

A Minor with a Major Impact: A Holistic Health Interdisciplinary Program - Assessment & Alumni Data

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Abstract

The Holistic Health Minor (HHM) is an interdisciplinary program that seeks to advance the understanding of complementary and alternative health care through interprofessional education, critical thinking and evidence-based research that can be applied within a variety of different healthcare professions. This interdisciplinary minor provides students the knowledge and background necessary to understand relevant issues in the holistic health field by emphasizing the importance of Interprofessional Education and Information Literacy/Research Skills. This manuscript provides an overview of the minor's curriculum, review of students' capstone portfolios, essential learning outcome assessment and alumni data from graduates over the last 5 years. More specifically, this paper provides logistical data about the minor, students' capstone portfolio instructions along with implementation, completion and assessment of this process through a grading rubric. Alumni data, both quantitative and qualitative data suggests long-term impact of the HHM in graduate's personal and professional lives. Results of descriptive statistics and qualitative data indicate the majority of participants currently incorporate knowledge, obtained during their minor, in their daily lives. Over half of the participants reported obtaining the minor contributed to securing their first job upon graduation. This material can assist institutions in establishing or rethinking and expanding interdisciplinary programs educational and professional growth. Finally, this article touches on areas of future research needed to assess and strengthen similar program offerings with a focus on sustainable impact.

Keywords: Interdisciplinary minor • Holistic health • Program assessment • Alumni data • Higher education

Introduction

The Holistic Health Minor (HHM) provides students with an array of courses that promote a healthy lifestyle. For HHM students, healthy living builds on traditional modalities by including complementary, integrative and alternative practices and approaches to wellness. The courses within the minor broaden students' views of healthy living to include stress reduction, integrative medicine, philosophy and more. As supported by program and alumni data in this paper and based on the current state of health in the U.S., programs like this Holistic Health Minor are needed.

Such needs can assist with many of U.S. current health-related problems. For example, The National Center of Health Statistics (2015) reports that for 2011-2012, 35% of US adults 20 and over were obese while 34% percent of adults were overweight [1]. Obesity and overweight conditions impact the mental, physical and relationship health of millions of Americans. Often, people pay for health and fitness services themselves; however, this is changing. The Affordable Care Act now requires insurers to pay for some prevention services. Dr. Natalie Digate Muth (2015) [2] highlights preventative services are graded as A or B. Grade B services relate to disease prevention in adults with cardiovascular risk factors and these services may be eligible for referral by physicians. This is significant and is creating a need for skilled

professionals who can assist those who qualify for ACA-based assistance. Another such example is wellness coaching; Annabelle Robertson (2008) [3] calls wellness coaching a "new" fitness trend. She noted that in 2007, educated and experienced fitness professionals were the number one fitness trend. In the U.S., Walter Thompson (2014) predicts educated and experienced fitness professionals will be the third most significant trend in 2015 [4]. Thompson presented 20 fitness trends for 2015 and all of them can be offered by certified fitness professionals. The following trends mentioned by Thompson have specific professional certifications (National Commission for Certifying Agencies -accredited) or specialty certification. Furthermore, the use of smartphones and the rapid development of a variety of new technologies are making a huge impact on health and wellness. Mobile health (mHealth) is an avenue to track physical activity and other quality of life measures. One study demonstrated a willingness to participate in m-health weight management research and programs, with women more willing to do so. Most participants were willing to participate in m-health programs that used text messages, food/activity/sleep apps, smart watches/fitness trackers and stress management/anxiety apps [5]. Opportunities exist for college health and wellness professionals to use a variety of m-health tools and apps to promote general health and wellness.

These areas of health prevention and treatment, along with dozens of other ones, would be enhanced by the presence of a Holistic Health Minor where course offerings provide a scaffolding of skills to foster personal and professional growth. Thus, the purpose of this manuscript is to provide an overview of one such program in order to educate and encourage similar development for undergraduate students. This paper will overview the Holistic Health Minor's mission and goals, along with curriculum development, detail the assessment process, which includes students' capstone portfolios and report alumni data from graduates over the last 5 years. Specifically, this report provides logistics about the minor, students' capstone portfolio instructions along with implementation, completion and assessment of this process (i.e., grading rubric) and shares results of alumni data; both quantitative and qualitative data regarding the impact of the HHM in their current personal and professional lives.

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Methodology

The holistic health interdisciplinary minor

History & overview: In 1996, a group of Stockton faculty and staff formed the Stockton College Holistic Health Initiative (SCHHI) to promote holistic health and health care on the University campus and in the surrounding community. In 2002, SCHHI began to work on establishing a Holistic Health Minor (HHM). The HHM officially began in the fall of 2005. It has been developed as an interdisciplinary minor within the School of General Studies along with other minors. Faculty teaching General Studies courses became the mainstay of several foundational courses which met the mission and vision of the minor. The demand grew from less than ten students per year in 2006 to over 200 in 2021 and is the second largest minor on campus.

A student initiated Holistic Health Club was established in 2013 to meet the desire of students to further hone holistic practices beyond the classroom. With the increasing number of students in the Bachelor of Science in Health Science (BSHS) program, the intention to deepen experiences in holistic health contributes to the growth of the program. Furthermore, students from Stockton's School of Business, School of Arts and Humanities, Social and Behavioral Science and the School of General Studies alongside other programs at Stockton has enhanced the diversity of majors who take this minor experience.

In 2016, the faculty developed various tracks within the minor <https://stockton.edu/health-sciences/holistic-health-minor.html> and at the request of the President, adding a biobotanical track. This track can be cross-listed with the minor in cannabis studies: <https://stockton.edu/general-studies/cannabis-studies.html> and students can endeavor a cannabis certificate: <https://www.stockton.edu/continuing-studies/cannabis-cert.html>. Also, the faculty have discussed potential certifications (ACE fitness, wellness coaching, yoga, etc.) to increase utility of the minor beyond graduate school applications. Faculty teaching in the HHM maintain expertise and updated information in their course offerings. Many conduct research in their respective areas of holistic health and disseminate the results in manuscripts and presentations at local, state, national and international levels. Course learning outcomes and student projects have been directly impacted by the current trends in specific content areas.

Mission, goals & student outcome

Holistic health minor's mission: To provide the Holistic Health Minor graduates with a global perspective in the foundation of holistic health and wellness.

Holistic health minor's vision: The Holistic Health Minor will serve as a catalyst for creating collaborative relationships throughout academic community (both internal and external) that will enhance the quality of life through education and community engagement.

Holistic health minor goals: The HHM program outcomes were developed during in the 2010 program review and updated in collaboration with the Holistic Health Faculty members in 2021. A review of the University's current mission statement and strategic plan were utilized in the development of these outcomes. In 2013 years ago, interprofessional education (IPE) was added to these goals, since this is part of the strategic plan of the School of Health Sciences.

Through IPE the HHM advances the understanding of integrative health care through education, critical thinking and research with an array of healthcare professionals and business strategies. The two main goals of the program are:

1. **Interprofessional education:** To provide courses taught by a qualified and interdisciplinary faculty that identifies and defines the available holistic therapies and their relevance in modern health care. Students learn the philosophical rationales and aesthetic foundations for such therapies and experientially acquire a skill for a personal

holistic health philosophy. Further, they learn to think critically about holistic health, evaluating therapies based on empirical, peer-reviewed research and to apply this perspective to decision-making processes with various disciplines in healthcare.

2. **Information literacy/research:** To encourage faculty and students to collaborate in undertaking quality research. These efforts would help address the need to evaluate critically and fairly the theoretical bases, efficacy and safety of holistic treatments and their role in the health care system.

Student learning outcomes

- Successfully apply theoretical concepts of holistic health into proven practice.
- Explore holistic concepts by examining the relationship between quality of life, health, illness and recovery.
- Analyze health promotion activities and reflect on how these have affected health decisions.
- Be able to locate, retrieve and critically evaluate a variety of information sources related to holistic health.

Curriculum

Students are required to complete five courses (20 total credits) to receive the Holistic Health Minor. One course (4 credits) must be in Research Methods and the other four courses (16 credits) include approved courses

Table 1. List of courses.

General Category	
GEN 2240 Introduction to Research	PSYC 2241 Statistical Methods
POLS 3150 Introduction to Political Methodology	PSYC 3242 Experimental Psychology
SOWK 3102 Research Methods in Social Work (SOWK majors only)	SOCY 3642 Social Research Methods
NURS 3335 Nursing Research Methods	EXSC 4102 Research in Exercise Science
HLTH 3200 Research Methods	PUBH 2330 Research Method & Statistics
GNM 2138 Scientific Inquiry	
Modern Topics in Holistic Health	Psychology & Wellness
• ANTH 2136 World Perspectives on Health	• GEN 1016 Mind Body Conditioning
• GAH 2162 Medicine, Ethics and the Arts	• GEN 2319 Meditation: Theory & Practice
• GAH 2163 Wellness in America	• GEN 2516 Mind Body Conditioning
• GEN 2158 The Body in Motion	• GEN 3617 Physical and Mental Wellness
• GEN 1406 Health and Wellness	• GIS 3633 States of Consciousness
• GIS 3207 Contemporary Issues in Bioethics	• GIS 4660 Grief & Loss
• GNM 1026 Alternative Health Care	• GIS 4676 Perspectives on Happiness
• GNM 2117 Microbes and Man	• GSS 2159 Psychology of Well Being
• GNM 2144 Alternative Health Care	• GSS 3160 Stress and Anxiety
• GNM 2201 Health and Healing	• GSS 3161 Smoking & Vaping Across the Continuum
• GNM 2267 Folk & Traditional Medicine	• GSS 3624 Pursuit of Happiness
• GNM 2336 Modern Health Issues	• PSYC 2212 Health Psychology
• GSS 3604 Honors Economic Well-Being	• PSYC 3635 Positive Psychology
• HTMS 3128 Spa Management in Hospitality Operations	• GEN 1014 Business & Life
• PUBH 2432 Contemporary Health Issues	• GNM 1138 Science for Citizen Leaders
• PUBH 2300 Focus on Women's Health	• GSS 2119 Law for Life
• GSS 3169 The Veteran Experience	• GSS 2722 The Law and Social Change
	• GSS Entrepreneurial Thinking and Behavior
	• POLS 2215 Law School Basics

Table 2. Lis of courses for biobotanical pathways.

Core Course	Medical/Alternative Healthcare
<ul style="list-style-type: none"> • Research: GEN 2240, Introduction to Research, in addition to the research courses listed for the General Holistic Health pathway. • Foundation in Biobotanicals: GIS 4483, Medical Marijuana in New Jersey • Basics of Drug Actions/ Interactions on Biological Systems: GSS 2351, Herbal Psychopharmacology 	<ul style="list-style-type: none"> • GEN 1406 Health and Wellness • GNM 1026 Alternative Health Care • GNM 1138 Science for Citizen Leaders • GNM 2138 Scientific Inquiry • GNM 2201 Health and Healing • GNM 3105 Psychopharmacology • GSS 2256 Exploring the Dying Process • GIS 3319 Addictions
Political/Social/Legal Impact	Business
<ul style="list-style-type: none"> • GSS 2119 Law for Life • GSS 2722 The Law and Social Change • GSS 3169 The Veteran Experience • POLS 2215 Law School Basics 	<ul style="list-style-type: none"> • GEN 1014 Business and Life • GEN 2168 Business Basics • GSS 3124 Entrepreneurial Thinking and Behavior

with the Holistic Health attribute. These courses provide students with a broad introduction to holistic health, as well as background in research methodology. For example: while POLS 2150 is a political science course, it covers the relevant research background and techniques and students can arrange with the instructor for the research projects to cover holistic health-related topics. Other course options can include Study Abroad opportunities or Independent Study with an instructor within the Holistic Health Minor, as approved by the Holistic Health Minor Coordinator. The Holistic Health minor has two curriculum pathways: 1) General Holistic Health minor and 2) Holistic Health minor with focus on Biobotanicals.

Holistic health general pathway: Students pursuing this pathway will take one course in research methodology. Students select one course from this category which provides them exposure to research, statistics and other necessary quantitative skills to allow you to critically examine and explore the field of holistic health. Then, students choose four courses from the following list depending on what kind of introduction to the fields of holistic and integrative health students wish to endeavor. In addition, students may elect to complete an independent study that would serve as an elective. An independent study allows the student to pursue a particular area of holistic health in greater depth if the topic is not already covered comprehensively by an existing course (Table 1).

Hhm bio-botanical pathway: The Holistic Health minor curriculum pathway in Biobotanicals offers students a foundation for understanding the medical/alternative healthcare, pharmacy, business, political/social/legal issues surrounding medical biobotanical legislation, policy, care giving and consumption. This background will benefit students interested in all areas of healthcare and care giving, social work, psychological counseling and among other careers and professions, politics and government, law and advocacy, insurance, journalism, higher education as well as medical biobotanical-related entrepreneurship. Students will take one core course in research methods and four from the list of electives in any of the three areas: Medical/Alternative Healthcare, Business and Political/Social/Legal Impact (Table 2).

Holistic health minor assessment

Ongoing programmatic assessment is a key component of the success, development and evolution of the HHM. In 2011, 2 HHM faculty members [6] designed and researched the effectiveness of an e-portfolio rubric which was published in the Journal of e-Portfolio. This has been a formal assessment since 2012 which includes student-provided artifacts showing successful completion and obtainment of the four program outcome measures alongside holistic health philosophy and additional classroom and community engagement. Through this process, student outcomes are measured every year collectively through student e-portfolio submissions, aligning with the tenets of program goals noted above.

During the academic years of 2019-2021, over the course of 3 academic semesters, 2 HHM faculty initiated a study of the acquisition of two essential learning outcomes (ELOs) as defined by the university: Information Literacy and Critical Thinking. These two ELOs were selected due to link between information literacy and critical thinking as skills needed in order to successfully engage in actions related to analysis, information retrieval and evaluation and exploration regarding the various topics and concepts covered under the larger umbrella field of holistic health.

During the periods of data collection (Spring 2020, fall 2020 and Spring 2021 academic terms) faculty who were teaching HHM designated courses were invited to complete a brief survey to determine faculty perspectives on how students in their HHM course were progressing in these two identified ELOs. Additionally, faculty were encouraged to invite student-specific survey completion within their courses to evaluate progression in meeting these ELOs during the semester. Both faculty and student surveys were administered online via Qualtrics (Table 3).

During the Spring 2021 term, two additional questions were asked of faculty related to Diversity, Equity and Inclusion (DEI) as a new 2020 DEI initiative was established across campus. The majority of faculty (90%) stated this explicit integration of DEI in their courses: "If you currently incorporate any Diversity, Equity and Inclusion work into your course this semester (such as readings, videos, class projects/assignments, events, etc.), please describe here. If not, please type Not Applicable. All faculty indicated Yes" and the following are the descriptions of how:

- Exploration of aromatherapy use among different cultures historically; current integration of aromatherapy into the healthcare setting and for various clinical uses.
- These issues are addressed in the topics selected for discussion such as social determinants of health, health inequities, access to health care, discrepancies in health outcomes. Videos, readings, discussion postings and websites are reviewed.
- The course covers an introduction to the history, philosophy and application of Ayurveda which is a health system cultivated in India. Many of the studies and articles are written by doctors from India. The students will be watching a documentary on the Ayurvedic doctor from India who first brought it to the United States.
- In-class Discussions focused on cultural sensitivity in the fields of nutrition and health, as well as In-Class Discussions on how traditional forms of healthcare and medicine need to be respected by allopathic medical practitioners.
- I have a Discussion Board that is graded that address the above items as it relates to nutrition.
- Health disparities are covered throughout the course and in more depth in a reading assignment and online discussion toward the end of the semester.

"If yes, what is the impact of these discussions, readings, projects, etc., on the learning of your students? If not, please type Not Applicable." The following are the responses:

- They are surprised to learn of the widespread use of aromatherapy among almost all cultures around the world.
- It is hoped that students will become empowered to be advocates for their own health and the health and well-being of others. In addition, they will become educated consumers of health care.
- The students are learning that Ayurveda is a holistic health system based on the needs of the individual. This includes lifestyle factors related to Diversity, Equity and Inclusion.
- I believe that this has led to greater detail when students submit Discussion Board posts and Reading Questions, as well as richer discussions in class.

- Students often report new awareness of health disparities that they previously had not considered.

5 Year Alumni data

Rationale: The well-being and motivation of Stockton University graduates who undertake the Holistic Health Minor within the context of their graduate work in health care and training and the consequent impact upon the quality of care provided is not fully understood. For students entering healthcare graduate programs, previous research demonstrates that there are ongoing challenges in delivering high-quality care at the local level, especially in time-pressured health care specialties. Research [7,8] notes the foundational well-being and leadership of doctors who engage in self-care training experienced improvements in perceived confidence and competence (1). Although adequate quality of care was demonstrated, the authors found no significant relationships between well-being of foundation doctors and the quality of care they provided to patients, suggesting the need for further work in this area (2).

Adding a COVID-19 pandemic to the mix, there is very limited evidence regarding the impact of interventions to tackle mental health problems in public health and health care workers. A recent systematic review found pooled prevalence was higher for acute stress disorder (40%), followed by anxiety (30%), burnout (28%), depression (24%) and post-traumatic stress disorder (13%) [9]. Factors associated with the likelihood of developing those problems, including sociodemographic (younger age and female gender), social (lack of social support, stigmatization) and occupational (working in a high-risk environment, specific occupational roles and lower levels of specialized training and job experience) factors. Four studies reported interventions for frontline healthcare workers: two educational interventions increased confidence in pandemic self-efficacy and in interpersonal problems solving, whereas one multifaceted intervention improved anxiety, depression and sleep quality [10]. The risk factors identified represent important targets for future interventions and foundational skillset for emerging healthcare graduate students. As such, the purpose of this alumni survey was not only to identify

Table 3. Faculty & student assessment data.

ELO Questions Posed to Faculty		Spring 2020 Mean Score	Fall 2020 Mean Score	Spring 2021 Mean Score
Relative to all other learning outcomes for your course, how important is it that students learn to comprehensively explore a topic before accepting an opinion or formulating a conclusion?		8.83	8.0	9.17
By the end of your course, how well are students able to take information from one or more sources and develop a comprehensive analysis or synthesis?		7.33	7.50	8.33
By the end of your course, how well are students able to thoroughly question the viewpoints of experts?		6.33	6.33	7.33
By the end of your course, how well are students able to systematically and methodically analyze their own assumptions and/or the assumptions of others?		7.50	7.33	8.00
By the end of your course, how well are students able to evaluate the relevance of contexts when presenting a position?		7.0	7.33	7.33
By the end of your course, how well are students able to take a position (perspective, thesis, or hypothesis) understand its complexities and acknowledge its limits?		6.17	6.50	6.50
By the end of your course, how well are students able to evaluate and logically rank evidence/perspectives based on conclusions and related outcomes (consequences and implications)?		6.33	6.33	6.83
Component of Critical Thinking ELO	Questions Posed to Students	Spring 2020 Mean Score	Fall 2020 Mean Score	Spring 2021 Mean Score
Explanation of Issues	On a scale of 1 to 10 (with 1 being least confident, 10 being most confident), how confident do you feel in your ability to state, describe and explain issues and problems that are relevant to the field of holistic health?	7.23	7.65	7.90
Evidence	On a scale of 1 to 10 (with 1 being least confident, 10 being most confident), how confident do you feel in your ability select, analyze, interpret and use information and evidence?	8.05	7.69	8.07
Influence of Context and Assumptions	On a scale of 1 to 10 (with 1 being least confident, 10 being most confident), how confident do you feel in your ability to systematically and methodically analyze your own assumptions and the assumptions of others and to evaluate the relevance of context when presenting a position?	7.78	7.73	7.67
Students' Position (Perspective, Thesis/Hypothesis)	On a scale of 1 to 10 (with 1 being least confident, 10 being most confident), how confident do you feel in your ability to form a specific position, identify the limitations of a position and incorporate the points of views of others?	7.95	7.63	7.92
Conclusions and Relating Outcomes	On a scale of 1 to 10 (with 1 being least confident, 10 being most confident), how confident do you feel in your ability to form conclusions and relate outcomes in a logical and reflective way?	8.19	8.29	7.83
Component of Information Literacy ELO	Questions Posed to Students	Spring 2020 Mean Score	Fall 2020 Mean Score	Spring 2021 Mean Score
Determine the Extent of Information Needed	On a scale of 1 to 10 (with 1 being least confident, 10 being most confident), how confident do you feel in your ability to effectively define the scope of research questions and determine their key concepts?	7.91	7.78	7.95
Access Needed Information	On a scale of 1 to 10 (with 1 being least confident, 10 being most confident), how confident do you feel in your ability to effectively access necessary and needed information?	8.21	8.28	8.57
Evaluating Information & Sources	On a scale of 1 to 10 (with 1 being least confident, 10 being most confident), how confident do you feel in your ability to evaluate information and its sources critically?	7.68	7.39	7.72
Use Information Effectively	On a scale of 1 to 10 (with 1 being least confident, 10 being most confident), how confident do you feel in your ability to use information effectively to accomplish a specific purpose?	8.62	8.15	8.40
Use Information Ethically and Legally	On a scale of 1 to 10 (with 1 being least confident, 10 being most confident), how confident do you feel in your ability to access and use information ethically and legally?	8.76	8.33	8.60

Table 4. Sample descriptive statistics.

	Race	Frequency	Percent
Valid	White	51	63.7
	Black or African American	6	7.5
	Asian	2	2.5
	Other	4	5
	Total	63	78.8
Missing	System	17	21.3
Total		80	100
	Degree	Frequency	Percent
Valid	Missing	20	25
	BSHS	22	27.5
	Public Health	8	10
	Did not specific field / just BS degree	5	6.25
	BSHS Pre-PT	4	5
	Business	4	5
	BSHS Pre-OT	3	3.75
	BSHS Pre-Speech	3	3.75
	Nursing	3	3.75
	Psychology	3	3.75
	Hard Sciences (Chemistry & Biology)	3	3.75
	Sustainability	1	1.25
	Pharmacology	1	1.25
	Total	80	100

alumni’s implementation of their HHM into their personal lives but also lives were shaped. Specifically, the purpose of this survey was to explore minor alumni regarding HHM impact on job acquisition and sustainable well-being in the workplace [11,12].

Procedures: Student Holistic Health Minor (HHM) graduates were surveyed to explore the utility of the minor through their professional experiences. The survey was approved by Stockton’s Institutional Review Board and former HHM students who graduated during the last 5 years; from fall 2016 through summer 2021 were surveyed. In total, the names, majors and email addresses for 317 students were identified. An initial email was sent to all students with a link to a brief survey, requesting feedback on the impact of their HHM after graduation. A second similar email, a week later, was sent to increase response rate. Approximately half of the 80 responses were received after the initial email and the other half a week later after the second email. A total of 80 of 317 completed the survey, which equates to a little over a 25% response rate.

Specifically, alumni were asked two 7-point Likert Scale questions (Never to Always); one 5-point Likert Scale questions (Strongly Agree to Strongly Disagree) and opens ended question and the demographics – gender, age, race, major, place of employment and current job title. Here are the questions:

1. How often do you feel you have incorporated various holistic practices in your personal life?
2. How often do you use various evidence based holistic strategies in the workplace?
3. Do you feel the acquisition of the HHM helped obtained your first place of employment after graduation?
4. Please provide any additional Information about your HHM journey to better understand your experience while at Stockton and after graduation.

Sample: Descriptive Statistics for the sample indicate approximately 90% female, 8.6% male, with a mean age of 25.2 and Standard Deviation of 5.2, range 21-53. A little over 60% of the sample indicated race as “White”; complete breakdown in Table 4. For employment, there 30 participants who did not provide information. Out of the remaining 50 the breakdown is as

Table 5. Descriptive statistics of results.

	How often do you feel you have incorporated various holistic practices in your personal life?	Frequency	Percent
Valid	Never	1	1.3
	Rarely	4	5
	Sometimes	12	15
	Moderately	11	13.8
	Often	19	23.8
	Very Often	18	22.5
	Always	11	13.8
Missing	System	4	5
Total		80	100
	How often do you use various evidence based holistic strategies in the workplace?	Frequency	Percent
Valid	Never	3	3.8
	Rarely	9	11.3
	Sometimes	12	15
	Moderately	18	22.5
	Often	17	21.3
	Very Often	7	8.8
	Always	8	10
Missing	System	6	7.5
Total		80	100
	Do you feel the acquisition of the HHM helped obtained your first place of employment after graduation?	Frequency	Percent
Valid	Strongly disagree	13	16.3
	Somewhat disagree	10	12.5
	Neither agree nor disagree	24	30
	Somewhat agree	19	23.8
	Strongly agree	7	8.8
Missing	System	7	8.8
Total		80	100

follows: 36 Health-Related (Physical & Mental) Fields; 10 Non-Health Fields; 2 Students; 2 unable to determine. For degrees, 20 participants did not respond, but the remaining data was collapsed into the following 12 categories.

Results

Descriptive statistics indicate the majority of alumni incorporate holistic practices into their personal lives. Specifically, the highest frequency reported was “often” with 23.8% closely followed by “very often” at 22.5%. Overall, a little over 93% include holistic health practices in their lives “sometimes” or more; meaning less than 7% indicate rarely or never incorporating it into their personal lives. Descriptive statistics indicate at least half of the alumni use various evidence based holistic strategies in the workplace. Specifically, the highest frequency reported was “moderately” with 22.5% closely followed by “often” at 21.3%. Overall, almost 85% incorporate it at their workplace “sometimes” or more. Almost 40% agree that obtaining a HHM minor helped to contribute to the acquisition of their first job upon graduation. While the largest group, almost 30% did not agree or disagree with this statement. Leaving a little over 30% that did not feel this was a contributing factor. These results are not surprising given the list of employment titles and companies. In addition, several responses to the open-ended questions provide further qualitative data to explain this quantitative data; for example:

- “Pursuing the HHM was a great experience but unfortunately did not coincide with my major or career of choice. I pursued it more as a

hobby and pure enjoyment of the field! I try to incorporate holistic living in my daily life, though. (yoga, balanced meals, etc.)."

- "Your HHM will ultimately help you become a better healthcare provider, even if it doesn't necessarily convince an employer to hire you because of it."

Table 5 provides descriptive statistics for all three questions, including frequencies and percentages of each response.

The last question that was opened ended, instructing alumni to provide any additional information about their HHM journey to better understand the experience while at Stockton and after graduation. Of the 80 participants, 23 responded to this question via narratives. The following are the major themes that emerged from these responses; students reported:

- Viewing patients (mental and physical health) holistically
- Incorporating Holistic Health Practices into patient treatments
- Incorporating Holistic Health Practices in daily personal lives
- Enjoyed classes & professors
- Grateful they completed minor and
- Desired for a major – both academically and in health-care industry.

Conclusion & Implications

This paper presents how a minor in holistic health was established, implemented, evaluated and assessed regarding sustainability of impact with graduates from Stockton University. The data includes the last five years which provides a snapshot of faculty and student outcomes. It is clear the curriculum organization provided freedom throughout the acquisition of a four year major degree with a wide variety of course offerings both didactic and experiential. On a 10-point scale, average course assessments to measure program goals, ranged between 6.17 to 9.17, with the majority in the 80% range. Students agree or strongly agree 80-90% of the time that the implementation of a student e-portfolio is beneficial for reflection and the courses meet the program goals of health literacy and interprofessional engagement. Organization and student-centered experiential learning was evaluated as functional and provided satisfactory learning outcomes by the students, even though there was room for improvements. One of the main benefits regarding the freedom of course selection within various tracks is the orientation and desire to foster health and well-being practices during a college experience. Furthermore, several courses were offered online due to the COVID-19 pandemic, yet students were able to successfully navigate with technology supported distance learning.

The overall aim of the holistic health courses was to provide both theoretical knowledge in holistic health practices including eastern and western philosophies and practices.

Students apply the knowledge in practice through experiential meditation, yoga, tai chi and aromatherapy and incorporate into daily stress management and problem-solving. Course experiences were also reinforced by on campus wellness activities and through the student initiated Holistic Health Club. As the courses targeted students across campus but housed in the School of Health Sciences, the faculty is interdisciplinary which models clinical practice in healthcare. Students' learning interests in integrative health practices support graduate degrees in healthcare and industry however, the diversity of students provide rich utility for other majors on campus as evidenced by representation across business, health sciences, the arts and humanities. The competence requirement for students taking this minor is varied and the minor provides flexibility for self-discovery and application across various domains of learning. Such students would be guided to focus on various tracks if they wish to deepen knowledge of a specific area, such as biobotanicals or have the freedom to explore across tracks based on inquisitive nature of a particular holistic health practice. However, all students are required to take a research course to decipher scientific studies and integrate health data from an informed perspective thus meeting the health literacy primary goal of the minor. Students

interested in taking a certification or master's degree in integrative health would have a strong foundation to launch post-graduate studies and further deepen their learning through the minor.

Organizing a minor within a university setting requires a commitment of faculty and administrative resources for student advising, appropriate assessment and assurance of accountability through successful completion of all required courses (20 total credits) and an e-portfolio reflection. Our alumni data point to the utility and personal transformation of health and well-being throughout their careers. Our graduates report that the minor had impact on their personal, professional or both aspects of their lives. Specifically, both quantitative and qualitative data support positive implications of the HHM; reporting alumni incorporate the knowledge and skills they learned to their own wellbeing and that of their patients. Moreover, alumni who are not working in healthcare, report being glad they completed the minor and how they integrate it into their non-health related workplace. These data are promising, especially considering the recent pandemic. The interdisciplinary course offerings, dedicated faculty, students' e-portfolios, assessment procedures and alumni data paints a clear picture to the benefits of the HHM. This interdisciplinary minor helps provide students with a foundational skill set to live their personal and professional lives more holistically and increase not only their overall wellbeing, but those of others.

This paper has some limitations, such as describing the curriculum of one minor in a university setting. While quantitative data was in aggregate, the qualitative program evaluations by the students were not included due to ethical considerations and privacy. However, course surveys and alumni data received IRB approval. Curriculum development and assessment of a highly relevant holistic health courses is an important contribution for improving self-assessment of well-being and appreciation of other cultures and context where basic understanding of public health and healing has a fundamental role. Future works would increase student diversity specifically gender and race to enhance greater discourse in equity and inclusion. Additionally, future collaborations may include exploration of similar programs with various national and international teaching institutions providing similar programs, to learn from the experiences of other faculty and students and to share course and program outcomes.

Conflict of Interest

No conflict of interest.

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