

Increasing Retention Rates of CUNY Freshmen through Comprehensive Mental Health Services

Patrick Locoteta, Peter Lin, Yamely Hernandez, Jeleeta Jolly, Gurjot Kaur, Vanessa Guerrero

Evidence Table A

Group Members: Yamely & Patrick Evidence Table A: Significance of Health Issue

Why is **addressing mental health to improve Freshman retention rates** a significant public health issue?

Author(s), Year	Research Method	Findings Relevant to Selecting Health Issue
<p>Thomas, N. S., et al. (2021)</p>	<p><u>Prospective Cohort Study</u> The study used a longitudinal sample of 9,904 students across 4 cohorts of university students to examine the relative importance of social, behavioral, and interpersonal factors on student retention over time.</p> <p>Data for this analysis come from the Spit for Science (S4S) sample, an ongoing study of college students enrolled at a large urban university in the mid-Atlantic region</p> <p>S4S is a cohort sequential, longitudinal study of incoming students aimed at understanding genetic and environmental influences on health and well-being in college students. All incoming first-time, first-year students age 18 or older were invited to complete questionnaires upon entry to the university. Follow-up surveys were completed each spring semester thereafter.</p>	<p>In terms of risk, those who reported greater levels of depressive symptoms (OR = 1.09, $p < .001$), antisocial behaviors during high school (OR = 1.09, $p < .01$), or stressful events before entering college (OR = 1.10, $p < .01$) were more likely to drop out after the first semester.</p> <p>The prevalence of dropping out during the period of Year 1 Spring to Year 2 Fall was the highest in this study</p> <ul style="list-style-type: none"> - Depressive symptoms (OR = 1.06, $p < .001$), recent antisocial behaviors (OR = 1.06, $p < .05$), and recent stressful events (OR = 1.12, $p < .001$) were again associated with higher odds of dropping out. - For protective factors, those who reported more social support (OR = 0.95, $p < .01$) and those living on campus (OR = 0.69, $p < .001$) were less likely to drop out <p>Overall, there are 3 consistent predictors of student retention:</p> <ul style="list-style-type: none"> - depressive symptoms, - exposure to stressful life events, - antisocial behaviors. <p>The study's findings show that increased depressive symptoms, antisocial behaviors, and exposure to stressful events are consistently related to increased risk of dropping out of college.</p> <p>They also show that protective factors related to student involvement are most effective in students' earlier years of college.</p> <p>These findings support administrative efforts to maximize student retention by engaging newer students and addressing student behavioral health concerns.</p>

Why is addressing mental health to improve Freshman retention rates a significant public health issue?

Author(s), Year	Research Method	Findings Relevant to Selecting Health Issue
		<p>Relating to CUNY Similar patterns may exist at CUNY. Highlighting the importance of early interventions to support mental health and improve freshman retention is crucial for fostering educational equity and enhancing population health, making it a significant public health concern.</p>
<p>Mushunje, R., et al. (2023)</p>	<p>Systematic Review This systematic review synthesized 63 articles published between 2000-2022 on interventions to address college student SDOMH (social determinants of mental health) challenges.</p> <p>The purpose of this systematic review is to identify and summarize interventions implemented by higher education institutions intended to address college student SDOMH challenges</p>	<p>Background College students are particularly impacted by SDOMH, given the cost associated with college attendance, housing, and transportation, among other challenges.</p> <ul style="list-style-type: none"> - SDOMH challenges can adversely impact college access, persistence, and college student mental health <p>The five SDOMH domains include:</p> <ul style="list-style-type: none"> - (1) economic stability, - (2) education access and quality, - (3) health care access and quality, - (4) neighborhood and built environment, - (5) social and community context <p>Unaddressed SDOMH can adversely impact college access, persistence, and student mental health outcomes</p> <p>Study's Review In a study on college students' debt accumulation and persistence, researchers found that 54% of undergraduate students who had loans in their names were more likely to drop out for financial reasons</p> <p>Researchers found that first generation college students who tend to come from lower socioeconomic backgrounds attribute their reason for dropping out of college to the inability to afford tuition</p> <p>Persistence in college may also be thwarted by healthcare crises worsened by insufficient healthcare coverage, which is directly connected to the healthcare access and quality SDOMH domain</p> <p>In terms of mental health, unaddressed SDOMH issues (i.e., food insecurity, housing instability, etc.) led to increased anxiety and depression symptomatology</p> <ul style="list-style-type: none"> - In another study of college students, researchers found that food insecurity and the lack of food was associated with malnutrition - Physical consequences of food insecurity, such as fatigue and illness, can affect students' academic success by affecting their concentration in classes - Addressing SDOMH challenges is an important equity issue <p>Other research studies have found that college students are struggling with food insecurity, housing insecurity, healthcare access, and transportation, which contribute to issues surrounding retention and mental health</p>

Why is addressing mental health to improve Freshman retention rates a significant public health issue?

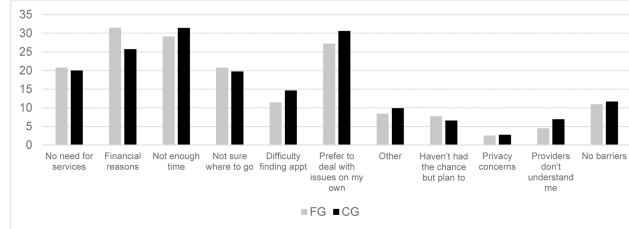
Author(s), Year	Research Method	Findings Relevant to Selecting Health Issue
		<p>Main SDOMH Interventions focused on education (37.5%) & healthcare access (42.3%) Less Prominent SDOMH areas of focus were economic stability (4.7%) & neighborhood/built environment (1.6%)</p> <ul style="list-style-type: none"> - Lack of addressing economic factors for college students was surprising as research emphasizes the association between financial hardships and poor overall well-being for college students <p>Relating to CUNY Addressing mental health within the context of social determinants is a significant public health issue for CUNY freshmen because it directly impacts students' mental health, academic success, and persistence, is a growing problem fueled by financial and healthcare barriers, and is crucial for supporting the diverse and often underserved student population at CUNY.</p>
<p>Lipson, S. K., et al. (2023)</p>	<p><u>Cross-Sectional Study</u> The present study uses population-level data from the national <i>Healthy Minds Study</i> to compare the prevalence of mental health symptoms and use of services for first-generation and continuing-generation students from 2018–2021</p> <p>The sample includes 192,202 students at 277 campuses, with 17.3% being first-generation.</p>	<p><u>Background</u> In the 2020–2021 academic year, over 60% of students were experiencing at least one clinically-significant mental health problem (based on validated screening tools), a roughly 50% increase since 2013</p> <ul style="list-style-type: none"> - About 40% of college attendees are FG students → face unique stressors (basic needs insecurity, home & school environment stress lower levels of familial support) <p><u>Results</u> More than half of FG students (54.2%) reported their financial situation as always/often stressful relative to 37.7% of CG students.</p> <p>Relative to CG students, FG students had slightly lower levels of flourishing (36.2% vs. 37.0%) and slightly higher levels of depression (43.1% vs. 40.4%) and anxiety (36.4% vs. 34.1%)</p> <p>Among FG students with depression, anxiety and/or suicidal ideation, 45.5% had received any mental health treatment in the past year (a 54.5% treatment gap) relative to 55.1% of CG students (a 44.9% treatment gap)</p> <ul style="list-style-type: none"> - Less than one-third of FG students with symptoms (32.8%) received counseling/therapy in the past year relative to 42.8% of CG students. <p>Barriers to mental health treatment as reported by students with a positive screen for depression/anxiety and/or reporting suicidal ideation reveal similar patterns for FG and CG students with one exception</p> <ul style="list-style-type: none"> - A higher proportion of FG students reported financial reasons as a salient barrier to treatment (31.5%) relative to CG students (25.8%).

Why is **addressing mental health to improve Freshman retention rates** a significant public health issue?

Author(s), Year

Research Method

Findings Relevant to Selecting Health Issue



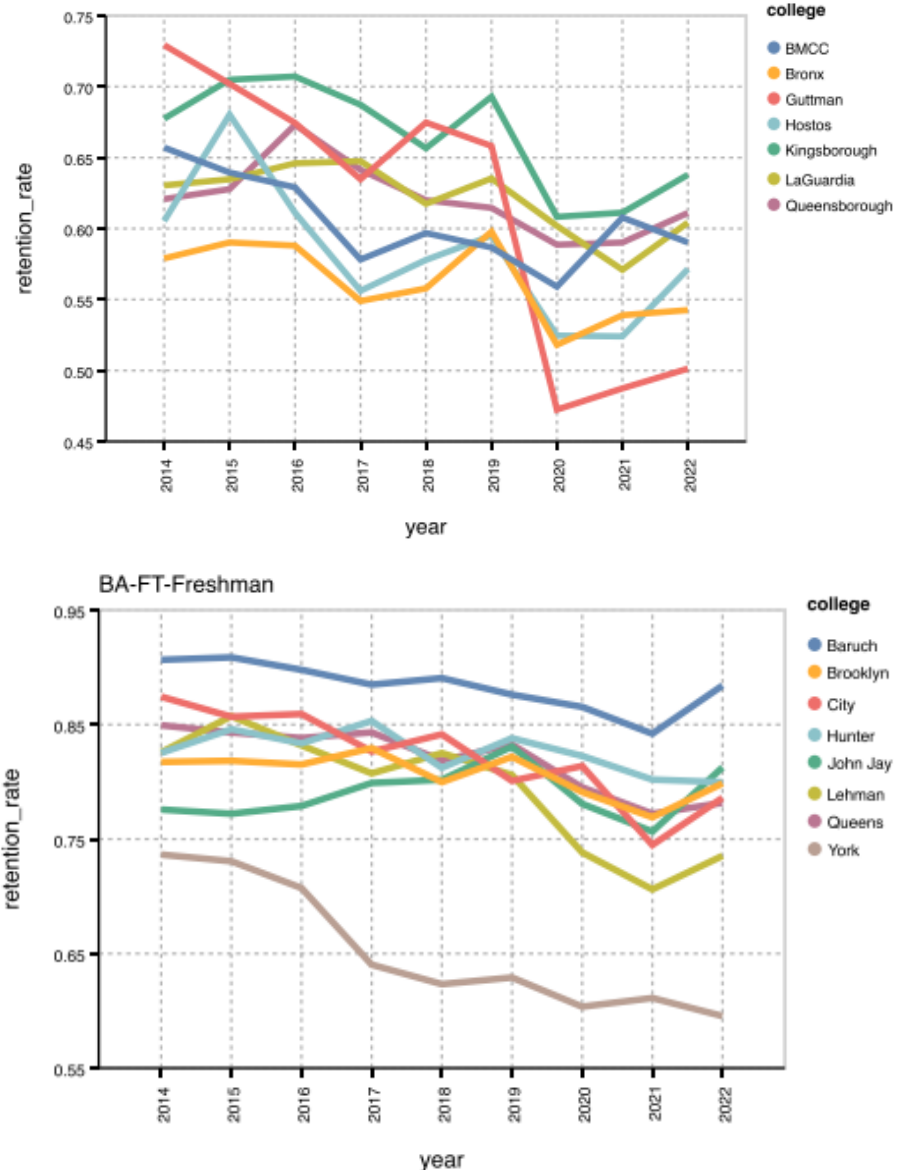
Efforts to reduce basic needs insecurity (e.g., campus food pantries) can, and in fact must be thought of as part of a public health approach to addressing student mental health and reducing inequalities

In terms of mental health service utilization, our data show that FG students had lower rates of accessing treatment, especially therapy.

Given that FG students are less likely to access mental health treatment and also more likely to drop/stop out of college, there will be a strong return on investment for expanding the reach of mental health services to meet the unique needs of FG students.

Evidence Table B
Group Members: Peter & Vanessa
Evidence Table B: Specific Priority Group

Why are **CUNY Freshmen** our specific targeted priority group?

Author(s), Year	Research Method	Findings Relevant to Selecting Priority Group
Verzani, J. (2024)	<p>Retrospective Cohort Quantitative Descriptive Study</p> <p>The study uses CUNY's databases that cover retention rates, enrollment types (BA/AA, FT/PT, freshman/transfer), and graduation outcomes over time from Fall 2014 to Fall 2022.</p> <p>The study utilized idiosyncratic graphical displays to analyze the retention data, showcasing different cohorts (BA-FT-Freshman, BA-PT-Freshman, BA-FT Transfer, BA-PT Transfer) and retention rates throughout the explored years for different CUNY institutions (Senior College & Community Colleges).</p>	 <p>The top graph displays retention rates for seven colleges: BMCC, Bronx, Guttman, Hostos, Kingsborough, LaGuardia, and Queensborough. The bottom graph displays BA-FT-Freshman retention rates for eight colleges: Baruch, Brooklyn, City, Hunter, John Jay, Lehman, Queens, and York.</p>

		<p>Graphics show that the retention rates of freshmen in both community & senior CUNY institutions have regressed downwards, with full-time BA-seeking students experiencing a ~7 percentage point drop from 2017 to 2021.</p> <p>Community college freshmen experienced retention declines similar to those at senior colleges, indicating that both institution types face issues in retaining first-year students.</p> <p>The 2019 freshman cohort saw a spike in retention, which is likely due to flexible pandemic-related policies, but this was followed by a decline in the following years, which may indicate ties to stressors like COVID-19</p> <p>Part-time students and AA-seeking freshmen consistently had lower retention and graduation rates than full-time, BA-seeking freshmen</p> <p>Although there are no explicit reasons stated for why retention rates are dropping, they serve as an indication of the effectiveness of teaching and the quality of the student experience. Further studies & analyses would be needed to pinpoint multifactorial reasons for this decline.</p>
<p>Kalkbrenner, M. T., & Flinn, R. E. (2024).</p>	<p>Cross-Sectional Quantitative Study A recruitment message was distributed via email through Qualtrics (electronic survey platform) to collect data from FGCS who were at least 18 years old, taking at least one college course, and the first person in their family that will earn a bachelor’s degree in 2022.</p> <p>The data collection sites were all part of a research-intensive university and located in a rural area in the Southwestern United States. All four campus locations qualify as Minority Serving Institutions (MSIs) based on the U.S. Department of Education’s criteria for an MSI</p> <p>Data were collected via an anonymous online survey from four campus locations in three different cities to ensure an adequate sample size for psychometric testing and to increase the representativeness of the data. Data were collected from a sample of 433 FGCS.</p>	<p>Higher Mental Health Risk Among FGCS (First Gen College Students) which has direct implications for their retention and academic success</p> <ul style="list-style-type: none"> - come from families with significantly lower incomes, are more likely to rely on grants or loans, face more debt, subjectively feel more stressed financially and academically, work more hours in paid employment, and are less likely to report feeling that they have enough time in their lives to successfully manage required tasks - also report lower social support from family and friends, lower sense of belonging to their respective universities, less satisfaction with life, poorer mental health, and less use of mental health services relative to non-FGCS - less likely than non-FGCS to seek help from friends and family and more likely to state that they would not seek help from others in general for mental or emotional problems <p>Peer-to-Peer Mental Health Support</p> <ul style="list-style-type: none"> - Past investigators consistently find that college students are more likely to discuss mental health issues with their peers than with college personnel. - peer-to-peer mental health support can be an effective strategy to increase mental health literacy (MHL), defined as one’s help-seeking attitudes, behaviors, and predisposition to refer others to mental health support services <p>Promoting Mental Health as a PPV to Academia & Retention</p>

There was the use of the **Mental Distress Response Scale (MDRS)** to screen peer responses to students in mental distress

- MDRS demonstrated strong **internal consistency (Cronbach's $\alpha > 0.85$)**.

The MDRS is a brief, 10-item, MHL-based screening tool for assessing how college students respond when encountering a peer in mental distress, which is comprised of two subscales, Approach/Encourage and Diminish/Avoid

- As institutions of higher education attempt to maintain enrollment and support students' educational attainment amidst a global pandemic that has exacerbated many students' mental health concerns, it is crucial to **identify strategies to foster students' positive mental health, which research has identified as a predictor of academic satisfaction, persistence, higher GPA, and retention**

MDRS Scores (supporting evidence from the study to what was mentioned above)

- **correlated significantly** with established measures of anxiety and depression.
- FGCS reported **elevated distress-response**, suggesting higher mental health vulnerability.

Overall, findings of the study highlight the crucial role non-professional supports (e.g., peers) can play in MHL and supporting positive mental health among FGCS

Possible Intervention Mentioned → college counselors and their constituents can attend first-year student success (introduction to college) courses, which FGCS are typically required to attend, and have a brief conversation about peer-to-peer mental health support and administer the MDRS

- helpful for FGCS given the recent finding that FGCS were less likely than non-FGCS to report an intention to seek help from friends and family when distressed

MDRS has potential to enhance peer-to-peer mental health support. Emerging research suggests that college students in the U.S. identified seeking support from peers as a primary coping mechanism

- Peer-to-peer mental health support has implications for increasing FGCS' retention and completion rates as well as their overall psychological well-being.

Relating Back to CUNY Freshmen & Retention Rates

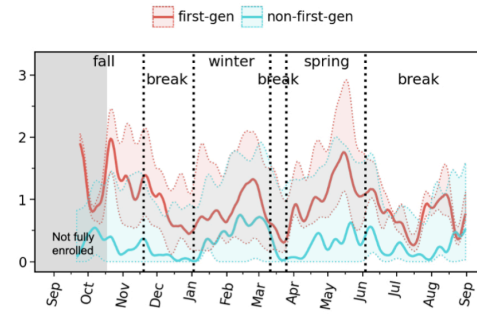
- Many CUNY freshmen & students in general are FGCS
- Stressors that FCGS face compared to non-FCGS play a part especially in the first years, where freshmen retention rates can be seen to drop
- Mental health literacy and support systems tailored to FGCS could address the exact barriers that contribute to early academic departure at CUNY
- Peer-driven strategies allow CUNY to scale low-cost interventions without overburdening counseling centers as well giving experience to students who want to have a career in this field

<p>Wang, W., et al. (2022).</p>	<p>Prospective Longitudinal Cohort Study</p> <p>The study collected longitudinal mobile sensing data for N=180 first-year college students, where 27 of the students are first-generation, representing 15% of the study cohort and representative of the number of first-generation students admitted each year at the study institution, Dartmouth College across their first year at college, including all academic terms and breaks.</p> <p>The study focused on discussion of risk factors, behavioral patterns and mental health of first-generation and non-first-generation students</p> <p>The study uses the StudentLife app which offers data-informed insights that could be used to identify struggling students and provide new forms of phone-based interventions with the goal of keeping students on track.</p> <ul style="list-style-type: none"> - allows to sense students' behavior using iOS and Android phones passively. - operates in the background of phones and passively collect sensing data without any user intervention <p>To control for selection bias as much as possible, the study was advertised to all first-year students during the enrollment period at Dartmouth College irrespective of whether they were first-generation students or not; that is, we avoid explicitly selecting only first-generation students</p> <p>The first study to investigate the first-year student experience using smartphone data across a full 12-month period, including all their academic terms and their academic breaks when students typically return home.</p> <ul style="list-style-type: none"> - The longitudinal nature of the First-Gen study offers an in-depth portrait of the first year of college life. It allows us to explore the behavioral patterns and differences at a level of detail not possible before. Furthermore, it 	<p>In a large survey of 150,000+ first-year students, 9.5% reported frequent depression and 34.6% felt overwhelmed by academic and other pressures.</p> <p>Among all first-year students entering college, “first-generation” college students are one group that experience increased risk. These are students who come from families with no history of college degrees. Therefore, first-generation students have no family history of how to deal with the risks and demands of challenging academic environments, how to fit in, and how to cope with the various challenges they will encounter</p> <p>The risk of attrition in the first year among first-generation students is 71% higher than that for non-first-generation students</p> <ul style="list-style-type: none"> - first-generation students are more likely to face challenges that jeopardize their abilities to adjust to college life and achieve academic success <p>Researchers have identified various risk factors associated with first-generation students, including, physical and mental health, family support in decision-making, social support and socioeconomic status (SES)</p> <p>The authors also report that first-generation students are more likely to experience depressive symptoms in comparison to non-first-generation students.</p> <p>First-generation students are also known to spend less time socializing with peers and interacting with teachers</p>
---------------------------------	---	---

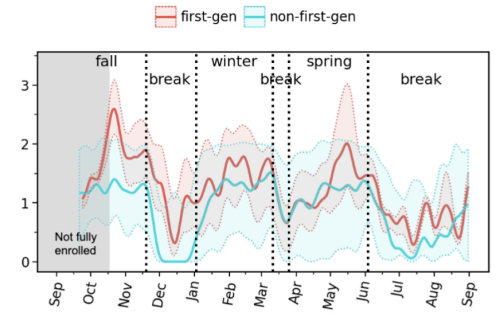
presents an opportunity to study the predictive nature of time series sensing data and its relationship with the mental well-being of first-generation students.

The study captured and quantified the high school years as first-year students enter Dartmouth College using a high school life survey. We assess the risk factors for all students (N=180), taking into account various dimensions of the survey, including, socioeconomics, lifestyle, and social and support networks.

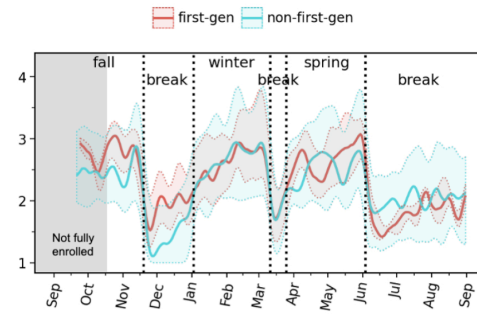
They also used periodic Ecological Momentary Assessment (EMA) to collect self-reported mental health data from students.



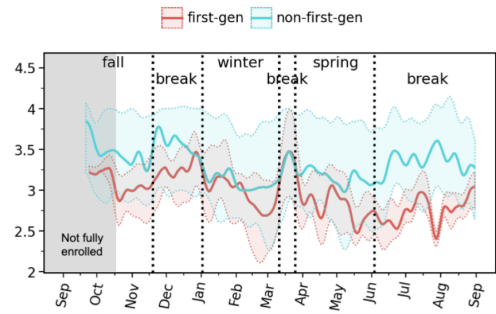
(a) Depression score



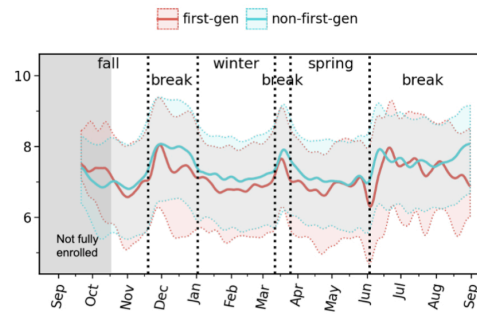
(b) Anxiety score



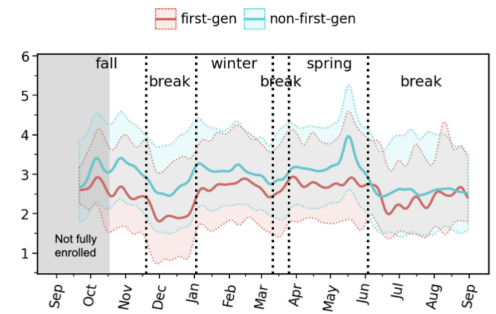
(c) Stress score



(d) Self-esteem score



(e) Sleep duration



(f) Physically active hours

The results show that the first-generation students have significantly lower socioeconomic status (SES), poorer physical and mental health (referred to as lifestyle in the table), and are less satisfied with support from their families and teachers during high school

		<p>They compared mental health (using PHQ-4) across each term. PHQ-4 is used clinically to assess depression and anxiety</p> <ul style="list-style-type: none">- However, they observe that first-generation students' higher PHQ-4 scores are statistically significant only in the fall term- supports hypothesis that the first-generation students adapt to overcome initial risk factors as the year progresses. <p>Intervention at Dartmouth</p> <p>Dartmouth College, for example, has a month-long summer orientation program between high school and college for admitted first-generation students. During orientation, we teach mini-classes and offer skill-building workshops, self-assessment tools, and goal-setting sessions. The goal of the orientation is to Bootcamp their first year, where students learn about the pitfalls, hear about coping skills, talk to faculty and begin to forge a strong peer network that will help carry them through the college years.</p> <p>Relating Back to CUNY Freshmen & Retention Rates</p> <ul style="list-style-type: none">- Although the study is from Dartmouth, the core challenges faced by FGCS, such as higher depression, anxiety, and academic overwhelm during their first semester, are likely universal among FGCS populations, including those at CUNY.- CUNY serves a more socioeconomically diverse student body. This suggests that the mental health challenges and retention risks observed at Dartmouth could be equal or greater in magnitude at CUNY- The finding that FGCS experience the greatest mental health risk during the fall term aligns with CUNY's reported declines in freshman retention, indicating that early-semester support services at CUNY are crucial.
--	--	--

Evidence Table C
Group Members: Gurjot & Jeleeta
Evidence Table C: Specific Health Behavior

Which behavior(s) need to be addressed to improve retention rates among Freshman students?

Author(s), Year	Research Method	Findings Relevant to Selecting Health Behavior
<p>Sanborn, J., et al. (2024)</p>	<p>Cross-Sectional Study This study focuses on understanding the experiences of students at these campuses. It serves as a baseline assessment for a three-year pilot demonstration project called CUNY Comprehensive Access to Resources for Essential Services (CARES). CARES aims to connect Bronx students to services and benefits programs that support their essential needs. The student population in the Bronx is predominantly people of color, with 92% of students identifying as Black, Hispanic/Latino or Asian/Pacific Islander, and 56% are full-time students.</p> <p>CARES partnered with the CUNY Office of Applied Research, Evaluation and Data Analytics (OAREDA) to disseminate a survey to a population-representative sample of Bronx students enrolled during the 2021-22 academic year. The survey aimed to collect information from a simple random sample of 10,000 students who had been enrolled at BCC, Hostos, and Lehman during the fall of 2021. Selected students were invited via email to participate in an online survey between September 7th and September 30, 2022. The survey explored various aspects of students' experiences, such as their education, food security, housing, mental health, and healthcare</p> <ul style="list-style-type: none"> - Of the 10,000 students invited, 1,833 completed the survey (18.3% response rate) <p>In this analysis, we assessed the association between number of unmet essential needs and academic attrition indicators, including dropping out, taking a leave of absence, or being at risk for academic probation.</p>	<p>The study identified 4 types of unmet essential needs prevalent in the student population: food insecurity, housing instability, lack of healthcare access, and unmet need for mental health services</p> <p>Unmet need for mental health treatment was defined first by identifying individuals screening positive for anxiety, depression, or at least one symptom of posttraumatic stress disorder (PTSD), followed by assessing their utilization and/or satisfaction with mental health services they received in the past 12 months.</p> <ul style="list-style-type: none"> - Anxiety and depression were assessed using PHQ-4, a validated tool that detects symptoms of anxiety and depression. It consists of four items that ask participants to rate the frequency of specific problems experienced over the past two weeks. - Respondents identified as having anxiety, depression or any PTSD symptoms and who also 1) did not utilize mental health services, or 2) utilized mental health services but were dissatisfied with the services they received, were categorized as having an unmet need for mental health treatment <p>The most prevalent unmet need within the population was housing instability, affecting 49.0% of students, followed by food insecurity (43.6%), unmet need for mental health treatment (41.1%), and lack of healthcare access (20.2%)</p> <p>Almost a quarter (24.2%) of the Bronx CUNY campus student population faced at least one indicator of attrition. This was primarily driven by risk for academic probation (15.4%) and taking an LOA (11.4%); 2.0% of respondents reported having dropped out of their studies.</p> <p>About half (49.4%) of students had two or more unmet needs while one in five (21.9%) had at least three unmet needs</p> <p>These findings align with the current literature linking food insecurity, housing instability, and poor mental health with adverse academic outcomes, including dropout and poor academic achievement</p> <p>Furthermore, many colleges have limited or no provisions for student housing or comprehensive health services. This is often the case at public universities, where the focus is primarily on classroom spaces and academic facilities</p>

	<p>This study is one of the first to explore the relationship between cumulative unmet basic needs and indicators of academic progress among college students</p> <p>The findings revealed a modest dose-response relationship between the number of unmet needs and the likelihood of experiencing indicators of attrition in adjusted models, suggesting a cumulative impact of unmet needs on the risk of attrition among public college students</p>	<p><u>Our Input</u> Through this study, we see that many students with anxiety, depression, or PTSD do not seek mental health services or are dissatisfied with the services when they need them. Students may lack knowledge about when to seek services, or even know what services are available – showing poor utilization of campus services.</p> <p>With unmet need for mental health treatment being prevalent in 41.1% of students in this study, it shows a significant portion of the student population is experiencing psychological distress without receiving adequate support. This is linked to poor academic performance, taking a LOA, and decreasing retention rate.</p> <p>Addressing mental health proactively through early screening, accessible counseling, peer support, and stigma reduction is essential for improving retention rates, particularly among vulnerable groups like CUNY freshmen, who often face additional socioeconomic and structural barriers to care.</p>
<p>Pointon-Haas, J., et al.(2023)</p>	<p><u>Systematic Review</u> In May 2021, a worldwide systematic search of studies written in English was conducted in the databases: Ovid (PsycINFO, Medline, EMBASE), Web of Science (Core Collection), and the Education Resources Information Center (ERIC). The search was limited to the past 30 years in alignment with a previous review that included a study from 1991. Grey literature was searched for through OpenGrey and Grey Matters.</p> <ul style="list-style-type: none"> - Included studies were quantitative, longitudinal (with and without a control) or cross-sectional with a control. 	<p>Peer support is ‘support provided by and for people with similar conditions, problems or experiences’</p> <ul style="list-style-type: none"> - one-to-one mentoring and self-help groups <p>Many studies targeted students by year of study, with the majority of studies offering peer support for lower-year students such as ‘first year’ or ‘freshmen and sophomores’</p> <p>Peer support interventions aimed at improving student mental health and well-being were set up with specific objectives, such as easing the transition into higher education (peer mentoring), meeting academic objectives (peer learning) or enhancing mutual support (peer-led support groups)</p> <p>Three types of peer support were represented in 28 papers:</p> <ul style="list-style-type: none"> - peer-led support groups <ul style="list-style-type: none"> - gathers groups of students for mutual support - peer mentoring <ul style="list-style-type: none"> - relies on higher-year/more experienced students to support lower-year/less experienced students - peer learning <ul style="list-style-type: none"> - convenes students based on academic objectives <p>Peer learning and peer mentoring had more positive, significant results reported for the outcomes of anxiety and stress.</p>

		<p>Peer-led support groups were the only type targeting students with mental health difficulties</p> <ul style="list-style-type: none"> - assessed depression more than any other type of peer support, they did not show a majority of significant results for any of the outcomes measured. <p>Of the three peer support types, peer mentoring was also the most promising for improving stress outcomes</p>
<p>Aulck, L., et al. (2021)</p>	<p><u>Retrospective Cohort Study</u></p> <p>In this work, the study uses transcript data (student registrar, student survey, and noninstitutional data) on over 76,000 students across 17 cohorts (22 years of data) to examine the impact of first-year interest groups (FIGs) on student graduation and retention</p> <p>Specifically, the study population consisted of 76,324 students.</p> <ul style="list-style-type: none"> - Of these students, 41,894 (54.9%) enrolled in a FIG, while 34,430 of them did not (45.1%). 	<p><u>Background</u></p> <p>Recent estimates from the National Center for Education Statistics have about 40% of first-time, full-time bachelor's degree-seeking students at 4-year postsecondary institutions not graduating within 6 years of first enrollment</p> <ul style="list-style-type: none"> - Of particular interest is the fact that a large number of those leaving higher education without degrees are the 20% to 30% of first-year (i.e., freshman) students seeking baccalaureate degrees who do not return for a second year of schooling <p>One way in which universities have combated freshman attrition and attempted to improve the college experience is through the implementation of freshman orientation seminars (freshman seminars). Freshman seminars are courses focused on helping incoming students transition to college life, both socially and academically</p> <ul style="list-style-type: none"> - This promotes a sense of community, belonging, and provides freshmen with a means by which to more easily socialize and develop a peer group, more connected to the campus community, and more satisfied with the college experience overall <p><u>Results</u></p> <p>41,894 (54.9%) enrolled in a FIG, while 34,430 of them did not (45.1%).</p> <p>Graduation and re-enrollment rates for the FIG students were 82.1% and 94.4%, respectively; graduation and re-enrollment rates for the non-FIG students were 77.6% and 92.0%, respectively</p> <p>FIG students had much higher unadjusted graduation and re-enrollment rates than their non-FIG peers and, across the University as a whole, rates were substantially higher than national averages</p> <p>Controlling for coursework, FIG students had notably higher GPAs (+0.09 on a 4.0 scale) when taking the same courses as their non-FIG counterparts</p> <ul style="list-style-type: none"> - the results here indicate that FIGs tend to have a substantial effect on student academic success (as measured by GPA)

		<p>Meanwhile, the graduation and re-enrollment rates of underrepresented FIG students were substantially higher than their non-FIG peers and much more pronounced than the estimated effect of taking a FIG when examining all students</p> <p>Then, using open-ended survey responses from FIG participants, we tease out what FIG participants found most valuable about the program, which centered on social aspects of the program (namely making new friends and knowing people in classes).</p> <ul style="list-style-type: none"> - In this case, over 70% of all respondents mentioned some social impact the FIG had on their first term (across the <i>new people</i>, <i>people in classes</i>, <i>FIG leader</i>, and <i>community</i> codes). The idea of forming study groups in classes also ties into the idea of first-year students being academically supported as they adjust to college-level study and gain confidence <p>Relating Back to CUNY Freshmen & Retention</p> <ul style="list-style-type: none"> - CUNY system does offer First-Year Seminars, however, it is not standardized across all campuses nor students (not all freshmen have the opportunity to take this class) - Standardizing Freshman Seminar Courses → make them mandatory; Include this in registration automatically or tie it to orientation
<p>Huang, K., et al. (2024)</p>	<p>Meta-Analysis This systematic review and meta-analysis assessed the effectiveness of physical activity interventions on undergraduate students' mental health.</p> <p>7 databases were searched and a total of 59 studies were included (38 RCTs & 21 others).</p> <p>The search was initially conducted on 24 May 2022 and subsequently updated on 14 August 2023</p> <p>The search requirements were: peer-reviewed studies reporting on original research and published in English were included if the following criteria were met:</p> <ul style="list-style-type: none"> (i) participants were enrolled in undergraduate university programs; (ii) PA interventions were at least 4 weeks in duration and were part of experimental randomized controlled trials (RCTs), longitudinal, cohort, pre-post and single-arm studies; 	<p>A longitudinal study conducted between 2013 and 2021 across the United States showed a 50% increase in mental health diagnoses and a two-fold increase in displaying poor mental health symptoms in university students</p> <p>Participation in physical activity is one strategy that has been shown to improve physical health and prevent poor mental health.</p> <ul style="list-style-type: none"> - Participating in a minimum of 150 min per week of moderate to vigorous intensity PA is protective against symptoms of depression and is associated with lower anxiety and stress, and a higher quality of life <p>The pooled effects indicated that the PA interventions showed moderate to large effects in reducing poor mental health outcomes in undergraduate students in terms of anxiety</p> <p>Considering the increasing rates of poor mental health in undergraduate students and the positive effect of PA on mental health identified in the current meta-analysis, PA interventions have the potential to be an effective strategy to prevent and manage university students' mental health</p> <ul style="list-style-type: none"> - Prompt intervention could not only mitigate the potential long-term impacts of poor mental health on academic performance, relationships, and overall wellbeing

	<p>(iii) comparators included waitlist controls, no-treatment control, other health behaviour comparison or no control (e.g. single-arm or pre-post studies);</p> <p>(iv) studies reported mental health outcomes including symptoms of psychological distress, such as anxiety and depression, loneliness or social isolation and stress.</p>	<p>Relating Back to CUNY Freshmen & Retention</p> <ul style="list-style-type: none"> - Many CUNY students work part-time or full-time, commute long hours, and juggle family obligations, all of which limit time and access to health-promoting behaviors like physical activity. - At the same time, data show that physical activity is an effective, accessible intervention for reducing symptoms of poor mental health and enhancing overall well-being in college students. - By implementing low-barrier and time-efficient physical activity interventions, CUNY can help its freshmen manage mental health challenges more effectively. <p>Possible Interventions</p> <ul style="list-style-type: none"> - Embed 4–8 week movement-based mental health tracks into CUNY Start, ASAP, or first-year seminar programs. <ul style="list-style-type: none"> - Partner with professors teaching first-year seminars or freshman learning communities to include one optional active session per month (e.g., movement + journaling, mindful walking, intro to stretching). - Leverage CUNY campus apps or Blackboard to track weekly movement and offer incentives like MetroCard refills, bookstore vouchers, or priority registration.
--	--	--

References: (APA Format)

Aulck, L., et al. (2021). Helping students FIG-ure it out: A large-scale study of Freshmen Interest Groups and student success. *AERA Open*, 7, 233285842110218.

<https://doi.org/10.1177/23328584211021857>

Huang, K., et al. (2024). Effectiveness of physical activity interventions on undergraduate students' mental health: Systematic review and meta-analysis. *Health Promotion International*, 39(3), daae054. <https://doi.org/10.1093/heapro/daae054>

<https://doi.org/10.1093/heapro/daae054>

Kalkbrenner, M. T., & Flinn, R. E. (2024). Psychometric properties of scores on the Mental Distress Response Scale among first-generation college students:

Implications for retention. *Journal of College Student Retention: Research, Theory & Practice*, 26(3), 844–860. <https://doi.org/10.1177/15210251221123041>

Lipson, S. K., et al. (2023). Mental health among first-generation college students: Findings from the national Healthy Minds Study, 2018–2021. *Cogent Mental Health*, 2(1), 2220358. <https://doi.org/10.1080/28324765.2023.2220358>

<https://doi.org/10.1080/28324765.2023.2220358>

Mushunje, R., et al. (2023). Addressing social determinants of mental health to improve college access, retention, and completion. *Journal of College Access*, 8. <https://files.eric.ed.gov/fulltext/EJ1410996.pdf>

Pointon-Haas, J., et al. (2023). A systematic review of peer support interventions for student mental health and well-being in higher education. *BJPsych Open*, 10(1), e12. <https://doi.org/10.1192/bjo.2023.603>

Sanborn, J., et al. (2024). The cumulative impact of unmet essential needs on indicators of attrition: Findings from a public university population-based sample of students in the Bronx, NY. *Journal of Urban Health*, 101, 764–774. <https://doi.org/10.1007/s11524-024-00872-w>

Thomas, N. S., et al. (2021). Longitudinal influence of behavioral health, emotional health, and student involvement on college student retention. *Journal of College Student Development*, 62(1), 2–18. <https://doi.org/10.1353/csd.2021.0001>

Verzani, J. (2024). New student retention at CUNY. *The City University of New York (CUNY)*.

https://www1.cuny.edu/sites/cunyufs/wp-content/uploads/sites/48/2024/10/retention_report_Verzani_Sept_2024_2.pdf

Wang, W., et al. (2022). First-gen lens: Assessing mental health of first-generation students across their first year at college using mobile sensing. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies*, 6(2), 95. <https://doi.org/10.1145/3543194>