Mental Health Services at the UT Health Science Center at San Antonio: A Report on Student Needs and Recommendations

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Abstract

The stigma surrounding mental health has often resulted in its place at the sidelines. And at an institution that trains students for professions of high stress and emotional strain, the result is increased rates of mental health concerns, including burnout and depression. These data underscore the importance of intentional mental health wellness at institutions of higher education like the University of Texas Health Science Center at San Antonio (UTHSCSA). Thus, when reports of dissatisfaction surrounding the Student Counseling Center (SCC) at UTHSCSA surfaced, students formed a Mental Health Committee (MHC) to investigate concerns. In collaboration with the Student Health Advisory Committee (SHAC), the MHC designed a survey to assess issues regarding both the SCC and the Student Health Clinic (SHC). This report focuses on the SCC and issues regarding mental health of the entire student body at UTHSCSA. The results of the survey showed significant dissatisfaction with access to care (i.e. appointment wait time, ease of scheduling) from students who currently utilize the SCC. It also revealed surprisingly limited awareness of SCC services among a large majority of the student body. These results indicate a need for reform of the services at the SCC, and also suggest that broader-scale interventions to improve mental health should be considered. Below is a summary of MHC recommendations based on extensive literature research, survey analysis, and faculty input.

Summary of Recommendations

Informational Recommendations

#1 Create a printed "Student Wellness Handbook" that describes how to use services available to students at UTHSCSA.

#2 During student orientation, a one-hour session that actively engages students on available services at the school should be required.

#3 Improve the utility of the Student Counseling Center's website.

#4 Define the differences and unique benefits of each campus provider (i.e., SHC and SCC) of mental health services; these differences should be made available to students.

Service Recommendations

#5 Increase appointment availability and financial support of the Student Counseling Center.

#6 Grant students the power to propose and approve changes in funding for the Student Health Center and Student Counseling Center through the Student Government Association.

Process Recommendations

#7 Continue student involvement with a sustainable model that improves communication and collaboration between student leaders and faculty to address issues specific to student mental health.

#8 Notify students that they may be paired with a counseling intern prior to scheduling an appointment; when informing the student, focus on the student's need for continuity-of-care (rather than the provider's level-of-training) and ensure them that they may opt out at any time.

#9 Create a post-appointment feedback form given to students who used the Student Counseling Center as part of a continuous monitoring and improvement initiative.

#10 Create protocols on handling special situations that affect access to care that are given to all current and future new patients.

Environmental Recommendations

#11 The Student Counseling Center and Student Health Center should remain as separate, independent entities.

#12 Consider rearranging the waiting room, if possible, in the Student Counseling Center to improve the feeling of privacy.

#13 Consider creating discreet parking spots (similar to those in front of the Student Health Center) that students can use for appointments at the Student Counseling Center.

Institutional Recommendations

#14 Programs that extend beyond access to mental health services, (e.g., those impacting culture and curricula) should be considered to improve student wellness and to decrease need for mental health services.

#15 Required mindfulness practice and lectures should be considered in curricula.

Background

Introduction

In a collaborative effort to improve health services at a multidisciplinary institution, the Mental Health Committee (MHC) and the Student Health Advisory Committee (SHAC) of University of Texas Health Science Center at San Antonio (UTHSCSA) partnered to survey their colleagues on issues regarding both the Student Counseling Center (SCC) and the Student Health Clinic (SHC). This report will focus on mental health services in the context of students enrolled at UTHSCSA.

The MHC established goals and anticipated outcomes in the first committee meeting: to investigate the student advocates' growing call for reform by collecting baseline data on students' mental health needs, experiences at the SCC, and perceptions of the SCC; to educate students, faculty, and other invested parties, with relevant and unbiased information; and to support the SCC in sustainable reform by providing data-driven recommendations, giving feedback in the hiring process of a new director of the student counseling center, and developing a process improvement model that allows continuous feedback issues on issues relevant to students.

Student Need for Mental Health Services

Advocacy for reform began with UTHSCSA medical students due to anecdotal reports of unreasonably long wait times and lack of access to counseling services. These reports have gained visibility in recent years. To investigate, two first-year medical students who serve as representatives for the 32-person Student Government Association (SGA), Austin Sweat, BS and Henderson Jones, BA, JD, introduced a resolution to establish a Mental Health Committee. This was a critical step because of the stigma associated with mental health services. Even though inadequate access to counseling services appeared to be the popular consensus among students, none came forward to advocate in a public forum until Austin and Henderson's resolution. Initially, the resolution failed to pass, likely due to the lack of data and understanding of mental health needs. Three second-year medical students, Christopher Lam, BSME, Sara Noble, BBA, MA, and Christine Binkley, BS rallied to support the resolution. Taking into consideration the stigma of mental health services and the need to establish a clear need for investigation, Christopher sent out an informal survey to his colleagues of approximately 200 second-year medical students requesting feedback on experiences at the SCC. Responses included powerful stories of suicidal ideation, delayed access to care, medication withdrawals with limited availability and stigma to blame. The students recited the anonymous feedback to the governing body of SGA at the following meeting; Austin and Henderson's resolution passed with two abstentions and the remainder all voting "yes." The Mental Health Committee was subsequently formed with Christopher, Brian Vasquez, and Alaine Walsh, BSCE.

School of Nursing

There has been increasing concern regarding stress and anxiety levels among university students. Emotional stability is crucial in successfully completing an undergraduate or graduate degree. A review on depression and other mental health issues among nursing students resulted in only international studies. These studies were excluded due to differences in culture and curricula. The absence of substantial literature on nursing students' mental health is troubling and may indicate a culture where mental health stigma is reality.

However, at two Midwestern universities compared "accelerated" and "generic" baccalaureate nursing students source of stressors, in which they identified three categories: fears of failures (e.g., graduation, coursework, clinicals, NCLEX), problematic relationships (e.g., faculty, clinical instructors), and time management issues [1]. The "accelerated" students had much higher citations of fears of failure than "generic" students [1].

Of concern are the downward trending NCLEX-RN pass rates, from 89.0% in 2011 to 78.5% in 2014. This could cause increased stress and anxiety among nursing students, and in turn, increasing levels of stress and anxiety that may be affecting pass rates.

If the signs of negative emotions were addressed early on in a nursing student's education, academic performance could improve. A study was performed in 2010 that researched undergraduate nursing students at different levels and the amounts of stress and anxiety expressed. The survey used a Depression Anxiety Stress Scale and a Kruskal-Wallis test to determine the prevalence of emotions from nursing students in different semesters. Results showed a significant result indicating that stress and anxiety are high, especially in first semester nursing students [2]. A lower GPA was also identified with nursing students in their first year of school. This finding could potentially have an etiology rooted in stress and anxiety. By learning coping and study skills along with accessing resources like the SCC, nursing students could benefit from improved academic outcomes and a better quality of life.

School of Medicine

Approximately half of medical students experience burnout, which is characterized by chronic exhaustion, depersonalization, and low sense of accomplishment [3]. These students will graduate into a profession where women and men are 250 to 400 percent and 70 percent, respectively, more likely to complete suicide [4]; in 2011, the National Institute for Occupational Safety and Health of the Centers for Disease Control and Prevention found that physicians were the ranked the second highest occupation of death by suicide [5].

There is little education on suicide prevention for medical students, and when the chief medical officer of the American Foundation for Suicide Prevention and a psychiatry resident both independently reached out to medical schools to

search for suicide statistics of medical students, schools refused to provide information [6].

One may wonder if students who enter the medical field are predisposed to mental health issues such as burnout and depression, but a study suggests the opposite. Students who entered medical school had lower rates of burnout, depression, and had a higher quality of life than other college graduates of the same age before starting medical school, even when adjusting for age, sex, relationship status, and race/ethnicity [7].This underscores the importance of considering the effect of learning environments on mental health and ensuring the accessibility of mental health services for students in need.

School of Dentistry

Dentists rank as the third highest occupation of death by suicide, right below physicians [5]. High levels of perceived stress have been noted in healthcare students. The demands of course work, adapting to a new environment, along with having to balance emotional, financial, and educational stressors is not unique to healthcare students. However, students pursuing a Doctor of Dental Science degree have added stress relating to increased coursework, increased financial demand, and with most students having to provide for their families. A study was conducted with four different groups of healthcare students (Nursing, Medical, Dental, and graduate mental health students) by sending out multiple surveys at different intervals of their first year of school. The study focused on the relationship between emotional intelligence and perceived levels of stress. Emotional intelligence is determined by an individual's ability to adequately identify their emotions and to employ coping mechanisms to reduce levels of stress. Although the initial survey results showed no significant difference of stress levels between the different student groups and a similar level of Emotional Intelligence, a follow-up data collection showed a significant increase in the levels of stress in the dental school group later in the year [8].

School of Health Professions

The School of Health Professions may be the most complex of school. There are six educational programs: Physician Assistant Studies, Physical Therapy, Respiratory Care, Clinical Laboratory Sciences, Emergency Health Sciences, and Occupational Therapy. Each program varies greatly from one another in their admission requirements – some require a high school diploma while others require a bachelor's degree. Few studies on mental health issues could be found for these individual smaller programs.

Due to the heterogeneous student body of the SHP and the lack of literature on mental health, the MHC can only agree that the literature for other schools may be applicable to some programs due to similar curricula and working environments (e.g., Physician Assistant Studies and School of Medicine), and less applicable to others.

Graduate School of Biomedical Sciences

A study conducted at a large southwestern university surveyed a total of 301 graduate students, screening for perceived levels of stress and any signs of suicidal ideation. Among the sample group, 7.3% reported thoughts of suicide, 2.3% reported having a plan to commit suicide, 1.7% had hurt themselves in the last two weeks, and 9.9% reported at least one attempt at suicide in their lifetime [9]. Graduate students tend to experience high amounts of stress, anxiety, feelings of hopelessness, depression, desperation and lack of control; all of which are major contributors to the increased levels of suicidal ideation. This population should be introduced to better-developed mental health services, along with techniques to promote wellness and help-seeking behaviors.

Student Health Center

In order to obtain baseline data on student needs, the MHC aimed to create a school-wide survey. Prior to survey development, the committee set up interviews with several faculty members. The first meeting was with the Director of the Student Health Center, Julie Novak, DNSc, RN, CPNP, FAANP. Since the SHC also provides mental health services, the primary goal of this meeting was to review the differences between the two services, including the roles of the Psychiatric Mental Health Nurse Practitioners (PMHNPs), and to determine any existing or previous relationships between the SHC and SCC. Regarding the PMHNPs, there are currently two practicing PMHNPs who are faculty at the school of nursing, and each has undergone extensive training and is doctorally prepared [10]. They work with a collaborating physician who supervises and authorizes their actions; however, there currently is no collaborating psychiatric physician. The collaborating physician for the SHC is Mark Nadeau, MD, MBA in the Department of Family & Community Medicine. Because of the setup, PMHNPs do not have prescriptive authority for certain restricted medications (e.g., Schedule II prescriptions) [10]. Also, there is currently no need to increase hours from its current two days per week with on-call availability because there is no unmet demand and no significant wait time [10].

A major structural difference between the SHC and SCC is in its financial support. Of the Student Services Fees that are designated for health services, one-third is allocated to the SCC, and two-thirds is allocated to the SHC. The SCC predominantly depends on the Student Services Fees, which is designed to remove student barriers to access, as a representative of the SCC explained. Having a service that does not bill insurance allows students to feel safe when seeking help in times of crisis. For example, a student who is a dependent on another's insurance policy may not feel able to see a mental health care provider if they are uncertain whether or not services may be accessible to their parent or spouse. The SHC, on the other hand, predominantly depends on billing insurance [10]. While the co-pay is covered for students with the Student Health Insurance

plan, students with accepted private insurance plans provide the co-pay. Students who do not have accepted insurance plans can choose to pay out-of-pocket for care, but this can range from $139-200 for a new client [10].

The SCC and SHC are operated as two discrete entities; however, Dr. Novak shared her long-term vision of co-locating the SHC and SCC in order to facilitate communication between healthcare providers in the SHC and the SCC. She pointed to reducing the stigma surrounding mental health care and increasing access to care, benefiting students, the SHC, and the SCC. Yet, the literature actually presents a more conflicted view.

Approximately 24.5% of campus counseling centers are administratively integrated with health centers, and 33.2% located within the same building as student health service [11]. Integration of health and counseling services presents different challenges and consequences for every campus, and data of integration outcomes are mixed [12]. Meta-analyses of integrated centers have shown that clinically outcomes were no better than non-integrated models, resulting in conflicting recommendations. Some recommend integration of services and others recommending against integration of services, with subsequent devaluation of mental health services as a concern [12]. Due to the lack of consensus on the issue of co-location and integration of services, any plan to integrate services should be carefully evaluated to fit the unique nature of UTHSCSA – an institution with students of tremendous diversity in age, curricula, and culture.

Student Counseling Center

The absence of a Director of the SCC since the summer of 2014 further complicated investigation efforts. A director not only manages the SCC but also serves as a clinician, and because of this, the MHC felt it could not accurately assess the alleged issues surrounding the center for two main reasons. First, there was no central figure that could serve as a source of information. Secondly, we wondered how having no director affected the state of the SCC -- in other words, is the vacancy the primary cause of student grievances?

Since the health science center is already recruiting for a new Director of the Student Counseling Center, with both the MHC and SHAC assisting with the interview process, the MHC felt it necessary to answer this question. Thus, the MHC reached out to a representative of the SCC, who explained that they began declining in their ability to meet student needs “a few years ago.” With this information, the MHC felt it could justify continuing its efforts, and that even with a new director, negative student accounts of the SCC could persist.

Objectives

The purpose of this study is to identify and quantify, wherever possible, the mental health needs of students and the barriers to meeting these needs. From these objectives, the MHC will be able to provide data-driven recommendations for meeting student mental health needs and to identify areas of further study.

Methods

Development of Survey

From the foundation provided by faculty and student advocates, the MHC partnered with the SHAC to create a single survey that addressed concerns of both the Student Health Center and the Student Counseling Center. The two committees worked closely with Deborah Chang, BA, MEd, PhD, the Program Coordinator for Office of Student Life, and Le’Keisha Johnson, BBA, MBA, is the Director of the Office of Student Life, and Ben Rivers, BS, MS the Assistant Director for Wellness and Recreational Sports, and Jacqueline Mok, PhD, the Vice President for Academic, Faculty and Student Affairs. After discussion and rigorous vetting of questions, survey questions (Appendix I) asked students about their awareness of SCC services, utilization of mental health services, experiences at the SCC (if they visited the SCC in the past 12 months), perceptions of the SCC (if they did not visit the SCC in the past 12 months), student priorities when evaluating their health services, and demographics.

Implementation of Survey

Voluntary student surveys tend to garner low response rates at UTHSCSA. Because students are frequently required to complete surveys, survey fatigue is the likely culprit. Prior to distribution to all eligible respondents, defined as any student enrolled at UTHSCSA, a response rate of 10% or less was expected. The response rate of just over 20% of this survey was surprisingly high. The higher-than-expected response rate could be due to a combination of high student interest and the strategies employed from literature to improve the response rate and completion rate of the SHC and SCC survey. The methods to improve participation are shown in Table 1.

Statistical Analysis

Data were analyzed using SPSS statistical software. To determine awareness levels of the mental health services between various demographic groups (campus location, gender, school affiliation), χ^2 analyses were conducted ($p < 0.05$). On measures of experience of, perceptions of, and utilization of the student counseling center, we conducted independent t-tests and one-way analysis of variance tests to determine whether differences were found by various factors (campus location, gender, school affiliation). When appropriate, post hoc tests ($p < 0.05$) were computed to determine where the significance among the groups existed.

Table 1. Methods used to improve response and completion rates of the survey.

Factors that improve response rates	Method addressing factor
▪ A survey length of less than 13 minutes. [13] ▪ Provide a realistic time estimate. An underestimate would result in incomplete surveys; an overestimate would result in people not even starting the survey. [13]	▪ The survey was piloted by the Student Government Association, which showed the average time taken to be just over nine minutes. Only 2 of the 28 responses took more than 13 minutes. ▪ A progress bar was included in the survey so that respondents could track their progress.
▪ Clear, simple language. [13] ▪ Identify the task clearly. [13]	▪ More than 10 drafts of the survey were made in an effort to ensure precision and clarity of language.
▪ Contact potential respondents multiple times, which is one of the most important factors in improving response rates. [13]	▪ Each student should have received three e-mails total: a pre-notification e-mail, the distribution e-mail, and a "last day" reminder e-mail in a short time span (January 16th to January 28th). ▪ Student government association representatives from each school were asked to encourage classmates to complete the survey. The survey was also posted onto social media sites, such as Facebook.
▪ Send a pre-notification, with one study showing it to double the response rate. [14] ▪ Sponsorship of survey by respected leaders. [13]	▪ A pre-notification e-mail was sent prior to distribution of the survey. ▪ The three e-mails were sent by the president of the Student Government Association, Director of the Office of Student Life, and Student Affairs Deans of each school.
▪ Convey high salience of survey to potential respondents. [15]	▪ Salience was conveyed by emphasizing the survey's focus on student services, and even more, the "last day" reminder e-mail was sent out by each school's student affairs deans to emphasize the importance of student's participation in the survey so that their school can be well-represented.
▪ Ensure there is a perception of anonymity, especially for sensitive surveys. [16] ▪ Avoid attachments in e-mails. [13] ▪ Provide contact information. [13]	▪ We ensured no attachments were in the e-mails, bolded the word "anonymous" in all e-mails, and provided contact information of the MHC and SHAC.

Results & Discussion

In order to meet the objectives of identifying student needs and barriers to care, we asked questions related to demographics, awareness, utilization, experiences, perceptions, and priorities. Out of 3147 eligible student participants, 679 students responded to the survey for an overall response rate of 21.6%.

Demographics

The gender distribution of the respondents (Figure 1) is similar to the actual enrollment of 1961 (62.3%) females and 1186 (37.3%) males. The school distribution of respondents is shown in Figure 2 and can be compared to the actual distribution of enrollment: 29% in the School of Nursing (SON), 28% in the School of Medicine (SOM), 20% in the School of Dentistry (SOD), 15% in the School of Health Professions (SHP), and 8% in the Graduate School of Biomedical Sciences (GSBS). Figure 3 more clearly illustrates the over- and under-representation of each school by response rates, which varied widely from 40% (GSBS) to 9% (SOD). In addition, the large majority of students that answered the survey, 72%, study on the Long Campus which is where the Student Counseling Center is located, and the Greehey Campus represented 10% of respondents.

Overall, 49% of respondents have UTHSCSA's Student Health Insurance, 32% of respondents use their parent's health insurance, and 8% use their spouse's health insurance (Figure 5). More interestingly, the insurance coverage varies by school: the GSBS stands out for having the highest rate of UTHSCSA Student Health Insurance coverage at 77%. The students that use their parent's insurance at the highest rate are those in the SOM at 49%, the SHP and SON are set apart by having the highest number of respondents who use their spouse's insurance at 17% and 18%, respectively, and the SON and SOD answered "Other" at 22% and 23%, respectively (Figure 6). The most commonly specified type of insurance when selecting "Other" was "TriCare" (for active military duty) and "VA" (for retired military).

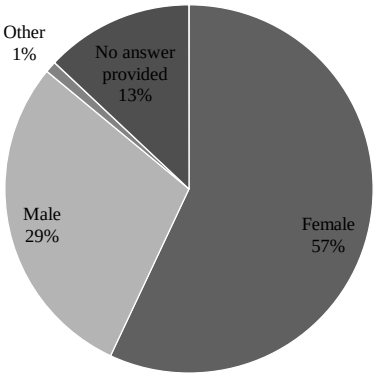


Figure 1. Respondents' gender distribution (N=679).

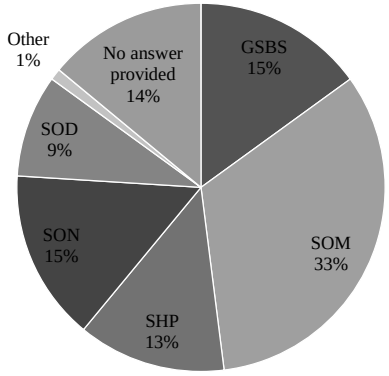


Figure 2. Respondents' enrollment by school (N=679).

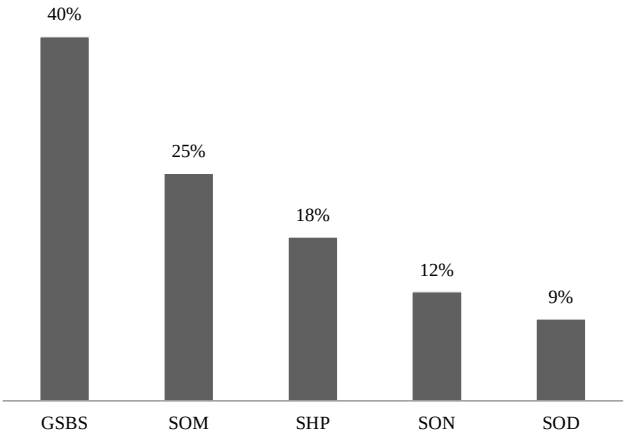


Figure 3. Response rates of each school (n=580).

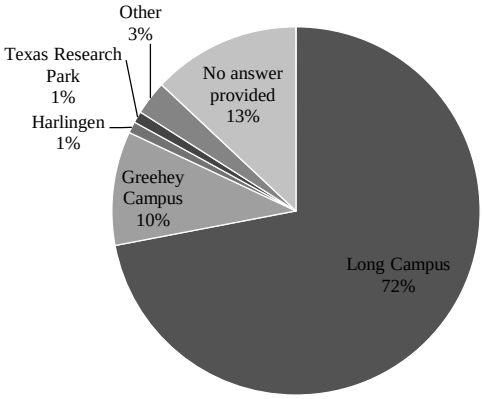


Figure 4. Respondents' primary location of study (N=679).

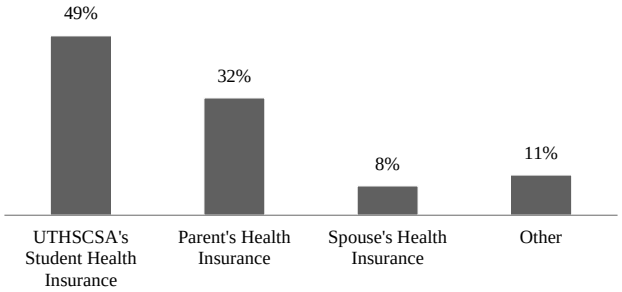
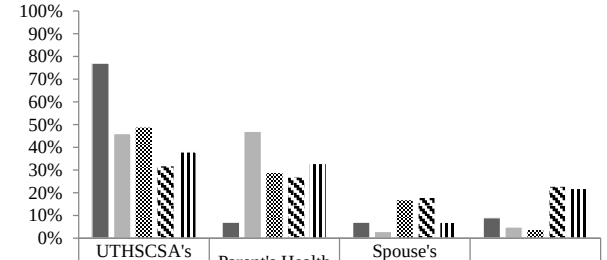


Figure 5. Respondents' insurance coverage type (n=580).



	UTHSCSA's Student Health Insurance	Parent's Health Insurance	Spouse's Health Insurance	Other
GSBS	77%	7%	7%	9%
SOM	46%	47%	3%	5%
SHP	49%	29%	17%	4%
SON	32%	27%	18%	23%
SOD	38%	33%	7%	22%

Figure 6. Respondents' insurance coverage type by school (n=580).

Awareness of SCC Services

The awareness of basic information about the SCC is low, with only 36% of respondents stating that they knew of its location (Figure 7), although about 70% of students knew that personal counseling was available even if they did not know where it was located (Figure 8). Awareness of SCC characteristics and services offered vary by school (Figure 9 and Figure 10), which may indicate differences in the way each school educates their students on these services.

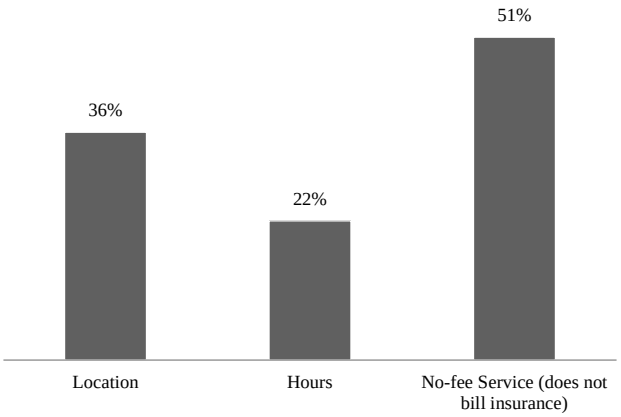


Figure 7. Respondents' awareness of the SCC's location, hours, and no-fee service (n=580).

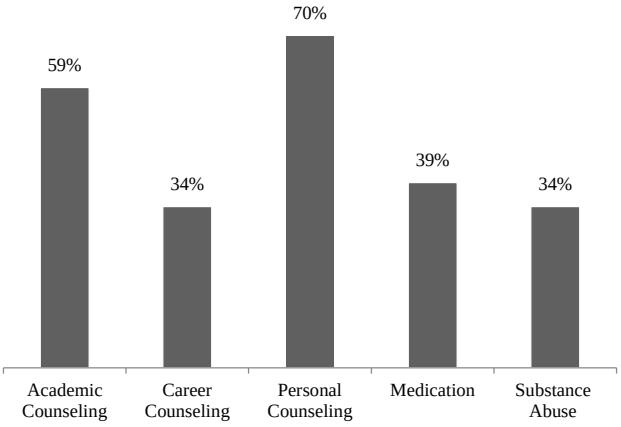
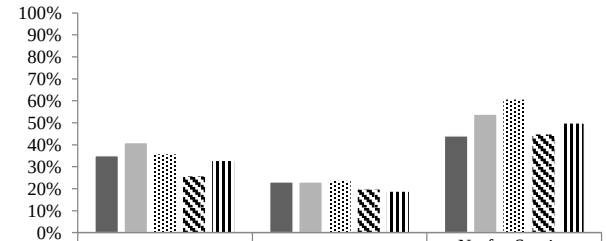
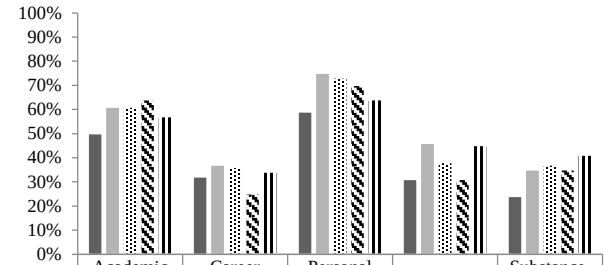


Figure 8. Respondent's awareness of services offered by the SCC (n=580).



	Location	Hours	No-fee Service (does not bill insurance)
GSBS	35%	23%	44%
SOM	41%	23%	54%
SHP	36%	24%	61%
SON	26%	20%	45%
SOD	33%	19%	50%

Figure 9. Respondents' awareness of the SCC's location, hours, and no-fee service by school (n=580).



	Academic Counseling	Career Counseling	Personal Counseling	Medication	Substance Abuse
GSBS	50%	32%	59%	31%	24%
SOM	61%	37%	75%	46%	35%
SHP	61%	36%	73%	38%	37%
SON	64%	25%	70%	31%	35%
SOD	57%	34%	64%	45%	41%

Figure 10. Respondents' awareness of services offered by the SCC by school (n=580).

Utilization of Mental Health Services

Usage of Mental Health Services in the Past 12 Months

Students who responded to the SCC section of the survey visited a mental health care provider at a rate of 29% in the past 12 months. Of those who visited a mental healthcare provider, 34% received counseling services only and 6% received psychiatric services only, while 32% used both psychiatry and counseling (Figure 11). Although we did not directly ask whether or not respondents used psychiatric services, "Medication Consultation/Management" was used as a proxy for psychiatry. The 24% of students who did not use the SCC as their provider for their mental health needs may be partly due to low rates of awareness (Figure 7, Figure 8), and free response comments support this, for example:

> *"I didn't know this was an option! Could have saved a lot of money."*

Additionally, only 33% of those who used another provider have UTHSCSA Student Health Insurance, while 53% of those who used the SCC have UTHSCSA Student Health Insurance (Figure 12) This could suggest that those who are not aware of the no-fee, no-insurance policy of the SCC could assume that the SCC is not even an option available to them.

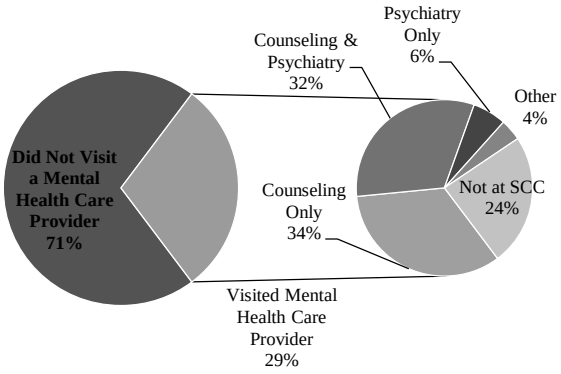


Figure 11. Respondents' usage of mental health services (n=604).

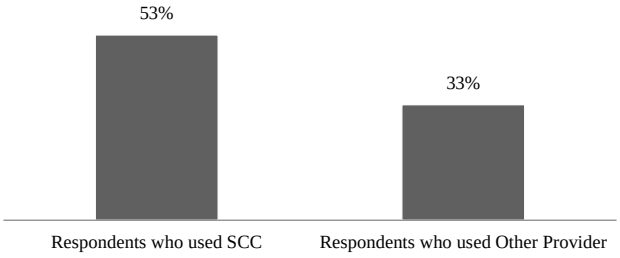


Figure 12. Respondents' rate of UTHSCSA Student Health Insurance coverage by those who use mental health services at the SCC (n=135) and those who use mental health services at another provider (n=43).

Co-location of SCC and SHC

A specific question included in the survey asked, "Would you be more or less likely to utilize counseling or psychiatric services currently offered by the Student Counseling Center if they were located in the same building as the Student Health Center?"

Asking for student feedback on co-location of the SCC and the SHC may appear out of place, but student concerns have been raised because of privacy issues, a recurring theme associated with mental health services.

> *"Wasn't sure I wanted to be connected to the school."*

When asked, student leaders and faculty offered different perspectives on this issue. Some purport that co-locating the SCC and SHC in order to offer integrated health services improve student access. Others claim that co-locating the SCC and SHC will reduce access and usage due to fear of being seen by others when going to the SCC as the current location is in a "discreet" area with low traffic.

> *"I don't want to be seen as a 'mental health' or 'psychiatric' patient in front of other people who are not there for the same reason. I would rather not feel judged by colleagues who may not understand the need for such services."*

At first glance, Figure 15 appears to show that co-location of the SCC and SHC would increase student access to mental health services. However, teasing apart the data shows that 58% of those who selected "Less likely" compared to 18% of those who selected "More likely" have used mental health services in the past 12 months. Greater consideration may need to be given to students who need mental health services. Further supporting these findings is statistical analysis (Appendix II), illustrated in Figure 13, showing that students who have not visited the SCC are significantly ($p<0.001$) more likely to seek counseling services at a co-located SCC and SHC with a moderate effect size ($\eta^2 = 0.08$).

Another contributor to the imbalance may be the preference of students in the School of Nursing (Appendix II), who are more significantly ($p<0.001$) more likely to visit the SCC if it were co-located with the SHC than students in other schools (Figure 14) with a moderate effect size ($\eta^2 = 0.08$).

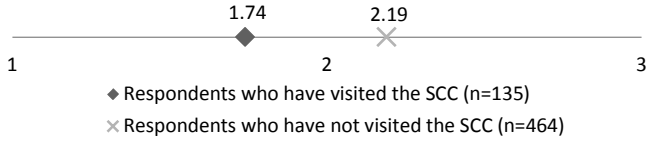


Figure 13. Differences between respondents who have visited the SCC and respondents who have not visited the SCC in likelihood of visiting the SCC if it were co-located with the SHC. (Coding: 1 = "Less likely," 2 = "Equally likely," 3 = "More likely")

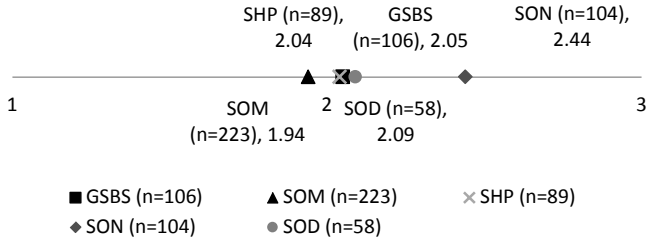


Figure 14. Differences between respondents from different schools on the likelihood of visiting the SCC if it were co-located with the SHC. (Coding: 1 = "Less likely," 2 = "Equally likely," 3 = "More likely")

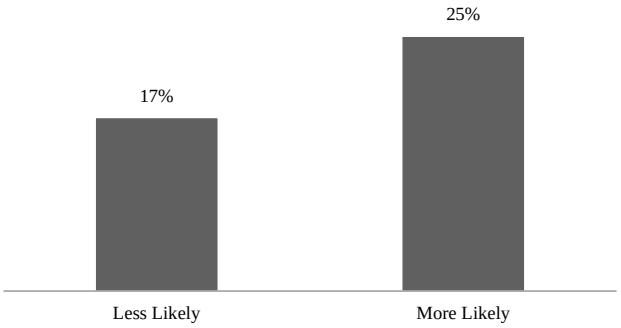


Figure 15. Respondents who are "Less likely" or "More likely" to visit the SCC if it were co-located with the SCC (n=600). (Note: that the remaining responses responded “Equally likely”)

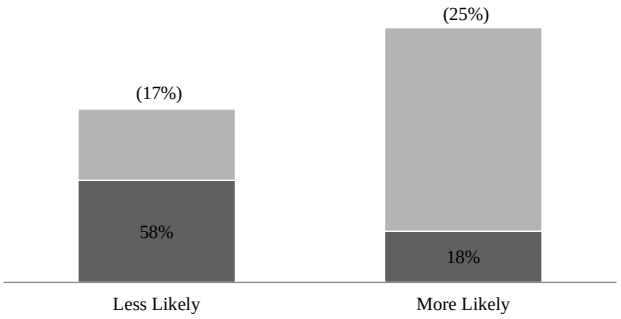


Figure 16. Proportion of respondents who answered "Less likely" (n=101) and proportion of respondents who answered "More likely" (n=151) that have used mental health services in the past 12 months.

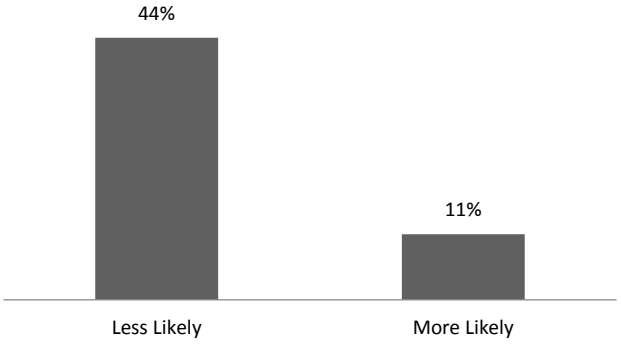


Figure 17. Proportion of respondents who answered "Less likely" (n=101) and proportion of respondents who answered "More likely" (n=151) that provided a free response answer.

Of the 190 free responses received regarding the SCC, 89 addressed the issue of co-location. Thematic analysis of free responses provides another layer of evidence suggesting decreased access to mental health services if co-location of the SCC and SHC occurred. Figure 17 suggests that those who responded “Less likely” are more passionate, as 44% of those who responded “Less likely” provided a free response and only 11% of those who responded “More likely” provided a free response.

Responses among those who were less likely to seek services at a co-located SCC and SHC centered around stigma, privacy, and confidentiality, whereas free response analysis among those who were more likely to seek services at a co-located SCC and SHC largely gave reasons about it simply being closer (which cannot be true for all students) or said that at least knowing where the services are located because they know the location of the SHC (which could be more effectively resolved by educating students).

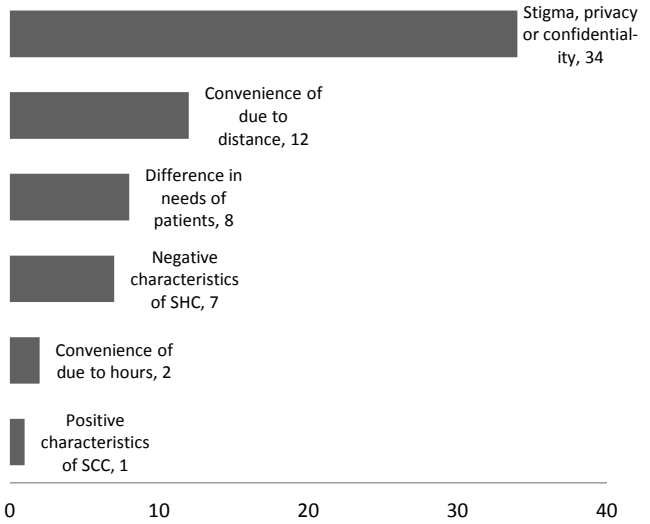


Figure 18. Themes among explanations for why respondents selected that they would be "Less likely" to seek services if the SCC were located in the same building as the SHC.

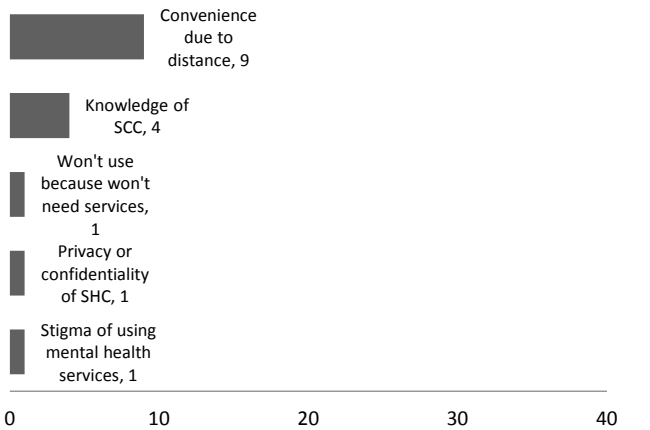


Figure 19. Themes among explanations for why respondents selected that they would be "More likely" to seek services if the SCC were located in the same building as the SHC.

Experiences at the SCC

The survey asked about the same 11 domains for both the SHC and SCC in their surveys to allow comparison between the two services. Furthermore, if a student noted that they did not visit the SCC in the past 12 months, they were directed to questions that asked for their *perception* of services offered rather than their *experience* of services. The feedback on perceptions and experiences at the SCC may misrepresent certain services due to the range of provider types (e.g., psychiatrists, resident psychiatrists, PhD-educated counselors, master's degree-educated counselors, and counseling interns); however, important differences were still delineated.

Figure 20 shows the proportion of students who answered "unacceptable" or "below expectations for each domain. "Convenience of office hours," "Ease of scheduling appointments," and "Appointment wait times" stand out as the top three issues with >15% of respondents responding negatively. "Establishing an on-going care relationship" is also reflected in the free response answers, particularly with the counseling interns, as they only stay for six-month internships. Additionally, analysis (Appendix II) showed that students who visited the SCC for counseling services only evaluated the SCC significantly (p=0.03) more poorly on "Level of training of provider" than students who visited both psychiatry and counseling with a moderate effect size (η^2 = 0.06).

Psychiatry services for medical students centers around issues of access, rather than the quality of care itself. This may be due to the requirement that psychiatry services for all schools are provided by resident psychiatrists except for medical students since residents have the potential to be involved in medical student evaluations. Thus, a part-time physician that is not on faculty at UTHSCSA provides services to medical students on Tuesdays and Thursdays for four hours on each day. Statistical analysis (Appendix II) supports this, as respondents in the SOM rated "Appointment wait times," "Ease of scheduling appointments," and "Convenience of office hours" as significantly worse (p= 0.02, p=0.001, and p=0.008, respectively) with effect sizes of moderate to large (η^2 = 0.09), large (η^2 = 0.14), and large (η^2 = 0.11), respectively. In addition, students who only visited the SCC for psychiatry were significantly (p=0.05) more likely to rate "Ease of scheduling appointments" poorly with a moderate effect size (η^2 = 0.06).

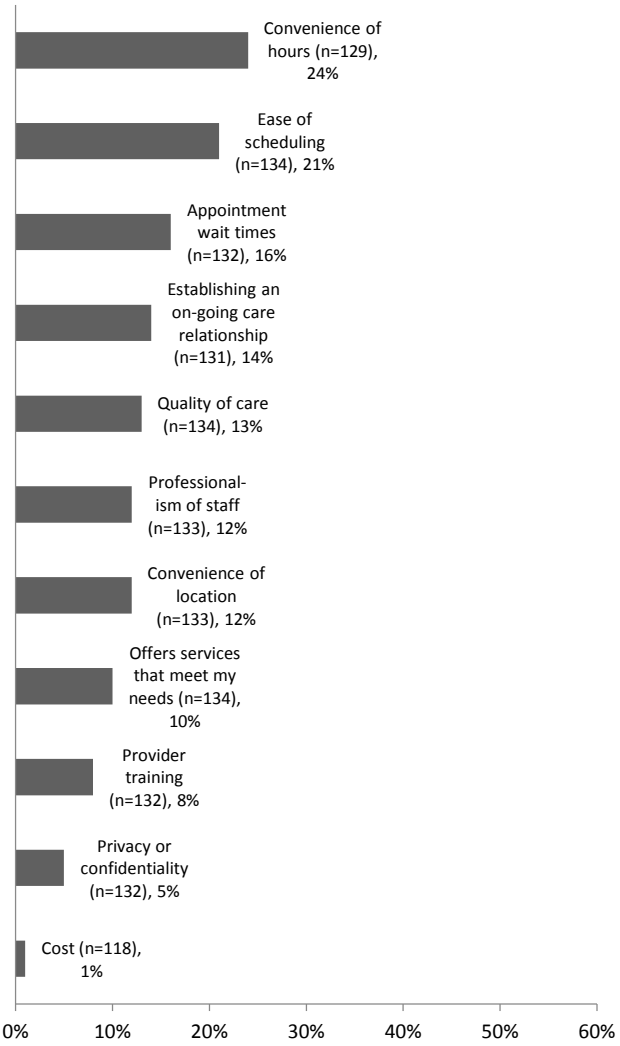


Figure 20. The proportion of respondents who answered "unacceptable" or "below expectations" on the 11 domains regarding their experience of the SCC. (Note: only students who have used the SCC in the past 12 months were included in this figure.)

Perceptions of the SCC

The perceptions of students who have not used the SCC in the past 12 months in the 11 domains are shown in Figure 21 and Figure 22. The difference between the two figures is that Figure 21 shows the perceptions of those who have visited an outside (i.e., not at SCC) mental health provider in the past 12 months; Figure 22, on the other hand, shows the perceptions of those who have not visited any mental health provider in the past 12 months. Those in Figure 21 appear to have the most negative opinions of the SCC. Again, the top four domains with negative evaluations are consistently "Appointment wait times," "Ease of scheduling appointments," "Convenience of office hours," and "Establishing an on-going care relationship with a provider."

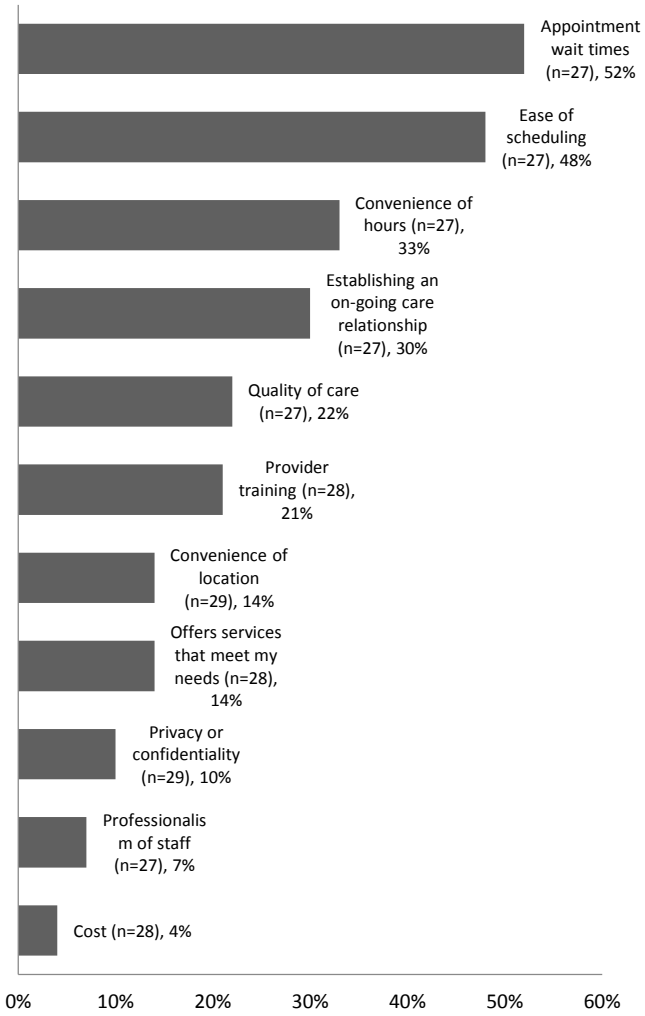


Figure 21. The proportion of respondents who answered "unacceptable" or "below expectations" on the 11 domains regarding their perception of the SCC. (Note: only respondents who have not used the SCC but have used mental health services elsewhere, in the past 12 months were included in this figure)

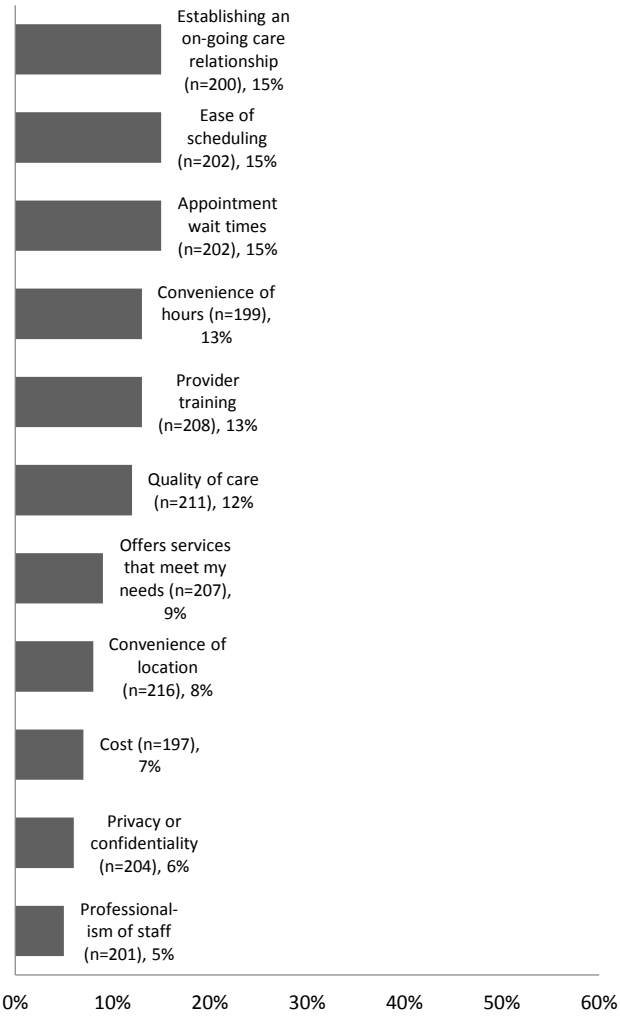


Figure 22. The proportion of respondents who answered "unacceptable" or "below expectations" on the 11 domains regarding their perception of the SCC. (Note: only respondents who have not used the SCC nor any mental health services in the past 12 months were included in this figure.)

Free Response Themes

Of the 190 free responses written for the SCC, and 101 were about experiences and perceptions. The themes were split into positive and negative themes in Figure 23 and Figure 24, respectively. Although "Quality of care provided" was mentioned negatively 19 times, it was also mentioned positively 17 times. Other positive themes related to cost, interactions with office staff, the convenience of SCC's location, and privacy.

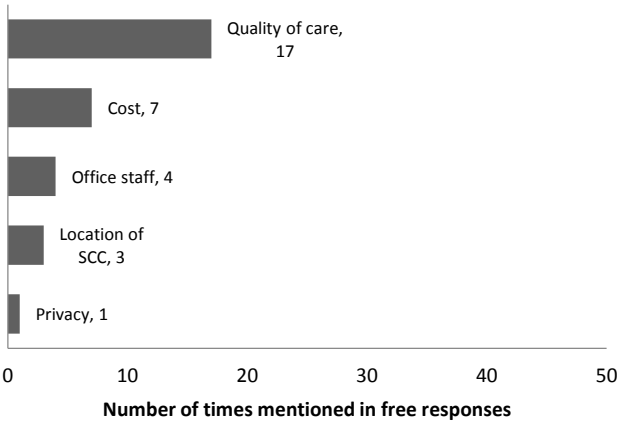


Figure 23. The number of times themes regarding students' experiences or perceptions of the SCC were mentioned in a positive context in the free response sections.

Among the negative themes, issues with access to care were mentioned 38 times, which agrees with the data in Figure 20, where "Appointment wait times," "Ease of scheduling appointments," and "Convenience of office hours" – all issues relating to access of care – were measures where the SCC performed most poorly. The free response comments also elucidated the reason for the poor performance on "Establishing an on-going care relationship with a provider." Students do their six-month internships and serve as counselors at the SCC, which leads to interrupted care, student remarked:

> *"She informed me that she would be leaving in 6 months after her rotation so there was pretty much no point in establishing long term care."*

Thus, feedback on the quality of care at the SCC may be more of a reflection of the internship program than psychiatric services or counseling services provided by non-interns.

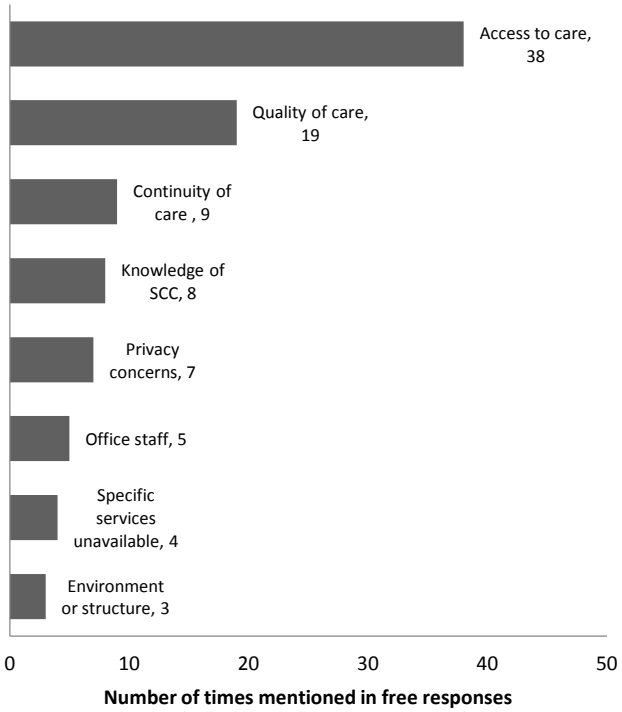


Figure 24. The number of times themes regarding students' experiences or perceptions of the SCC were mentioned in a negative context in the free response sections.

Student Priorities of Health Services

Not all domains can be considered equal when evaluating health services, as some may choose a more inconvenient location to receive quality care. On the last page of the survey, survey respondents were asked to rate the importance of 10 domains that match those used to evaluate their experiences and perceptions (excluding "Offers services that meet my current healthcare needs"). Figure 25 charts the percentage of respondents who answered "Very important" or "Extremely important" for each domain.

These student priorities are not specific to mental health services and were asked in the context of physical and/or mental health services. Because of the different natures surrounding each service (e.g., some may consider privacy higher for mental health services than for other health services), these priorities may not accurately depict priorities for the SCC. Any further studies on the SCC should re-evaluate these priorities for the specific services offered at the SCC.

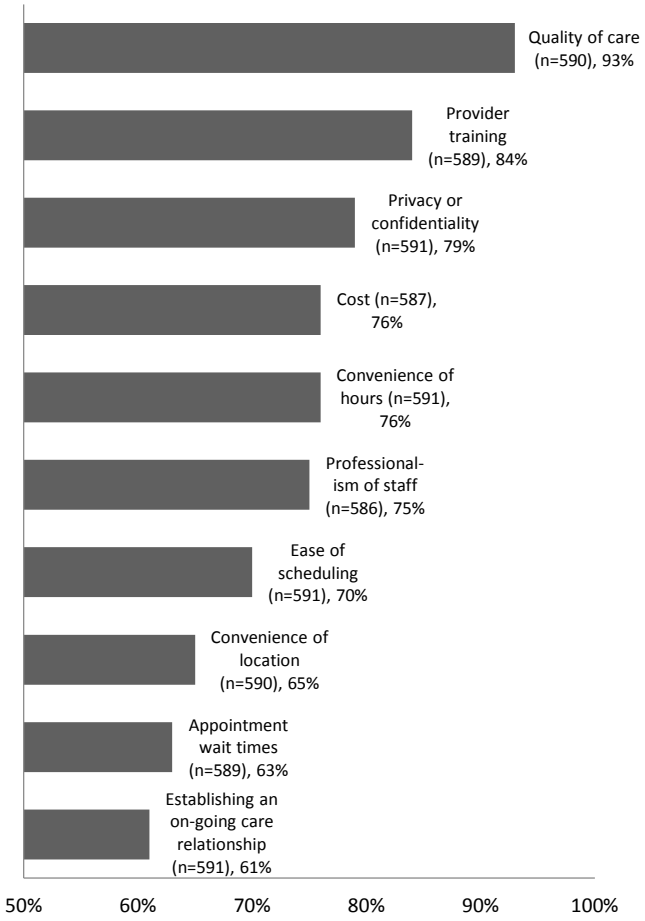


Figure 25. Percent of respondents responding "Very important" or "Extremely important" when evaluating the 10 domains of health services.

Recommendations & Implications

As the first survey establishing baseline data for all students enrolled at UTHSCSA, we identified and quantified mental health needs of students and barriers to meeting these needs. In this section, we provide (to our knowledge) the first data-driven recommendations that represent all UTHSCSA students on the issue of mental health services.

Based on extensive literature research, student feedback analysis, and faculty input and review, the Mental Health Committee endorses the following recommendations.

Informational Recommendations

<u>Recommendation #1</u>: Create a printed "Student Wellness Handbook" that describes how to use services available to students at UTHSCSA.

A "Student Wellness Handbook" has been created as part of a multi-faceted program that reduced depressive symptoms and suicidal ideation [17]. While content in such a handbook can be expansive, we believe that creating one for UTHSCSA should include, at minimum, the following

- Health-related services, including
    - Student Health Center
    - Student Counseling Center
    - School of Dentistry

> *"I hope that the distribution of this survey is an indication that information pertaining to the Student Health and Counseling centers is also going to be made more readily available to students. As a new student I am surprised that information pertaining to these services was not more thoroughly covered during the orientation process. I have personal interest in the services provided by the Student Health and Counseling Centers, however this information has been anything but easy to come by."*

- Other services that students, will likely use, including
    - Registrar Services
    - Financial Aid Office
    - Office of Student Life
- Specific information on accessing services, such as
    - Hours of access for each service
    - Payment expected for each service
    - Navigating insurance, especially for
        - Students with private insurance
        - GSBS students (due to their unique status as both employees and students)

> *"Need a clearer understanding of how to give insurance to Graduate Students. They are 1/2 employees and 1/2 students which leads to complexity when dealing with insurance."*

        - Students with insurance from the military (Tri Care or VA)

> *"I would need to know who would have access to my mental health records, and what kind of coverage by Tri Care Prime is available. Also, I would need to know if medication is prescribed there or where I would have to go to fill medications for mental health needs"*

- Policies on student information for potentially sensitive services (e.g., health-related services), including
    - Privacy policy on how patient information is handled at the Student Counseling Center and the Student Health Center
    - Implications, or lack thereof, of using the Student Counseling Center on a student's career (e.g., employment, residency applications, medical records, licensing, etc.)

> *"I haven't ever considered using campus services. I assumed it was like the employment assistance program, which turfs you. I would still be concerned about confidentiality."*

Concerns about privacy contributing to low rates of seeking help are not unique to UTHSCSA. In a study at a Texas medical school, about half of medical students either met screening criteria for depression or high level of burnout, but only 25% of students attended the counseling center at least once [18]. Another study of medical students at multiple institutions showed that 46% had at least one mental health-related concern [19]. Of the factors cited for preferring to receive mental health care off-campus, 70% of students mentioned confidentiality concerns, with only 25% aware that their school had a confidentiality policy for psychiatric services [19]. A separate qualitative study revealed one student explaining they would not want a record of using mental health services on their CV or records [20].

Comments on expected benefits from a handbook:

- More efficient use of services and decreased burden on staff needed to assist students
- Decreased anxiety and burden on students
- Greater participation in services, such as the Dental School's training program, which needs volunteer patients
- Overall improved student health and wellbeing

> *"This is such a wonderful service. I wish I had known about it in my first two years of medical school. I would*

have taken advantage of it much more and I think this would have greatly helped with the stress of life in med school. I think the must have mentioned it before but I did not for some reason comprehend it was free and with a licensed wonderful counselor. Excellent, awesome service and people!!!!"

A "Student Wellness Handbook" should be provided at student orientation and updated annually. Content to be included should consider the input of students through one or more committee(s) such as the Student Government Association, the Student Health Advisory Committee, and the Mental Health Committee.

<u>Recommendation #2</u>: During student orientation, a one-hour session that actively engages students on available services at the school should be required.

A walking tour is a suggested format, which includes

- Each student should have the aforementioned "Student Wellness Handbook" in-hand during the walking.
- Faculty or staff member providing the tour should actively reduce stigma of mental health services by speaking with compassion and informing students of the privacy policies, especially with sensitive services like the SCC.
- The Director of the SCC (or other employee associated with the SCC) should speak to students, during their stop at the SCC, emphasizing its
    - No-fee service
    - Hours of access
    - Privacy policies, including the policy that providers cannot have patients that they could possibly evaluate (e.g., resident psychiatric physicians cannot take medical students as patients)

Information included in the orientation on student services should be standardized such that all students, regardless of the school in which they are enrolled, receive the same pertinent information. Standardized service will avoid the disparities in comments such as these the following:

"Healthcare orientation ... when I first arrived to UTHSCSA was abysmal"

"Very thankful that we were told about this service upon matriculation. It would be very difficult to find if I did not know about it."

"Didn't know where the counseling center was or when its hours were, so didn't seek it out."

Comments on expected benefits from personal, active engagement during student orientation include:

- Reduced fear and stigma around use of mental health services
- Greater retention of information in the proposed "Student Wellness Handbook"
- Fair opportunity to learn about services available to students regardless of school.

<u>Recommendation #3</u>: Improve the utility of the Student Counseling Center's website.

The website should be updated annually with student input to have comprehensive information on mental health, including

- Updated information on using SCC services, including a map of its location, hours of service, and no-fee policy, and privacy policy.
- Alternative mental health service providers
    - A referral list of off-campus mental health providers and information on insurance accepted, a strategy that has been used at other medical schools [17].

      "Wasn't sure I wanted to be connected to the school"

    - After-hours emergency care
    - Anonymous, self-assessment that screens for symptoms of depression.

Comments on expected benefits from an updated website include:

- Increased access to care and services
- Provider referral list of off-campus providers may decrease the burden on the SCC while ensuring mental health services are available to students.

<u>Recommendation #4</u>: Define the differences and unique benefits of each campus provider (i.e., SHC and SCC) of mental health services; these differences should be made available to students.

The newly advertised mental health services offered by the SHC are creating confusion among students.

"Do both places offer mental health counseling? That seems confusing. How do I pick?"

Investigation into mental health services provided by the SHC offer no clear advantage, and from the MHC's

current understanding, only offers disadvantages as the SHC bills insurance and the PMHNPs at the SHC are limited in prescriptive authority. If the benefits of each service are left undefined, students may continue to make judgments about the services provided by the SHC and SCC.

"[I find] it troubling student health decided to provide for-pay mental health services when such an excellent program already exists. It felt like an aggressive and entitled move."

Availability of information will help avoid misinterpretation of services provided. More importantly, students who are knowledgeable can more fairly choose their provider based on their individual needs (e.g., needs not within the prescriptive authority of the PMNHPs at the SHC).

Service Recommendations

Recommendation #5: Increase appointment availability and financial support of the Student Counseling Center.

Reasons for increasing appointment availability include

- Survey data analyses showing that the greatest concerns among students regarding the SCC are all access-related ("convenience of hours", "ease of scheduling," and "appointment wait times").

> "The counseling center needs better hours and MORE STAFF."

- Limited availability of appointments have adversely affected the health of students

> *"I have heard that only one person in training is currently available… I feel I could benefit from services, but haven't sought them out due to this."*

- Increased awareness of services will likely increase demand for services.

> *"I didn't know this was an option! Could have saved a lot of money."*

Increasing the number of providers or hours that providers see patients at the SCC during peak hours (i.e., times when students are not in class) may be advantageous. For medical students, availability of psychiatric services for should increase to three days per week.

> *"It can sometimes be tricky to meet with Dr. Bailey, since she is only there on Tuesdays and Thursdays for a few hours. As a result, there isn't a lot of flexibility with scheduling and appointments often conflict with mandatory classes. She's great, but just has limited availability."*

> *"... physician needs to be available for more than a few hours 2 days a week."*

Services provided at the SCC should remain as a no-fee service.

> *"… I've considered going to a private pay practice but haven't because of money."*

> *"I am so thankful that UTHSCSA has a resource like the student counseling center. Everyone there I have interacted with has been a true professional. I could not have completed my training without them. Such a resource is essential in a healthcare training environment."*

Recommendation #6: Grant students the power to propose and approve changes in funding for the Student Health Center and Student Counseling Center through the Student Government Association.

Considering the complexities of funding shared services such as those provided by the SHC and SCC, we recommend that proposals for funding of health services to originate from students from the Mental Health Committee, Student Health Advisory Committee, or other health-focused committee led by students. Proposals from these committees should be voted on by the representatives of the Student Government Association. This would include key issues, such as

- Any change in Student Services Fees used to fund the SHC and SCC
- Allocation of funds between the SHC and SCC

Granting the Student Government Association power to make decisions on Student Services Fees regarding the SHC and SCC will lend itself to the following advantages:

- Negative responses will be minimized due to student involvement, whether due to increased tuition fees to fund the SCC or decreased access due to less funding.
- Since only 29% of respondents use mental health services, one may be concerned of unfairly reduced access to mental health services in the hands of students. However, allowing well-informed students who may feel more responsible to look after the student body as a whole will prevent this.
- SHC and SCC will be held accountable to students, the direct users of their services.

Process Recommendations

Recommendation #7: Continue student involvement with a sustainable model that improves communication and collaboration between student leaders and faculty to address issues specific to student mental health.

Sustainability of any program that involves student mental health should be considered because they often lose ground over time [6]. Student involvement can help prevent this by ensuring oversight and accountability of services provided, helping avoid cyclic responses to student mental health crises. The history of the MHC, formed in December 2014, and cooperation between the MHC and SHAC speaks to the need for a stronger communication structure between students and faculty. Student leaders of the MHC and SHAC serendipitously discovered each other's existence in the process of creating separate survey initiatives. A stronger relationship between the student-led MHC and the faculty-led SHAC should facilitate sustainable collaboration by

- Establishing a formal communication structure
- Outlining student and faculty roles
- Promoting student involvement
- Avoiding duplication of effort

To create such a model, we believe that the MHC should be indefinitely renewed by SGA until such a structure exists.

Additionally, student involvement can create greater transparency on issues of access, avoiding misinformation and false perceptions, such as the comment provided by this student:

"It's obvious by all the recent efforts to publicize it, that the counselor center is not being used. If it's a financial and resource drain then it needs to be scaled back or closed down, not publicized more so trick people that they have mental health issues so you can boost attendance to try and prove its worth."

Recommendation #8: Notify students that they may be paired with a counseling intern prior to scheduling an appointment; when informing the student, focus on the student's need for continuity-of-care (rather than the provider's level-of-training) and ensure them that they may opt out at any time.

Criticism of care received from the SCC revolved around the counseling interns, with much of it due to the continuity-of-care.

"She informed me that she would be leaving in 6 months after her rotation so there was pretty much no point in establishing long term care. I also received no follow up after having to miss a meeting."

As students at a health science center, we recognize that clinical experiences are necessary to train competent providers. Verbally informing the student will likely produce improvements in a student's experience, even if simply from adjusting expectations to avoid an unexpected discovery during an emotionally vulnerable time.

To prevent unmanageable demand of non-intern counselors, we also believe that the conversation should be an "opt-out" system rather than presented as a choice between an intern counselor and a PhD counselor. Students who eventually choose to opt-out may also provide feedback to the intern, which may enhance their learning experience. Because this recommendation is rooted in interpersonal interactions, it will be essential to engage any staff who schedules new appointments.

"…the most memorable face and professional interaction is always and only with Martha [the secretary]…the only one… I know and remember from that office."

Recommendation #9: Create a post-appointment feedback form given to students who used the Student Counseling Center as part of a continuous monitoring and improvement initiative.

A feedback form of students that use the Student Counseling Center will allow more accurate determination of whether student needs are being met. Careful planning due to privacy concerns will be needed, and obtaining such feedback will be critical to sustainable oversight. In this form, we recommend delineation of

- Psychiatry services versus counseling services
- Resident psychiatrists versus the psychiatrist for SOM students
- Counseling interns versus other counselors
- Voluntary demographic identifiers of students that include the different programs within the SHP

In addition to the questions asked in this survey, we recommend obtaining the following information in the form:

- Specific services that students would like that may currently be unavailable
- Feedback on the environment in the SCC

Recommendation #10: Create protocols on handling special situations that affect access to care that are given to all current and future new patients.

Factors that affect access to care cannot be fully captured by statistics such as average wait times. Protocols for handling special circumstances should be created to prevent mental health crises by ensuring appropriate access to care, such as in the following reported situations.

- Same-day appointments cancellations by the SCC
- After-hour emergencies
- Urgent or same-day appointments
- Late prescription refills

Environmental Recommendations

Recommendation #11: The Student Counseling Center and Student Health Center should remain as separate, independent entities.

Co-location and integration of mental health and primary care health services are controversial, and as such, the issue of co-locating the SCC and SHC should be determined based on factors unique to UTHSCSA [12]. Based on the analyses in this survey, we believe that co-location of the SHC and SCC will be detrimental to students' mental health. As mentioned in the Results and Discussion section, students who currently use the SCC would be less likely to seek help from the SCC if it were co-located with the SHC, citing concerns with privacy, confidentiality, and stigma. A sampling of free responses that highlight these concerns are below:

"There is still a stigma associated with mental health issues even among enlightened student doctors. I would prefer that the location be more discreet, as it currently is."

"I will stop going to the Student Counseling Center if it was attached to Student Health Services; there is already a stigma with mental health and connecting it with Student Health Center will make it harder to go."

"Placing the facilities for preventative medicine and emergent care with the psychiatric services runs the risk of feeding an unfortunately gossip mill."

"…. The waiting room at the [Student] Health Clinic always seems busy and less private."

Recommendation #12: Consider rearranging the waiting room, if possible, in the Student Counseling Center to improve the feeling of privacy.

Privacy is a priority to many students, and rearranging or relocating the waiting room to allow for more privacy should be considered, but we believe that this is a minor recommendation relative to other concerns at this time.

"… I do not like the waiting room set up. I think the exit should be separate from the waiting room. It is uncomfortable stepping out of your appointment and meeting someone else in your class waiting for their appointment.

"The waiting room is also right out in the open --there is absolutely no privacy."

Recommendation #13: Consider creating discreet parking spots (similar to those in front of the Student Health Center) that students can use for appointments at the Student Counseling Center.

A free response provided by a student led us to wonder why parking spots reserved for appointments were only available for the SHC.

"It would be helpful if there was temporary parking near the counseling center that is designated only for counseling patients, just like there is temporary parking near the health center"

Creating such parking spots would assist students whose primary location of study is not the Long Campus. Recognizing that anonymity and privacy is a high priority, a possibly fair solution is creating three additional parking spots closer in proximity to the SCC, such as Lot 1 or Garage A. The new signs and the current signs for the SHC parking spots should indicate that the spot is for SHC *or* SCC parking. We consider this recommendation to be minor in relation to the others in this report.

Institutional Recommendations

Recommendation #14: Programs that extend beyond access to mental health services, (e.g., those impacting culture and curricula) should be considered to improve student wellness and to decrease need for mental health services.

The MHC believes that student access to services provided by the SCC is critical; however, the current conversation and situation that initiated this report is limited to access to services. The conversation should explore factors that may be creating the need for mental health services, such as culture and curricula.

As discussed before, privacy concerns are not unique to UTHSCSA. In a study at a Texas medical school, only 25% of students who met screening criteria for depression or high level of burnout attended the counseling center at least once [18]. At a multi-institution study, 70% of medical students cited confidentiality concerns as a reason for preferring off-campus mental health care [19]. It is not surprising that even this report contains multiple recommendations (#1, #2, #3, #11, #12, and #13) with components that address stigma-related factors.

"I'm not especially comfortable with 'advertising' the fact that I am getting counseling."

One medical school's program to reduce depression and suicide in students included faculty education as one of the primary areas of focus [17]. Faculty members were educated on their role of creating a comfortable atmosphere so that students may be more willing to share their concerns, such as saying "It must be difficult for you, but I'm here to support you" [17].

Another perspective to consider is the lesser value that society assigns to mental health that seem to impede institutions' responses to high rates of mental health concerns. Take a moment to imagine the following two situations. (1) If half of a workplace's employees developed pneumonia would we ensure that they received appropriate access to healthcare providers and launch an immediate investigation to identify the root cause? (2) If half of a workplace's employees developed depression would we ensure that they received appropriate access to healthcare providers and launch an immediate investigation to identify the root cause?

Some medical schools have gone beyond cultural interventions; Vanderbilt University and Saint Louis University both implemented comprehensive changes that consider the curriculum. Saint Louis University's comprehensive program is summarized in Table 2.

Table 2. A summary of Saint Louis University School of Medicine's comprehensive program for medical student wellness [21].

The grading system changed to honors/near honors/pass/fail, and only the median test score and 75th percentile is reported to students.
Contact hours and "unnecessary detail" was reduced.
Longitudinal electives lasting approximately two years with a frequency of one-half day every two weeks were created.
A mandatory six-hour resilience and mindfulness program was implemented.
Anatomy course was integrated throughout the curriculum instead of as a single discrete course.
Learning communities were created around the topics of service & advocacy, research, global health, wellness, and medical education.

The results were promising, with reduction in moderate-high symptoms of anxiety (Table 3) and moderate-high symptoms of depression (Table 4).

Table 3. Summary of improvements in moderate-high symptoms of anxiety as a result of Saint Louis University's comprehensive program.

	Before Change	After Change	Difference
End of 1st year	55%	31%	-24%
End of 2nd year	60%	46%	-14%

Table 4. Summary of improvements in moderate-high symptoms of depression as a result of Saint Louis University's comprehensive program.

	Before Change	After Change	Difference
End of 1st year	27%	11%	-16%
End of 2nd year	32%	16%	-15%

The program at Saint Louis University used evidence-based educational theories to create and implement their sustainable program, which required no additional staff, little curricular time, and only a $10,000 annual budget [21]. This suggests that such a program may even be more cost-effective when considering mental health services.

Recommendation #15: Required mindfulness practice and lectures should be considered in curricula.

Requiring mindfulness as part of a comprehensive reform may improve wellbeing and academic performance. Studies on mindfulness interventions resulted in sustained improvements in the domains of total mood disturbance, physician empathy, emotional exhaustion, personal accomplishment, conscientiousness, and emotional stability physician [22]. Medical students in another study reported academic improvement, stress relief, and appreciation of the opportunity to participate in the learning of mindfulness [23]. Other studies in patients with Attention-Deficit/Hyperactivity Disorder (ADHD) found significant decreased hyperactivity/impulsivity and inattention as well as improvements in self-directedness [24] [25].

Mindfulness is simply an active, open, and nonjudgmental attention to the present moment. The practice of mindfulness techniques include body scan, breath

awareness, stretching, sitting meditation, walking meditation, eating meditation, and guided imagery [26].

When thinking about the place of mindfulness and any other student wellness initiatives in the curricula, we should also ask ourselves: if habits conducive to good mental health can be learned, should we not learn them? And, why spend a person's formative years fixing habits that may be conducive to depression and burnout?

Conclusion

The multidisciplinary nature of the UTHSCSA presents a situation where resources such as the SHC and SCC can be at the intersection of competing needs. The complexity of shared resources extend beyond enrollment numbers, as needs also vary due to factors such as curricular demands and age (e.g., younger students are more likely to use their parent's insurance).

Compromising on resources and demands of each school is arguably the greatest hurdle to improving services, second only to the availability of resources. Keeping in mind that a well-implemented program still *benefits all*, progress should not be delayed due to perceived imbalances if reasonable efforts are taken to minimize them.

The MHC calls for honest communication, open minds, and unbiased leadership to coordinate positive change, as we believe that access to appropriate health services is vital to a culture of wellness. As one respondent put it:

"Graduate school, medical school in my own experience, is a difficult undertaking. To have a non-judgmental, compassionate psychiatric services staff should be a priority for the institution."

Study Limitations

The voluntary nature of the survey may skew results by not providing a representative sample of the student population. Furthermore, the voluntary nature of each question (i.e., no question was required to be answered in order to submit the survey) we did not include questions left unanswered in analyses. Evaluation of the SCC characteristics did not delineate the services offered (e.g., counseling versus psychiatry) and respondents were only asked to evaluate the SCC as a whole. This may dilute the data on certain issues. Lastly, we did not include a question that separated SHP students by their programs, and any future studies should be sure to evaluate this, as the student populations vary widely.

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Appendix I: Survey Questions

PART ONE:
UTHSCSA Student Health Center (SHC)

This section of this survey is asking questions pertaining to the Student Health Center, the primary care clinic located in the Nursing school on the main UTHSCSA campus.

Do you know where the UTHSCSA Student Health Center is located?

- ○ Yes
- ○ No

Are you aware of the Student Health Center clinic hours?

- ○ Yes
- ○ No

What type of health coverage do you have?

UTHSCSA's Student Health Insurance (Academic Health Plan)
Private Insurance as a dependent on my parent's plan
Private insurance on my spouse's plan
Private insurance I purchased on my own (e.g., ACA Marketplace)
I don't currently have health insurance
Other: *please indicate* [WRITE---IN BOX]

BUILT---IN LOGIC: IF THEY ANSWER, "UTHSCSA's Student Health Insurance" above, this question will NOT appear:

The Student Health Center accepts approximately 15 other private insurance plans. Do you know if your private insurance plan is accepted?

- ○ Yes
- ○ No

Please check the services that you were aware of being offered by the Student Health Center:

Preventative Care	☐
Mental Health Care & Counseling	☐
Acute Care	☐
Management of Chronic Conditions (e.g., asthma, hypertension, diabetes)	☐
Emergent Care	☐
Influenza Vaccine	☐
Other Immunizations (not including influenza)	☐
Tb Screening	☐
HIV Screening	☐
Other STI Screening (not including HIV)	☐
Smoking Cessation Programs	☐
Weight Management Programs	☐
Lab Services	☐
Needlestick Care & Follow---Up	☐

In the past 12 months, how many times have you seen a health care provider for medical care?

(0 visits / 1 visit / 2 visits / 3 visits / 4 visits / 5 visits / 6+ visits)

BUILT---IN LOGIC: IF "0 visits" in the past 12 months, this question will NOT appear:
In the past 12 months, how many of those visits were at the Student Health Center?

(0 visits / 1 visit / 2 visits / 3 visits / 4 visits / 5 visits / 6+ visits)

BUILT---IN LOGIC: IF "0 visits" in the past 12 months, this question will NOT appear:
Please indicate the types of services and care you have obtained within the past 12 months from the Student Health Center and/or other (off---campus) healthcare providers:

	From the SHC	From other providers
Preventative Care	☐	☐
Mental Health Care & Counseling	☐	☐
Acute Sick Care	☐	☐
Management of Chronic Conditions (e.g., asthma, hypertension, diabetes)	☐	☐
Emergent Care	☐	☐
Influenza Vaccine	☐	☐
Other Immunizations (not including influenza)	☐	☐
Tb Screening	☐	☐
HIV Screening	☐	☐
Other STI Screening (not including HIV)	☐	☐
Smoking Cessation Programs	☐	☐
Weight Management Programs	☐	☐
Lab Services	☐	☐
Needlestick Care & Follow---Up	☐	☐

BUILT---IN LOGIC: IF indicate no visits with other providers, this question will NOT appear:
For the services you indicated obtaining from other providers, please describe factors that influenced your decision to seek care from other providers instead of the Student Health Center.

BUILT---IN LOGIC: For this question, there are two different question stems.

(a) IF respondent has visited the SHC one or more times in the past 12 months:

On a scale of 1 to 5: How well are the following aspects of your health care needs being met by the Student Health Center?

(1 = unacceptable, 5 = outstanding)

(b) IF respondent has not visited the SHC in the past 12 months:

On a scale of 1 to 5: How well do you perceive the following aspects would be met by the Student Health Center if you were to begin seeking health care there in the future?

(1 = unacceptable, 5 = outstanding)

ANSWER OPTIONS: 1, 2, 3, 4, 5, N/A

Offers services that meet your current health care needs?	
Quality of care provided?	
Appointment wait times?	
Ease of scheduling appointments?	
Convenience of office hours?	
Convenience of location?	
Insurance coverage or out---of---pocket costs?	
Level of training of provider?	
Establishing an on---going care relationship with provider?	
Protection of privacy/confidentiality?	
Professionalism of office staff?	

PART TWO:
UTHSCSA Student Counseling Center (SCC)

This section of this survey is asking questions pertaining to the Student Counseling Center, the mental health and counseling center located in the Medical School on the main UTHSCSA campus—*a separate entity from the Student Health Center.*

Do you know where the UTHSCSA Student Counseling Center is located?

- ○ Yes
- ○ No

Are you aware of the Student Counseling Center clinic hours?

- ○ Yes
- ○ No

Are you aware that the Student Counseling Center is a no---fee mental health services provider funded by student fees and does not bill your insurance?

- ○ Yes
- ○ No

Please check the services that you were aware of being offered by the Student Counseling Center:

Counseling for Academic Difficulties (e.g., test anxiety, conflict with instructor or clinical supervisor, time management, organizing and learning course objectives)	☐
Counseling for Career Issues (e.g., clarifying career goals/interests, confronting doubts about career choice, identifying a specialty interest)	☐
Counseling for Personal Issues (e.g., self---confidence, self---assertion, stress management, depression, anxiety, overcoming self---defeating behavior, relationship issues)	☐
Medication Consult/Management (e.g., evaluation, medication treatment, medication management, prescription refills)	☐
Substance Abuse Management (e.g., evaluation, referral, consultation, education)	☐

In the past 12 months, how many times have you seen a health care provider for mental health care?

(0 visits / 1 visit / 2 visits / 3 visits / 4 visits / 5 visits / 6+ visits)

BUILT---IN LOGIC: IF "0 visits" in the past 12 months, this question will NOT appear:
In the past 12 months, how many of those visits were at the Student Counseling Center?

(0 visits / 1 visit / 2 visits / 3 visits / 4 visits / 5 visits / 6+ visits)

BUILT---IN LOGIC: IF "0 visits" in the past 12 months, this question will NOT appear:
Please indicate the types of services and care you have obtained within the past 12 months from the Student Counseling Center and/or other mental health care providers:

	From the SCC	From other providers
Counseling for Academic Difficulties (e.g., test anxiety, conflict with instructor or clinical supervisor, time management, organizing and learning course objectives)	☐	☐
Counseling for Career Issues (e.g., clarifying career goals/interests, confronting doubts about career choice, identifying a specialty interest)	☐	☐
Counseling for Personal Issues (e.g., self---confidence, self---assertion, stress management, depression, anxiety, overcoming self---defeating behavior, relationship issues)	☐	☐
Medication Consult/Management (e.g., evaluation, medication treatment, medication management, prescription refills)	☐	☐
Substance Abuse Management (e.g., evaluation, referral, consultation, education)	☐	☐

BUILT---IN LOGIC: IF indicate no visits with other providers, this question will NOT appear:
For the services you indicated obtaining from other providers, please describe factors that influenced your decision to seek care from other providers instead of the Student Counseling Center.

BUILT---IN LOGIC: For this question, there are two different question stems.

(a) IF respondent has visited the SCC one or more times in the past 12 months:

On a scale of 1 to 5: How well are the following aspects of your health care needs being met by the Student Counseling Center?

(1 = unacceptable, 5 = outstanding)

(b) IF respondent has not visited the SCC in the past 12 months:

On a scale of 1 to 5: How well do you perceive the following aspects would be met by the Student Counseling Center if you were to begin seeking health care there in the future?

(1 = unacceptable, 5 = outstanding)

ANSWER OPTIONS: 1, 2, 3, 4, 5, N/A	
Offers services that meet your current health care needs?	
Quality of care provided?	
Appointment wait times?	
Ease of scheduling appointments?	
Convenience of office hours?	
Convenience of location?	
Insurance coverage or out---of---pocket costs?	
Level of training of provider?	
Establishing an on---going care relationship with provider?	
Protection of privacy/confidentiality?	
Professionalism of office staff?	

Would you be more or less likely to utilize counseling or psychiatric services currently offered by the Student Counseling Center if they were located in the same building as the Student Health Center?

- ○ More likely
  OPTIONAL: Describe why you would be **more** likely to use these services [write---in box]
- ○ Equally likely
- ○ Less likely
  OPTIONAL: Describe why you would be **less** likely to use these services [write---in box]

PART THREE:
Just a few more questions…

Please rank the degree of importance of the following factors/concerns in determining where you seek/obtain your healthcare: (1 = not at all important, 5 = very important)

- Quality of care provided
- Appointment wait times
- Ease of scheduling appointments
- Convenience of office hours
- Convenience of location
- Insurance coverage/out---of---pocket costs
- Level of training of provider
- Establishing an on---going care relationship with provider
- Protection of privacy/confidentiality
- Professionalism of office staff

What is your gender identity?

Female
Male
Transgender
Transsexual
FTM
MTF
Other: *please indicate* [WRITE---IN BOX]

What school are you studying in?

Graduate School of Biomedical Sciences
School of Dentistry
School of Health Professions School of Medicine
School of Nursing School of Public Health Other: *please indicate* [WRITE---IN BOX]

What is your primary location of study for the past 12 months?

Long Campus (San Antonio, Texas)
Greehey Academic & Research Campus (San Antonio, Texas)
Edinburg Academic Health Center (Edinburg, Texas)
Harlingen Academic Health Center (Harlingen, Texas)
Regional Campus in Laredo (Laredo, Texas)

Texas Research Park (San Antonio, Texas) Other:
please indicate [WRITE---IN BOX]

Please share any other comments or concerns you have related student health services offered at UTHSCSA.

Appendix II: Data Analyses

Do you know where the UTHSCSA Student Counseling Center is located?

Yes	No
221	338

n = 609

By insurance coverage (UTHSCSA insurance and Private insurance)

Awareness of Counseling Center Location	UTHSCSA insurance	Private insurance
Yes	122	98
No	177	208

n = 605

A chi-square test for independence (with Yates Continuity Correction) indicated a significant association between awareness and insurance coverage, X^2 (1, n = 605) = 4.66, p = 0.03, phi = 0.09. The effect size of the association was small.

Are you aware of the Student Counseling Center clinic hours?

Yes	No
136	473

n = 609

By insurance coverage (UTHSCSA insurance and Private insurance)

Awareness of SCC clinic hours	UTHSCSA insurance	Private insurance
Yes	77	59
No	222	247

n = 605

A chi-square test for independence (with Yates Continuity Correction) indicated no significant association between awareness of the clinic hours and insurance coverage, X^2 (1, n = 605) = 3.27, p = 0.07, phi = 0.08.

Are you aware the Student Counseling Center is a no-fee mental health service?

Yes	No
313	296

n = 609

By insurance coverage (UTHSCSA insurance and Private insurance)

Awareness of no-fee	UTHSCSA insurance	Private insurance
Yes	153	157
No	146	149

n = 605

A chi-square test for independence (with Yates Continuity Correction) indicated no significant association between awareness of the no-fee and insurance coverage, X^2 (1, n = 605) = 0.000, p = 1.00, phi = -0.001.

By School (Graduate School, Dentistry, Health Professions, Medicine, Nursing)

Awareness of no-fee	Graduate School	School of Dentistry	School of Health Professions	School of Medicine	School of Nursing
Yes	47	29	54	121	47
No	59	29	35	102	57

n = 580

Awareness of no-fee	All Other Schools	Graduate School
Yes	255	47
No	231	59

n = 592

Awareness of no-fee	All Other Schools	School of Dentistry
Yes	273	29
No	261	29

n = 592

Awareness of no-fee	All Other Schools	School of Health Professions
Yes	248	54
No	255	35

n = 592

Awareness of no-fee	All Other Schools	School of Medicine
Yes	181	121
No	188	102

n = 592

Awareness of no-fee	All Other Schools	School of Nursing
Yes	255	47
No	233	57

n = 592

Comparing each school with all other schools produced no significant associations between awareness and school.

In the past 12 months, how many times have you seen any provider (including the SCC) for mental health care?

Number of visits to any provider for mental health care	Responses
0 visits	426
1 visit	41
2 visits	32
3 visits	17
4 visits	19
5 visits	13
6+ visits	57

n = 605

Of the 179 students sought services for mental health care, the following visited the Student Counseling Center:

Number of visits to Student Counseling Center	Responses
0 visits	43
1 visit	32
2 visits	31
3 visits	9
4 visits	14
5 visits	11
6+ visits	39

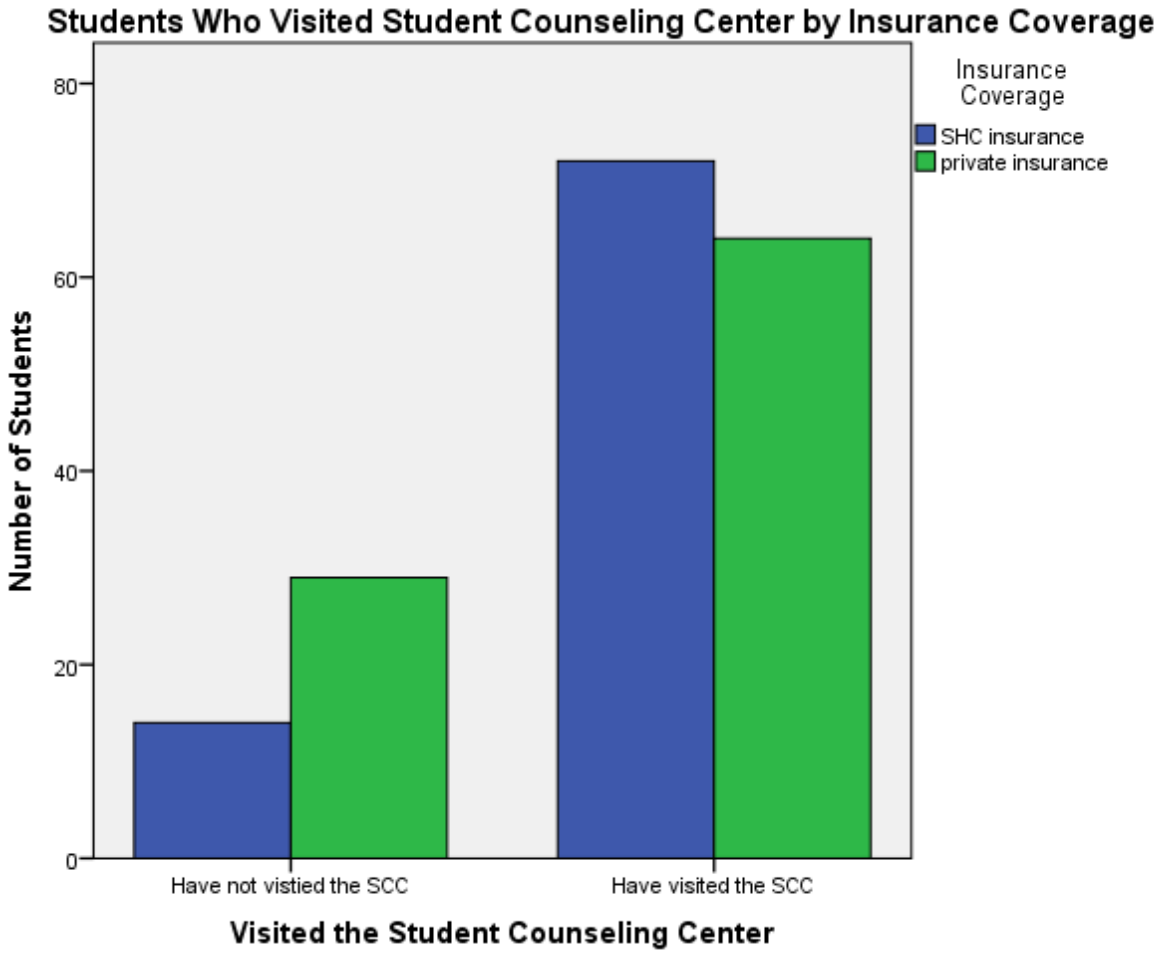
Summary: 136 students visited the Student Counseling Center at least 1 time.

Visits by insurance coverage (UTHSCSA insurance and private insurance)

Insurance Coverage	Visited UTHSCSA Student Counseling Center	Did not visit UTHSCSA Student Counseling Center
UTHSCSA insurance	72	14
Private insurance	64	29

n = 601

A chi-square test for independence (with Yates Continuity Correction) indicated there was a significant association between the type of insurance and whether students visited the UTHSCSA counseling center, X2 (1, n = 179) = 4.652, p = .03, phi = .02 (small effect size).



Factors that influenced decision to seek care from an outside provider:

- Scheduling Issues (11)
- Previously established relationship (12)
- Specific mental health needs (5)
- New student (4)
    - Unfamiliar with hours/services (4)
- Quality of provider (5)
- Confidentiality/Anonymity (2)

Based on your experience, how well are the following health care needs being met by the Student Counseling Center?

Experience with SCC Domains	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Exemplary
Offers services that meet my current health care needs (n = 134)	3	11	53	32	35
Quality of care provided (n = 134)	4	13	48	34	35
Appointment wait times (n = 132)	4	17	53	24	34
Ease of scheduling appointments (n = 134)	8	20	46	29	31
Convenience of office hours (n = 129)	5	26	52	25	21
Convenience of location (n = 133)	2	14	54	27	36
Insurance coverage or out-of-pocket costs (n = 118)	0	1	25	34	58
Level of training of provider (n = 132)	4	6	54	34	34
Establishing an on-going care relationship with provider (n = 131)	6	12	41	36	36
Protection of privacy/confidentiality (n = 132)	0	6	53	29	44
Professionalism of office staff (n = 133)	3	13	41	37	39

By Campus (Main Campus and Greehey Campus)

1 = unacceptable, 2 = below expectations, 3 = meets expectations, 4 = exceeds expectations, 5 = exemplary

Experience with SCC Domains	Main Campus Mean	Greehey Campus Mean
Offers services that meet my current health care needs	3.64 (n = 115)	3.30 (n = 10)
Quality of care provided [1]	3.63 (n = 115)	3.20 (n = 10)
Appointment wait times	3.51 (n = 113)	3.50 (n = 10)
Ease of scheduling appointments	3.36 (n = 115)	3.80 (n = 10)
Convenience of office hours	3.23 (n = 112)	3.20 (n = 10)
Convenience of location[2]	3.67 (n = 114)	3.10 (n = 10)
Insurance coverage or out-of-pocket costs	4.27 (n = 103)	4.43 (n = 7)
Level of training of provider[3]	3.69 (n = 114)	3.10 (n = 10)
Establishing an on-going care relationship with provider	3.67 (n = 113)	3.40 (n = 10)
Protection of privacy/confidentiality[4]	3.87 (n = 113)	3.30 (n = 10)
Professionalism of office staff	3.74 (n = 115)	3.40 (n = 10)

[1]An independent samples t-test was conducted to compare the quality of care provided means for students on the Main Campus and Greehey Campus. There was a significant difference in scores for Main Campus students (M = 3.63, SD = 1.10) and Greehey campus students, M = 3.20, SD = 0.42; t (22.3) = 2.58, p = 0.017 (two-tailed). The magnitude of the differences in the means (mean difference = 0.43, 95% CI: 0.09 to 0.78) was slightly less than moderate (eta squared = .05).

[2]An independent samples t-test was conducted to compare the convenience of location means for students on the Main Campus and Greehey Campus. There was a significant difference in scores for Main Campus students (M = 3.67, SD = 1.07) and Greehey campus students, M = 3.10, SD = 0.57; t (15.4) = 2.76, p = 0.014 (two-tailed). The magnitude of the differences in the means (mean difference = 0.57, 95% CI: 0.13 to 1.00) was moderate (eta squared = .06).

[3]An independent samples t-test was conducted to compare the level of training of provider means for students on the Main Campus and Greehey Campus. There was a significant difference in scores for Main Campus students (M = 3.69, SD = 1.04) and Greehey campus students, M = 3.10, SD = 0.32; t (31.9) = 4.25, p < 0.001 (two-tailed). The magnitude of the differences in the means (mean difference = 0.59, 95% CI: 0.31 to 0.88) was large (eta squared = .13).

[4n]An independent samples t-test was conducted to compare protection of privacy/confidentiality means for students on the Main Campus and Greehey Campus. There was a significant difference in scores for Main Campus students (M = 3.87, SD = 0.96) and Greehey campus students, M = 3.30, SD = 0.67; t (12.5) = 2.45, p = 0.03 (two-tailed). The magnitude of the differences in the means (mean difference = 0.57, 95% CI: 0.06 to 1.07) was small to moderate (eta squared = .04).

By Gender (Female and Male)

1 = unacceptable, 2 = below expectations, 3 = meets expectations, 4 = exceeds expectations, 5 = exemplary

Experience with SCC Domains	Female Mean	Male Mean
Offers services that meet my current health care needs	3.65 (n = 98)	3.57 (n = 35)
Quality of care provided	3.60 (n = 98)	3.71 (n = 35)
Appointment wait times	3.61 (n = 97)	3.26 (n = 34)
Ease of scheduling appointments	3.48 (n = 98)	3.26 (n = 35)
Convenience of office hours	3.36 (n = 95)	2.91 (n = 34)
Convenience of location	3.59 (n = 97)	3.66 (n = 35)
Insurance coverage or out-of-pocket costs	4.23 (n = 84)	4.39 (n = 33)
Level of training of provider	3.62 (n = 97)	3.79 (n = 34)
Establishing an on-going care relationship with provider	3.64 (n = 96)	3.68 (n = 34)
Protection of privacy/confidentiality	3.84 (n = 96)	3.86 (n = 35)
Professionalism of office staff	3.73 (n = 98)	3.70 (n = 34)

Independent samples t-tests were conducted between female students and male students. No significant differences were found across the domains. Therefore, responses were relatively similar across gender groups.

By School (Graduate, Dental, Health Professions, Medicine, Nursing)

1 = unacceptable, 2 = below expectations, 3 = meets expectations, 4 = exceeds expectations, 5 = exemplary

Experience with SCC Domains	Graduate Mean	Dentistry Mean	Health Professions Mean	Medicine Mean	Nursing Mean
Offers services that meet my current health care needs	3.41 (n = 22)	3.55 (n = 11)	4.11 (n = 19)	3.47 (n = 66)	4.00 (n = 13)
Quality of care provided	3.36 (n = 22)	3.72 (n = 11)	4.05 (n = 19)	3.51 (n = 66)	3.92 (n = 13)
Appointment wait times[1]	3.50 (n = 22)	3.91 (n = 11)	**4.00 (n = 19)**	**3.22 (n = 64)**	3.92 (n = 13)
Ease of scheduling appointments[2]	3.64 (n = 22)	3.82 (n = 11)	**4.00 (n = 19)**	**3.02 (n = 66)**	**4.00 (n = 13)**
Convenience of office hours[3]	3.32 (n = 22)	3.55 (n = 11)	**3.78 (n = 18)**	**2.90 (n = 63)**	3.62 (n = 13)
Convenience of location	3.50 (n = 22)	3.27 (n = 11)	3.95 (n = 19)	3.55 (n = 65)	3.69 (n = 13)
Insurance coverage or out-of-pocket costs	4.24 (n = 17)	4.50 (n = 10)	4.31 (n = 16)	4.24 (n = 62)	4.18 (n = 11)
Level of training of provider	3.45 (n = 22)	3.60 (n = 10)	4.17 (n = 18)	3.56 (n = 66)	3.92 (n = 13)
Establishing an on-going care relationship with provider	3.55 (n = 22)	3.50 (n = 10)	3.83 (n = 18)	3.58 (n = 65)	3.85 (n = 13)
Protection of privacy/confidentiality	3.77 (n = 22)	3.91 (n = 11)	4.05 (n = 19)	3.72 (n = 64)	4.08 (n = 13)
Professionalism of office staff	3.55 (n = 22)	3.82 (n = 11)	4.17 (n = 18)	3.59 (n = 66)	4.08 (n = 13)

[1]A one-way between-groups analysis of variance (ANOVA) was conducted. There was a statistically significant difference at the $p < 0.05$ level; $F (4, 124) = 3.09$, $p = 0.02$. The actual difference in mean scores between the groups was moderate to large. The effect size, calculated using eta squared was 0.09. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the School of Health Professions (M = 4.00, SD = 1.00) was significantly different from School of Medicine (M = 3.22, SD = 1.16).

[2]There was a statistically significant difference at the $p = 0.001$ level; $F (4, 126) = 5.192$, $p = 0.001$. The actual difference in mean scores between the groups was large. The effect size, calculated using eta squared was 0.14. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the School of Medicine (M = 3.02, SD = 1.16) was significantly different from School of Health Professions (M = 4.00, SD = 0.94) and School of Nursing (M = 4.00, SD = 1.00).

[3]There was a statistically significant difference at the $p < 0.05$ level; $F (4, 122) = 3.605$, $p = 0.008$. The actual difference in mean scores between the groups was large. The effect size, calculated using eta squared was 0.11. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the School of Health Professions (M = 3.78, SD = 1.00) was significantly different from School of Medicine (M = 2.90, SD = 1.04).

By type of service sought (Counseling services and Psychiatric services)

1 = unacceptable, 2 = below expectations, 3 = meets expectations, 4 = exceeds expectations, 5 = exemplary

Experience with SCC Domains	Counseling Mean	Psychiatric Mean
Offers services that meet my current health care needs	3.49 (n = 57)	3.64 (n = 11)
Quality of care provided	3.44 (n = 57)	3.73 (n = 11)
Appointment wait times	3.60 (n = 57)	3.18 (n = 11)
Ease of scheduling appointments[1]	3.51 (n = 57)	2.73 (n = 11)
Convenience of office hours	3.30 (n = 54)	2.70 (n = 10)
Convenience of location	3.47 (n = 57)	3.45 (n = 11)
Insurance coverage or out-of-pocket costs	4.17 (n = 47)	4.00 (n = 11)
Level of training of provider	3.39 (n = 56)	3.70 (n = 10)
Establishing an on-going care relationship with provider	3.44 (n = 55)	3.50 (n = 10)
Protection of privacy/confidentiality	3.79 (n = 57)	3.45 (n = 11)
Professionalism of office staff	3.60 (n = 57)	3.40 (n = 10)

[1]An independent samples t-test was conducted to compare ease of scheduling appointments means for student who sought counseling services and psychiatric services. There was a significant difference in scores for counseling students (M = 3.51, SD = 1.151) and psychiatric students, M = 2.73, SD = 1.272; t (66) = 2.03, p = 0.05 (two-tailed). The magnitude of the differences in the means (mean difference = 0.781, 95% CI: 0.012 to 1.551) was moderate (eta squared = .06).

By type of service (Counseling services, Psychiatric services, Both services)

1 = unacceptable, 2 = below expectations, 3 = meets expectations, 4 = exceeds expectations, 5 = exemplary

Experience with SCC Domains	Counseling Mean	Psychiatric Mean	Both Services Mean
Offers services that meet my current health care needs	3.49 (n = 57)	3.64 (n = 11)	3.81 (n = 59)
Quality of care provided	3.44 (n = 57)	3.73 (n = 11)	3.81 (n = 59)
Appointment wait times	3.60 (n = 57)	3.18 (n = 11)	3.49 (n = 59)
Ease of scheduling appointments	3.51 (n = 57)	2.73 (n = 11)	3.53 (n = 59)
Convenience of office hours	3.30 (n = 54)	2.70 (n = 10)	3.32 (n = 59)
Convenience of location	3.47 (n = 57)	3.45 (n = 11)	3.78 (n = 59)
Insurance coverage or out-of-pocket costs	4.17 (n = 47)	4.00 (n = 11)	4.44 (n = 54)
Level of training of provider[1]	**3.39 (n = 56)**	3.70 (n = 10)	**3.95 (n = 59)**
Establishing an on-going care relationship with provider	3.44 (n = 55)	3.50 (n = 10)	3.88 (n = 59)
Protection of privacy/confidentiality	3.79 (n = 57)	3.45 (n = 11)	3.97 (n = 58)
Professionalism of office staff	3.60 (n = 57)	3.40 (n = 10)	3.97 (n = 59)

[1]A one-way between-groups analysis of variance (ANOVA) was conducted. There was a statistically significant difference at the $p < 0.05$ level; $F(2, 123) = 3.585$, $p = 0.03$. The actual difference in mean scores between the groups was moderate. The effect size, calculated using eta squared was 0.06. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the Students who sought counseling services only (M = 3.39, SD = 1.11) was significantly different from students who sought both counseling and psychiatric services (M = 3.95, SD = 1.11).

By Insurance Coverage (UTHSCSA Insurance and Private Insurance)

1 = unacceptable, 2 = below expectations, 3 = meets expectations, 4 = exceeds expectations, 5 = exemplary

Experience with SCC Domains	UTHSCSA Insurance Mean	Private Insurance Mean
Offers services that meet my current health care needs	3.66 (n = 70)	3.61 (n = 64)
Quality of care provided	3.64 (n = 70)	3.59 (n = 64)
Appointment wait times	3.52 (n = 68)	3.48 (n = 64)
Ease of scheduling appointments	3.49 (n = 70)	3.32 (n = 64)
Convenience of office hours	3.21 (n = 68)	3.28 (n = 61)
Convenience of location	3.70 (n = 69)	3.52 (n = 64)
Insurance coverage or out-of-pocket costs	4.31 (n = 62)	4.21 (n = 56)
Level of training of provider	3.76 (n = 68)	3.56 (n = 64)
Establishing an on-going care relationship with provider	3.77 (n = 69)	3.50 (n = 62)
Protection of privacy/confidentiality	3.91 (n = 68)	3.77 (n = 64)
Professionalism of office staff	3.72 (n = 69)	3.72 (n = 64)

No significant differences found

If you were to seek care from the Student Counseling Center, how well do you PERCEIVE the following aspects of your health care needs would be met?

Perceptions of SCC Domains	Unacceptable	Below Expectations	Meets Expectations	Exceeds Expectations	Exemplary
Offers services that meet my current health care needs (n = 235)	4	18	157	42	14
Quality of care provided (n = 238)	3	29	149	44	13
Appointment wait times (n = 229)	12	33	140	34	10
Ease of scheduling appointments (n = 229)	11	33	139	36	10
Convenience of office hours (n = 226)	6	29	152	28	11
Convenience of location (n = 245)	2	20	146	53	24
Insurance coverage or out-of-pocket costs (n = 225)	0	15	131	47	32
Level of training of provider (n = 236)	3	31	148	40	14
Establishing an on-going care relationship with provider (n = 227)	4	33	137	38	15
Protection of privacy/confidentiality (n = 233)	3	13	143	46	28
Professionalism of office staff (n = 228)	0	13	147	48	20

By Campus (Main Campus and Greehey Campus)

1 = unacceptable, 2 = below expectations, 3 = meets expectations, 4 = exceeds expectations, 5 = exemplary

Perceptions of SCC Domains	Main Campus Mean	Greehey Campus Mean
Offers services that meet my current health care needs	3.17 (n = 196)	3.24 (n = 25)
Quality of care provided	3.13 (n = 198)	3.15 (n = 26)
Appointment wait times	2.96 (n = 191)	3.08 (n = 24)
Ease of scheduling appointments	2.99 (n = 191)	3.04 (n = 24)
Convenience of office hours	3.01 (n = 188)	3.17 (n = 24)
Convenience of location	3.32 (n = 204)	3.23 (n = 26)
Insurance coverage or out-of-pocket costs	3.44 (n = 186)	3.40 (n = 25)
Level of training of provider	3.13 (n = 197)	3.08 (n = 25)
Establishing an on-going care relationship with provider	3.09 (n = 190)	3.26 (n = 23)
Protection of privacy/confidentiality	3.36 (n = 196)	3.22 (n = 23)
Professionalism of office staff	3.31 (n = 191)	3.29 (n = 24)

No significant differences between the two groups found.

By Gender (Female and Male)

1 = unacceptable, 2 = below expectations, 3 = meets expectations, 4 = exceeds expectations, 5 = exemplary

Perceptions of SCC Domains	Female Mean	Male Mean
Offers services that meet my current health care needs	3.11 (n = 154)	3.31 (n = 76)
Quality of care provided	3.09 (n = 155)	3.25 (n = 77)
Appointment wait times	2.91 (n = 149)	3.14 (n = 74)
Ease of scheduling appointments	2.96 (n = 150)	3.09 (n = 74)
Convenience of office hours	2.99 (n = 148)	3.14 (n = 74)
Convenience of location	3.29 (n = 161)	3.44 (n = 77)
Insurance coverage or out-of-pocket costs	3.39 (n = 147)	3.48 (n = 73)
Level of training of provider[1]	**3.06 (n = 156)**	**3.28 (n = 75)**
Establishing an on-going care relationship with provider	3.04 (n = 150)	3.26 (n = 3.26)
Protection of privacy/confidentiality	3.34 (n = 151)	3.42 (n = 76)
Professionalism of office staff	3.30 (n = 149)	3.37 (n = 75)

[1]An independent samples t-test was conducted to compare level of training of provider means for female students and male students. There was a significant difference in scores for female students (M = 3.06, SD = 0.75) and male students, M = 3.28, SD = 0.76; t (229) = -2.103, p = 0.04 (two-tailed). The magnitude of the differences in the means (mean difference = -0.222, 95% CI: -0.430 to -0.014) was small (eta squared = .02).

By School (Graduate, Dental, Health Professions, Medicine, Nursing)

1 = unacceptable, 2 = below expectations, 3 = meets expectations, 4 = exceeds expectations, 5 = exemplary

Perception of SCC Domains	Graduate Mean	Dentistry Mean	Health Professions Mean	Medicine Mean	Nursing Mean
Offers services that meet my current health care needs	3.03 (n = 36)	3.33 (n = 18)	3.26 (n = 38)	3.01 (n = 88)	3.47 (n = 49)
Quality of care provided[1]	**3.03 (n = 37)**	3.31 (n = 19)	3.26 (n = 38)	**2.93 (n = 89)**	**3.49 (n = 49)**
Appointment wait times	2.97 (n = 34)	3.36 (n = 19)	3.29 (n = 35)	2.64 (n = 87)	3.25 (n = 48)
Ease of scheduling appointments	2.97 (n = 34)	3.26 (n = 19)	3.29 (n = 35)	2.69 (n = 87)	3.29 (n = 48)
Convenience of office hours	3.03 (n = 34)	3.26 (n = 19)	3.20 (n = 35)	2.82 (n = 85)	3.23 (n = 47)
Convenience of location	3.24 (n = 37)	3.50 (n = 20)	3.29 (n = 38)	3.22 (n = 90)	3.54 (n = 50)
Insurance coverage or out-of-pocket costs	3.14 (n = 36)	3.41 (n = 17)	3.36 (n = 36)	3.45 (n = 83)	3.62 (n = 47)
Level of training of provider[2]	**2.84 (n = 37)**	3.31 (n = 19)	3.22 (n = 37)	**2.98 (n = 88)**	**3.51 (n = 49)**
Establishing an on-going care relationship with provider[3]	3.00 (n = 34)	3.37 (n = 19)	3.28 (n = 36)	**2.87 (n = 86)**	**3.46 (n = 46)**
Protection of privacy/confidentiality	3.12 (n = 33)	3.42 (n = 19)	3.36 (n = 36)	3.29 (n = 90)	3.65 (n = 49)
Professionalism of office staff	3.18 (n = 34)	3.26 (n = 19)	3.32 (n = 37)	3.23 (n = 86)	3.57 (n = 47)

[1]A one-way between-groups analysis of variance (ANOVA) was conducted. There was a statistically significant difference at the $p < 0.001$ level; $F (4, 227) = 5.579$, $p < 0.001$. The actual difference in mean scores between the groups was moderate. The effect size, calculated using eta squared was 0.09. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the School of Nursing (M = 3.49, SD = 0.68) was significantly different from the Graduate School (M = 3.02, SD = 0.55) and School of Medicine (M = 2.93, SD = 0.79).

[2]There was a statistically significant difference at the $p < 0.001$ level; $F (4, 225) = 6.323$, $p < 0.001$. The actual difference in mean scores between the groups was moderate to large. The effect size, calculated using eta squared was 0.10. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the School of Nursing (M = 3.51, SD = 0.68) was significantly different from the Graduate School (M = 2.84, SD = 0.73) and School of Medicine (M = 2.98, SD = 0.74).

[3]There was a statistically significant difference at the $p < 0.001$ level; $F (4, 216) = 5.565$, $p < 0.001$. The actual difference in mean scores between the groups was moderate to large. The effect size, calculated using eta squared was 0.09. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the School of Nursing (M = 3.46, SD = 0.78) was significantly different from the School of Medicine (M = 2.87, SD = 0.78).

By Insurance Coverage (UTHSCSA insurance and Private insurance)

1 = unacceptable, 2 = below expectations, 3 = meets expectations, 4 = exceeds expectations, 5 = exemplary

Perception of SCC Domains	UTHSCSA Insurance Mean	Private Insurance Mean
Offers services that meet my current health care needs	3.09 (n = 109)	3.26 (n = 125)
Quality of care provided	3.07 (n = 110)	3.20 (n = 127)
Appointment wait times	2.93 (n = 107)	3.03 (n = 121)
Ease of scheduling appointments	2.94 (n = 107)	3.05 (n = 121)
Convenience of office hours	2.96 (n = 103)	3.10 (n = 122)
Convenience of location[1]	**3.20 (n = 114)**	**3.41 (n = 130)**
Insurance coverage or out-of-pocket costs	3.38 (n = 103)	3.46 (n = 124)
Level of training of provider	3.04 (n = 106)	3.20 (n = 129)
Establishing an on-going care relationship with provider	3.01 (n = 103)	3.20 (n = 123)
Protection of privacy/confidentiality[2]	**3.22 (n = 102)**	**3.46 (n = 130)**
Professionalism of office staff	3.28 (n = 103)	3.36 (n = 124)

[1]An independent samples t-test was conducted to compare convenience of location means for students with UTHSCSA insurance and students with private insurance. There was a significant difference in scores for UTHSCSA insurance students (M = 3.20, SD = 0.78) and private insurance students, M = 3.41, SD = 0.79; t (242) = -2.04, p = 0.04 (two-tailed). The magnitude of the differences in the means (mean difference = -0.21, 95% CI: -0.405 to -0.007) was small (eta squared = .01).

[2]An independent samples t-test was conducted to compare protection of privacy/confidentiality for students with UTHSCSA insurance and students with private insurance. There was a significant difference in scores for UTHSCSA insurance students (M = 3.22, SD = 0.77) and private insurance students, M = 3.46, SD = 0.84; t (224.5) = -2.33, p = 0.02 (two-tailed). The magnitude of the differences in the means (mean difference = -0.21, 95% CI: -0.405 to -0.007) was small (eta squared = .02).

Would you be more or less likely to utilize counseling or psychiatric services currently offered by the Student Counseling Center if they were located in the same building as the Student Health Center

Less Likely	Equally Likely	More Likely
101	347	152

n = 600

By Insurance coverage (UTHSCSA insurance and Private insurance)

Insurance Coverage	Less Likely	Equally Likely	More Likely
UTHSCSA insurance	57	168	68
Private insurance	43	177	83

n = 596

Differences between students who sought only counseling services, versus those who sought only psychiatric services, versus those who sought both.

1 = less likely, 2 = equally likely, 3 = more likely

Counseling Mean	Psychiatric Mean	Both Services Mean
1.94 (n = 68)	1.82 (n = 11)	1.57 (n = 60)

There was a statistically significant difference at the $p < 0.01$ level; $F(2, 136) = 4.923$, $p = 0.009$. The actual difference in mean scores between the groups was moderate. The effect size, calculated using eta squared was 0.07. Post hoc comparisons using the Tukey HSD test indicated that the mean score for the Students who sought counseling services only (M = 1.94, SD = 0.71) was significantly different from students who sought both counseling and psychiatric services (M = 1.57, SD = 0.62).

Differences between students who indicated they have visited the Student Counseling Center versus those who indicated they have not visited (but have sought mental health services elsewhere).

1 = less likely, 2 = equally likely, 3 = more likely

	Have visited Mean	Have not visited Mean
Likelihood of utilizing SCC if co-located	1.74 (n = 136)	2.11 (n = 43)

An independent samples t-test was conducted to compare the likelihood for students who have visited the SCC and those who have not visited the SCC, but have received mental health care elsewhere. There was a significant difference between students who have visited the SCC (M = 1.74, SD = 0.68) and students who have not but have received services elsewhere (M = 2.12, SD = 0.59; t (80.86) = 3.57, p = 0.001 (two-tailed). The magnitude of the differences in the means (mean difference = 0.38, 95% CI: 0.17 to 0.59) was moderate (eta squared = 0.07).

Differences between students who indicated they have visited the Student Counseling Center versus those who have not been to the Student Counseling Center (seeking mental health services elsewhere or not)

1 = less likely, 2 = equally likely, 3 = more likely

	Have visited Mean	Have not visited Mean
Likelihood of utilizing SCC if co-located	1.74 (n = 136)	2.19 (n = 464)

An independent samples t-test was conducted to compare the likelihood that students would use the Counseling Center if located with the Student Health Center for students who have visited the SCC and those who have not visited the SCC. There was a significant difference between students who have visited the SCC (M = 1.74, SD = 0.68) and students who have not but have received services elsewhere (M = 2.19, SD = 0.60; t (199.7) = 7.003, p < 0.001 (two-tailed). The magnitude of the differences in the means (mean difference = 0.45, 95% CI: -0.58 to -0.32) was moderate (eta squared = 0.08). In other words, students who have not been to the student counseling center indicated they would be more likely to visit the SCC if it were located with the SHC than those who have visited the SCC.

Differences between 5 schools (Graduate, Dentistry, Health Professions, Medicine, Nursing

1 = less likely, 2 = equally likely, 3 = more likely

	Graduate School Mean	Dentistry Mean	Health Professions Mean	Medicine Mean	Nursing Mean
Likelihood of utilizing SCC if co-located	2.05 (n = 106)	2.09 (n = 58)	2.04 (n = 89)	1.94 (n = 223)	2.44 (n = 104)

A one-way between groups analysis of variance (ANOVA) was conducted to explore the impact of the School (Dentistry, Graduate, Health Professions, Medicine, and Nursing) on the likelihood of students to utilize the Student Counseling Center if it were co-located with the Student Health Center. There was a statistically significant difference at the P > .001 level for the 5 schools: F (4, 575) = 11.79, p > .001. The actual difference in mean scores between the groups was moderate. The effect size, calculated using eta squared was 0.08 Post-hoc comparisons using the Tukey HSD test indicated that the mean score for the School of Nursing (M = 2.44, SD = 0.55) was significantly different from the School of Dentistry (M = 2.09, SD = 0.68), Graduate School (M = 2.05, SD = 0.62), School of Health Professions (M = 2.04, SD = 0.67), and School of Medicine (M = 1.94, SD = 0.61). There were no significant differences between the other four schools.

Reasons for more or less likely to utilize counseling services if co-located with student health center

- Visibility, Privacy or Confidentiality of Student Health Center (35)
- Convenience
    - Distance (30)
    - Hours (3)
- Stigma or Judgement (29)
- Awareness or knowledge (11)
- May not understand difference in needs (8)
- Would Still Use (4)
    - Despite Change of Location (2)
    - Because location doesn't matter (8)
- Student Health Center Characteristics (other than location) (5)
- Student Counseling Center Characteristics (other than location) (1)
- Importance of Counseling Services (1)
- Medical Building appears more official (1)

Please rank the degree of importance of the following factors/concerns in determining where you seek/obtain your healthcare

Valued Domains	Not at all Important	Slightly Important	Moderately Important	Very Important	Extremely Important
Quality of care provided	1	0	39	209	342
Appointment wait times	2	31	187	250	120
Ease of scheduling appointments	2	17	158	290	125
Convenience of office hours	3	16	120	296	157
Convenience of location	10	34	161	251	135
Insurance coverage or out-of-pocket costs	2	15	76	237	258
Level of training of provider	2	13	82	247	246
Establishing an on-going care relationship with provide	13	56	159	218	146
Protection of privacy/confidentiality	4	9	112	184	283
Professionalism of office staff	4	14	126	240	203

n = 592