

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

## Bucknell University Site Report – Summary of Fall 2020 Data Collection

Terri Norton, PhD, *Bucknell University*  
Dara Méndez, PhD, *The University of Pittsburgh*  
Jason Méndez, PhD, *The University of Pittsburgh*  
Cassandra R. Davis, PhD, *The University of North Carolina at Chapel Hill*

Harriet Hartman, PhD, *Rowan University*  
Julie Sexton, PhD, *The University of Colorado Boulder*  
Milanika Turner, PhD, *Florida Agricultural and Mechanical University*

June 2021

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 North Carolina at Chapel Hill and The University of Pittsburgh (PA). The team selected sites based on convenience. At each site, researchers were responsible for gathering and distributing surveys to FGCS. In some cases, all FGCS received surveys while in other cases only a small group received them. 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 submit visual images of their workspace and address equitable schooling spaces. This report presents the combined findings from all sites and compares them to results from Bucknell University.



### 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

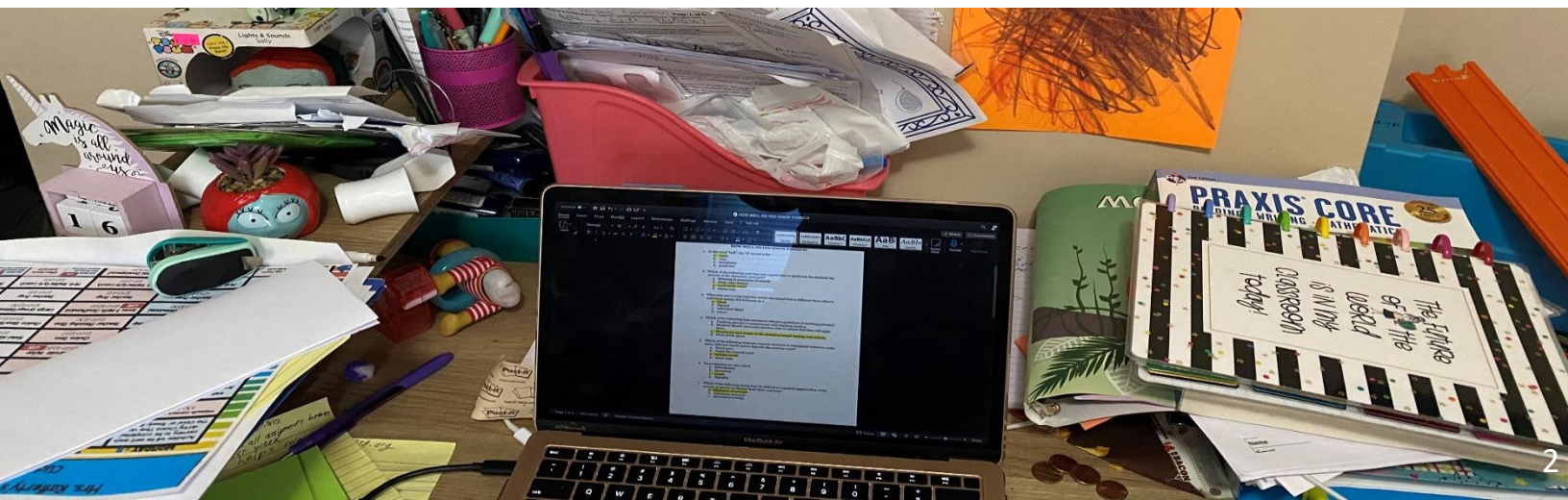
In fall 2020, 24 Bucknell FGCS completed the initial online survey. Approximately 60.9% of respondents were White. Additionally, most respondents represented in-state residents (47.6%) and roughly 41.7% identified as a junior in college.

**Table 1. Demographics of Survey Respondents**

	ALL N (%)	BUCKNELL N (%)
<b>Race/Ethnicity</b>		
White, Non-Hispanic	261 (40.2%)	14 (60.9%)
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%)	n/a
Middle Eastern/ Middle Eastern American	13 (2.0%)	n/a
American Indian/Native Alaskan	n/a	n/a
Other Race/Ethnicity	n/a	n/a
Prefer not to answer	12 (1.9%)	n/a
<b>Gender</b>		
Woman	470 (71.4%)	n/a
Man	156 (23.7%)	n/a
Genderqueer or gender non-conforming	10 (1.5%)	n/a
Questioning	n/a	n/a
Transgendered Man	n/a	n/a
My identity is not listed	n/a	n/a
Prefer not to answer	n/a	n/a

	ALL N (%)	BUCKNELL N (%)
<b>Family Income</b>		
Lower-middle income	217 (32.4%)	n/a
Low-income	207 (32.4%)	n/a
Middle income	167 (26.1%)	n/a
Upper-middle income	40 (6.3%)	n/a
High income	n/a	n/a
Prefer not to answer	n/a	n/a
<b>Class Year</b>		
Junior	194 (29.4%)	10 (41.7%)
Freshman	168 (25.5%)	n/a
Senior	163 (24.7%)	n/a
Sophomore	118 (17.9%)	n/a
<b>Status</b>		
In-state	581 (89.9%)	10 (47.6%)
Full-time during Spring 2020	453 (69.9%)	19 (79.2%)
Transferred from another college	231 (35.7%)	5 (20.8%)

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



## Barriers

The research team asked Bucknell 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 and were equally concerned with having enough funds to complete 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		BUCKNELL	
	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%)	14 (58.3%)	17 (70.8%)
I am concerned about having enough funds to complete college.	401 (64.1%)	378 (57.9%)	14 (58.3%)	14 (58.3%)
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 Bucknell 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.

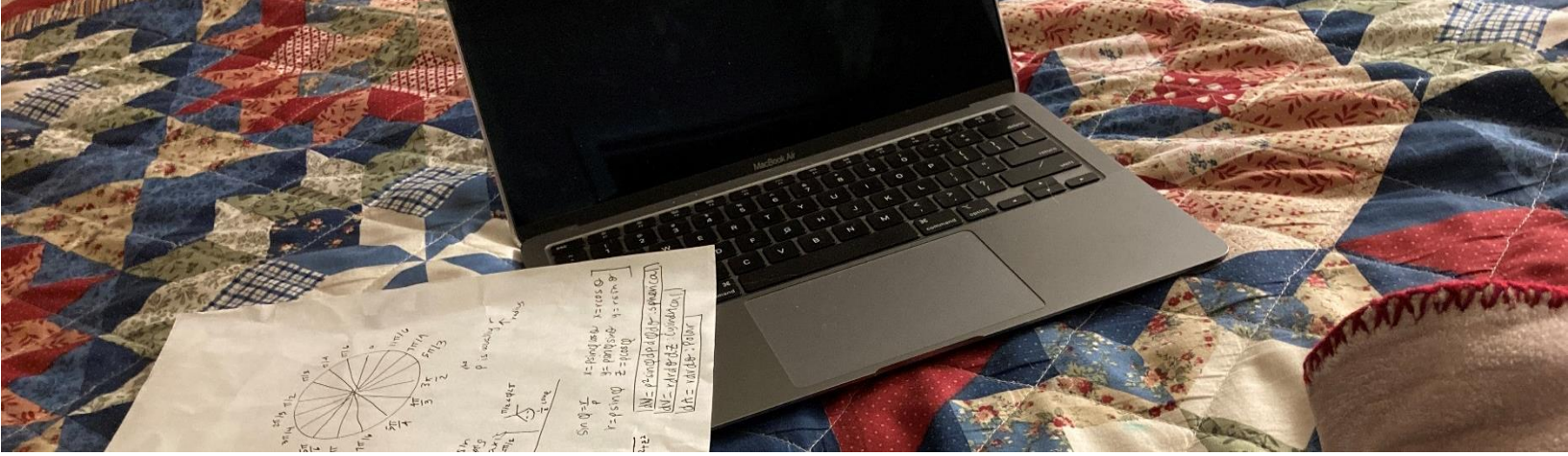
**Table 3. Institutional Barriers for FGCS**

	ALL		BUCKNELL	
	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%)	12 (50.0%)	9 (37.5%)
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%)	24 (100.0%)	24 (100.0%)

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

*“COVID has made the financial responsibility of college even more challenging.”*  
**-Bucknell FGCS**





When asked how the pandemic exacerbated **academic barriers**, Bucknell FGCS indicated that they were less likely to like school today (October 2020) as compared to before COVID-19 (see Table 4).

**Table 4. Academic Barriers for FGCS**

	ALL		BUCKNELL	
	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%)	20 (83.3%)	22 (91.7%)
I have poor study habits.	350 (55.4%)	250 (38.1%)	n/a	n/a
I am not concerned about my academic eligibility.	356 (56.6%)	384 (58.8%)	14 (58.3%)	15 (62.5%)
My grades are lower than expected.	335 (53.3%)	137 (20.9%)	n/a	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, Bucknell 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		BUCKNELL	
	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%)	11 (47.8%)	11 (45.8%)
I am experiencing loneliness.	447 (71.3%)	231 (35.5%)	18 (75.0%)	13 (54.2%)
I miss my friends from college.	437 (70.3%)	220 (34.0%)	13 (54.2%)	10 (41.7%)
I am homesick.	147 (23.6%)	141 (21.7%)	n/a	n/a
I feel overwhelmed.	546 (87.1%)	409 (62.5%)	20 (83.3%)	17 (70.8%)
I struggle with adjusting to college.	375 (59.6%)	240 (36.7%)	11 (45.8%)	9 (37.5%)

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

## Resources

The research team asked Bucknell students to describe the types of resources they used during the pandemic. The team defined resources as Wi-Fi, academic tools (e.g., books), personal supplies (e.g., food), space and time. Over half (83.3%) of surveyed FGCS indicated having accessing to useful resources today, as compared to 91.7% before COVID-19 (see Table 6). Also, slightly more surveyed students (58.3%) agreed in having a great study environment in October 2020 compared to before COVID-19 (50.0%).

**Table 6. Access to Resources**

	ALL		BUCKNELL	
	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%)	-	18 (75.0%)	-
I have a great study environment.	273 (43.2%)	470 (71.8%)	14 (58.3%)	12 (50.0%)
I have access to resources that will help me excel in school.	414 (66.0%)	567 (87.2%)	20 (83.3%)	22 (91.7%)

*"Provide hot spots to students who need WIFI while at home! I desperately need WIFI at home but can't afford it."*

**-Bucknell FGCS**

## Relationships

The research team explored how Bucknell FGCS remained connected to their peers and instructors during the initial stages of COVID-19. Overall, FGCS expressed a low connection to their fellow students and instructors during the distance learning period (see Table 7). Less than half of respondents (47.8%) felt connected with their instructors.

**Table 7. Feelings of Connectedness**

	ALL		BUCKNELL	
	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%)	-	11 (47.8%)	-
I am emotionally close with my family.	465 (73.6%)	499 (76.3%)	18 (75.0%)	17 (70.8%)
I am physically close to my family.	387 (61.5%)	401 (61.4%)	12 (50.0%)	13 (54.2%)

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 Bucknell 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, 16.7% mentioned being accountable for most of their care. In addition, 33.3% 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 Bucknell FGCS**



The team asked Bucknell FGCS to assess, retrospectively, the extent to which **family obligations** were more pronounced in October 2020 as compared to before the pandemic. Interestingly, close to half of survey respondents (45.8%) indicated being responsible for the emotional needs of their family in October 2020. FGCS also asserted that their family members faced physical (54.2%) and mental (45.8%) health challenges before the pandemic. Results show that these challenges were also present seven months into the pandemic.

**Table 8. Family Obligations on Health**

	ALL		BUCKNELL	
	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%)	13 (54.2%)	13 (54.2%)
An immediate family member has a mental health condition not related to COVID-19.	265 (42.0%)	256 (39.2%)	11 (45.8%)	11 (45.8%)
My family obligations make it difficult to attend college.	221 (35.1%)	137 (20.9%)	n/a	n/a
I am responsible for the emotional needs of my family.	303 (48.3%)	265 (40.8%)	11 (45.8%)	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, Bucknell FGCS agreed that COVID-19 affected their mental health (73.9%) and physical health (60.9%) negatively. No students reported someone in their household experienced hospitalization due to COVID-19. Overall, 87.5% 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 Bucknell students compared their life before COVID-19 with their present state of 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



## Bucknell FGCS' Open-Ended Recommendations

### How can university officials improve your distance learning experience?

- Bucknell could ensure that their faculty and staff members know how to operate the technology needed to conduct classes and events in a remote format.
- Give us some breaks...I feel like I'm very overwhelmed by schoolwork and a long weekend or a few days when classes are a bit more laid back would be great.
- [Do] not punish students who chose to stay at home and do distance learning by cutting their financial aid.
- Provide financial support, assuring students are okay mentally & aren't overwhelmed.
- Ask professors to be mindful that not all students come from middle class or above and that distance learning is hard.
- I think making the professors use the same websites [or online platforms] for submitting assignments, posting assignments and grades would make it a lot easier to keep track of work.

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

- COVID has made the financial responsibility of college even more challenging.
- COVID is an emotional rollercoaster. If students need the time off or time away from studies to recuperate, please try and understand.
- The issue with food being so costly for less than ideal options in general is affecting diets...You cannot focus on schoolwork if your basic needs are not being met.
- I am not eating enough because of the new food/meal plans. There isn't adequate vegan food. I'm really hungry most of the time. The food pantry isn't stocked enough.
- The online learning is close to impossible to make the same as in person and it is much easier to get by without really learning anything. I have a lot more trouble learning online than in person.

### What currently motivates you to continue with schooling?

- My career goals. It has always been a dream of mine to become one of the leading experts in my field. I know the only way I am going to do this is if I remain focused in school, especially during these uncertain times.
- Being the first in my family to graduate from college.
- The goal of obtaining a degree as quickly as possible.
- An education is one thing that no one can take from me. Once I have it, it is mine and I can use that to make my life and my family's lives better and inspire future generations to keep going no matter the circumstances.
- To help my family in the future.



## 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 (e.g., 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.



This research is supported by the National Science Foundation – funded Social Science Extreme Events Research (SSEER) network and the CONVERGE facility at the Natural Hazards Center at the University of Colorado Boulder, the North Carolina Scholars Strategy Network and the Faculty of Color and Indigenous Faculty Fund at The University of North Carolina at Chapel Hill (UNC-CH).

The authors wish to thank Maura Elise Holt-Ling, Aimee Yan and Amani Lizama McHarris for their work as contributing authors as they assisted the team with pulling this document together. The authors also thank the FGCS who shared their voices with the research team and the universities' administrators who entrusted us with this project. Lastly, we wish to thank the Center for First-generation Student Success, The UNC-CH Lookout Scholars Program, Rowan University's Flying First, GenFirst! and the Engineering Success Alliance at Bucknell University, The Federal TRIO Programs at the University of Pittsburgh, FAMU's Office of Sponsored Programs and all individuals as well as organizations who support FGCS.

The authors are solely responsible for any remaining errors.

For more information about this study, email Terri Norton at [trn005@bucknell.edu](mailto:trn005@bucknell.edu).