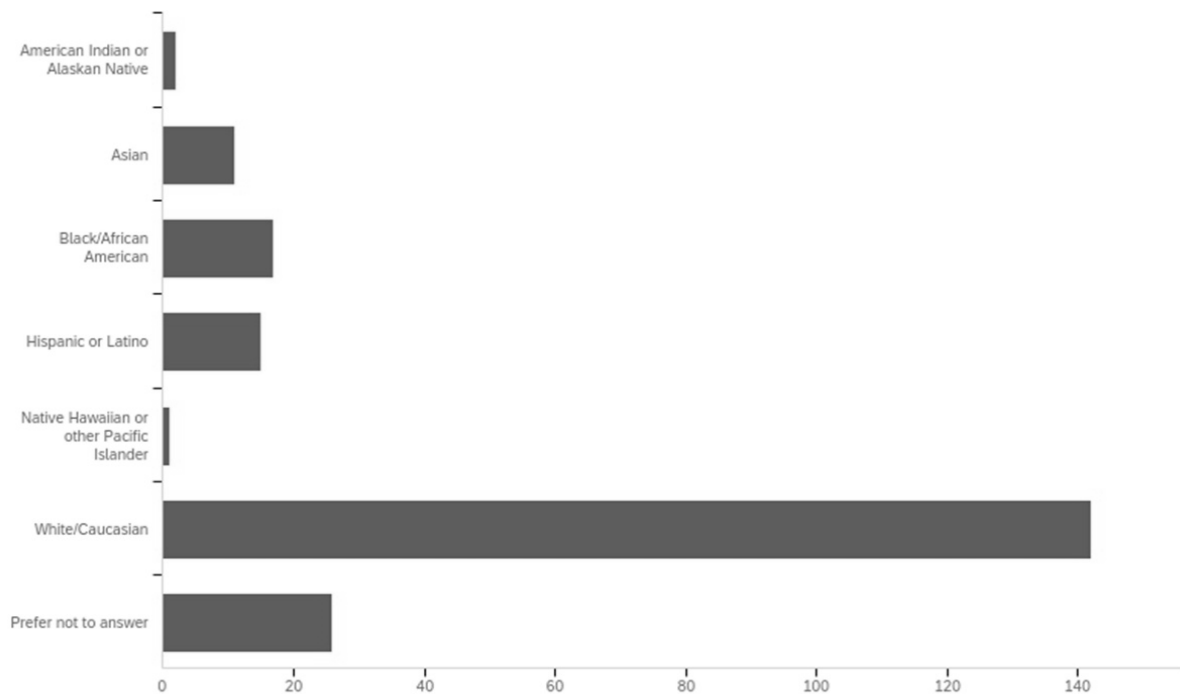
Figure 7 shows that females accounted for 69% (147/213) of total survey responses. Males accounted for only 25% (54/213). The research team also included the response options “Prefer not to answer” and “Not listed.” Twelve individuals decided not to answer (6%) (12/213), and no responses were recorded for the “not listed” option.

**FIGURE 7
GENDER**



The survey asked respondents to provide information about their race, as revealed in Figure 8.

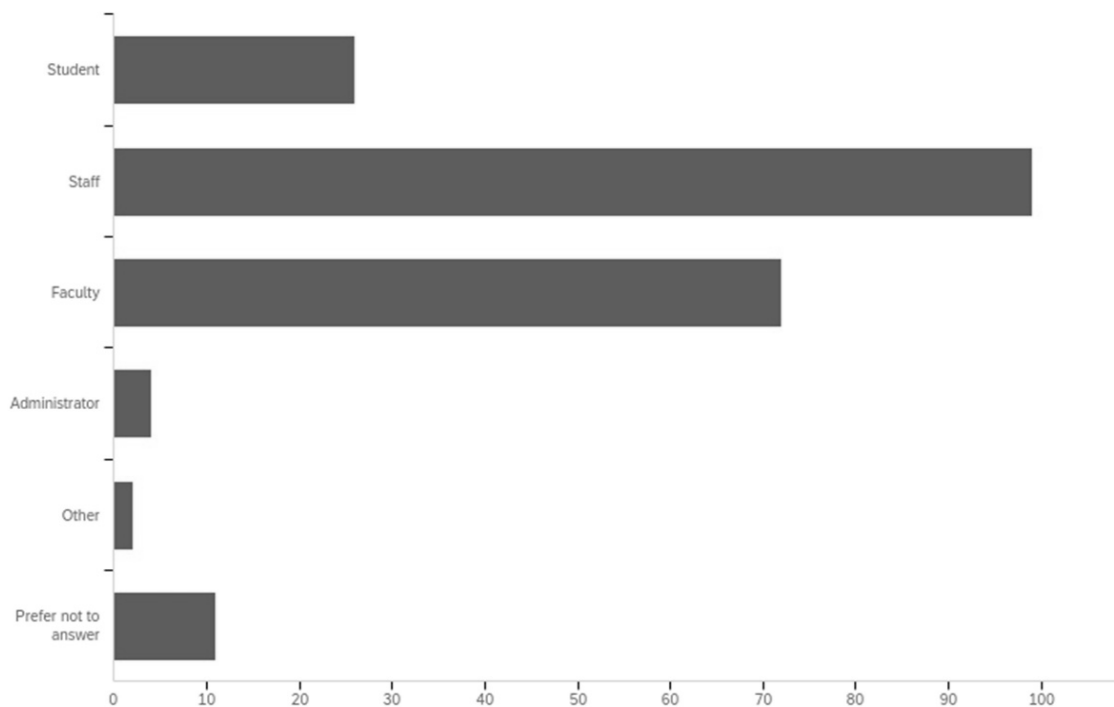
**FIGURE 8
RACE/ETHNICITY**



Of the 230 respondents, 26 individuals preferred not to answer (26/230, 11.3%). Two-thirds of individuals were White/Caucasian. Seventeen individuals were Black/African American (17/230, 7.4%), fifteen were Hispanic or Latino (15/230, 6.5%), and eleven were Asian (11/230, 4.8%). Two individuals were American Indian or Alaskan Native (2/230, 0.9%) and one individual was a Native Hawaiian or Pacific Islander (1/230, 0.4%).

Only respondents from the KSU community were allowed to participate in this survey. This includes students, staff, faculty, and administrators. Figure 9 shows a combined eighty percent of survey responses came from both faculty (72/214, 33.64%) and staff (99/214, 46.26%). Student responses only accounted for 12.15% (26/214) of our data. Four individuals were administrators, two held other roles, and eleven preferred not to answer. It is important to realize the various roles of those surveyed to understand the point of view they possess and how that is reflected in their responses.

**FIGURE 9
ROLE AT THE UNIVERSITY**



DISCUSSION

Through this study, the insight obtained related to how COVID-19 affected the Kennesaw State University community. The study took place in Fall 2021 and was the third COVID-19 research project performed by researchers in KSU’s Industrial & Systems Engineering department. During the past year and a half, KSU has worked vigorously to provide a safe campus and allow students to continue their education with minimal interference. Protocols were put in place to keep the KSU community safe, many of which are no longer in place (such as mask mandates), but the practices have remained (the majority of the KSU community continue to wear masks on campus).

A Qualtrics™ survey was created at the beginning of the Fall 2021 semester that asked KSU students, faculty, staff, and administrators about their opinions on how well KSU handled the pandemic and the data primarily focused on the impact of those practices. The survey ran for 4 days through the KSU Today daily electronic newsletter. During these four days and a 3-week filtering period, a total of 230 responses were

received. The primary focus for the research pertained to the four Research Questions regarding the protocols on campus and how the pandemic affected students' degree progression.

Results of the survey indicate that most respondents comprised staff and faculty (~80%). Student respondents accounted for 12.15% of all responses. Our research findings conclude that: 1) Responses were relatively equal, from Strongly disagree to Strongly agree concerning KSU doing a good job in handling the COVID-19 pandemic; 2) The majority of student responses felt that transitioning to online course delivery did not impede, or adversely impact, their degree progression (156/214, 72.9%); 3) Whereas the most impressive part of how KSU handled the pandemic was vaccine availability and testing on campus (103/179, 57.5%), the least impressive part of how KSU handled the pandemic was when they no longer mandated mask wearing (although wearing masks was strongly recommended) so early upon returning to campus (65/183, 35.5%); and 4) The protocol that respondents most desired to see remain in place was the remote option for both student learning and employee work (82/196, 41.8%).

CONCLUSION

The COVID-19 pandemic quickly evolved into a maelstrom during Spring 2020, forcing colleges and universities to quickly transition to remote learning at mid-term to finish the Spring semester. Many schools returned to campus beginning Fall 2020, albeit with much apprehension. This study represents a "snapshot" of perceptions and feelings among respondents at a large university in the metro-Atlanta area to an online Qualtrics™ survey to gauge how people felt about the university's handling of the COVID-19 pandemic, whether the transition to remote learning negatively impacted students' degree progression, and what protocols people preferred to see remain in place after the pandemic is declared over.

The university community had a mostly favorable impression of the university's quick response to shutting down the university and swiftly transitioning to online learning, following CDC guidelines to put protocols in place for the safe return to campus during Fall 2020, including frequent communications with the campus community, posting signage all over campus, taking measures to frequently sanitize high-touch surfaces, and providing university-issued masks and hand sanitizer lotion in every building. Although the university no longer mandated masks during Fall 2020, mask wearing was strongly recommended. Remote learning/work was the most preferred post-pandemic protocol that respondents preferred to remain in place, followed by the continued cleaning and sanitizing of all areas on campus.

RESEARCH LIMITATIONS

The biggest limitation to this research is that it was conducted at only one large university at one moment in time during the COVID-19 pandemic and, therefore, the results may not be generalizable across all colleges and universities in the U.S. The research survey was administered soon after the return to campus during Fall 2020 to gauge "first impressions" upon the return to campus when universities faced much criticism for returning to campus amid the pandemic when both the number of people infected and COVID-19-related death tolls were increasing throughout the world.

AREAS OF FUTURE STUDY

Areas of future study include determining the impact of the COVID-19 pandemic across multiple colleges and universities both within the U.S. and internationally regarding what was most and least impressive in each university's handling of the pandemic among their constituents and what protocols respondents prefer to see remain in place post-pandemic. Of particular interest would be if remote learning/work has now become a universal preference among students, staff, and faculty.

ACKNOWLEDGEMENT

This study was approved by the Kennesaw State University Institutional Review Board [IRB-FY22-88]. A signed informed consent cover sheet was obtained from each participant.

REFERENCES

- Bellamy, K., & Keyser, R. (2022). Concerns with taking the COVID-19 vaccine. *The Kennesaw Journal of Undergraduate Research*, 1(2). Retrieved from <https://digitalcommons.kennesaw.edu/kjur/vol9/iss1/2>
- Berry, C., Walker, K., Baker, N., & Trevor-Wright, C. (2023). “I see a lot of crazy things and I don’t know what to believe”: Lessons learned about health literacy and strategies for communicating with vaccine-hesitant college students. *Healthcare*, 11(15). doi:10.3390/healthcare11152212
- Borowiak, M., Ning, F., Pei, J., Zhao, S., Tung, H.-R., & Durrett, R. (2020). *Controlling the spread of COVID-19 on college campuses*. Retrieved from arXiv:2008.07293v1
- Bouchey, B., Gratz, E., & Kurland, S. (2021). Remote student support during COVID-19: Perspectives of chief online officers in higher education. *Online Learning*, 25(1), 28–40. <https://doi.org/10.24059/olj.v25i1.2481>
- Brack, A.B., Millard, M., & Shah, K. (2008). Are peer educators really peers? *Journal of American College Health*, 56(5), 566–568.
- Brown, J., Kush, J., & Volk, F. (2022). Centering the marginalized: The impact of the pandemic on online student retention. *Journal of Student Financial Aid*, 51(1), 1–24.
- Browning, M.H., Larson, L.R., Sharaievska, I., Rigolon, A., McAnirlin, O., Mullenbach, L., . . . Alvarez, H.O. (2021). Psychological impacts from COVID-19 among university students: Risk factors across seven states in the United States. *PLoS One*, 16(1), 27. <https://doi.org/10.1371/journal.pone.0245327>
- Buizza, C., Ferrari, C., Sbravati, G., Dagani, J., Cela, H., Rainieri, G., & Ghilardi, A. (2023). Impact of COVID-19 pandemic on well-being, social relationships and academic performance in a sample of university freshmen: A propensity score match evaluation pre- and post-pandemic. *International Journal of Environmental Research and Public Health*, 20(15). <https://doi.org/10.3390/ijerph20156485>
- Cahuas, A., Marenus, M., Kumaravel, V., Murray, A., Friedman, K.O., & Chen, W. (2023). Perceived social support and COVID-19 impact on quality of life in college students: An observational study. *Annals of Medicine*, 55(1), 136–145. doi:10.1080/07853890.2022.2154943
- Choate, K., Goldhaber, D., & Theobald, R. (2021). The effects of COVID-19 on teacher preparation. *Kappan*, 102(7), 52–57.
- Clark, K., Bailey, M., Wasshuber, S., Huntley, R., Bjorkman, K., Bauer, L., . . . Alderete, T. (2023). High rates of observed face mask use at Colorado universities align with students’ opinions about masking and support the safety and viability of in-person higher education during the COVID-19 pandemic. *BMC Public Health*, 23(1). doi:10.1186/s12889-023-15211-y
- Colclasure, B.C., Marlier, A., Durham, M.F., Brooks, T.D., & Kerr, M. (2021). Identified challenges from faculty teaching at predominantly undergraduate institutions after abrupt transition to emergency remote teaching during the COVID-19 pandemic. *Education Sciences*, 11(556), 24. <https://doi.org/10.3390/educi11090556>
- Connell, R., Wallis, L., & Comeaux, D. (2021). The impact of COVID-19 on the use of academic library resources. *Information Technology and Libraries*, 40(2), 1–20. doi:10.6017/ital.v40i2.12629
- de Oliveira, W.A., Andrade, A.L., de Souza, V.L., De Micheli, D., Fonseca, L.M., de Andrade, L.S., . . . dos Santos, M.A. (2021). COVID-19 pandemic implications for education and reflections for school psychology. *Psicologia: Teoria e Prática*, 23(1), 1–26. doi:10.5935/1980-6906/ePTPC1913926

- de Oliveira, W., Andrade, A.d., Fonseca, L., de Andrade, L., & dos Santos, M. (2021). COVID-19 pandemic implications for education and reflections for school psychology. *Psicologia: Teoria e Prática*, 23(1), 1–26. doi:10.5935/1980-6906/ePTPC1913926
- Dorsey-Elson, L., Chavis, C., Baptiste-Roberts, K., Bista, K., Tannouri, A., Oni, A., . . . Efe, S. (2021). Teaching and learning as CANVAS ambassadors during the COVID-19 pandemic: Faculty experiences at one historically black college and university. *Journal of Interdisciplinary Studies in Education*, 10(1), 1–15.
- Doyle, J. (2020). Fostering student success outside of online classrooms. *Inside Higher Education*. Retrieved from <https://www.insidehighered.com/advice/2020/04/07/whats-role-student-affairs-and-academic-support-staff-when-most-students-arent>
- Freedman, G., Oates, I.G., & Kirk, S.E. (2023). Applying social psychology to a global crisis: Student engagement in a laboratory class during the COVID-19 pandemic. *Scholarship of Teaching and Learning in Psychology*, 9(2), 171–184. <https://doi.org/10.1037/stl0000227>
- Garrett, R., Legon, R., Fredericksen, E.E., & Simunich, B. (2020). CHLOE 5: The pivot to remote teaching in spring 2020 and its impact. *Quality Matters*. Retrieved from <https://www.qualitymatters.org/qa-resources/resource-center/articles-resources/CHLOE-5-report-2020>
- Gentles, C.H., & Brown, T.H. (2021). Latin American and Caribbean teachers' transition to online teaching during the COVID-19 pandemic: Challenges, changes and lessons learned. *Pixel-Bit*, 61, 131–163. <https://doi.org/10.12795/pixelbit.88054>
- Gonzalez-Ramirez, J., Mulqueen, K., Zealand, R., Silverstein, S., Reina, C., BuShell, S., & Ladda, S. (n.d.). Emergency online learning: College students' perceptions during the COVID-19 crisis. *Emergency Online Learning*, 55(1).
- Gradišek, P., & Polak, A. (2021). Insights into learning and examination experience of higher education students during the COVID-19 pandemic. *Journal of Contemporary Educational Studies*, 72(138), 286–307.
- Greenland, S., & Moore, C. (2022). Large qualitative sample and thematic analysis to redefine student dropout and retention strategy in open online education. *British Journal of Educational Technology*, 53(3), 647–667. doi:10.1111/bjet.13173
- Hedding, D.W., Greve, M., Breetzke, G.D., Nel, W., & Jansen van Vuuren, B. (2020). COVID-19 and the academe in South Africa: Not business as usual. *South African Journal of Science*, 116(7/8). doi:10.17159/sajs.2020/8298
- Hickey, S., Hebert, E., & Webb, N. (2021). College student experiences of the COVID-19 pandemic concerns, preventive behaviors, and impact on academics and career choice. *American Journal of Health Studies*, 36(2), 76–87.
- Jung, J., Horta, H., & Postiglione, G.A. (2021). Living in uncertainty: The COVID-19 pandemic and higher education in Hong Kong. *Studies in Higher Education*, 46(1), 107–120.
- Kecojevic, A., Basch, C., Sullivan, M., Chen, Y.-T., & Davi, N. (2021). COVID-19 vaccination and intention to vaccinate among a sample of college students in New Jersey. *Journal of Community Health*, 46(6), 1059–1068. doi:10.1007/s10900-021-00992-3
- Kennedy, M. (2020). Classes dismissed: The Covid-19 virus pandemic has shut down virtually the entire U.S. education system and disrupted the lives of millions of students and staff. *American School & University*, 92(6), 14–17.
- Keyser, R. (2019). A correlation between non-mandatory attendance and course grades in a fourth-year hybrid industrial engineering course. *Journal of Higher Education Theory and Practice*, 19(8), 17–24.
- Keyser, R.S., & Parvathareddy, H. (2017). An assessment of average course grades in a converged classroom environment. *Journal of Higher Education Theory and Practice*, 17(3), 70–87.

- Koris, R., & Pál, Á. (2021). Fostering learners' involvement in the assessment process during the COVID-19 pandemic: Perspectives of university language and communication teachers across the globe. *Journal of University Teaching & Learning Practice*, 18(5), 11–20. doi:10.53760/1.18.5.11
- Lanou, A.J., Perry, J., Perry, L.G., III, Garland, B., Hunt, K., & Gold-Leighton, K. (2021). Practice report: Student health ambassadors at residential campuses contribute to safer campus living and learning during the COVID-19 pandemic. *Journal of Higher Education Theory and Practice*, 21(8), 144–158.
- Odigibben, M., Rivera, E., & Keyser, R. (2021). Faculty perceptions of cleanliness and safety on a college campus during the COVID-19 pandemic. *Journal of Higher Education Theory and Practice*, 21(12), 71–83.
- Ogidigben, M.E., Rivera, E.R., & Keyser, R.S. (2021). Return to campus? Amid the COVID-19 pandemic? *Journal of Higher Education Theory and Practice*, 21(6), 1–7.
- Ogidigben, M., Rivera, E., & Keyser, R. (2022). Faculty perceptions of safety and the impact of online classroom modalities during the COVID-19 pandemic. *The Kennesaw Journal of Undergraduate Research*, 1(5). Retrieved from <https://digitalcommons.kennesaw.edu/kjur/vol9/iss1/5>
- Ousey, K., Bullen, B., Hodgson, H., & Atkin, L. (2021). How has the COVID-19 pandemic changed the way we teach? *Wounds UK*, 17(1).
- Pagoto, S., Lewis, K., Groshon, L., Palmer, L., Waring, M., Workman, D., . . . Brown, N. (2021). STEM undergraduates' perspectives of instructor and university responses to the COVID-19 pandemic in Spring 2020. *PLoS ONE*, 16(8), e0256213. doi:10.1371/journal.pone.0256213
- Pearman, C., Chang, C.-W., & McLean, A. (2022). Was it what you expected? The impact of COVID-19 on first-year college students. *Critical Questions in Education*, 13(3), 24.
- Pogue, K., Altman, J., Lee, A., Miner, D., Skyles, T., Bodily, R., . . . Poole, B. (2023). Decrease in overall vaccine hesitancy in college students during the COVID-19 pandemic. *Vaccines*, 11(1). doi:10.3390/vaccines11071132
- Servick, K., Cho, A., Guglielmi, G., Vogel, G., & Couzin-Frankel, J. (n.d.). *Labs go quiet as researchers brace for long-term coronavirus disruptions*. Retrieved from <https://www.sciencemag.org/news/2020/03/updated-labs-go-quiet-researchers-brace-long-term-coronavirus-disruptions>
- Stankovska, G., Memedi, I., & Grncarovska, S. (2022). Impact of COVID-19 on higher education: Challenges and opportunities. *BCEs Conference Proceedings*, 20, 181–188. Bulgarian Comparative Education Society.
- van Schalkwyk, F. (2021). Reflections on the public university sector and the covid-19 pandemic in South Africa. *Studies in Higher Education*, 46(1), 44–58. doi:10.1080/03075079.2020.1859682
- Walwyn, D.R. (2020). Teaching on the edge of chaos: Report on “The future of universities in a post-COVID-19 world”. *South African Journal of Science*, 116(7/8), 20–21. <https://doi.org/10.17159/sajs.2020/8404>
- Watermeyer, R., Knight, C., Crick, T., & Borrás, M. (2023). ‘Living at work’: COVID-19, remote-working and the spatial-relational reorganisation of professional services in UK universities. *Higher Education*, 85, 13–17–1336. doi:10.1007/s10734-022-00892-y
- WHO. (2020). *WHO Director-General's opening remarks at the media briefing on COVID-19*. Retrieved October 15, 2021, from <https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>
- Wiles, G.L., & Keyser, R.S. (2016). Converged classroom approval based on student satisfaction. *Journal of Higher Education Theory and Practice*, 16(3), 17–21.
- Zou, C., Li, P., & Jin, L. (2021). Online college English education in Wuhan against the COVID-19 pandemic: Student and teacher readiness, challenges, and implications. *PLoS ONE*, 16(10), 24. <https://doi.org/10.1371/journal.pone.0258137>

APPENDIX

SURVEY QUESTIONS

1. Do you follow CDC guidelines by wearing a mask, hand sanitizing, and social distancing?

Yes

Sometimes, but not always

No

Undecided

Prefer not to answer

2. Do you feel like mask wearing and social distancing should still be mandated after having received the vaccine?

Yes

No

Undecided

Prefer not to answer

3. Have you, or will you, receive one of the COVID-19 vaccines?

Yes

No

Undecided

Prefer not to answer

4. Did the online course delivery option help or hurt you in your degree progression?

It helped

It hurt

Neither helped nor hurt

Does not apply

Prefer not to answer

5. Do you feel that KSU has done a good job in handling the pandemic?

Strongly agree

Somewhat agree

Agree

Neither agree nor disagree

Disagree

Somewhat disagree

Strongly disagree

6. What impressed you the most in KSU's handling of the pandemic?

Free-response question

7. What impressed you the least in KSU's handling of the pandemic?

Free-response question

8. Do you feel like we will ever go back to the "old normal?"

Yes, we are already there

Yes, within the next few years

No, I think this is the "new normal"

Undecided

Prefer not to answer

9. When the COVID-19 pandemic is declared over, what protocols, if any, would you like to see remain in place that came about during the pandemic?

Free response question

Next, we would like to collect some demographic data.

10. Please select your age group.

18-29

30-39

40-49

50-59

60-69

70-79

80+

Prefer not to answer

11. Gender

Male

Female

Not listed

Prefer not to answer

12. Race and/or Ethnicity

American Indian or Alaskan Native

Asian

Black/African American

Hispanic or Latino

Native Hawaiian or other Pacific Islander

White/Caucasian

Prefer not to answer

13. What is your role at KSU?

Student

Staff

Faculty

Administrator

Other

Prefer not to answer