



## College Success Requires Attention to the Whole Student

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### Abstract

Annually, nearly 20% of first-time, degree-seeking college students do not return after the first year. There are a variety of factors that impact a student's ability to remain in college, including social and emotional factors, as well as institutional, structural and financial barriers. Due to the economic and employment advantage of a college degree, it is important to offer a variety of supports for students, in order to facilitate student persistence and college degree completion. This study examined the theoretical assumption that college student persistence and degree completion is influenced by individual wellness practices across a number of life domains: physical, social, emotional, spiritual, and intellectual. Undergraduate college students (n=266) completed an online survey in May, 2021 to examine the relationship between these five life domains and student persistence in college. Results indicate that four of the five life domains are predictive of student persistence in college. Spiritual wellness was not directly predictive of student persistence, but was significantly associated with social and academic factors that do influence student persistence. Recommendations for the higher education system are suggested for improvement of student persistence and degree completion.

**Key Words:** Life Domains; College Student Persistence; Physical Wellbeing; Social Wellbeing; Emotional Wellbeing; Spiritual Wellbeing; Intellectual Wellbeing

### Introduction

According to the National Center for Education Statistics (NCES; [https://nces.ed.gov/programs/coe/indicator\\_ctr.asp](https://nces.ed.gov/programs/coe/indicator_ctr.asp)), approximately 60% of the students who enrolled in a college or university in 2011 graduated with an undergraduate degree by 2017. Annually, nearly 20% of first-time, degree-seeking college students do not return after the first year [1]. Due to the economic and employment advantage of a college degree, it is important to offer a variety of supports for students, in order to facilitate student persistence, retention and college degree completion. Earlier research on new college students by Gerdes and Mallinckrodt [2] found that social and emotional factors strongly influence student retention rates. Several more recent studies have also found that feelings of mental illness, anxiety and depression pose a significant barrier to degree completion among college students [3-6]. Fink [5] found that supportive college environments, including welcoming residence halls, and having a sense of belonging are predictors of college student mental wellness, which in turn promotes persistence in college.

Regretfully, there are a number of barriers to obtaining this rite of

passage to adulthood, including: the high cost of tuition, limited financial aid, student loan debt, geographic isolation, family norms and stress [4,7]. The Centers for Disease Control (CDC; 2019) recently reported that adverse childhood experiences significantly contribute to mental and physical health, and economic outcomes. Additionally, there is a growing understanding that perceived wellbeing is impacted by such factors as financial security, physical health, safety, trauma, substance use, military service, coping strategies, social networks, self-care practice, and interpersonal skills, which in turn impact economic productivity [8-10]. College degree completion improves employment opportunities and financial independence [7].

Another important barrier to degree completion is unwanted sexual contact [11]. The National Institute of Justice, reported that 19% of women experienced some form of sexual assault during college [12]. College students who had previously experienced sexual assault and those who reported a high frequency of intoxication were at highest risk for subsequent assaults [12]. Nearly 10% of students seeking counseling services on college campuses report that they have been a victim of sexual abuse [11]. Additionally, over 10% of college students surveyed in spring, 2019 reported unwanted sexual contact and 2.1% reported that a sexual assault was affecting their academic performance [13]. While few victims of sexual assault report their experience to law enforcement they do tell someone who is close to them, indicating a need for support [12]. Banyard and colleagues (2017) found victimization due to interpersonal violence and stalking correlated with increased stress, and decreased commitment to academic success. Dating and intimate partner violence, sexual assault, and stalking, all forms of interpersonal violence, have been declared a public health concern for higher education campuses, with women ages 18-24 incurring the highest risk for victimization [14].

Research examining the link between college academic performance, retention, and mental health has generally been limited to students from one institution. Eisenberg and colleagues [4] found that symptoms of depression and anxiety did predict low grade point average and increased risk of college drop out in a large sample of college students. Another study found that college students with moderate depression had lower grade point averages than students with mild and severe symptoms of depression [3]. However, this study used a small sample of college students and did not account for other factors that might also impact academic performance, such as financial stress, substance abuse, and poor social support [3].

Student retention, especially among first generation students, has been found to relate to strong social relationships, participation

in campus community activities, and academic engagement [15]. Additionally, social support is critical for college students who identify with minority or marginalized groups because they are more susceptible to social isolation [16]. Teaching effective coping strategies and offering prosocial activities provides support to college students who have been exposed to trauma [17,18]. College students with a supportive social network and no or mild symptoms of depression are more likely to perform well academically and flourish in college [5].

College offers an opportunity to socialize young adults to a wide range of self-care and wellness practices, which are important for an individual's wellbeing [19]. Fink [5] suggests that students who experience social wellbeing - who easily transitioned to the social context of college, who experienced a positive sense of belonging and supportive social relationships within their residence hall - tended to flourish in college. Students who experience intellectual wellbeing - are confident in their academic skills, have professional confidence and a sense of civic engagement - are also predicted to flourish in college [5]. However, these values may not transfer to engagement and participation in campus activities [5]. Based on the theoretical assumption that college student success is linked to wellness practices across a number of life domains, this study explored the relationship between indicators of student persistence, and student active engagement and attention to wellbeing across five domains

of wellbeing [physical, social, emotional, spiritual, and intellectual].

## Methods

This study examined the degree to which college students are attending to their wellbeing across five life domains. The specific research question is: What is the relationship between these five life domains [physical, social, emotional, spiritual, and intellectual] of wellbeing and student persistence in college? Individual characteristics related to these life domains [e.g. trauma, substance use, employment, military service, study habits, financial security] are assumed to also impact wellbeing and progress toward degree completion. These individual characteristics are examined within the context of these five life domains.

An electronic survey of undergraduate college students was conducted during May, 2021. Survey participants were part of a panel of study participants (N=266) purchased from Qualtrics (<https://www.qualtrics.com/about/>). Study participants were anonymous undergraduate students from across the United States who had agreed to participate as a respondent for Qualtrics surveys. See Table 1 for a demographic description of survey participants. Participants were asked to complete a survey about their perceived wellbeing and progress toward college degree completion. The study was approved by the university Institutional Review Board (IRB, # FY2021-146) and funded by an internal university grant.

| Variable                              | Percent | n<br>(N=266) | ACHA %<br>(N=8851) |
|---------------------------------------|---------|--------------|--------------------|
| Female gender identity                | 55.06   | 147          | 70.9               |
| White/European American               | 61.8    | 165          | 73.8               |
| Attending a public college/university | 71.91   | 192          | NA                 |
| Annual income <\$20,000 (N=212)       | 57.5    | 122          | NA                 |
| I work <21 hours/week                 | 82.4    | 220          | NA                 |
| Suburban pre-college residence        | 52.56   | 143          | NA                 |
| Urban pre-college residence           | 25.84   | 69           | NA                 |
| Rural pre-college residence           | 19.85   | 53           | NA                 |
| Have a diagnosed disability           | 13.48   | 36           | 1-11.8             |
| International Students                | 5.6     | 15           | 6.1                |
| Military Veteran                      | 2.2     | 6            | 1.8                |

Table 1: Participant Demographics

## Survey Tool

The dependent variable was undergraduate college student persistence, as measured by the number of reported completed credits, current number of credits enrolled, and history of dropping out of college for at least one academic term. The independent measures of perceived wellbeing are related to the five life domains of wellbeing and include: physical health, substance use, safety, financial security, social networks, self-care skills, spiritual practices, emotional

wellness, mental illness, trauma experiences, study habits, and professional preparation. The Qualtrics survey was comprised of 69, Likert-type questions related to perceived wellbeing in these five life domains [physical, social, emotional, spiritual, and intellectual]. Participants rated each prompt on a forced-choice, four-point scale [4= strongly agree, 3= agree, 2= somewhat disagree and 1= disagree]. The survey included nine questions regarding academic status, which were generally formatted as multiple choice or fill-in the blank

[see Academic Status below]. All fill-in-the-blank responses asked for numerical responses only, e.g. “How many credits are you currently enrolled in?” And “What is your age in years?”. Finally, the survey included nine demographic questions, including: gender identity, age, ethnicity, annual income, living situation, pre-college community type, employment, military status and disability status [see Table 1 below]. These participant demographic variables and measures of perceived wellbeing were expected to impact persistence in college as an undergraduate student. The survey included 29 questions that are similar or that addressed similar constructs as questions on the December 2020 American College Health Association survey [13]. Results from these questions are compared to results of the ACHA survey in order to provide a measure of reliability. On average the survey took respondents 19 minutes to complete.

### Data Collection and Analysis

The survey was distributed by Qualtrics during April and May, 2021 and data was collected until 250 complete surveys had been received. It is important to note that data was collected during the COVID-19 pandemic and this historical event may impact study results. Survey participants were anonymous to the researcher and identified by a unique, numerical code; however, data from survey responses was automatically available in the investigator's web-based Qualtrics files. Numerical data was imported into SPSS (v27 for Mac, IBM, 2021) for descriptive and bi-variate analysis. Unfortunately, data from the variable regarding year of initial enrollment in college, which relates to degree completion, resulted in unusable data. A majority [242] of responses were not reported in a year format. Perhaps, the survey question was unclear to the survey participants. There were three survey participants who reported that they were enrolled as both an

undergraduate, and a graduate student. There were 35 participants who reported that they were currently enrolled in more than 25 credits [variable: current number of credits enrolled], which seemed highly unlikely. Consequently, these data were counted as missing.

Descriptive analysis was conducted that included means for ratio level data and frequencies for nominal and ordinal level data. These results are presented in the tables below. Due to the nature of the data collection tool, a vast majority of the results are presented at the nominal and ordinal level of measurement. Bi-variate correlation analysis using Spearman's Correlation Coefficient [non-parametric] was applied as a measure of the statistical significance [ $p < .05$ ] of relationships between all variables. Many of the measures were not statistically significantly correlated. When significant correlations were observed in specific life domains the scores were summed to create a composite variable for that specific life domain.

The average age of the survey participants was 20.49 years ( $SD=1.90$ ). The largest group of respondents (21.6%) on the ACHS survey reported being 19 years old. As observed in Table 2, the results of this study are generally consistent with the demographics from the ACHA survey. The US Department of Education [1] reports that 56% of 2018 enrolled undergraduate students in public universities identified as women, 48% as White and 12% as Black. The respondents to this survey represent a similar gender composition, but more White students are represented in this survey than are reported in the DoE statistics. Most of the survey participants had very low income and 20% [ $n=54$ ] preferred not to disclose their income information.

### Academic Status

| Variable  | Percent | n   |
|---|---------|-----|
| Completed 60 or fewer credits to date                 | 60.67   | 162 |
| Started college in the fall academic term             | 79.40   | 212 |
| Considered dropping out of college                    | 28.46   | 76  |
| Dropped out of college for at least one academic term | 15.73   | 42  |

Table 2: Academic Indicators

Most [67.7%,  $n=180$ ] reported that their current credit load was typical. The average number of reported credits for the term in which they completed the survey was 13.26 [ $SD=5.05$ ]. Most [94.4%] of the respondents on the ACHA survey reported being enrolled as full-time students. Only 24 respondents provided information on the year that they began their college education. Of these 24, 37.5% [ $n=9$ ] reported starting college in 2019. Survey responses to having considered dropping out and having dropped out of college for at least one semester were significantly correlated [2-tailed Pearson Correlation = 0.274,  $p < .01$ ]. There were 24 [9%] participants who had both considered dropping out and who reported that they had dropped out of college for at least one semester. There were 70 [26.3%] who had either dropped out of college for one semester or who had considered dropping out. These two variables were combined to create a new variable: “combined drop-out risk”. Participant responses coded as: “yes” they had dropped out of college for at least one semester and/or had considered dropping out of college were coded as 1, and

responses coded as “no” to both having dropped out of college for at least one semester and had considered dropping out of college were coded as 0. This new variable became the primary indicator of student persistence. Annual income was not statistically significantly correlated to drop-out risk [Spearman Correlation Coefficient = 0.034].

### Physical Wellbeing

Included in this section are the results of survey prompts related to physical wellness habits [prompts 1-6], substance use [prompts 7-12], stalking [prompt 13], physical mobility [prompts 14-15] and financial security [prompts 16-21]. Table 3 details the frequencies of relevant variables in this life domain.

| Prompt  | Percentage Agree | n   | ACAH % (N=8851) |
|---|------------------|-----|-----------------|
| 1. My physical wellbeing is important to me                           | 89.14            | 238 | NA              |
| 2. On average I exercise for at least 30 minutes a day                | 61.05            | 163 | 26.2            |
| 3. I eat at least 3 meals each day                                    | 58.8             | 157 | NA              |
| 4. I sleep at least 7 hours each night                                | 49.81            | 133 | 57.8            |
| 5. I eat at least 3 servings of fruits/vegetables each day            | 33.71            | 90  | 29.6            |
| 6. I don't skip more than 1 meal a week                               | 12.36            | 33  | NA              |
| 7. I always use marijuana weekly                                      | 13.5             | 36  | 26.4            |
| 8. I always use tobacco daily   | 11.7             | 31  | 36.5            |
| 9. I always get drunk weekly  | 10.2             | 27  | NA              |
| 10. I always drink alcohol 3+ times per week                          | 9                | 24  | 37.6            |
| 11. I always black-out from alcohol                                   | 6.8              | 18  | NA              |
| 12. I always use opioids weekly                                       | 2.3              | 6   | 2               |
| 13. I have been stalked by someone I know or had a relationship with  | 23.22            | 62  | 4.1             |
| 14. My physical condition does not impact mobility on campus          | 70.04            | 187 | NA              |
| 15. I have a diagnosed disability                                     | 13.5             | 36  | NA              |
| 16. My parents are willing and able to help me with my expenses       | 72.66            | 194 |                 |
| 17. I have enough money to pay my bills each month                    | 65.54            | 175 | 52.8            |
| 18. I often feel stress and worry related to my financial security    | 64.79            | 173 | NA              |
| 19. I usually have at least \$1000 in savings                         | 54.68            | 146 | NA              |
| 20. I am often worried about my student loan debt                     | 46.82            | 125 | NA              |
| 21. My job often interferes with my academic responsibilities/studies | 33.71            | 90  | NA              |

Table 3: Physical Wellbeing Frequencies

The six indicators of physical wellness habits were statistically significantly correlated [ $p < .01$ ]. These ratings were summed to create a composite variable: physical wellness habits and this composite variable was then compared to drop-out risk and found to be statistically significantly correlated [Spearman Correlation Coefficient =  $-.152$ ,  $p < .05$ ].

The six indicators of substance use were statistically significantly

correlated [ $p < .01$ ]. These ratings were summed to create a composite variable: substance use and this composite variable was then compared to drop-out risk and not found to be statistically significantly correlated [Spearman Correlation Coefficient =  $-.035$ ]. However, the composite variable for substance use was found to be statistically significantly correlated with the physical wellness habits variable [Spearman Correlation Coefficient =  $-0.191$ ,  $p < .01$ ].

The six indicators of financial security were statistically significantly correlated [ $p < .05$ ]. These ratings were summed to create a composite variable: financial security and this composite variable was then compared to drop-out risk and found to be statistically significantly correlated [Spearman Correlation Coefficient =  $-.138$ ,  $p < .05$ ]. Additionally, the composite variable for financial security was statistically significantly correlated with the composite variable physical wellness habits [Spearman Correlation Coefficient =  $.224$ ,  $p < .01$ ]. Annual income was also found to be statistically significantly correlated with physical wellness habits [Spearman Correlation Coefficient =  $0.179$ ,  $p < .01$ ]. However, the composite financial security variable was not significantly correlated with the composite substance use variable.

Two indicators of physical mobility were statistically significantly

correlated [ $p < .05$ ]. A composite variable: physical mobility was created by summing the ratings of these two variables. The Physical mobility variable was then compared to drop-out risk and found to be statistically significantly correlated [Spearman Correlation Coefficient =  $.205$ ,  $p < .01$ ]. Additionally, this composite variable was statistically significantly correlated with financial security [Spearman Correlation Coefficient =  $.241$ ,  $P < .01$ ]. Finally, having been stalked was also statistically significantly correlated with drop-out risk, financial security and physical mobility [Spearman Correlation Coefficients respectively =  $-.155$ ,  $.246$ , and  $.308$ ,  $p < .05$ ].

#### Social Wellbeing

Indicators of social wellbeing are detailed in Table 4. Only one of these indicators was similar to a question on the ACHA survey.

| Variable   | % Agree | n<br>(N=267) | ACHA%<br>(N=8851) |
|--|---------|--------------|-------------------|
| Help others when they ask for my help  | 91.76   | 245          | NA                |
| Personal connections with others are important   | 89.89   | 240          | NA                |
| Considers how others feel when making a difficult decision                                   | 85.77   | 229          | NA                |
| Willing to talk through a problem with others  | 84.27   | 225          | NA                |
| Family is supportive and helpful.  | 82.4    | 220          | NA                |
| Shares amicable living space with at least one other person                                  | 79.4    | 212          | NA                |
| Has a small, close group of friends  | 75.66   | 202          | NA                |
| Has 3+ reliable friends that provide help and support  | 71.45   | 191          | 65.7%             |
| Prefers to go out with friends rather than study   | 62.55   | 167          | NA                |
| Has a significant other/spouse who is supportive   | 53.56   | 143          | NA                |
| Rather study than go to a party  | 53.18   | 142          | NA                |
| Usually attends a campus event (e.g. music, sports, theatre, dance, celebrations) each month | 45.69   | 122          | NA                |
| Regularly participates in a campus club or intramural team                                   | 35.96   | 96           | NA                |
| Spends time with a large, diverse group of friends   | 29.96   | 80           | NA                |

Table 4: Indicators of Social Wellbeing Frequencies



A composite variable for social wellbeing was created by summing the ratings of these 14 survey responses. The composite variable: social wellbeing was then compared to the drop-out risk variable and found to be statistically significantly correlated [Spearman Correlation Coefficient =  $-.195$ ,  $p < .01$ ].

### Emotional Wellbeing

The measure of emotional wellbeing included indicators of mental self-care practices, help seeking, mental illness and experiences of trauma.

| Variable  | % Agree | n<br>(N=267) | ACHA%<br>(N=8851) |
|---|---------|--------------|-------------------|
| 1. My mental health is important to me  | 86.52   | 231          | NA                |
| 2. Acknowledge when they have negative feelings toward someone they care about.           | 77.53   | 207          | NA                |
| 3. Spend time reflecting on goals & accomplishments every week                            | 55.06   | 147          | NA                |
| 4. Meditate/engage in relaxing behaviors every day  | 47.94   | 128          | NA                |
| 5. Engage in regular mindfulness practice   | 38.95   | 104          | NA                |
| 6. Seek help from friends/family when feeling stressed/anxious                            | 63.3    | 169          | NA                |
| 7. Ask for help when needed   | 53.18   | 142          | NA                |
| 8. I see a counselor at least twice each month  | 25.9    | 70           | NA                |
| 9. In the previous 12 months I have experienced overwhelming anxiety.                     | 74.91   | 200          | NA                |
| 10. In the previous 12 months I have experienced depression or a sense of hopelessness.   | 65.17   | 174          | 40.5%             |
| 11. In the previous 12 months I have had thoughts of suicide.                             | 37.83   | 101          | 11.5%             |
| 12. I experienced unwanted sexual contact prior to coming to college.                     | 26.22   | 70           | NA                |
| 13. I have experienced unwanted sexual contact since coming to college.                   | 19.48   | 52           | 6.5%              |
| 14. I experienced physical abuse by my caregivers as a child.                             | 16.85   | 45           | NA                |
| 15. I have experienced physical violence by someone I live with or previously lived with. | 16.85   | 45           | 3%                |
| 16. I have been physically assaulted since coming to college.                             | 13.48   | 36           | 3%                |
| 17. I was raped or sexually assaulted by someone I know or see on campus.                 | 11.24   | 30           | 5.8%              |

Table 5: Emotional Wellbeing

A composite variable for mental self-care practices was created by summing the survey response ratings for prompts 1-5 in Table 5. The composite mental self-care practices variable was then compared to the drop-out risk variable and not found to be statistically significantly correlated [Spearman Correlation Coefficient =  $-.113$ ]. A composite variable for help seeking was created by summing the survey responses for prompts 6-8 in Table 5. The composite help seeking variable was then compared to the drop-out risk variable and not found to be statistically significantly correlated [Spearman Correlation Coefficient =  $-.082$ ]. A composite variable for mental

illness was created by summing the survey response ratings for prompts 9-11 in Table 5. The composite mental illness variable was then compared to the drop-out risk variable and found to be statistically significantly correlated [Spearman Correlation Coefficient =  $.154$ ,  $p < .05$ ]. Finally, a composite variable for trauma was created by summing the survey responses for prompts 12-17 in Table 5. The composite variable for trauma was found to be statistically significantly correlated to the drop-out risk variable [Spearman Correlation Coefficient =  $.158$ ,  $p < .01$ ]. The composite mental illness variable and composite trauma variable were also

statistically significantly correlated with each other [Spearman Correlation Coefficient = .331,  $p < .01$ ]. The composite variable mental self-care practices and help seeking were not significantly correlated with the composite mental illness or trauma variables. However, both mental self-care practices and help seeking were statistically significantly correlated with the composite social well being variable [Spearman Correlation Coefficients were 0.348 and 0.404,  $p < .01$ , respectively].

### Spiritual Wellbeing

Two indicators of spiritual wellbeing were examined: “My spiritual wellbeing is important to me” [67.42% agree,  $n=180$ ] and “I participate regularly in a church, temple, synagogue or mosque” [31.84%,  $n=85$  agree]. The survey responses to these prompts were

summed to create a spiritual wellbeing variable. The spiritual wellbeing variable was compared to the drop-out risk variable and not found to be statistically, significantly correlated [Spearman Correlation Coefficient = -0.102]. However, the composite spiritual well being variable was statistically significantly correlated to the composite variable: mental wellness habits [Spearman Correlation Coefficient = .323,  $p < .01$ ] and social wellbeing [Spearman Correlation Coefficient = 0.213,  $p < .01$ ].

### Intellectual Wellbeing

Indicators of intellectual wellbeing include academic habits and behaviors related to professional preparation. None of these measures were similar to questions on the ACHA survey.

| Variable   | % Agree | n (N=267) |
|--|---------|-----------|
| 1. My intellectual wellbeing is important to me  | 87.64   | 234       |
| 2. My grade point average each semester/quarter is usually above 2.5 on a 4.0 scale.                     | 85.77   | 229       |
| 3. I am usually on time for class.   | 85.02   | 227       |
| 4. I have committed to an academic major.  | 85.02   | 227       |
| 5. I usually complete all of my assignments on time.   | 80.9    | 216       |
| 6. I usually complete all of the assigned reading on schedule.   | 70.41   | 188       |
| 7. I see my academic advisor at least once each semester/quarter.  | 65.17   | 174       |
| 8. I enjoy reading for pleasure.   | 59.93   | 160       |
| 9. On average I study more than 3 hours a day.   | 53.18   | 142       |
| 10. I am familiar with at least 3 types of employment opportunities where I can apply my academic major. | 72.28   | 193       |
| 11. I regularly associate with 3 or more students in my chosen academic major.                           | 54.68   | 146       |
| 12. I usually meet with the instructor when I am struggling with a class.                                | 49.06   | 131       |
| 13. I participate in a professional student club on campus that is related to my academic major.         | 35.21   | 94        |
| 14. I am a member of a professional organization related to my career path.                              | 34.83   | 93        |

Table 6: Intellectual Wellbeing

A composite variable for academic habits was created by summing the survey responses to prompts 1-9 listed in Table 6. The composite academic habits variable was then compared to the drop-out risk variable and found to be statistically significantly correlated [Spearman Correlation Coefficient = -.214,  $p < .01$ ]. A composite variable for professional preparation was created by summing the survey responses to prompts 10-14 listed in Table 6. The composite professional preparation variable was then compared to the drop-out risk variable and found to be statistically significantly correlated [Spearman Correlation Coefficient = -.257,  $p < .01$ ]. Both the

variables academic habits and professional preparation were statistically significantly correlated to each other [Spearman Correlation Coefficient = 0.356,  $p < .01$ ].

### Discussion

The results of this study indicate that physical, social, emotional, and intellectual wellbeing, are critical for student persistence and college degree completion. While spiritual wellbeing was not a significant predictor of student persistence, it was significantly related to social and emotional wellbeing.

## Physical Wellbeing

More than half of survey respondents reported that they exercise at least 30 minutes per day, they generally eat at least three meals per day, and they moderate their use of intoxicating substances. However, survey respondents who perceived that their physical condition made it difficult to get around campus were more likely to be at risk for dropping out of college. This finding affirms that attending to physical wellbeing is an important factor in earning a college degree. Additionally, this finding has implications for how campuses attend to the needs of students with physical disabilities and limitations. Some colleges offer students incentives to participate in fitness activities [20]. Most four-year colleges and universities do not require undergraduate students to take courses in physical education [21]. Consequently, incentives to engage in physical activity may be one of the only options available to motivating students to engage in physical activity.

Financial wellbeing significantly impacts physical wellbeing and student persistence. Nearly 65% of survey respondents noted that they felt stressed about their financial security. This may result in working more hours, skipping meals or living in substandard housing [22,23]. The need to work more hours also reduces a student's available time to engage in physical activities. One third of survey respondents noted that their employment responsibilities interfere with their studies. Many survey respondents reported that they were living with parents or other family members, which may be influenced by COVID-19 quarantine requirements. During the COVID-19 pandemic food insecurity was on the rise among college students due to lost employment and changes in housing [24]. Just under half (39.5%) of respondents on the ACHA survey reported low or very low food security [13]. Interestingly, 12.9% of ACHA survey respondents reported that financial challenges had impacted their class performance [13].

The average annual net cost (2017-2018) of undergraduate public education is \$7,200 [1]. A majority (67%) of students in public universities receive student loans and accumulate an average of \$30,000 in student loan debt [1]. Nearly half of survey respondents reported that they worried about the impact of their student loan debt. Participants who had financial support from family were most likely to remain in college. However, many families are not financially able to offer economic support to their adult child in college. Increased opportunities for financial aid or lower tuition costs would go a long way to improve student physical well-being and subsequent degree completion. Public funding of higher education has dropped by more than 40% since 1980 and college students and their parents pay for more than two-third of the cost of higher education [25]. A reduction in this financial burden would increase access to higher education, improve college student mental wellbeing and facilitate their timely degree completion.

## Social Wellbeing

Most survey respondents reported positive social wellbeing. They are connected to family and friends and these relationships are important to them. However, survey respondents who were not socially connected were more likely to be at risk to drop out of college. Fewer than half of the survey respondents were actively engaged with campus activities and clubs. This finding is consistent with current research regarding the importance of college social connections for degree completion [26,15]. This finding supports the need for college campuses to promote student engagement with campus activities outside of the classroom. Some campuses have recognized the importance of social wellbeing and have structured the integration of academic and residence life to support student engagement across campus life domains [20].

While measures of spiritual well-being were not found to be

significantly related to student persistence they were found to be significantly related to measures of social wellbeing. About two-thirds of survey participants indicated that their spiritual wellbeing was important to them and just under one third engage in regular religious practices. Additionally, just under half of the survey participants regularly engage in meditation practices. Spiritual wellbeing has been linked to social support and resilience in young adults [27].

Intimate relationships and increased use of alcohol and other mood altering substances are common among college students. However, these aspects of social wellbeing can be detrimental to degree completion when they become traumatic or consuming [5]. The findings of this survey are consistent with prior research regarding the negative impact of sexual assault, intimate partner violence and substance abuse on college campuses [12,28,29]. Unwanted sexual contact and sexual assault continue to be chronic problems on college campuses (ACHA-NCHA, 2019). While the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act [Clery Act] was put in place in 1990 to encourage reporting of campus violence [30], many college students who have experienced violence on campus are reluctant to make an official report and suffer in silence or confide in a friend [31,29]. Importantly, campus counseling therapists are not bound by the reporting requirements of the Clery Act and they can deliver services to victims of sexual and physical violence on campus ("Title IX/ Clery Act," 2014). College students need to be better informed of this resource.

## Emotional Wellbeing

Nearly three-quarters of survey respondents noted that they felt overwhelming anxiety and nearly two-thirds experienced depression or a sense of hopelessness in the past year. Additionally, survey results indicate that feelings of depression/hopelessness placed college students at significant risk of dropping out of college. This finding is consistent with prior research [6]. Despite these significant mental health challenges, only one quarter of survey respondents report engaging with a counselor on a regular basis. In fact, help seeking behaviors and mental self-care practices were not found to be directly related to student persistence, which is not consistent with prior research. Rates of counseling center utilization vary widely across US colleges and universities, largely due to the availability of these services (CCMH; CCMH Annual Report, 2020). Earlier research has found that students who do engage in counseling are more likely to remain enrolled in college [32]. Stigma associated with seeking mental health services has decreased, but still deters many students from accessing counseling services [33,34].

One of the reasons that college students are experiencing mental illness is that they have also experienced trauma, either before coming to college or while at college. Over one-quarter of survey respondents reported that they had been a victim of unwanted sexual contact prior to coming to college and nearly 20% of survey respondents reported experiencing unwanted sexual contact while at college. The rates of physical and sexual violence experienced by the survey respondents varied from a low of 11% (experienced rape) to a high of 26% (experienced unwanted sexual contact prior to coming to college). Physical and sexual trauma often make it very difficult for students to concentrate on their education if they are not receiving counseling and support [31].

Primary prevention activities that are facilitated by the campus counseling center offer promise to meet the emotional and social wellbeing needs of undergraduate students [35]. Such services include bystander intervention training, social connection groups and activities that support stress management and emotion regulation [19,36-38]. Many of these kinds of services can be facilitated by graduate students enrolled in campus mental/behavioral health professional degree programs [35]. Engaging professional graduate



students in these kinds of activities offers them opportunities to develop their practice skills and contribute to the mental health needs of the campus community, while being supervised by experienced professionals.

Institutions of higher education are encouraged to consider creative ways to support the emotional wellbeing of their students in an effort to ensure degree completion. In some instances students are unaware of the available resources, and/or they are unable to access these resources due to time constraints and availability [11]. Many communities are experiencing a shortage of mental health care professionals and the COVID-19 pandemic has placed increased pressure on mental health providers [13,39]. Some agencies have waiting lists so long that they could not meet the needs of these potential clients within six months [40]. As suggested above, institutions of higher education can collaborate with professional behavioral and mental health education programs to expand the number of available clinicians and provide students with opportunities to practice therapy skills under the supervision of a skilled professional. Student engagement in campus activities, such as group mindfulness practice, helps students develop a keen sense of awareness of their present environment and fosters improved focus and concentration, which is critical for academic success [41].

### Intellectual Wellbeing

Well over half of the survey respondents indicated behaviors that are consistent with good study habits and a commitment to intellectual wellbeing. High ratings on indicators of intellectual wellbeing predicted a greater likelihood of student persistence in college. Over half of the survey respondents had selected a major area of study, had identified areas of employment opportunity and had at least three professional peers that they were close to. However, fewer than half of survey respondents reported that they are creating/developing professional networks on campus. A college degree offers an opportunity for graduates to begin to develop a professional network that can be beneficial to their long-term professional development. Indicators of professional development combine social and intellectual wellbeing that are important for young adult developmental success beyond college [42,43].

### Study Limitations

Responses from 35 survey respondents to one of the important indicators of degree completion, number of current credits, were missing. Additionally, only 24 survey respondents provided the year that they began their college career. This made it impossible to calculate the time for degree completion.

### Conclusion

Opportunities to promote student flourishing and integrate all of these life domains for college students might be found in the development of First Year Interest groups (FIGs), and learning networks for non-residential university environments [5]. Inkelas and colleagues [44] found that universities that supported integrated living and learning environments that maintained budget oversight, facilitated faculty involvement, focused on academic coursework, and provided resources, such as recreation, clubs and activities were more successful in retaining and graduating students than universities that did not attend to the integration of living and learning on college campuses. Brower [45] found that campus living and learning environments promoted peer accountability and prevention of substance abuse. Additionally, student mentoring programs may also provide opportunities to successfully support student degree completion [46]. Higher education structures that intentionally attend to the whole student offer improved opportunities for student degree completion [5].

College success is influenced by at least four life domains and requires higher education systems to attend to more than just

completion of course requirements. This study suggests a variety of opportunities for higher education system to better support students to remain engaged in college, complete their degree and improve their economic future. Investing in these students' education is an investment in the future economic and social wellbeing of society. Well educated and supported graduates increase our ability to solve serious problems and improve communities locally and globally.

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