

Facing COVID-19: An assessment of First-Generation College Students' Persistence to Graduation during a Pandemic

The University of Pittsburgh Site Report – Summary of Fall 2020 Data Collection

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On January 21, 2020, the Washington State Department of Health confirmed the nation's first case of COVID-19. By mid-March, university officials from across the U.S. suspended face-to-face classes and moved instruction to a virtual platform. University-wide closures across the nation prompted a collaboration between researchers, college administrators and students to assess the impact of COVID-19 on First-Generation College Students (FGCS). For the purpose of this report, the team defines FGCS as an individual for whom neither parent completed a four-year bachelor degree.

What does college persistence to graduation look like for FGCS living through the COVID-19 pandemic? And how, if at all, does COVID-19 exacerbate already existing barriers?

To help answer these pressing questions, researchers from an interdisciplinary team administered surveys to FGCS during the COVID-19 pandemic. Through analysis, researchers identified the effect of the pandemic on persistence to graduation for FGCS. The team also collected open-ended responses from FGCS who provided recommendations to their universities on how to improve supports.

Methods

The research team administered online surveys to FGCS across five universities: Bucknell University (PA), Florida A & M University, Rowan University (NJ), The University of Pittsburgh (PA) and The University of North Carolina at Chapel Hill. Sites were selected based on convenience where researchers purposefully selected FGCS at each site. Each site researcher was responsible for gathering and distributing surveys to FGCS. In some cases, all FGCS received the email while in other cases only a small group received the email. This was due to each school's divergent ways in identifying and connecting with FGCS. The team collected respondents' perceptions on the extent to which COVID-19 exacerbated barriers to college persistence, reduced access to resources, hindered connections with peers and family and disrupted health. Lastly, the team administered a photovoice methodology survey where they asked students to take visual images of their workspace to gather perceptions on equitable schooling space. This report presents the combined findings from all sites and compares them to results from the University of Pittsburgh (PITT).



TIMELINE:

- January 2020 – Nation's first case of COVID-19
- March 2020 – Universities suspended face-to-face classes
- June 2020 – Pilot administered survey at Rowan and UNC-CH
- October 2020 – First round of data collection
- April 2021 – Second round of data collection
- October 2021 – Third round of data collection

FALL 2020 DATA COLLECTION:

- 5 universities
- 659 Barriers survey
- 166 Photovoice surveys
- 48 interviews

Demographics of Sample

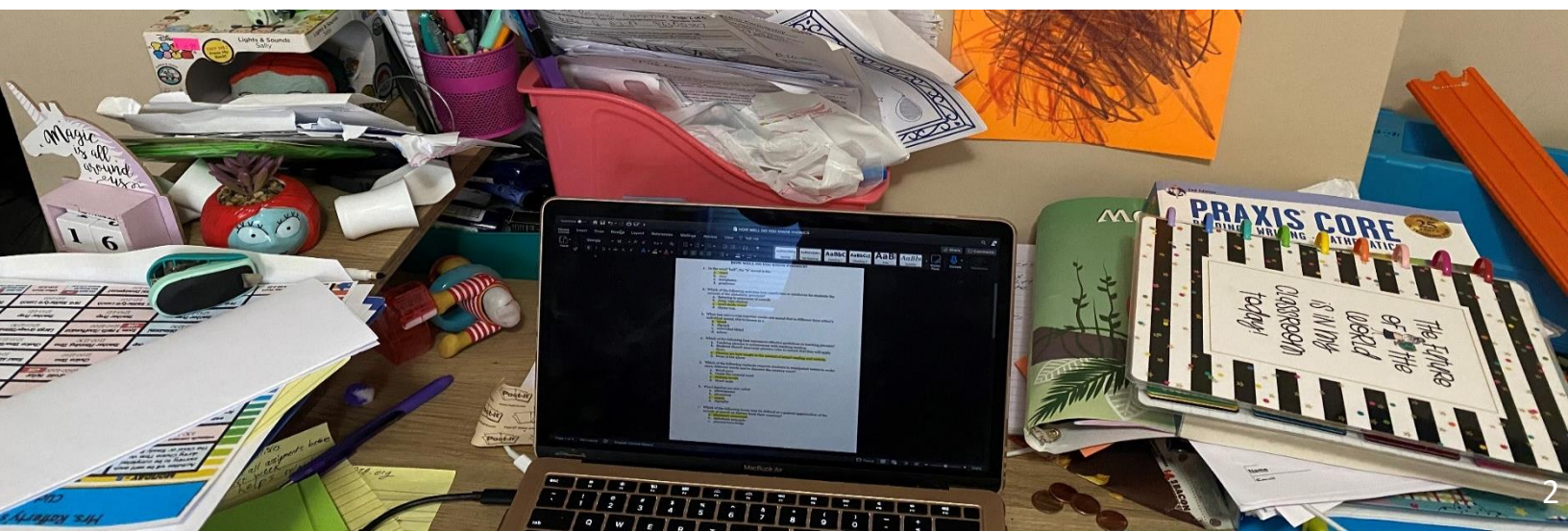
In fall 2020, 23 PITT FGCS completed the initial online survey at PITT. Approximately 43.5% of respondents were White, 87.0% identified as a woman and 47.8% described their households as low-income. Additionally, most respondents represented in-state residents (73.9%).

Table 1. Demographics of Survey Respondents

	ALL N (%)	PITT N (%)
Race/Ethnicity		
White, Non-Hispanic	261 (40.2%)	10 (43.5%)
Hispanic/Latin American	127 (19.6%)	n/a
Black, Non-Hispanic	119 (18.3%)	n/a
Asian/ Asian American	67 (10.3%)	n/a
Multiracial	40 (6.2%)	0 (0.0%)
Middle Eastern/ Middle Eastern American	13 (2.0%)	n/a
American Indian/Native Alaskan	n/a	0 (0.0%)
Other Race/Ethnicity	n/a	0 (0.0%)
Prefer not to answer	12 (1.9%)	0 (0.0%)
Gender		
Woman	470 (71.4%)	20 (87.0%)
Man	156 (23.7%)	n/a
Genderqueer or gender non-conforming	10 (1.5%)	0 (0.0%)
Questioning	n/a	0 (0.0%)
Transgendered Man	n/a	0 (0.0%)
My identify is not listed	n/a	n/a
Prefer not to answer	n/a	0 (0.0%)

	ALL N (%)	PITT N (%)
Family Income		
Lower-middle income	217 (34.0%)	n/a
Low-income	207 (32.4%)	11 (47.8%)
Middle income	167 (26.1%)	n/a
Upper-middle income	40 (6.3%)	0 (0.0%)
High income	n/a	0 (0.0%)
Prefer not to answer	n/a	0 (0.0%)
Class Year		
Junior	194 (29.4%)	n/a
Freshman	168 (25.5%)	n/a
Senior	163 (24.7%)	n/a
Sophomore	118 (17.9%)	n/a
Status		
In-state	581 (89.9%)	17 (73.9%)
Full-time during Spring 2020	453 (69.9%)	15 (65.2%)
Transferred from another college	231 (35.7%)	n/a

Note: Items with fewer than 10 responses were omitted and replaced with "n/a" to keep subject anonymity.



Barriers

The research team asked Pitt FGCS to assess, retrospectively, the extent to which existing barriers were more pronounced during COVID-19 than before the pandemic. When asked about the extent COVID-19 has impacted their **financial barriers** to college, respondents indicated that they were less likely to have enough funds for college next year, more likely to be concerned about having enough funds to complete college, and less likely to be able to borrow money for college (see Table 2). The term “Before COVID-19” relates to the period before the university-wide shutdown in March 2020, while “Today” refers to October 2020.

Table 2. Financial Barriers for FGCS

	ALL		PITT	
	Today Agree N (%)	Before COVID-19 Agree N (%)	Today Agree N (%)	Before COVID-19 Agree N (%)
I will have enough funds for college next year.	355 (56.5%)	436 (66.5%)	10 (43.5%)	14 (60.9%)
I am concerned about having enough funds to complete college.	401 (64.1%)	378 (57.9%)	19 (82.6%)	16 (69.6%)
I am unable to borrow money for college.	194 (31.1%)	185 (28.4%)	n/a	n/a

Note: Items with fewer than 10 responses were omitted and replaced with “n/a” to keep subject anonymity.

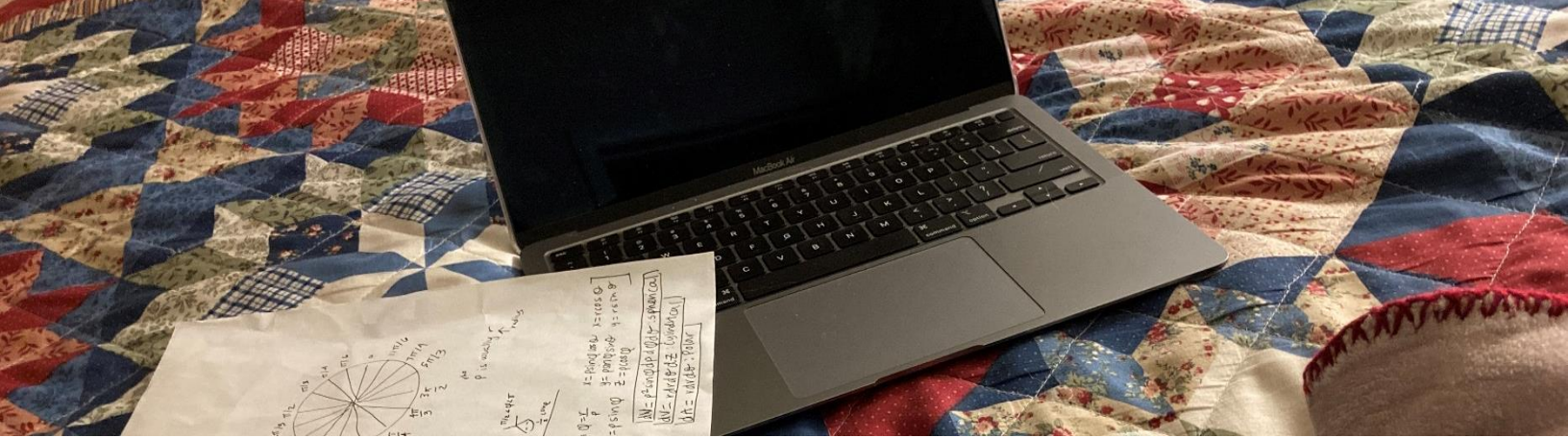
When asked about the extent COVID-19 has impacted PITT FGCS’ **institutional barriers** to college, respondents saw a minimal difference between Before COVID-19 and today. Table 3 provides additional insight into FGCS’ perceptions on institutional barriers.

Table 3. Institutional Barriers for FGCS

	ALL		PITT	
	Today Agree N (%)	Before COVID-19 Agree N (%)	Today Agree N (%)	Before COVID-19 Agree N (%)
At my university, I face inequalities because of my social class.	187 (29.8%)	179 (27.5%)	13 (56.5%)	12 (52.2%)
At my university, I face inequalities because of my race.	87 (13.4%)	79 (12.1%)	n/a	n/a
At my university, I face inequalities because of my proficiency in English.	20 (3.2%)	18 (2.8%)	n/a	n/a
On average, my professors are knowledgeable in their field.	582 (92.2%)	615 (94.3%)	22 (95.7%)	23 (100.0%)

Note: Items with fewer than 10 responses were omitted and replaced with “n/a” to keep subject anonymity.

“Being an out-of-state student during these times is hard because of how much I’m paying for online classes. It creates yet another financial stressor.”



When asked how the pandemic exacerbated **academic barriers**, PITT FGCS indicated that they were less likely to like school, more likely to have poor study habits and more likely to have grades lower than expected today (October 2020) as compared to before COVID-19 (see Table 4).

Table 4. Academic Barriers for FGCS

	ALL		PITT	
	Today Agree N (%)	Before COVID-19 Agree N (%)	Today Agree N (%)	Before COVID-19 Agree N (%)
I like school.	380 (60.4%)	562 (85.9%)	17 (73.9%)	19 (82.6%)
I have poor study habits.	350 (55.4%)	250 (38.1%)	14 (60.9%)	n/a
I am not concerned about my academic eligibility.	356 (56.6%)	384 (58.8%)	11 (50.0%)	11 (50.0%)
My grades are lower than expected.	335 (53.3%)	137 (20.9%)	12 (52.2%)	n/a

Note: Items with fewer than 10 responses were omitted and replaced with "n/a" to keep subject anonymity.

Survey respondents also shared their **personal barriers**. Overall, PITT FGCS were more likely to experience loneliness, miss their friends and struggle with adjusting to college today as compared to before COVID-19 (see Table 5).

Table 5. Personal Barriers for FGCS

	ALL		PITT	
	Today Agree N (%)	Before COVID-19 Agree N (%)	Today Agree N (%)	Before COVID-19 Agree N (%)
I struggle with low self-esteem.	348 (55.9%)	318 (48.9%)	17 (73.9%)	14 (60.9%)
I am experiencing loneliness.	447 (71.3%)	231 (35.5%)	14 (60.9%)	n/a
I miss my friends from college.	437 (70.3%)	220 (34.0%)	16 (69.6%)	n/a
I am homesick.	147 (23.6%)	141 (21.7%)	n/a	10 (43.5%)
I feel overwhelmed.	546 (87.1%)	409 (62.5%)	20 (87.0%)	16 (69.6%)
I struggle with adjusting to college.	375 (59.6%)	240 (36.7%)	13 (56.5%)	n/a

Note: Items with fewer than 10 responses were omitted and replaced with "n/a" to keep subject anonymity.

Resources

The research team asked students to describe the types of resources they used during the initial stages of COVID-19. The team defined resources as Wi-Fi, academic tools (e.g., books), personal supplies (e.g., food), space and time. Over half (72.7%) of surveyed FGCS indicated having access to useful resources today as compared to 95.5% before COVID-19 (see Table 6). Survey results also show that FGCS are more likely to have access to food and supplies in October 2020 as compared to at the start of the pandemic.

Table 6. Access to Resources

	ALL		PITT	
	Today Agree N (%)	Before COVID-19 Agree N (%)	Today Agree N (%)	Before COVID-19 Agree N (%)
I have the tools and resources needed to be a successful learner in a virtual environment.	377 (82.0%)	-	20 (87.0%)	-
I have a great study environment.	273 (43.2%)	470 (71.8%)	11 (47.8%)	16 (69.6%)
I have access to resources that will help me excel in school.	414 (66.0%)	567 (87.2%)	16 (72.7%)	21 (95.5%)

“The other students here at Pitt are honestly what motivates me the most to continue getting my work done. Everyone is so studious, kind, and motivated in their own studies that it gives me that push to focus on mine.”

Relationships

The research team explored how PITT FGCS remained connected to their peers and instructors during the initial stages of COVID-19. Overall, FGCS expressed consistency around being emotionally close with their family (see Table 7).

Table 7. Feelings of Connectedness

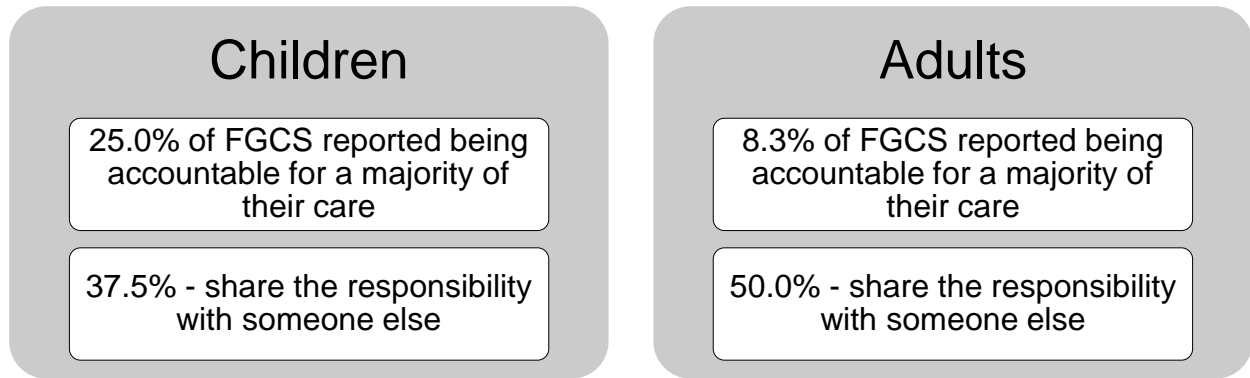
	ALL		PITT	
	Today Agree N (%)	Before COVID-19 Agree N (%)	Today Agree N (%)	Before COVID-19 Agree N (%)
I feel connected to my fellow students.	73 (15.3%)	-	n/a	-
I feel connected to my instructors.	177 (32.0%)	-	n/a	-
I am emotionally close with my family.	465 (73.6%)	499 (76.3%)	15 (65.2%)	15 (65.2%)
I am physically close to my family.	387 (61.5%)	401 (61.4%)	11 (50.0%)	-

Note: Items with fewer than 10 responses were omitted and replaced with “n/a” to keep subject anonymity.

Caregiving Responsibilities in the Home

The research team assessed the degree PITT FGCS connected with their family and developed newfound responsibilities of caregiving in the home. We asked students to address their obligations related to caregiving during COVID-19. Of those FGCS who indicated having children aged 0-18 in their home, 25.0% mentioned being accountable for most of their care. In addition, 50.0% of surveyed FGCS reported sharing the responsibility of taking care of an adult or older person in their home (see Figure 1).

Figure 1. Caregiving Responsibilities of PITT FGCS



The team asked PITT FGCS to assess, retrospectively, the extent to which **family obligations** were more pronounced in October 2020 as compared to before the pandemic. Interestingly, more than half of survey respondents (60.9%) indicated being responsible for the emotional needs of their family in October 2020. FGCS also asserted that their family members faced physical (73.9%) and mental (56.5%) health challenges before the pandemic. Results show that these challenges were also present for family members seven months into the pandemic.

Table 8. Family Obligations on Health

	ALL		PITT	
	Today Agree N (%)	Before COVID-19 Agree N (%)	Today Agree N (%)	Before COVID-19 Agree N (%)
An immediate family member has a physical health problem not related to COVID-19 (e.g., cancer, diabetes, etc.)	296 (47.1%)	292 (44.7%)	17 (73.9%)	17 (73.9%)
An immediate family member has a mental health condition not related to COVID-19.	265 (42.0%)	256 (39.2%)	13 (56.5%)	13 (56.5%)
My family obligations make it difficult to attend college.	221 (35.1%)	137 (20.9%)	11 (47.8%)	n/a
I am responsible for the emotional needs of my family.	303 (48.3%)	265 (40.8%)	14 (60.9%)	n/a
I am responsible for the physical needs of my family.	170 (27.1%)	138 (21.2%)	n/a	n/a
I have a personal health problem not related to COVID-19 (e.g., cancer, diabetes, etc.)	119 (19.2%)	114 (17.5%)	n/a	n/a

Note: Items with fewer than 10 responses were omitted and replaced with "n/a" to keep subject anonymity.

Health – Physical and Emotional Discomforts

Overall, PITT FGCS agreed that COVID-19 affected their mental health (82.6%) and physical health (65.2%) negatively. No students reported someone in their household experienced hospitalization due to COVID-19. Overall, 65.2% of surveyed FGCS self-reported being at least in good health during the pandemic. To assess a more in-depth perspective of mental health, we generated questions that focused on the extent COVID-19 impacted students' discomforts. Our findings below provide a snapshot of students' physical and emotional discomforts brought on by the COVID-19 pandemic.

When PITT students compared their life before COVID-19 with their present state on discomforts, FGCS were

- more likely to feel tired or did not have energy
- more likely to have a poor appetite
- less likely to feel healthy
- more likely to have soreness in muscles or joints
- more likely to have trouble relaxing
- more likely to be nervous
- more likely to feel depressed
- less likely to wake up feeling refreshed



PITT FGCS' Open-Ended Recommendations

How can university officials improve your distance learning experience?

- We should have had a more extended add/drop period because classes are still changing, and times are just hard right now.
- There probably should have been more resources for professors to learn how to use the technology necessary for the virtual experience.
- Have study groups and virtual gatherings.
- I think they should be more accommodating to students that have other obligations. Not everyone can attend class synchronously from their homes, and there shouldn't be a penalty for that.
- Assure that professors are being kind to students experiencing technical difficulties and giving assignments that aren't just "busy work."
- Reconsider the quality of internet connection with the company it currently works with. The internet connection is unstable most of the time and it is really a major inconvenience to students.

What do you want your university officials to know about how COVID-19 has affected your college experience?

- It doesn't feel like college. It feels like a locked room and trying to get an education through a screen.
- COVID-19 makes it harder to do everything and it is impossible for students to commit the same amount of time and effort to school as they could before.
- I feel that I am not learning anything or building necessary connections for the future.
- I understand that the university needs to make money but especially this semester, tuition balances should have reflected the quality of our education and the loss of access to different on campus resources.
- COVID has become a huge financial stressor, especially with being an out-of-state student.

What currently motivates you to continue with schooling?

- Getting my degree and helping people with similar backgrounds to me.
- I have an end goal of making a more sustainable planet through medicine. I have struggled too much to just give up now without giving back to those who helped me so far.
- Being able to survive financially.
- The fact that I paid thousands of dollars for this and that I'll be wasting precious money.
- I would like to eventually go to Law School.
- The knowledge that once I graduate, I will be educated enough to get a stable job, pursue a career I am passionate about, and be able to afford my own living space and other material possessions.

Implications for Policy and Practice

Colleges and universities play a key role in supporting FGCS as they face COVID-19 at home and on campus. Results from this study allow college administrators and interested stakeholders to assess the needs of FGCS and create appropriate supports that assist FGCS on their journey to graduation. Our findings reveal that FGCS continue to face challenges that have been exacerbated by the pandemic when it comes to persisting through college, accessing resources, connecting to family and peers as well as assessing health. Schooling sites can use the following practices to aid FGCS during the pandemic:

- 1. Assess students' needs** – Encourage faculty and administrators to survey students anonymously to assess students' needs at the beginning, middle or end of the academic period (i.e., semester). Online surveys can be used to assess gaps in resources and supplies (e.g., food, WI-FI, etc.) as well as determine the extent students are facing additional caregiving responsibilities.
- 2. Create virtual spaces to connect** – Allow students to virtually meet in an informal setting across classes, years and regions. Students described feeling disconnected from their peers and expressed a need to connect in a virtual or socially distanced space.
- 3. Allow for physical and mental health checks** – Ensure that counseling services are available for FGCS, faculty and staff to address exhaustion and burnout. Many respondents reported working longer hours and non-traditional days. Students also stated feeling more stressed and faced emotional and physical discomforts due to the uncertainty of the pandemic.



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The authors are solely responsible for any remaining errors.

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