

Pandemic Presentations: The Impact of Masks on Speech Students during the COVID-19 Pandemic and Suggested Best Practices for the Communication Center

Kristen Foltz
The University of Tampa

Riley Robertson
The University of Tampa

The National Association of Communication Centers' directory of Communication Centers reflects over 150 centers in existence throughout the United States and Canada (2021). These centers serve students at colleges and universities in a variety of ways, including writing and oral communication. When the COVID-19 pandemic forced the closure of universities in spring 2020, communication centers also closed. After the wave of initial lockdowns, some universities then transitioned to a fully online academic experience whereas other universities slowly opened their doors to in person learning. These regulations also meant some communication centers were allowed to open their doors to serve student clients with some restrictions. The Centers for Disease Control (CDC) issued recommendations for students returning to in person learning ("Operation Strategy"). Included in these recommendations was the use of masks. Students returning to face-to-face learning were required to wear face masks even in their formal classroom presentations ("Operational Strategy").

Students studying in the United States likely had little or no experience in wearing a mask, although the use of masks does exist in some other countries. Despite this, many instructors in public speaking classes continued the tradition of requiring students to give speeches in class. This

study examines the impact of masks on undergraduate students in terms of their self-perceived confidence and their overall satisfaction while speaking in public. Researchers also inquired about strategies students used while giving their speeches in a mask. The survey used consists of questions regarding the content or organization of the speech and the delivery. This data can help assist communication centers working with clients in a pandemic or other health crises to make informed decisions about their presentations and the impact that a mask has on a speaker.

Literature Review

In early 2020, word spread of a virus impacting China that spread quickly to other Asian nations. On February 11, 2020, the World Health Organization (WHO) identified and named COVID-19, the exact illness that would take over the world (Ferrer, 2020). Just a few months later, on March 11th, COVID-19 was declared a pandemic at a world press conference held by the General Director of the World Health Organization (Ferrer, 2020). Many countries implemented lockdown procedures to stop the spread (Papadopoulos et al., 2020).

Although the emergence of the virus shocked many, coronaviruses have existed for many years. For example, in 2007, scientists studying different types of coronavirus strains

warned that “the presence of a large reservoir of SARS-CoV-like viruses in horseshoe bats is a time bomb” (Morens et al., 2020, p. 955). In 2020, COVID-19 took the world by storm. Most scientists and epidemiologists deemed COVID-19 the deadliest respiratory disease pandemic since 1918 when the “Spanish” influenza pandemic killed an estimated 50 million people (Morens et al., 2020). COVID-19 changed the role of disease control entities for years to come (Balkhair, 2020).

To contain the spread of the virus, disease control agencies and governments recommended the use of masks to reduce the spread of the virus. Though a new concept in many places, masks were already common in others. For example, residents in Beijing wear face masks in an effort to keep their short-term health in check due to the high pollution levels in the air (Cherrie et al., 2018). The mask mandate distressed some Americans who were less familiar with the concept of wearing a mask. According to the Infection Disease Control Society (Tso & Cowling, 2020), the stigma surrounding masks in Asia affected the beliefs of the legitimacy of masks in the Western world. Many citizens, including some politicians, initially dismissed the usage of masks. However, many East Asian communities immediately implemented mask usage and detailed how to properly use them (Tso & Cowling, 2020). Despite the confusion and certain controversies, most countries implemented mask mandates. Public health authorities indicated masks as one of the easiest ways to block the spread of COVID-19 between people (Wang & Zhou, 2020). Masks also provided a sense of comfort and some level of respiratory hygiene (Chiang & Chen, 2020).

With the rapid and fatal spread of COVID-19, colleges and universities quickly responded with how they would move forward with instruction. Colleges and universities across the nation were also tasked with figuring out the mandates and health codes to ensure the safety of their students. One study investigated universities’ responses to COVID-19 on a global level and revealed 86.7% of students reported their college or university moved to online instruction (Aristovnik et al., 2020). They also found “the most dominant forms of online lectures were real-time video conferences (59.4%), followed by asynchronous forms: Sending presentations to students (15.2%), video recording (11.6%), and written communication using forums and chats (9.1%)” (Aristovnik et al., 2020, p. 8).

Schools that remained open or that opened immediately following a government issued lockdown were required to comply with CDC guidelines. A framework guide by Reimers and Schleicher (2020) highlights the safest and most effective practices of reopening schools during a pandemic. Many of the guidelines included moving classes to remote platforms, even utilizing TV programs (Reimers & Schleicher, 2020). However, some school districts opted for a new hybrid model of learning which included an element of face-to-face instruction. This face-to-face instruction created a controversy regarding whether to mask or not mask children (Esposito & Principi, 2020).

One university that faced a surge in COVID-19 cases upon reopening was the University of North Carolina (UNC), Chapel Hill, despite encouraging the use of masks in their communication materials (Wilson, 2020). UNC mandated masks at all times for indoor

classes and common spaces, which included classrooms during instructional periods (Wilson, 2020). Masking practices at UNC were very similar to the mandates at most universities due to the recommendations created for education by the CDC (“Operational Strategy”).

Mask mandates and the act of wearing a mask are becoming increasingly politically charged. However, this is not an issue unique to the modern era. During the 1918 flu pandemic, mask mandates also caused division in society (Rabinovitch-Fox, 2020). While this research explores public speaking while masked, a communication center consultant should be mindful of the beliefs of the clientele visiting the center to avoid potential conflict.

Even though using a mask to keep the community safe is important, there have been many implications for students enrolled in courses with presentations or public speaking. As a result, communication centers need to be aware of how wearing a mask impacts the speaker as to better serve their clients. This study reviews data collected from undergraduate students enrolled in a public speaking course in the fall 2020 and spring 2021 semesters. Even as some may argue the pandemic is coming to a close, the possibility of future events such as COVID-19 makes it important for communication center consultants to understand the best practices for presenting in a mask.

Method

The participants of this study were undergraduate students enrolled in a speech course at a private, mid-sized, four year university located in the Southeastern United States. Students listed on the roster of any course

designated “SPE” or “speech” in the fall 2020 and spring 2021 semesters received an email with a link to the survey instrument on Qualtrics. The “SPE” designation included the following courses: Speech for Business and Professionals; Oral Communication; Interpersonal Communication; and other upper level or advanced public speaking courses. In total, 183 students responded to the survey.

The survey consisted of 50 questions. Demographic questions included gender identity, ethnicity, age, major, and class rank at the university. Other questions inquired about the impact of wearing a mask on the wearer in terms of presenting a speech live or in person. Additional questions were asked about virtual presentations, such as Zoom presentations, pre-recorded videotaped speech presentations, and other preferences for public speaking courses. The results from these questions will be explored in a different project.

For the purpose of this paper, the questions 7-18 will be analyzed as they relate to students wearing masks during live or in person classroom presentations. The initial questions 7-11 inquired about the students’ previous public speaking experience, whether the students presented while wearing a mask, and if their faculty or instructor provided guidance on the impact of wearing a mask during a presentation. Question 12 asked about the satisfaction level of the student while presenting in a mask while question 13 asked about the effect on the confidence level of a speaker while wearing a mask. The remaining questions in this section of the survey pertained to changes made to both the structure of a presentation and its delivery. Specifically, questions 14

through 15 asked if the presenter felt the need to change the structure of their speech due to the nature of wearing a mask, and subsequently, an open-ended question was provided for them to explain what was changed. Question 16 asked if the speaker felt the need to change their delivery due to the use of the mask followed by an open ended question asking the participant to explain. Finally, question 18 asked if the presenter felt more nervous due to the use of a mask.

Results

Participants

Of the 183 students answering demographic questions, the majority or 62.3% of participants identified as female which is consistent with enrollment at the university where the participants completed the survey. The rest of the participants or 31.7% identified as male. The majority of the participants or 69.4% indicated they were Caucasian with 9.3% being Latino or Hispanic. The remainder were either Asian, African American/black, multi-ethnic, or other. Most were 20 years of age with 37.7% responding with this group. 23.5% were 21 years of age and 18% were 19 years of age. Students 18 years of age represented 6%. No participants under the age of 18 completed the survey. The majority or 38.8% were juniors enrolled in their third year of college. Next, 29.5% were sophomores or in their second year of college and 18% were seniors in their fourth year. Only 8.2% were freshmen.

Experience with Public Speaking

Regarding experience in public speaking, 144 participants, or 78.7% indicated they presented a speech live or in person before that semester. Only 10.4% or 19 people said they had not, and 3 were unsure. Students were

asked whether the student presented live or in person during the fall 2020 or spring 2021 semester and 77.6% indicated yes whereas 13.1% said no. Regarding the number of presentations given during the 2020-2021 academic year, 35.5% of the participants indicated they presented live or in person in the fall semester or spring semester an average of 3-5 times. 18.6% of participants presented live or in person 1-3 times. 14.2% indicated they presented 5-7 times whereas only 3.3% presented 7-10 times and 2.7% indicated they presented more than 10 times. Most of the participants presented many times throughout the pandemic.

Q10 inquired if the student wore a mask while presenting live or in person. Almost all respondents or 68.3% indicated yes, they wore a mask while presenting and 6% replied no, while 25.7% failed to respond. Those that replied “no” (to presenting live in person with a mask) were moved to the next section of the survey and did not answer any other questions pertaining to live or in person presentations. The majority of students, or 99 participants, indicated their professor or instructor advised them about presenting in a mask.

Student Satisfaction

Regarding the satisfaction level of the participants in their presentations while wearing a mask, 29.5% or 54 respondents indicated “moderately satisfied” and 12.6% or 23 people said “extremely satisfied.” 8.2% or 15 people replied “slightly satisfied” and 15 people or 8.2% said “slightly dissatisfied.” 10 participants indicated they were “moderately dissatisfied.” 3 students were “extremely dissatisfied.” The remainder or 8.7% said “neither satisfied nor dissatisfied.” Therefore,

the majority were either moderately or extremely satisfied with their presentation in a mask.

Participants also answered the following question, “to what extent did wearing a mask impact your level of confidence while presenting,” 24% or 44 people indicated “neither positive nor negative” or in essence neutral. Regarding slightly negative experiences, 18% selected this option. Moderately positive received 22 responses or 12%. Slightly positive received 9.8% of responses. The remainder was either moderately negative (3.8%), extremely negative (2.2%), and extremely positive (3.8%). Therefore, the majority of students felt neutral about wearing a mask with very few feeling either extremely positive or negative toward. However, it is of note that 18% of participants felt slightly negative.

Speech Modifications

Researchers inquired whether or not the students adapted or modified their presentations in terms of structure, organization, and content due to the use of a mask. Most students or 59.6% of participants indicated no modifications or changes were made. 14.8% of people said they did change an aspect of their structure, organization, and content. Thus, only a quarter made changes in this regard.

The next question asked whether participants changed the delivery or presentation style due to the use of a mask. 33.9% indicated yes that a change was made whereas 37.7% said no changes were made. See Table 1 for more data on these findings. Therefore, more students changed their delivery style rather than their content. This will be discussed in more detail below, but it provides a framework for how speech center consultants can work better with clients wearing masks on modifications

to their presentations during the time of a pandemic or health crisis.

The open-ended questions reflected students changed the following aspects of their delivery: volume, gestures, movement, pacing, expression, pronunciation, content, and “other.” “Other” included topics such as volume, eye contact, and breathing. One participant indicated, “since I had to wear a mask, it was important for me to speak louder and increase my volume in order for my audience to adequately hear me. Also, I had to use facial gestures that involved my eyes considering that was the only part of my face the audience could see.”

Student Confidence

Q18 asked “did presenting live with a mask make you feel more nervous than presenting without a mask?” Most students indicated they felt about the same presenting with a mask or without as 30.1% or 55 responded as such. Some students felt slightly less nervous wearing a mask than without one or 12% of participants. Similarly, 10.4% said they felt slightly more nervous while wearing the mask. It appears most students did not have any change in nerves or confidence.

Discussion

Most participants had some previous experience presenting in a classroom setting and the majority presented a speech that semester. On average, participants presented 3-5 times, whereas only a quarter presented 1-3 and slightly less presented 5-7 times. Very few participants presented more than seven times in the semester.

It is also not surprising during the 2020-2021 academic year 68.3% of participants wore a mask during their

presentations. Researchers posit this reflects existing mask mandates in the city and state where the university is located. As a result of these mandates, it is unusual that 6% replied they did not wear a mask during their presentation, as this would be against mandates. Researchers hypothesize these students may have been taking a class in an outdoor setting or held classes outside, as this was a common practice at the institution where researchers disseminated the survey. Alternatively, the responses to these questions were made in error.

More participants indicated they were moderately satisfied than extremely satisfied. However, 92 participants, or 50.3% reflected some form of satisfaction ranging from slightly to extremely satisfied with wearing a mask during their presentation. Regarding dissatisfaction, only 28 participants, or 15% reflected some level of dissatisfaction. The remaining 8.7% were neutral. Therefore, the majority of participants felt satisfied with their presentation even though they were wearing a mask. Although this initially would suggest no impact of a mask, a large number did make changes to their presentation as discussed below.

In addition to the satisfaction level, most participants reflected they felt neutral when asked about how a mask impacted their confidence level while presenting. 18% reflected they felt slightly negative about their confidence. The remainder felt slightly or moderately confident. Only 3.8% of participants felt an extremely positive shift in their confidence while wearing a mask. Wearing a mask and covering one's face does not in fact help a speaker gain confidence. If anything, it may reduce the speaker's confidence, or the level will remain the same.

Consultants can therefore spend their time assisting on other improvements, unless the client indicated they are in the percentage of less confident students. While wearing a mask only caused 14.8% of participants to change their organization or structure, the majority (59.6%) did not change anything. This result is not surprising as wearing a mask does not impact the content of the speech, but rather the delivery style. Therefore, more students changed their delivery than did not.

Most responses to the open-ended questions on modifications pertained to volume. Participants noted the role of volume three times more than any other open-ended response with participants indicating they had to increase their volume for participants to hear them. The next highest response regarding the impact of masks related to pronunciation and or articulation. For example, one participant notes he or she had to "be extra careful with pronunciation." To a lesser extent, participants noted expression. For example, one participant indicated "the mask took away part of my tool set, to be able to fully express myself and be more charming." In addition, most students indicated they did not experience an impact on their level of nervousness due to a mask. Other comments indicating difficulty with the mask included adjusting the mask and difficulty breathing. In summation, there was minimal impact on a student wearing a mask regarding their confidence or nervousness, except for modifications to the delivery style.

Best Practices for the Communication Center

While in a pandemic or other situation involving mask mandates, researchers suggest communication

centers and their consultants expand their efforts towards areas of improvements regarding delivery strategies, in addition to emphasizing coaching on content and structure. Due to the abundance of responses pertaining to modifications made by participants, there are many different strategies centers may use to coach their clients. As many students indicated their professors provided them with advice for presenting while masked, meeting with a communication center consultant is the perfect opportunity for consultants to reinforce these newfound public speaking skills. Consultants should emphasize techniques regarding voice, breathing, and expressions, as these participants indicated them as being helpful. In the event of another pandemic, centers may wish to create specialized training programs for their consultants to help better prepare them to assist students, as the success of a communication center often relies on the training of its consultants (Brown, 2020).

Volume and Breathing

It comes as no surprise that a speaker's volume and ability to breathe may be adversely impacted by wearing a mask. Overall, masks force a speaker to work harder which adversely impacts communication (Gama et al., 2021). First, some masks are more breathable than others. Research demonstrates surgical masks have less of an impact on a speaker's voice than a KN95 mask (Nguyen et al., 2021). Centers may help clients find breathable masks or other products to help enhance volume. For example, perhaps a center could even supply microphones or work with students on how to amplify their voices. Additionally, a center can hold workshops regarding tips on delivery while speaking in a mask, teach clients

breathing exercises, and do volume and pronunciation activities. A consultant can teach a client to take deeper breaths and hold it in the diaphragm as an exercise. Then, the client can release the air slowly in order to help with breath control. Teaching clients the importance of a strategic pause will also give them the opportunity to catch their breath if they become out of breath due to the mask. A combination of better equipment and practice with a mask may help a speaker improve their delivery.

Facial Expressions

One tool in public speaking is facial expression. As this is lost due to a mask covering most of the face, consultants can guide clients to include more humor, stories, and engagement to make up for the loss of expressive interaction. Eye contact with the audience becomes increasingly important as the eyes are the only visible part of a speaker's face. One specific strategy that consultants can teach clients is how to scan the room to connect with the entire audience as opposed to just looking at one spot. Finally, adding vocal variety may help make up for the fact that facial expression is lost. Clients can work on changing their delivery to add more emphasis on certain words or even vary the volume.

Physical Strategies

Centers can further guide their clients by teaching other nonverbal communication strategies. These may include more physical suggestions, such as focusing or positioning body movement toward the audience so the audience can hear the speaker more clearly. A speaker should also consider how he or she uses body placement throughout a speech presentation so

that they effectively utilize the space. Consultants should recommend a masked speaker use more hand gestures to provide emphasis on certain key parts of their presentation. Practices such as this can continue to be beneficial even when students no longer present while wearing a mask.

Content of Speech

With a speaker's face obscured by a mask, one suggestion is to enhance the content of the presentation to include clear organization and present more interesting information. Although most of the participants indicated they did not change their content or organization, it is important to note there are many benefits to modifying the content to help maintain the audience's interest. Therefore, a speaker can include more personal stories, incorporate humor, and include interesting facts. These not only will help the audience pay attention, but it may even help the audience connect more with the speaker. A renewed focus on quality visual aids may also assist the audience in paying attention despite being unable to fully see a speaker's face. Finally, having a strong organization including transitions will help an audience to follow along with the presentation.

Virtual Tutoring

Many communication centers transitioned to virtual coaching during the pandemic. When coaching via Zoom or other online platform, researchers suggest having clients wear a mask during their session. Even though a remote session, this will allow the client to practice what it will be like to wear a mask while presenting in person. Consultants should also ask the client to stand up and move around during their rehearsal to simulate in person

presentations. Virtual coaching also presents a great opportunity to evaluate visual aids since many platforms allow for screen sharing.

Independent Thinking

One strategy that a communication center consultant can implement relates to helping a client become more independent. Schwartzman and Ellis suggest consultants ask questions that encourage clients to develop their own solutions to their problems (2011). By reaching their own conclusion, a client may take more ownership or responsibility for their own performance or work. Perhaps a consultant can ask clients to brainstorm their own strategies to overcome any perceived obstacle that a mask presents. By allowing a client to produce their own plan of action, they will be more likely to implement it.

Professional Development

Many times, consultants are undergraduate students working with their peers. Scholars support the use of training and development programs to enhance consultants' skills in working with clients (Brown, 2020). It would be beneficial to revisit trainings for consultants to ensure they have the skills necessary to coach their peers while wearing masks. These could be mask wearing strategy trainings and developmental programs. These could also be workshops in which the consultants themselves practice breathing techniques, purposeful movement, or other strategies to be familiar with them themselves.

This research into the impact of masks may also be useful for the work that communication centers do in other areas besides improving public speaking. For example, researchers

highlight the use of communication centers for professional development work among their consultants (LaGrone, 2020). Professionals may not be completely comfortable wearing a mask, but in a work setting they may be forced to do so. Addressing mask wearing among the consultants of a center will help them adjust to the new normal. Also, if a consultant works with a client on interview preparation, he or she may want to practice answering questions while masked.

Conclusion

Not surprisingly, students faced with mask mandates during the 2020-2021 academic year had to adjust their presentations to accommodate wearing a mask. Luckily, students that work with consultants in a communication center do benefit from that work, even if it is in the form of higher grades (Davis et al., 2017). Centers can easily adapt to the “new normal” of mask wearing in a variety of ways which will benefit clients.

As many students adjusted their delivery, this suggests several things for communication center employees or public speaking consultants. One suggestion being a renewed focus on improving a client’s volume during their presentation. Though masks may not be a typical part of a communication consultant’s tutoring forever, exercises to improve student volume should be more heavily emphasized in centers going forward to continue to assist students. Additionally, almost a quarter of students altered their content as a result of the mask. Future research could explore how a presenter can maximize his or her presentation despite a mask by incorporating various strategies into the presentation. For example, since the speaker is wearing a mask, perhaps they should

include more images in the content of their presentation since the audience cannot see the speaker’s face or be more cognizant of movement.

In the completion of this study, students self-reported their experience, confidence, and satisfaction. This is a limitation as some respondents may not have been honest about their nerves or level of confidence. Another limitation is the spring 2020 semester, the time period when the health crisis really impacted American universities, was not captured in the study. Additionally, not every institution treated the pandemic the same way regarding their response due to the wide range of local and state mask mandates. The university where the study occurred required students to wear masks in the classroom.

While the pandemic appears to be ending, the future is unknown regarding mask mandates. It is foreseeable that in the future another pandemic could occur that also impacts society in a manner similar to the impact of COVID-19. The future of communication centers may be transforming. However, as students learn to adapt to the current climate, consultants can assist speakers in the adjustments they need to make to keep their presentations strong. Going forward, speakers may encounter obstacles that disrupt the “norms” of public speaking. Therefore, even though it is unknown if masks will become the new norm, communication centers should be prepared to adapt no matter what the future brings.

References

- Aristovnik, A., Keržič, D., Ravšelj, D., Tomažević, N., & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students:

- A global perspective. *Sustainability*, 12(20), 8438.
- Balkhair, A. A. (2020). COVID-19 Pandemic: A new chapter in the history of infectious diseases. *Oman Medical Journal*, 35(2), e123.
- Brown, J. (2020). Communication consultant proficiency: Benefits of building better consultants. *Communication Center Journal*, 6(1).
- Chiang, C. H., Chiang, C. H., Chiang, C. H., & Chen, Y. C. (2020). The practice of wearing surgical masks during the COVID-19 pandemic. *Emerging Infectious Diseases*, 26(8), 1962-1962.
- Cherrie, J. W., Apsley, A., Cowie, H., Steinle, S., Mueller, W., Lin, C., & Loh, M. (2018). Effectiveness of face masks used to protect Beijing residents against particulate air pollution. *Occupational and Environmental Medicine*, 75(6), 446-452.
- Davis, A., Linvill, D., & Jacobs, M. (2017). Communication center effectiveness: The impact of tutoring on speech performance. *Communication Center Journal*, 3(1).
- Esposito, S., & Principi, N. (2020). To mask or not to mask children to overcome COVID-19. *European Journal of Pediatrics*, 179(8), 1267-1270.
- Ferrer, R. (2020). COVID-19 Pandemic: the greatest challenge in the history of critical care. *Medicina Intensiva*.
- LaGrone, T., Mills, L. A., (2020) The Communication Center as a Resource for Professional Development. *Communication Center Journal*, 6(1), 109-111.
- Gama, R., Castro, M. E., van Lith-Bijl, J. T., & Desuter, G. (2021). Does the wearing of masks change voice and speech parameters? *European Archives of Oto-Rhino-Laryngology*, 1-8.
- Morens, D. M., Breman J. G., Calisher C. H., Doherty P. C., Hahn B. H., Keusch G. T., Kramer L. D., LeDuc J. W., Monath T. P., & Taubenberger J. K. (2020). The origin of COVID-19 and why it matters. *The American Journal of Tropical Medicine and Hygiene*, 103(3), 955-959.
- National Association of Communication Centers. (2021). *Directory of communication centers*. Retrieved from <http://commcenters.org/resources/directory-of-centers>.
- Nguyen, D. D., McCabe, P., Thomas, D., Purcell, A., Doble, M., Novakovic, D., Chacon, A., & Madill, C. (2021). Acoustic voice characteristics with and without wearing a facemask. *Scientific Reports*, 11(1), 1-11.
- Operational strategy for k-12 schools through phased prevention. (n.d.). Retrieved from <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/operation-strategy.html>
- Papadopoulos, D. I., Donkov, I., Charitopoulos, K., & Bishara, S. (2020). The impact of lockdown measures on COVID-19: a worldwide comparison. *MedRxiv*.
- Rabinovitch-Fox, E. (2020, November 17). Perspective | the battle over masks has always been political. *The Washington Post*. <https://www.washingtonpost.com/outlook/2020/11/18/battle-over-masks-has-always-been-political/>.
- Reimers, F. M., & Schleicher, A. (2020). A framework to guide an education response to the COVID-19 Pandemic of 2020. *Organisation for Economic Co-operation and Development*. Retrieved April, 14(2020), 2020-04.
- Schwartzman, R., & Ellis, E. D. (2011). Catering to customers or cultivating

communicators? Divergent educational roles of communication centers. *International Journal of Humanities and Social Science*, 1(17), 58-66.

- Tso, R. V., & Cowling, B. J. (2020). Importance of face masks for COVID-19: a call for effective public education. *Clinical Infectious Diseases*, 71(16), 2195-2198.
- Wang, M. W., Zhou, M. Y., Ji, G. H., Ye, L., Cheng, Y. R., Feng, Z. H., & Chen, J. (2020). Mask crisis during the COVID-19 outbreak. *Eur Rev Med Pharmacol Sci*, 24(6), 3397-3399.
- Wilson, E., Donovan, C.V., Campbell, M., Chai, T., Pittman, K., Seña, A.C., Pettifor, A., Weber, D.J., Mallick, A., Cope, A. and Porterfield, D.S., Pettigrew, E., Moore, Z. (2020). Multiple COVID-19 clusters on a university campus—North Carolina, August 2020. *Morbidity and Mortality Weekly Report*, 69(39), 1416.

Table 1

Changes to Speeches (N=183)

Category	Total Selections (n)	Percent Total (%)
Changes to the structure/ organization/content of the presentation		
Yes	27	14.8
No	109	59.6
Did Not Respond	47	25.6
Changes to the delivery/performance of the presentation		
Yes	62	33.9
No	69	37.7
Did Not Respond	52	28.4