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## Impact of the COVID-19 Pandemic on College Students and their Teamwork Abilities

Cameron Garde

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UNIVERSITY OF NEW HAVEN  
HONORS PROGRAM

**2022-2023 Honors Thesis**

Impact of the COVID-19 Pandemic on College Students and  
their Teamwork Abilities

Cameron Garde

A thesis presented in partial fulfillment of the requirements of the Undergraduate Honors  
Program at the University of New Haven.

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December 20<sup>th</sup>, 2022

Date

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## **Abstract**

The COVID-19 pandemic left a significant negative impact on the mental health of the world, most notably on traits that affect how people work well with others. Previous research into the effects of the pandemic have found how education has been impacted from the sides of both colleges and students to detract from upper education as a whole. Teamwork and group efforts also ran into unforeseen issues, heavily impacting college students both in the middle of and well past the effects of pandemic restrictions. This thesis uses and analyzes data from a survey disseminated to the University of New Haven Chargers Marching Band, who is classified as a large-scale team that saw significant changes due to the aforementioned pandemic restrictions. Said survey goes over the impacts to the mental health of marching band members, as well as their perception on how their teamwork was impacted by the restricted season. This data highlights how the aspects of goal-setting and social interaction were hit the hardest by pandemic restrictions in the marching band, and potentially for the future of all current college students as they move into the workplace.

## **Introduction and Background**

On March 11th, 2020, the World Health Organization declared a global pandemic due to the SARS-CoV-2 virus. At this point, the COVID-19 disease had infected 118,000 people across the world, and declaring a worldwide pandemic was the best move in order to prevent unnecessary deaths (Katella, 2021). At the time of this proposal being written, being November 2022, WHO reports that there have been over 630 million total reported cases of COVID-19, with over 6.5 million deaths stemming from the disease (WHO, 2022). With over two years of a constant worldwide pandemic, every facet of society has been affected, from the worldwide economy to the health and safety of individuals at home. One of the most notable effects of the

COVID-19 pandemic has been its impact on education; students from kindergarten through high school and college were forced into online classes, unable to attend schools in person and interact with their peers as they used to. Instead of attending a regimented school environment and participating in athletics and extracurriculars, students were stuck in their homes, with nowhere to go but Zoom classes. This has been a constant since the pandemic started, and students are unfortunately still suffering from forced online classes to prevent cases in their respective institutions.

The University of New Haven Chargers Marching Band has been active on campus since 2009, with a long and storied history of massive growth every year of its operation. With constant rehearsals, football games, and exhibitions to play at, the members of the band are often working together in close proximity to each other. As well as this, the marching band often draws from local high school bands and elite regional bands to bolster its numbers, meaning that many of its members have experienced a very similar marching band experience for every year they have done it. This meant that when the COVID-19 pandemic hit the university, the fall semester of marching band looked markedly different than it ever had. With 6 feet required between members of the band in drill and masks on at all times other than when playing wind instruments, a social aspect that many took for granted beforehand was suddenly stripped away from them. Exhibitions and football games were canceled, and the band ended up only doing a single standstill performance to car-bound parents. While the band has returned to normal as of the 2022 season, there is little doubt among the band members that the 2022 season had a marked effect on how band was run even today.

The goal of this research is to delve into the effects the COVID-19 pandemic has on the mental and social health of college students, focusing on how it will affect their abilities to work

effectively in teams in the workplace. This research will focus on a survey targeted at University of New Haven marching band members that either entered into or were currently enrolled in the University after March of 2020. This survey will ask how they were personally affected in certain aspects of their lives and how they feel now as opposed to when the pandemic began, as well as how they have worked in teams both before and after the pandemic. The results will be able to focus on comparing the differences between the two timeframes in order to discover how perspectives have changed over the past two years. This survey will be conducted on all grade levels, as long as the respondent in question has had experience with marching band both before and after the pandemic. This ensures a larger response base as well as relevant experience from all to apply to the survey's questions.

### **Literature Review**

This segment of the thesis will be split into several different sections. The first section will go over the COVID-19 pandemic and its general, worldwide effects and impact. The second section will focus in on how this pandemic affected college regulations, and the third section on how it affected college students themselves. The fourth section will discuss how the pandemic has affected teamwork in colleges and the workplace, while the final section will touch on how marching bands are able to exemplify teamwork and cooperation.

#### The COVID-19 Pandemic

The website YaleMedicine provides a general timeline for the first year of the pandemic, as a general overview of how the COVID-19 pandemic both began and progressed to where it has left us today (Katella, 2021). In December of 2019, scientists in China discovered a new illness with similar symptoms to pneumonia, which was confirmed in January to spread from human to human. This new illness forced China to put Wuhan, the city containing the discovery,

under complete lockdown. The United States would be the next country to become affected, as a resident had traveled to Wuhan and later tested positive for the illness when he returned home. Over the next two months, countries around the world began to see a massive spread of this new disease, dubbed COVID-19, causing the World Health Organization to declare a global pandemic. This pandemic would effectively shut down the entire world in a matter of months; countries closed their borders, nationwide mask and quarantine policies were implemented, and many businesses closed their doors, some for the last time. “Social distancing” became the new norm, with even the most basic in-person reactions taking place from a minimum of 6 feet apart.

The focus of the world turned to “flattening the curve,” the concept of slowly reducing the number of new cases to the point of little to no increase on a daily basis. However, at the same time, the world as a whole began attempting to re-open in a sense; for example, the United States came out with a federal protocol to relax restrictions in May of 2020 (Piccirillo, 2020). By working with state officials, the United States as a whole would be able to track how the pandemic cases shifted with the implementation of new policies or relaxing of prior ones, allowing for a safe and measured re-opening of the country. This idea, while sound in theory, did not pan out how the federal government intended, as individual states often came up with their own plans for a phased rollout, meaning that this would not technically be endorsed by the government. As mentioned in an interview with an infectious disease specialist, having a consensus for re-opening allows for the “response to be data-driven” (Piccirillo, 2020). This means that a properly coordinated rollout would be able to implement proper restrictions across the nation all at once, as well as allowing for data analysis on how protective immunity or testing would affect the spread of COVID-19. At this point in time, it became up to the individual as to how best to approach their response to the pandemic.

One of the most notable phases of the pandemic was the re-opening of schools in September of 2020. When the pandemic truly began in March, schools switched to a fully online learning curriculum, and students had not physically attended school since then. September saw a mix of in-person and remote learning, with many schools taking a hybrid approach to ensure safety in their returns to the classroom. However, as the colder weather forced people indoors, where the virus spread more easily, cases took an uptick as winter approached, with the US beginning to set numerous records for most cases per day. Good news came in December, when the Federal Drug Administration approved for both Pfizer-BioNTech and Moderna to produce vaccines on an emergency basis. These vaccines came at the same time as more variants of the COVID-19 virus emerged across the world, making for a race against time. Vaccines would need to be implemented fast enough to ensure that the variants would not heavily disrupt the progress that had been made thus far.

Across the numerous variants, two have stuck out as significant enough to garner change from governments: Delta and Omicron. Delta was found and named in October of 2021 in India, and quickly became responsible for over 90% of all cases of COVID-19 (World Economic Forum, 2021). By all accounts, Delta is simply a more infectious and lethal variant of the initial virus. Cases also took a drastic uptick in November of 2021 when the WHO named the Omicron variant of COVID-19. Omicron seems to have acted as a snapshot of the pandemic as a whole; over a three-month timeframe, it caused record case spikes around the world, and is now settling down (Charumilind, 2022). These variants are of the most interest because of the sheer amount of cases there are; there are many different variants, but the most data has been collected about these two due to how infectious they are. As of November 17<sup>th</sup>, 2022, there have been a worldwide total of 633,263,617 cases of COVID-19, as well as 6,594,491 deaths from these



cases (WHO, 2022). The current approach to the virus is one of caution, but with relaxed restrictions. Taking the University of New Haven as an example, a mask-optional policy was introduced for those with complete vaccine/booster status in the spring of 2022, and the fall of 2022 saw the full reinstatement of normal college functions.

### Colleges' Reactions to COVID-19

In the director of WHO's opening remarks about classifying the outbreaks of COVID-19 as a pandemic, he emphasized that this pandemic would "not just be a public health crisis, it is a crisis that will touch every sector" (WHO, 2020). This was especially apparent to college students, as over 1,300 colleges across the United States shifted to online learning instead of on-campus education. For instance, the University of New Haven sent all of its students home and instituted fully online learning. In the fall of 2020, only 27% of institutions offered a majority of in-person learning, with 44% at majority of online classes and 21% on hybrid learning (NCSL, 2021). This had drastic effects on certain students who could not access the Internet as easily as some of their peers, and also forced institutions to ensure that their systems were up to the task of handling their entire population of students taking classes online. Another pressing issue was admissions; visits to campuses understandably carried too much risk to carry on as normal, and testing for high school students also took drastic changes. College enrollment dropped by 13.1% for freshmen in the fall of 2020, and overall enrollment took a drop of 2.5% nationwide (NCSL, 2021). Universities were suddenly saddled with extra costs, such as refunding room and board and increased operating costs to deal with the new COVID-19 policies. As well as this, the dorms and dining halls of a typical college campus were suddenly unsafe even come the fall, meaning universities had to institute their own policies if their state's policies were not sufficient enough to ensure students could return to campus safely.

The National Conference of State Legislatures goes over how state and federal lawmakers targeted colleges and universities with several policies designed to ensure safe returns to campus and continued health among college students (NCSL, 2021). Chiefly focused on safety, Maryland's HB 187 required each college or university to submit a plan of action for any potential campus outbreaks, following certain guidelines and requiring the plan to actively be implemented on campuses. New York's SB 8107 targeted SUNY and CUNY schools, ensuring students were refunded for any housing charges during the closures of said schools. Massachusetts's HD 4961 suspended any student loan payment on Commonwealth-issued loans until 360 days after the state's Emergency Order had expired, cancelling any interest over said timeframe. In order to protect universities from any legal suits due to COVID exposure on campus, policies such as Louisiana's HB 59a allowed for immunity from legal repercussions exempting cases of gross negligence. At the federal level, the CARES Act allotted over \$14 billion for emergency relief for colleges and universities to deal with the pandemic, and another \$22.7 billion came from the COVID-19 Economic Relief Bill.

### The Pandemic's Effects on College Students

The most important information to the topic of this thesis is how all of the issues and policies outlined in the previous two sections have affected college students. Concerning the exact feelings on the pandemic responses of the universities, Third Way published a poll from May 2021 surveying 1,002 university students nationwide to discuss how they felt about the pandemic and university life (Third Way, 2021). 72% of students said that their institution's method of handling the pandemic made them trust in their institution more, and 81% felt that their university did the best they could during the pandemic. However, 56% agreed that their degree may be worth less due to the online classes, and 65% have said that colleges and

universities are not worth the great monetary costs they require at this time. The same poll also gives insight into how students have been personally handling the pandemic in terms of their education, citing lack of motivation at 84% and proper instruction at 77% as major challenges to a successful college education.

A study hosted by BMC Psychology goes more in specifics as to how the pandemic and quarantining affected students mentally (Giusti, 2021). 55% of participants reported “significant impairment in concentration and learning abilities” due to education taking place online, with 81.5% of said participants attributing it to lack of interpersonal communication. 80% of participants were forced to cut out any social studying habits that they had, and mentioned that the increased familiarity of their homes had a significant effect on this. Over two-thirds of the participants registered 5 main impairments to schoolwork; sadness, sleep patterns, lack of concentration, loss of energy, and pessimism. Despite this, only 7.9% of participants reported that their emotional state worsened as a result of the pandemic. The study discusses how older students adapted to online learning better due to a more solid social foundation, but that a significant amount of students suffered from decreased academic performance due to the shift to online learning.

A second study hosted by BMC Psychology specifically goes into the impact of the pandemic on the mental health of college students in the United States (Lee, 2021). 83.8% of the surveyed students reported that they had increased feelings of at least one of anxiety, depression, and loneliness, with correlation to closeness to graduation but no correlation to gender. Nearly 61% of students had more difficulties completing work away from campus, and 50% reported increased weight gain while off campus, which was correlated with the increased feelings of loneliness mentioned above. Only 26.4% of respondents did not have any major changes to

future plans as a result of the pandemic. A majority of students reported strained relationships with both friends and family as opposed to either improved or stabilized relationships. The study concludes from the data that there is a significant negative effect on a student's mental and social health as a result of the pandemic, likely contributing to potential trauma or stress. This also affects those closer to graduating less than those freshly enrolled in university.

A study by Garver et al. looks closer at how student groups on campus, such as athletics or clubs, were affected by their time under pandemic restrictions (2021). Out of 249 participants, 69.1% reported that "a lot has changed" about how their group was run and felt disappointment or annoyance about their groups being canceled or postponed. Said participants mostly compared their feelings during this pandemic to either that of a severe injury or could not find a sufficient feeling to compare their feelings to. However, the survey could not ultimately find any significant changes in anxiety or stress levels despite finding a moderate uptick in depressive symptoms. This was a very single-track survey that lacked the capability to test on a multi-variable level, but still showed that the impact of the pandemic specifically affected those in college-level group activities through the cancellation or alteration of said activities.

#### The Pandemic's Effect on Teamwork

Focusing in on a specific facet of the pandemic's effects on college students, the move to online learning and interaction has severely hampered the ability of said students to continue to work in teams in a college setting. A study performed by Jessica Wildman, as well as other authors, showcases some firsthand accounts of how college students were affected and how they are able to deal with the issues (Wildman, 2021). The results of this study were focused into 3 categories for analysis: challenges, changes, and consequences. Many of the challenges experienced by the team members were external in nature, specifically relating to their home

environments and other classes. Issues also stemmed from different time zones and a general lack of work ethic due to the digital environment. A huge change aside from moving to Zoom and Microsoft Teams for online work was just how much a team communicated; there was a huge spectrum of whether a team might have communicated more, less, or not at all. Many teams were also forced to focus on work that they were able to perform from home, such as supporting documentation or reports. Physical prototypes or projects were almost unanimously scrapped as a potential work device due to the physical distance between team members. Consequences suffered by the teams ranged from general slowness and delays of work to morale loss, as their project environments were no longer available. This study makes the incredibly important distinction that as much as the pandemic affects individuals, it also shows how teams of college-level students are affected just as much.

Another study, hosted on Frontiers, delves into how virtual teams perform and what affects them the most (Garro-Abarca, 2021). According to these results, the single most important factor in online teamwork is trust in one's teammates; this single variable can increase confidence, communication, and general team cohesion while working. The next most correlated variable was the actual features of the task and how it affected the active communication of the team. If the project was more stable and clear-cut, general teamwork and efficiency improved across the board. Empowering team members was another important aspect of the study, as the power a teammate held has a direct correlation with the first mentioned variable, trust. Some other significant variables mentioned by the study included leadership of the teams, direct communication between teammates, and team cohesion. Overall, this study is able to highlight clear-cut variables that have significant impact on how a digital team is able to perform in the workplace.

### An Overview of Marching Bands

Since the main population tested by this paper is that of the University of New Haven Chargers Marching Band, it is important to cover the different traits of a marching band and why they are a valuable group to survey for teamwork-related issues. Typically, the marching band meets twice a week for rehearsals, as well as nearly every weekend for major performances at football games and exhibitions. With major meetings for three days per week, it is no wonder that marching band qualifies as a tight-knit and beneficial team for all involved. A paper by Altaftazani et al. goes over certain benefits and traits emphasized by being part of a marching band, such as cooperation, responsibility, and loyalty (2020). In elementary school, such a group allows for early understanding of social interactions in terms of both personal and team life. The repetition of meetings per week serves to ingrain this lesson as a learned behavior instead of an action only taken at marching band. In college, this remains much the same in terms of learned behavior; with large groups of varied students at different levels of maturity and life experience, being able to learn how to perform said social interaction with college students allows for a much more realistic snapshot of workplace behaviors.

A 2021 paper helps to lay out exactly how the pandemic affected the operations and continued social interaction aspect of marching band (Cumberledge). The major restrictions listed were six-foot social distancing and mandatory masks at all times when not playing wind instruments, which were the two major restrictions imposed upon the Chargers marching band. Notably, while there were fewer opportunities to perform, every surveyed band still had some semblance of a marching band season, and an overwhelming majority of respondents said that the adjustments their band made to compensate for the pandemic were sufficient. The most important factor of this study was that the pandemic restrictions did have a negative influence on

at least half of the sample responses in terms of social interaction and community, showing that there was at least some form of significant impact on the major aspects of marching band as they relate to teamwork.

### **Statement of the Problem**

The problem being discussed in this paper is the effect of the COVID-19 pandemic on the social and mental health of college students, focusing on how these effects will impact their teamwork abilities in the workplace. With severe amounts of isolation depriving this group of proper peer-to-peer or peer-to-teacher interaction, studies have shown that students have suffered drawbacks in terms of their mental health. The survey portion of this paper will provide quantitative research into the specific effects on University of New Haven students. One of the most important aspects of a proper education at the university level is learning how to work properly in teams, and lessened interaction with others likely has a negative effect on this ability. The survey results will be used to analyze how teamwork may suffer in the workplace as a result of the pandemic.

### **Research Questions**

1. How have University of New Haven students been affected by isolation during the COVID-19 pandemic depriving them from peer-to-peer interaction? This focuses on personal perspective on both before and after the pandemic, and how their mental health may or may not have been affected.
2. How have pandemic restrictions affected a student's ability to work as part of a group on a specific objective? This delves into group projects and the like, asking how qualities such as goal-setting and conflict resolution have been affected.

## Methods

The method of data collection for this research was a survey designed using Google Sheets. After an initial demographic section, this survey focused on two sections, themed around the two research questions above: the impact of isolation on college students' health, and the impact of the COVID-19 pandemic as a whole on teamwork abilities. Within the first section, students were asked to discuss personal interactions both before and after the pandemic, focusing on social interaction, mental health, and loneliness. Typically, each question ranked on a 3 point scale, showing either negative change, no change, or positive change from a negative, neutral, or positive baseline. This survey did not need to go intensely in-depth, but rather note any patterns of change within the perspective of students both before and after the pandemic. This section also utilized an external survey from UCLA to rank loneliness on a numerical scale instead of attempting to simplify it to an unhealthy extent. The second section of the survey focused on the teamwork aspects of education, using the same 1-3 scale to rate how different aspects of teamwork have satisfied students. For some teamwork-focused questions, this scale was enlarged to 5 points in order to accurately rank to what extent a subject may feel something.

In terms of dissemination, this survey was completely focused on a singular team: the University of New Haven Chargers Marching Band. This was for two purposes, one for sample bias and one for convenience. By utilizing a single team with shared or mostly similar experiences, the results will follow one singular bias instead of numerous unknown biases. As well as this, the marching band is home to numerous personal avenues for survey dissemination, which opened up more avenues of motivation for members to complete said survey. This survey was placed onto the band's main messaging app, BAND, and announced at multiple rehearsals. Personal connections were used to emphasize taking the survey to members of Kappa Kappa Psi,



the band fraternity, as well as multiple smaller social media channels. The addition of a giveaway of Amazon gift cards was to ensure that a longer survey would still be taken by members of the band. Roughly two and a half weeks were given for the band members to fill out this survey, as the end of this period also signified the end of the band season, which would likely result in a loss of interest in the survey. After the completion of said survey, the results would be taken and analyzed in order to glean potential effects of the pandemic.

### **Results**

In total, the survey was filled out by 23 unique respondents. The mean age of said respondents was 20, with a 47.8%/34.8%/17.2% split between female, male, and other genders. There was an overwhelming 87% majority of Caucasian respondents, with the other 13% identifying as Latino or Hispanic. In August of 2020, which was the beginning of the marching season during the COVID-19 pandemic, 43.5% of the respondents were freshmen, 39.1% had not been enrolled at the university yet, and a remaining 17.4% were sophomores or juniors. 82.6% of respondents had not been a part of the University of New Haven Marching Band before the season in question. Overall, the average response to this survey comes from a 20-year-old female who was a freshman coming into this university, without any experience in this marching band from before the pandemic.

In the Personal Experiences section of the survey, 73.9% of respondents said that they often spent time interacting with others, and that they saw a significant decrease in this time when the pandemic started. However, only 47.8% of respondents said that they returned fully to their pre-pandemic lifestyle, with an additional 47.8% taking a more neutral approach. As for mental health, 56.5% of respondents rated their mental health at a neutral state from before the pandemic started. While the same percentage of respondents stated their mental health

significantly decreased as a result of the pandemic, no participants showed any increase in their mental health status during the pandemic.

Looking at the UCLA loneliness scale used in this section, the mean response was of a 50.59, with a median of 51 and a standard deviation of 11.26. For context, this score was on a 0-100 scale, with 0 being the least lonely and 50 being the true middle of the scale. 56.5% of respondents responded that their answers from before the pandemic would be similar to their current answers, while 39.1% believed their answers would have been more positive.

In the Teamwork section of the survey, 47.8% of respondents ranked their enthusiasm for teamwork as average, while 30.4% were very enthusiastic and 21.7% were not enthusiastic. However, 73.9% of respondents reported no real change in their enthusiasm levels after the pandemic, with only 13% each reporting an increase or decrease. 40.9% of respondents had a strategy to meet teamwork goals to a great or very great extent, 22.7% had a strategy to some extent, and 36.3% had little to no strategy. While 28.6% of respondents did not have any internal conflicts, only 19.1% of respondents were able to sufficiently resolve them, with 33.3% answering neutrally and an additional 19.1% were unable to sufficiently resolve them. As for goal assessment, 40.9% of respondents were able to do so sufficiently and another 40.9% assessed them to some extent. An even split of 40.9% of respondents each would have answered the questions either more positively or the same before the pandemic began.

Relating to team interactions, 59.1% of respondents classified their interactions before the pandemic as neutral, while the remaining 40.9% listed them as positive. 54.5% of respondents saw no change in these interactions after the pandemic, while 22.7% of respondents each saw a positive or a negative change.

Overall, all multiple-choice questions were answered by at least 91.3% of the respondents, and all open response questions were answered by at least 60.9% of the respondents. 69.6% of respondents chose to enter the giveaway by associating their responses with their university email, which will not be used to identify them over the course of this thesis.

### **Analysis**

In terms of peer-to-peer interaction, the main note to take is that while a majority of people saw a decrease in the amount of time they spent interacting with others, less than half of them returned to a pre-pandemic lifestyle. A fair number of responses mentioned that since August 2020 was their freshman year, the restrictions severely hampered their ability to begin interactions at the university, and by the time the restrictions were lifted it was harder as an individual to socialize. Even if marching band was a built-in time for interaction with other members of the individual section teams, COVID restrictions for many respondents seemed to permanently damage social interaction at a college level. A notable quote from an anonymous respondent here in support of the above states that, “I feel like my section was a lot more sheltered and I feel like I missed that formative time to make friends with different people.” While the rehearsals took the same amount of time both before and after COVID, the inclusion of masks and social distancing made it more about the individual than about group interaction.

Looking at mental health, the majority of respondents had a relatively neutral view on their mental health, but no multiple-choice responses showed any sort of improvement of said mental health, and a majority reported that they felt there was a significant decrease. A common theme in the majority of responses was that marching band prevented the respondents’ mental health from getting too much worse as a typical feature of the band. One view of the situation was that, “marching band was a lot of my social interaction outside of school so the lack of band

really decreased my social interactions and effect my mental health as a result.” Since marching band takes up a significant portion of one’s week as a member, running into the social interaction limitations discussed already would make that portion of the week much worse for one’s mental health, contributing to the majority of negative responses. For others, marching band still happening during the pandemic “gave me a reason to get out of my room and be with people in the same space.” This allowed for some of the respondents to avoid any significant mental health deprecation during the pandemic by providing an outlet for social interaction.

The results of the loneliness scale answers show that most people tend towards a 50 on the loneliness scale, showing a moderate trend towards being lonely. The majority of respondents answered that their answers would likely be around the same since before the pandemic. This follows with the prior points of band acting as “a constant in my life,” where despite restrictions marching band was able to balance respondents’ social interactions in order to avoid significant effects on their loneliness. However, for some respondents, restrictions in marching band made it “a lot harder to make friends and interact with people.” Only a singular respondent answered that their pre-pandemic self would be less lonely than now, showing that even a semblance of normalcy through restricted band was not enough to make things any better than they were before.

The multiple-choice answers based on enthusiasm and willingness to work in teams were perhaps the most balanced results in the survey, with the major trend being neutrality. The most common sentiment echoed throughout the responses was that “the pandemic made teamwork harder with the band but didn’t change my willingness to work with people.” If someone voluntarily signs up for marching band, it generally implies that their willingness to do a strenuous activity such as this is high enough to be less affected by any sorts of restrictions.

However, the restrictions absolutely would have impacted people's ability to perform in teams in terms of face-to-face discussions and performance.

The section of questions based on goal-setting and goal progress showed that the pandemic severely affected the marching band's ability to have goals in the first place. As one response said, "we really did not have goals as we didn't have concerts or shows." Many of the other responses also emphasized mask-wearing and social distancing on the field as additional goals that might even supersede the typical goals to improve both individually and as a group. A clear majority of respondents were able to create their own strategies to meet the goals mentioned above, as well as respond positively to interpersonal conflicts and assess goal progress. Reflection to before the pandemic saw a relatively even split between neutral and more positive answers. One of the major new goals of band was focusing on "personal well-being," as several of the responses mention interpersonal communication and health as newer goals that the band had not focused before. To an extent, however, some respondents noted that, "the band was much better at working together through things pre-Covid." This lends credence to how the results of goal-setting seemingly did not always work out for the respondents.

### **Conclusion**

This surveying process left several avenues in order to improve upon the results. For one, while the initial goal for this survey was to obtain a minimum of 30 responses, 23 was the final number at the end of the two-week period for respondents. This was after multiple different promptings at band rehearsal and in separate chatrooms, meaning that there was some intrinsic problem with the motivation of the intended survey group. Some of this lack of motivation most likely stems from the survey itself, as the total time for the survey ended up being around 10-15 minutes instead of a more easily accessible 5 minutes, which likely turned away more than one

person. This would also account for how the total numbers of answers per question, both multiple choice and open-ended, decreased as the survey went on. Other motivational issues may include a lack of formal discussion on the survey, as the option to take said survey was simply presented and explained at the end of a physically demanding rehearsal. There was also an unforeseen technical issue with the external survey in that the initial form did not save previous answers after navigating away from the page, meaning that some may have started taking the quiz and not finished it due to some frustration with the technology.

As for the dataset itself, the initial decision to focus in on the marching band as a subset of college students helped to eliminate several large-scale variables that would come with more than one team environment, such as differing team sizes or communication methods. However, focusing in on the band also came with its own selection of biases only made stronger by limiting the sample size as such. This study did not obtain an accurate sample of different types of working teams, such as ones that may have run into different issues or approached similar ones in different ways. It also approached a very specific subset of people that would voluntarily sign up to do marching band, especially during a pandemic; one can assume some form of pre-existing mental resiliency from this subset. Many of the older respondents had also made pre-existing connections within the band, meaning that their social aspects and mental fortitude would be resistant to something like the COVID-19 pandemic. This leads to a very similar set of people being surveyed on the same activity, which shows in the general lack of variety in the sample responses. Issues also arose with who decided to answer the survey as well, as younger freshmen and sophomores were the main respondents compared to older band members with more experience as part of the team. Due to all of these issues, any correlations other than

surface level would be considered very weak due to very strong internal biases affecting different demographics in different ways.

The most important factor in the mental health section of this survey, and the main reason that this survey was disseminated, was to categorize the potential permanent effects that the pandemic may have on college students. On this section, a telling statistic is that less than half of the respondents for the survey returned to whatever their previous social interaction levels from before the pandemic were. This already shows that the restrictions from the pandemic have a negative effect in a team-based environment, if participants in an activity explicitly designed around fostering positive social interaction and growth are reporting back a shift in lifestyle. On the other hand, marching band did provide an outlet for those feeling trapped by the restrictions to have some form of structured interaction per week to have some sense of the “normalcy” one may have felt from before the pandemic. The same goes for the loneliness results, where there was no significant change in how people felt on the scale from before the pandemic. Overall, these specific results show that the majority of potentially permanent effects from the pandemic would be focused on how individuals interact with others in any environment, but not nearly as much in terms of personal health and loneliness.

In terms of teamwork conclusions, the results of the enthusiasm for teamwork generally remaining unchanged are a positive sign for the future. If the pandemic did not significantly affect people’s willingness to perform well in group work, it is a hopeful sign that group work in the workplace will not be affected by this generation of college students. The same goes for self-assessment for both goals and conflicts, where the future of workplace assessment looks bright if the trends from this survey holds true. However, the most concerning part was the inability of the respondents to set goals within the marching band and the self-reflection not being entirely

positive on this front. If the band as a whole still suffered post-COVID and pandemic restrictions in terms of forming goals, future teamwork may struggle to get off the ground if proper goals are unable to be set.

In conclusion, this research shows that potential permanent effects of the pandemic will likely be focused on the initial stages of team formation. With social interactions and initial goal-setting being the primary negatives, freshly formed teams in the workplace consisting of this generation of college students may struggle to get off the ground. Communication and planning are two incredibly vital traits to the formation of a team, and while this survey shows that continuing those traits within a team was not significantly affected by the pandemic, it also calls into question how effectively college students now can begin the process of making a team. However, if a team is able to overcome these initial hurdles of team formation, the standards for actionable work and self-assessment should be relatively unchanged from before the pandemic.

For future research into this topic, perhaps the most open avenue to improvement is doing a similar study over a period of time instead of utilizing a single time period's perspective. Being able to have multiple points of data to support change over time would result in much stronger and more actionable results. As well as this, using different varieties of teams within the college system, such as larger group projects or athletics teams, would allow for multiple different perspectives and the ability to make connections between team traits and responses to the pandemic restrictions. An especially potent research opportunity would be to look at a comparison of this current generation of college students with those who have been working in the workplace for a longer period of time to compare how these two generations may accomplish similar tasks in different ways.



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