

**Internal Barriers to Student Use of Campus Wellness Centers**  
Cat Bonilla, Grace Fogland, Noemi Guzman, and Mollie McBride  
SOAN 371: Foundations of Social Science Research – Quantitative Methods  
St. Olaf College, Fall 2018

**Executive Summary**

In the fall of 2018, students in the Sociology/Anthropology 371 course conducted research on individual and institutional barriers regarding student use of campus Wellness Centers. We sent an anonymous online survey to 1200 students (excluding freshmen, Peer Educators, and those studying off-campus) at St. Olaf College. We received 308 responses, a 25.7% response rate. Our sample reflects many demographics of the student body, and matches the general rule of thumb for a sample of a population of approximately 2200.

Many prior studies have examined the effectiveness of wellness centers/programs in the workplace, but fewer have studied their effectiveness on college campuses, and fewer have examined barriers to student use of wellness centers. Our research examines individual barriers to college student use of a wellness center. From our review of literature, we explore four internal barriers: busyness, stigma, stress, and poor coping methods. We examine which students experience these barriers and how the barriers are related to Wellness Center use. Findings may be useful for other colleges and universities seeking to promote student health and increase student use of wellness services.

The most important results of our research are:

- The top area of stress students reported experiencing in Fall 2018 was academics.
- Students tended to indicate low levels of stigma about health-related help-seeking.
- The majority of students reported difficulty making time to go to the WC or its events.
- Domestic students tended to face a higher level of internal barriers to WC use in Fall of 2018 than international students did.
- Students with higher stress tended to have higher Wellness Center Use in Fall 2018
- Respondents who reported lower maladaptive coping strategies tended to use the Wellness Center more in Fall of 2018.
- Males had a higher level of stigma regarding seeking help for health (mental, emotional, physical, sexual).

Based on our research, we offer three recommendations for the Wellness Center:

1. To decrease stigma surrounding health and help-seeking, focus on educating students about overall health and the meaning of wellness by partnering with different departments/organizations (e.g., Piper Center, Athletic Department, Greater Than, SARN, etc.) to promote awareness about student wellness.
2. Focus on how students view stress, how they can deal with stress positively, and inform them of helpful resources on campus. Along with informing students of adaptive coping methods for dealing with stress. This can be done by continually providing flyers, posters, Toilet Talks, etc., in all campus buildings including residence halls.
3. Advocate changing the attendance policy for classes in order to allow for more absences related to mental health days. Many courses designate a certain number of allowable absences during the semester and state that more absences will negatively affect a student's course grade. We suggest that the Wellness Center educate faculty members on the importance of affirming student use of mental health days, as our research shows that academics play a large role in college students' stress levels.

## Background and Literature Review

Wellness centers and programs are a relatively recent development on college campuses, so social science research on these centers and programs is in relatively short supply. Fortunately, insights may also be gained from research on mental health centers and workplace wellness programs. The *American College Health Association-National College Health Assessment (2009)* argues that wellness is multidimensional, and it focuses on five main categories of college students' overall health: substance use, sexual health, weight and nutrition, violence, and physical and mental health (478), all of which might affect overall health and wellness among college students. The Wellness Center (WC) at St. Olaf includes social, spiritual, emotional, financial, mental, intellectual, chemical, sexual, and physical aspects of health in its understanding of wellness. Although limited, prior research has focused on the way that students view wellness centers and their programs, paying attention to their attitudes and awareness regarding wellness.

There are two main kinds of barriers that affect student access to and use of wellness centers and services: internal barriers, which exist internal to individuals, such as stress, stigma, poor coping methods, and insufficient time for wellness, and external barriers, which are usually outside of the individual's control, such as a center's operating hours and physical location. Internal barriers differ from external barriers, but both affect student use of campus wellness centers. Studies of internal barriers affecting student use of wellness centers (or mental health services) have examined the roles of stress (Beauchemin 2014), self-stigma (Boyd et al. 2014), methods of coping with stress (Holland and Wheeler 2016), and time (Hill-Mey et al. 2013). Our literature review focuses on these four main internal barriers: stress, stigma, coping/stress management, and time.

Studies of identity and societal perceptions have shown both a distinction and a connection between how individuals view themselves and how others view them. Within society, stigma is viewed as placing a negative stereotype on an individual based, for example, on the state of their mental health (Holland and Wheeler 2016). Due to socially stigmatic views such as being seen as weak or as less than, individuals who have needed or wanted to utilize mental health services have found it difficult to avoid the stigmatized label of "mentally ill." For this reason, students may perceive themselves as being subjected to negative views and ostracization from society and feel that their social and academic achievements are diminished (Boyd et al. 2014). Within an individual's own external environment, existing cultural and societal expectations can lead to different forms of stigma. For people with mental illness, internalized stigma, also referred to as self-stigma, is characterized by an individual's subjective perception of their own devaluation, marginalization, secrecy, shame, and withdrawal. Internalized stigma has a variety of adverse effects, including facing psychological barriers, demoralization, hopelessness, lowered self-esteem and self-efficacy, impaired social adaptation and limited social support (Boyd et al. 2014). Other research suggests that there is a difference between seeking physical health services versus mental health services (Beauchemin 2014). Physical health services, which address illnesses related to the physical body, are generally seen as more socially acceptable locations for help-seeking and they are easier to find, while students who struggle with their mental health have tended to be less aware of the specific resources available, and ultimately less likely to seek help (Beauchemin 2014).

Studies of self-stigma have revolved around stigma theory, which focuses on how individuals are labeled or characterized in a negative manner by other people. This can be used to explain why some students don't seek out wellness resources or professional help. The effect of stigma on individuals with mental illnesses has been a long-standing problem in our society (Link and

Phelan 2001). The underutilization of counseling services may be caused at least in part by the perceived stigma attached to the use of counseling (Yorgason, Linville, and Zitzman 2008). Race/ethnicity also play a role in the perceived stigmas that might be attached to mental health access, with students of color facing more familial stigmas than white students (Miranda et al. 2015). Some families of color often lack resources or knowledge when dealing with mental health due to the stereotypes associated with being diagnosed with any mental health compared to white families. Familial stigma can be understood as families that come from different backgrounds might differ in their expectations on how their children should or shouldn't handle issues relating to mental health. Mental illness is thought to carry a blemish or imperfection that society somehow negatively associated with the individual and their social groups such as family and friends (Holland and Wheeler 2016). If students are seen *deviating* from the normal population by seeking counseling, they could experience undue stigma. Thus, students in those situations wanted to avoid being stigmatized and were less likely to use counseling services (Holland and Wheeler 2016). One suggestion Holland and Wheeler make for combatting this problem is to increase and improve overall education on mental health.

Studies of stress, such as Holland and Wheeler's (2016), define a stressor as anything that causes a physical or emotional reaction on the body or mind. Researchers have examined four main types of stress: interpersonal stress, intrapersonal or internal stress, academic stress, and environmental stress. Stress can affect anyone, any time, and any place and it can vary in severity (Holland and Wheeler 2016), but it particularly impacts college students, where the environment may push students beyond their capabilities. College is a time when individuals adapt and adjust to a new social, physical and emotional environment. Due to the many changes that occur during the college years, stress can affect and even endanger students' well-being. Stress varies from person to person, but there is a common belief among many individuals about whether or not their stress is valid or "bad" enough for them to visit wellness centers. When a student feels like they're not in control, their stress can be too much for them to handle (Holland and Wheeler 2016). The severity of a stressor depends partly on how much, how long the student thinks about it, as well as on the amount of time the stressor itself has existed.

Studies of student methods for coping with stress have found that many students think they can 'deal with it' (coping with and managing their own stress) on their own. However, one study found two main categories of strategies that students use to try to deal with stress: adaptive and maladaptive, with the latter tending to cause more long-term harm to the student. *Adaptive* coping methods use "emotional support...instrumental support, positive reframing, planning, acceptance, humor, and religion", while *maladaptive* coping methods use "self-distraction, denial, substance use, behavioral disengagement, venting, and self-blame" (Holland and Wheeler 2016). Researchers develop the Brief COPE Inventory (BCI) as a tool used to measure students' methods of coping with stress. Using this tool, researchers found that students who used more adaptive coping methods were more likely to utilize mental health resources on campus (Holland and Wheeler 2016). Another study found that the Five Cardinal Mental Skills, a tool utilizing five concrete coping techniques of relaxation, imagery, routines, self-talk, and concentration, could help students (specifically student-athletes) manage their stress. The model was effective in lowering participants' stress levels due to its large variety of concrete and applicable techniques (Beauchemin 2014).

Studies of time have found that students, especially college athletes, have many responsibilities that hinder their ability to balance their workloads with social and leisure time. This can lead to an increase in mental and physical exhaustion (Beauchemin 2014). Other studies found that students were often unable to find the time to participate in wellness programs on any given day

(Beauchemin 2014). The greatest barriers to attendance or participation in wellness activities were time restrictions, feeling that the program was a low priority, problems getting to the events, and the fact that professional and personal responsibilities got in the way (Hill-Mey et al. 2013). Further studies found that students who devote time and effort to extracurricular activities in college get the most out of college, and many students feel obligated to join in these activities (Kilgo, Mollet, and Pascarella 2016). Even though student involvement in non-academic activities has been shown to have a positive relationship with student psychological well-being (Kilgo, Mollet, and Pascarella 2016), the time spent on extracurriculars can hinder students from seeking help to combat their stress. One way that some studies (Kilgo, Mollet, and Pascarella 2016) have suggested for addressing the barrier of time is to provide students with institutional resources to increase awareness and support for all students. This means that increasing awareness and providing information about time management will teach students about managing their time wisely and will help them to avoid feeling so stressed.

Our research focuses on internal barriers to students' use of the wellness center at a small, private liberal arts college in the northern region of the United States. For this research, our research questions were: 1) What internal barriers to Wellness Center use do students experience? 2) Which students are most likely to experience those barriers? 3) To what extent do the internal barriers affect Wellness Center use?

## **Methods**

We conducted a focus group that would allow us to gain insight into the different experiences that students have when it comes to internal barriers and Wellness Center use. The discussion in the focus group focused on how the Wellness Center, and general wellness overall, are viewed and talked about on campus. After obtaining the qualitative responses, where we were able to hear individual stories about experiences with the Wellness Center, we were able to conceptualize our topic of individual barriers better, and write survey questions based upon the personalized information we received. The anonymous survey was emailed to a list of 1200, randomly chosen students, excluding first years, off-campus students, current and past Wellness Center peer educators, our teaching assistants, and the researchers in our 371 (research methods) class in November 2018. The survey was cross-sectional, and asked respondents about their usage of the Wellness Center and barriers to that usage. We received 308 responses, which was 25.7% of our population.

Our independent variables were the internal barriers we identified as hindering students' access to the Wellness Center, including: stigma, stress, student coping methods (maladaptive vs. adaptive) and busyness. Other independent variables included demographics, such as gender, sexual orientation, racial/ethnic identity (all of which were open-ended questions), and class year. Our dependent variable was the usage of the Wellness Center, and our analysis focused on the influence (or lack thereof) that the internal barriers had on students' Wellness Center usage. To better understand respondents' experiences with internal barriers to the Wellness Center, our survey used Likert scales, multiple-response questions, matrices of statements, and open-ended questions. We designed the survey with St. Olaf's Form Creator tool.

To measure stigma on using the Wellness Center, we used an ordinal variable that contained three items, with five response categories ordered from "Strongly Agree" to "Strongly Disagree". Our survey asked participants to report the extent to which they agreed or disagreed with statements regarding the level of stigma associated with: seeking information or help with alcohol or drug use and health counseling (physical, mental, or sexual health). We measured stress through questions that asked about six areas of potential stress, including: Academics,

Paid Work, Family, Friendships and Relationships, Extracurricular activities, and Other (which included future plans, careers, mental and physical health). We measured student busyness by using an ordinal variable, asking participants how busy they felt, with 5 response categories from "Not busy at all" to "Extremely busy". The number of hours they devoted weekly to self-care this semester was also measured. We used five response options ranging from "A lot" to "Not at all" asking students how they respond in terms of coping with stress, which we classified into 2 types of coping methods: adaptive and maladaptive. Adaptive coping methods are the more positive ways students handle their stress levels, including emotional support and positive reframing of stressful situations, while maladaptive coping methods included more negative actions such as being in denial, using substances, and self-blame. We measured the frequency of the Wellness Center use for Fall 2018. The frequency of Wellness Center use was measured through an index.

Validity is defined as the truthfulness of a concept with a specific measure, where the researcher must be sure whether they are actually measuring what they claim they are measuring (Neuman 2012). The types of validity that applied to our research were face validity and content validity. Face validity is a judgement addressing the question of whether people (who are qualified to assess validity, such as other researchers) believe the definition and measurement of a concept fit the construct (Neuman 2012). We determined this by having our professor and TA assess our survey, and by implementing a pilot test in which our classmates judged our questions and content. Content validity addresses the question of whether or not all the content and areas of a definition are represented in a specific measure (Neuman 123). In our research, we made sure to include the full content of the definitions for each of our variables by examining our literature review, and conducting our focus group. Therefore, we tried to create full representation of our variables in each of our measures.

Neuman defines reliability as steadiness and stability, meaning that the repeated outcomes remain the same under similar and alike conditions (121). We worked to ensure our research was reliable by making certain we clearly conceptualized all of the variables in our study, and knowing the level of measurement (nominal, ordinal, interval, and ratio) each of our variables were. By conceptualizing each of the variables from the beginning of our research, it allowed us to ensure and maintain consistency within the labels of each of our measures - knowing which variables were independent, and which were dependent. In order to increase reliability, researchers need to be fully aware of what variables they will use in their research, what those variables mean, and how those variables will be used. From this, they can begin to conceptualize their variables for their own research to allow for reliability throughout their research.

The first approach we used for increasing reliability was applying inter-item reliability. When asking the participants to reveal what areas of life caused them stress, they were able to select as many items as they wanted. The selections included Academics, Friendships and Relationships, Extracurriculars, Paid work, Family and Other. In addition to the options we provided, we also included a free response option so they could include any other stressors they were dealing with.

The second approach we used was creating an index of questions surrounding stigma, maladaptive and adaptive coping methods, and frequency of Wellness Center use in the Fall of 2018. Stigma had three statements which revealed to us how students perceived seeking out counseling for mental health, stable people and their health, and seeking information regarding alcohol and drug use as a sign of weakness. Grouping the statements together helped individuals answer statements closely related.

Our third approach was pre-testing the survey by asking students from the other course section, SOAN371A, the other research team in our SOAN371B class, as well as our professor, to review our questions. They were able to offer feedback for suggestions on improving clarity and/or the ordering of our questions, and give us recommendations for how to create better response categories.

And the fourth approach our team used was using terms accessible for everyone. We made sure to define terms, include examples, and avoid using acronyms. Defining certain terms made sure that every participant had the same level of awareness and understanding of the concept we were referring to when taking our survey. We did not feel intimidated when we included terms, we had to make sure to give a variety of examples to ensure everyone had because there are things that could mean different things to individuals. One example of this was our intentionality of defining self-care. The act of taking care of one's self could vary on the individual, so we made sure participants could interpret the question to the best of their abilities. Lastly, we avoided using acronyms as they could confuse the participants. While the Wellness Center could be shortened to WC, we made sure to not include that in the beginning as individuals could interpret it differently.

In our research, our intended audience, the targeted participants, we focused on were full-time students, who were sophomores, juniors, and seniors. We specifically excluded first year students, off-campus students, current and past Wellness Center peer educators, our teaching assistants, and the researchers in our 371 (research methods) class from our target population. We did not include first years, as they would only have a limited exposure to the Wellness Center. Off-campus students were excluded, since their exposure to and attendance at Wellness Center events on-campus would have been nonexistent during the semester of our study. The rest of the groups we excluded had pre-exposure to the information and subject matter, and might give biased responses to our survey. That left about 1600 students. A worker in charge of creating email aliases created a group containing random students that fit the required criteria. Random sample is a method of selecting random from a population where all the participants have a chance of being selected. Of that group, we wanted a random sample of at least 1,200 of 1,600 participants to respond so that data that we would collect could be used for the general student population, and ultimately we emailed requests to 1200 students to take the survey. There were 308 respondents, which gave us a 25.7% response rate. Our sample was 71.4% (195) female and 26.7% (73) male. In terms of sexual orientation, our sample was 0.4% (1) female transgender, and 1.1% (3) non-binary. In terms of class year, 37.4% (104) were sophomores 31.7% (88) were juniors, and 30.2% (84) were seniors. Regarding sexual orientation, respondents self-identified as: 78.8% (201) heterosexual, 10.2% (26) bisexual, 3.9% (10) gay/lesbian, 3.1% (8) pansexual, 1.6% (4) questioning/don't know, 1.6% (4) queer, and 0.8% (2) asexual/demisexual. Regarding racial/ethnic identification, students self-identified themselves as: 75.8% (201) White, 9.0% (26) Asian/Asian American, 5.7% (15) multiracial/ethnic, 4.9% (13) Latinx/Hispanic, 2.3% (6) African American/Black, 0.8% (2) Middle Eastern, 0.4% (1) African, and 0.4% (1) Native American.

### ***Ethics***

We encountered four main ethical concerns: privacy (anonymity and confidentiality), informed consent, sensitive information, and rewarding our participants.

Privacy includes both anonymity and confidentiality, where anonymity is making sure names and characteristics of participants remain anonymous unless permitted. Disclosure and confidentiality is keeping the data in secret and permitting release only to third parties (Neuman

2012). This applies to our research because of the vulnerability of our target population as college students where any risk of disclosure could potentially cause harm due to the nature of questions perceived as threatening and personal. In order to resolve this issue, we made sure not to ask for any names on the survey and kept all responses anonymous when compiling the results. When trying to analyze the responses, each answer was given a random identifier. Since the researchers are students, giving each response a random identifier helped to keep individual's identity disclosed.

Informed consent includes never coercing participation and making certain to describe the exact procedure while informing them of what it is they will be doing and awareness of their rights. (Neuman 2012) This applies to our research because the risks for participation may be high in the sensitivity of the issues we presented and so maintaining explicit and mutual follow-up to the procedure will help us minimize all potential risk. We made sure to be transparent about informed consent by letting the participants know at the beginning of the survey about what the survey is for and telling prospective respondents that by taking the survey, they consented to participate.

Sensitive information regards the sensitive nature of the topic and content of research. Due to our study being conducted on mental health issues, beneficence, which is defined by efforts to ensure the well-being of participants, is important to minimize risk of embarrassment or shame for respondents. (Neuman 2012) We dealt with this issue by framing and wording the questions appropriately and we were thoughtful about where in the survey we placed each question. This means that we framed questions in a way to not ask threatening questions or questions that would allow for the participants to be identified in any way. We also included an option for respondents to leave questions blank if they wished.

In our research, we randomly-selected seven students who completed our survey and gave out two \$50 gift certificates and five \$20 gift certificates from the St. Olaf Bookstore or Amazon (depending on the winner's choice). The incentive of completing the survey could be the participants truly want to voice their opinions on the Wellness Center and/or to be considered in the drawing. For students only considering the survey for the gift cards could cause error in our data as they could be lying or not taking it seriously. Having incentives could motivate participants to spend some time answering the survey or avoid it due to the low probability of winning the drawing.

## **Results and Discussion**

### ***Univariate Analysis***

#### ***How much do students use Wellness Center Services? (INSERT SECTION HERE)***

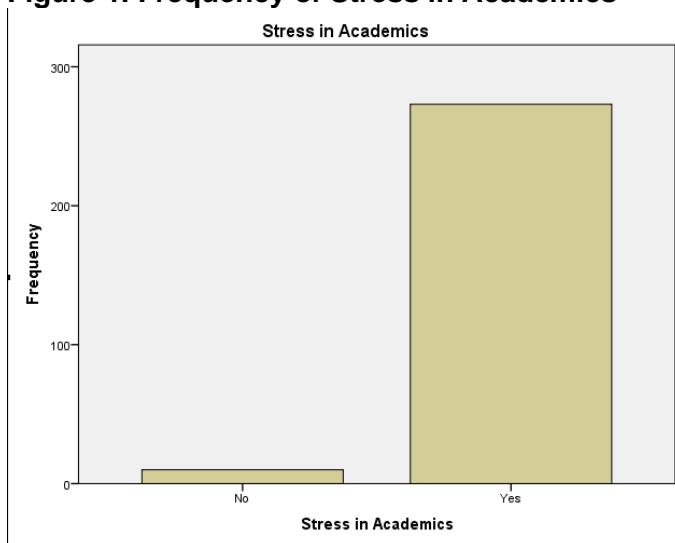
#### ***What internal barriers to Wellness Center use do students experience?***

##### ***Stress***

The first internal barrier we measured is stress. Students reported that the top area of stress they experienced in the semester of our study was academics, with nearly all students (96.5%)

reporting this, as shown in Table 1 below. Next in order were Friendships and Relationships with nearly two-thirds of students (62.9%) and extracurriculars with nearly half (48.8%). More than two-thirds of students reported stress related to paid work, and more than one-third reported family-related stress. Students also reported additional areas of stress (included in “Other” in the table and specified in responses to a follow-up question), with the most common areas being future plans, including career and graduate study (18 respondents), mental health (13 respondents), and physical health (12 respondents). Just as prior scholarship suggests about the challenges that college students face (Holland and Wheeler 2016), these results affirm the idea that the stress of academic environments such as college campuses has a strong impact on students. Students must adapt to an environment in which it is difficult to find balance between their interpersonal and academic lives. Based on our results, we speculate that academics play a large role in priority-setting among students during the semester.

**Figure 1. Frequency of Stress in Academics**



**Table 1. Areas of Stress Experienced This Semester**

Area of Stress	Percentage
Academics	96.5%
Friendships and Relationships	62.9%
Extracurriculars	48.8%
Paid Work	38.2%
Family	36.0%
Other	23.0%

**Table 2. Help-seeking stigmas regarding health (included in the Index of Stigma)**

Area of Stigma	Strongly Agree	Somewhat Agree	No Opinion	Somewhat Disagree	Strongly Disagree
Seeking mental health counseling is a sign of weakness	0.7%	3.2%	3.2%	11.0%	82.0%



Even stable people need help with health (physical, mental, or sexual health)	66.7%	22.7%	4.6%	4.6%	1.4%
Seeking information or help regarding alcohol or drug use is a sign of weakness	0.7%	1.4%	3.2%	7.4%	87.2%

*Stigma about health and help-seeking*

Students reported the extent to which they agreed or disagreed with each of the statements in Table 2 regarding stigma and wellness (below). Responses to all three statements indicate *low levels of stigma* about health-related help-seeking. Combining the somewhat and strongly agree responses and the somewhat and strongly disagree responses, 93.0% disagree that seeking mental health counseling is a sign of weakness; 89.4% agree that even stable people need help with health; and 94.6% disagree that seeking information or help regarding alcohol or drug use is a sign of weakness. These results were quite surprising, as they contradict Holland and Wheeler’s (2016) finding that students feel heavily influenced by their external environments and they internalize social stigmas about seeking help. Perhaps, if there were more than three items that asked about stigma, our results might have been different. The results may also be due to the self-reported nature of the data; students may hold stigma about health-related help-seeking but believe that they should not have that mindset. However, it may be that students are not very affected by societal stigma surrounding mental health services. Perhaps the mostly positive perceptions of help-seeking are due to improved education about health and wellness.

**Table 3. Index of Maladaptive Coping Methods**

<b>Maladaptive Coping Methods</b>	<b>A lot</b>	<b>A moderate amount</b>	<b>Somewhat</b>	<b>A little bit</b>	<b>Not at all</b>
Blame myself for things that go wrong	23.3%	35.3%	23.7%	15.5%	2.1%
Do things to distract myself from situation	24.4%	33.2%	23.7%	12.7%	6.0%
Give up or walk away from the situation	2.1%	7.1%	25.4%	34.6%	30.7%
Use drugs or other alcohol to get through	2.5%	4.3%	12.1%	16.0%	65.2%

*Adaptive and maladaptive coping strategies*

Students reported on four possible maladaptive coping strategies used to handle stressful situations. The question on the survey asked, “When facing stress while at St. Olaf, how much do you tend to respond in these ways?” Our results, shown in Table 3 below, shows how a large majority of students reported using two of the maladaptive coping methods (the first and

second, above): 83.4% report blaming themselves for things that go wrong at least somewhat (combining Somewhat, A moderate amount and a lot); and 81.3% reported doing things to distract themselves from the situation at least somewhat. Conversely, most students reported *not* using the other two maladaptive coping methods; 65.3% reported not tending to give up or walk away from the situation (combining a little bit and not at all) and (81.2%) reported the same regarding using drugs or other alcohol to get through. Overall, students tend to use at least some of these maladaptive coping methods when facing stress. In prior scholarship, maladaptive coping methods have included actions such as “self-distraction, denial, substance use and behavioral disengagement” when dealing with hard situations (Holland and Wheeler 2016). The highest maladaptive coping method was students blaming themselves when things went wrong, but most of our respondents indicated that they did not use alcohol or other drugs to get through their hardships. Our literature did not address which actions students were more likely to take compared to other actions.

**Table 4. Index of Adaptive Coping Methods**

<b>Adaptive Coping Methods</b>	<b>A lot</b>	<b>A moderate amount</b>	<b>Somewhat</b>	<b>A little bit</b>	<b>Not at all</b>
Take action to improve situation	27.3%	44.3%	24.1%	3.9%	0.4%
Seek advice from other people	15.2%	34.6%	28.6%	16.3%	5.3%

Students reported the extent to which they use two adaptive coping methods to handle stressful situations. As shown in Table 4 (below), the vast majority of students reported using these methods at least somewhat: Combining the responses for somewhat, a moderate amount, and a lot, 95.7% reported taking action to improve the situation, and 78.4% reported seeking advice from other people. Pluralities of the respondents reported taking action to improve the situation a moderate amount (44.3%) and seeking advice from other people when they are stressed a moderate amount (34.6%). Overall, students do use these adaptive coping methods for dealing with stress. Adaptive coping methods reported in prior studies included “emotional support, positive reframing, planning, acceptance” when dealing with situations (Holland and Wheeler 2016). Overall, most students did a moderate amount of taking care of themselves when dealing with stress. While the results were positive, students are still not fully using adaptive coping methods, perhaps due to the stigma of how they should handle situations.

**Table 5. Internal Barriers to Going to WC and Using WC resources**

<b>Internal Barriers</b>	<b>Strongly disagree</b>	<b>Somewhat disagree</b>	<b>No opinion</b>	<b>Somewhat agree</b>	<b>Strongly agree</b>
Hard to make time to go to Wellness Center/Events	2.2%	10.8%	12.9%	43.7%	30.5%
Embarrassed to seek peer	18.3%	20.8%	13.3%	33.1%	6.5%

support at WC					
Tend to seek help from WC when experiencing high stress (reverse-worded item)	16.5%	22.6%	21.1%	30.8%	9.0%
Unlikely to seek help from WC due to the stress being my own fault	16.5%	22.6%	21.1%	30.8%	9.0%
Embarrassed to seek info about wellness at the WC	25.2%	37.8%	15.8%	19.1%	2.2%

Students reported the extent to which they agreed or disagreed with each of the statements above regarding possible internal barriers that prevent students from going to the WC, attending its events and accessing its resources, as shown below in Table 5. Between about one-fifth and three-quarters of respondents reported experiencing these barriers. Combining the responses for somewhat and strongly agree, 74.2% agree of our respondents agree that it is hard to make time to go to the WC or its events; 39.6% agree that they feel embarrassed to seek peer support at the WC; 39.8% agree that they tend to seek help from the WC when stressed; 39.8% agree that they are unlikely to seek help from WC due to the stress being their own fault; and 2.2% agree that they're embarrassed to seek information about wellness at the WC over the 25.2% that disagree with this statement. Our results on stigma relate to the research findings from, "Mental Health Among College Students: Do Those Who Need Services Know About and Use Them?" when it focused on students not seeking out support when dealing with mental health (Yorgason, Linville, and Zitzman 2008). Students may not don't feel comfortable seeking help from their peers because they believe that they will be judged. Prior scholarship reveals that many students feel like they will be perceived as weak (Holland and Wheeler 2016) if they do ask for help, so they prefer not to get help.

### ***Bivariate Analysis***

Our bivariate analysis examined the barriers in relation to demographics, as well as the barriers in relation to Wellness Center use during Fall 2018. We ran Chi-Square tests, Cramer's V, Spearman rho, Mann-Whitney U-tests, and t-tests, which were determined based on the variables we were running. Our analyses found statistically significant relationships between the internal barriers to Wellness Center use, and demographic variables in only four cases.

### ***Which students tend to experience internal barriers to Wellness Center use?***

**Table 6. Gender and Index of Stigma**

	Gender (binary)	N	Mean	Std. Deviation	Std. Error Mean
Coping Index (6 items)	Female	194	14.59	3.223	.231
	Male	72	14.22	3.251	.383

As shown in Table 6, we conducted a Mann-Whitney U-Test to compare males and females on the index of stigma and found a significant difference between the two groups. The mean score for males was significantly higher ( $m = 4.66$ ) than the mean score for females ( $m = 3.79$ ;  $U=5308.00$ ,  $p<.05$ ). Gender is related to level of stigma, with men showing higher stigma regarding health-related help-seeking. Overall, our results on the relationship between males and higher levels of stigma was similar to Beauchemin's findings that Western society enforces gendered expectations regarding mental health, and perpetuates male stereotypes of associating mental health with weakness (2014).

**Table 7. Domestic Students and Index of WC Barriers**

	International student	N	Mean	Std. Deviation	Std. Error Mean
Experience of barriers index (4 items)	International student	17	10.47	3.281	.796
	Domestic student	259	12.10	3.045	.189

As shown in Table 7, we conducted an independent samples t-test to compare the mean scores for the Index of WC barriers among domestic students with the mean score among international students, and found significant difference between the two groups ( $t(274) = -2.123$ ,  $p < .05$ ). The mean score for domestic students was significantly higher ( $m=12.20$ ,  $sd=3.045$ ) than the mean score for international students ( $m=10.47$ ,  $sd=3.281$ ). Domestic students tend to face greater barriers related to the use of the WC, at least in terms of the barriers we asked about in our survey. It was surprising to discover that domestic students faced greater barriers relating to the use of the Wellness Center, as international students tend to face more obstacles to obtaining certain critical resources, such as health care. They also might experience culture shock, which could influence their overall wellness. One possible explanation for this finding is that international students might form social groups with other international students who might have similar/shared experiences or struggles with overall health. Separate coping methods, or different ways of healing and taking care of one's overall wellness for international students could be developed in these social communities, decreasing the need for international students to even utilize the WC's resources in the first place.

***To what extent do these internal barriers affect Wellness Center use?***

**Table 8. Stress and WC Use Fall 2018**

We calculated a Spearman's rho correlation coefficient for the relationship between the stress index and the index of the frequency of WC use this semester, and found a statistically significant small to moderate positive correlation, indicating a linear relationship between the two variables. ( $r(90)=0.219$ ,  $p<.05$ ). The stress index and the frequency of WC use this semester index are positively related. Higher stress is related to greater WC use, at least in the first 10 weeks of the fall semester. It was surprising to find that higher stress was associated with greater Wellness Center use, as we assumed students with higher stress would *not* utilize

			Stress index (6 items)	Frequency of WC use this semester (8 items)
Spearman's rho	Stress index (6 items)	Correlation Coefficient	1.000	.219 <sup>*</sup>
		Sig. (2-tailed)	.	.036
	Frequency of WC use this semester (8 items)	Correlation Coefficient	.219 <sup>*</sup>	1.000
		Sig. (2-tailed)	.036	.

the Wellness Center due to lack of time. However, perhaps some of the students who visited the Wellness Center with high levels of stress realized that they needed the resources being offered by the Wellness Center, and found them to be helpful in coping with their stress. It could also be that those high-stress students who use the Wellness Center more are more able to recognize their stress, and engage in adaptive behaviors to help mitigate it.

**Table 9. Index of Stress and WC Use Fall 2018**

			Frequency of WC use this semester (8 items)	Maladaptive Index (4 items)
Spearman's rho	Frequency of WC use this semester (8 items)	Correlation Coefficient	1.000	-.215 <sup>*</sup>
		Sig. (2-tailed)	.	.041
	Maladaptive Index (4 items)	Correlation Coefficient	-.215 <sup>*</sup>	1.000
		Sig. (2-tailed)	.041	.

We calculated a Spearman's rho correlation coefficient for the relationship between the maladaptive index and the index of the frequency of WC use this semester, and found a statistically significant small to moderate positive correlation, indicating a significant linear relationship between the two variables. ( $r(89) = -.215, p < .05$ ). The maladaptive index and the index of WC use this fall semester are negatively related, so lower maladaptive coping methods is associated with higher WC use this semester. However, in this relationship, causality could go either way here - or both. Perhaps students who engage in fewer maladaptive coping methods go to the WC as a positive way to cope with their stress, or maybe students who utilize the WC more engage in fewer maladaptive coping methods *because* they are taught to not engage in them. The association between lower maladaptive coping scores and higher Wellness Center use during the Fall of 2018 was unsurprising, as it echoes Holland and Wheeler's (2016) findings that students who used more adaptive coping methods were more likely to utilize mental health resources on campus, as they are more likely to be more confident in seeking out emotional support as a way of coping with stress. It also suggests that students who most need to learn and use adaptive coping techniques are unlikely to do so partly because they are less likely to use the Wellness Center, an important source of information about effective strategies for coping with stress. While our results didn't show that these students used adaptive coping methods only, they were less likely to use maladaptive coping methods and more likely to use the Wellness Center.

## Conclusion and Recommendations

The top area of stress students reported experiencing in the semester of our study (Fall 2018) was academics. Students generally indicated low levels of stigma about seeking help for health-related issues such as mental health. Many students reported blaming themselves for things that go wrong and distracting themselves from the situation at least somewhat. Also, students reported a moderate amount, on average, of taking independent action or seeking advice for help when dealing with stress. The majority of students reported encountering at least one internal barrier relating to lack of time when trying to seek help or information from the WC or its events. Also, domestic students tended to face a higher level of internal barriers to the WC use in Fall of 2018 than international students did. Students with higher stress were more likely to use the Wellness Center, which suggests that the resources the WC provides to assist students in coping with their stress levels are helpful. Respondents who self-reported lower maladaptive coping strategies tended to use the Wellness Center more in Fall of 2018. Males indicated a higher level of stigma regarding seeking help for health (mental, emotional, physical, sexual) as compared to females.

A main strength of our study is that our sample was well-chosen. We wanted to get sophomores, juniors, and seniors' perceptions of the Wellness Center, and we wanted to reduce potential biases by excluding certain groups: SOAN 371 students who were conducting the research, SOAN 371 TAs, first years, off-campus students, and current and past Peer Educators. Because we were able to narrow our focus, another strength that emerged was our ability to generalize our findings to St. Olaf sophomores, juniors, and seniors, since we were able to attain confidence from the fact that many of our respondents indicated they had some experience with the Wellness Center. Another strength of our research was that it included both quantitative analysis and a qualitative focus group. We were able to obtain statistical evidence to back our findings, as well as hear personal anecdotes about individual experiences of using the Wellness Center. By mixing the two forms of research, it gave us a more holistic and rich look at internal barriers to students' use of the Wellness Center.

Our research also has limitations. We are unable to generalize our findings beyond St. Olaf College because we did not include students outside our institution. Another limitation in our research was that it was a cross-sectional study. We conducted our research at one point in time instead of throughout the semester or even over a couple of years when experiences with the Wellness Center and usage of it may have changed. For example, if we had the opportunity and time, we could have surveyed students at the beginning of the semester, and again at the end of the semester (including first-years) to include their additional exposure to the Wellness Center as the year went on.

Based on our research, we offer three recommendations:

1. To decrease stigma surrounding health and help-seeking, focus on educating students about overall health and the meaning of wellness by partnering with different departments/organizations (e.g., Piper Center, Athletic Department, Greater Than, SARN, etc.) to promote awareness about student wellness.
2. Focus on how students view stress, how they can deal with stress positively, and inform them of helpful resources on campus. Along with informing students of adaptive coping methods for dealing with stress. All of this can be done by continually providing flyers, posters, Toilet Talks, etc., in all campus buildings including residence halls.
3. Advocate changing the attendance policy for classes in order to allow for more absences related to mental health days. Many courses designate a certain number of allowable absences during the semester and state that more absences will negatively affect a student's course grade. We suggest that the Wellness Center educate faculty members

on the importance of affirming student use of mental health days, as our research shows that academics play a large role in college students' stress levels.

## References

- American College Health Association. 2009. "American College Health Association-National College Health Assessment Spring 2008 Reference Group Data Report (Abridged)." *Journal of American College Health* 57(5):477-88.
- Beauchemin, James. 2014. "College Student-Athlete Wellness: An Integrative Outreach Model." *College Student Journal* 48(2):268-280.
- Boyd, Jennifer E., Emerald P. Adler, Poorni G. Otilingam, and Townley Peters. 2014. "Internalized Stigma of Mental Illness (ISMI) Scale: A multinational review." *Comprehensive Psychiatry* 55(1):221-31.
- Hill-Mey, Patricia E., Ray M. Merrill, Karol L. Kumpfer, Justine Reel, and Beverly Hyatt-Neville. 2013. "A Focus Group Assessment to Determine Motivations, Barriers and Effectiveness of a University-Based Worksite Wellness Program." *Health Promotion Perspectives* 3(2):154-164.
- Holland, Donna, and Heidi Wheeler. 2016. "College Student Stress and Mental Health: Examination of Stigmatic Views on Mental Health Counseling." *Michigan Sociological Review* 30:16-43.
- Kilgo, Cindy A., Amanda L. Mollet, and Ernest T. Pascarella. 2016. "The Estimated Effects of College Student Involvement on Psychological Well-Being." *Journal of College Student Development* 57(8):1043-1049.
- Miranda, Regina, Ariella Soffer, Lillian Polanco-Roman, Alyssa Wheeler, and Alyssa Moore. 2015. "Mental Health Treatment Barriers Among Racial/Ethnic Minority Versus White Young Adults 6 Months After Intake at a College Counseling Center." *Journal of American College Health* 63(5):291-298.
- Yorgason, Jeremy B., Deanna Linville, and Bryan Zitzman. 2008. "Mental Health Among College Students: Do Those Who Need Services Know About and Use Them?" *Journal of American College Health* 57(2):173-81.



## Appendix

**Table 1. Areas of Stress Experienced This Semester**

Area of Stress	Frequency	Percentage
Academics	273	96.5%
Friendships and Relationships	178	62.9%
Extracurriculars	138	48.8%
Paid Work	108	38.2%
Family	102	36.0%
Other	65	23.0%

**Table 2. Measures included in the Index of Stigma**

Areas of Stigma	Strongly Agree	Somewhat Agree	No Opinion	Somewhat Disagree	Strongly Disagree
Seeking mental health counseling is a sign of weakness	0.7% (2)	3.2% (9)	3.2% (9)	11.0% (31)	82.0% (232)
Even stable people need help with health (physical, mental, or sexual health)	66.7% (188)	22.7% (64)	4.6% (13)	4.6% (13)	1.4% (4)
Seeking information or help regarding alcohol or drug use is a sign of weakness	0.7% (2)	1.4% (4)	3.2% (9)	7.4% (21)	87.2% (246)

**Table 3. Index of Maladaptive Coping Methods**

Maladaptive Coping Methods	A lot	A moderate amount	Somewhat	A little bit	Not at all
Blame myself for things that go wrong	23.3% (66)	35.3% (100)	23.7% (67)	15.5% (44)	2.1% (6)
Do things to distract myself from situation	24.4% (69)	33.2% (94)	23.7% (67)	12.7% (36)	6.0% (17)
Give up or walk away from the situation	2.1% (6)	7.1% (20)	25.4% (72)	34.6% (98)	30.7% (87)
Use drugs or other alcohol to get through	2.5% (7)	4.3% (12)	12.1% (34)	16.0% (45)	65.2% (184)

**Table 4. Index of Adaptive Coping Methods**

Adaptive Coping Methods	A lot	A moderate	Somewhat	A little	Not at
-------------------------	-------	------------	----------	----------	--------

		<b>amount</b>		<b>bit</b>	<b>all</b>
Take action to improve situation	27.3% (77)	44.3% (125)	24.1% (68)	3.9% (11)	0.4% (1)
Seek advice from other people	15.2% (43)	34.6% (98)	28.6% (81)	16.3% (46)	5.3% (15)

**Table 5. Internal Barriers to Going to WC and Using WC resources**

<b>Internal Barriers</b>	<b>Strongly disagree</b>	<b>Somewhat disagree</b>	<b>No opinion</b>	<b>Somewhat agree</b>	<b>Strongly agree</b>
Hard to make time to go to Wellness Center/Events	2.2% (6)	10.8% (30)	12.9% (36)	43.7% (122)	30.5% (85)
Embarrassed to seek peer support at WC	18.3% (51)	20.8% (80)	13.3% (37)	33.1% (92)	6.5% (18)
Tend to seek help from WC when experiencing high stress (reverse-worded item)	16.5% (46)	22.6% (63)	21.1% (59)	30.8% (86)	9.0% (25)
Unlikely to seek help from WC due to the stress being my own fault	16.5% (46)	22.6% (63)	21.1% (59)	30.8% (86)	9.0% (25)
Embarrassed to seek info about wellness at the WC	25.2% (70)	37.8% (105)	15.8% (44)	19.1% (53)	2.2% (6)