

**College Student Well-Being: Using Websites as a Strategy for Campus-Wide Education
and Support Efforts**

by

Jason T. Miller

Bachelor of Arts, University of Pittsburgh, 2006

Master of Arts, University of Pittsburgh, 2007

Submitted to the Graduate Faculty of the
School of Education in partial fulfillment
of the requirements for the degree of
Doctor of Education

University of Pittsburgh

2022

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

This dissertation was presented

by

Jason T. Miller

It was defended on

July 11, 2022

and approved by

Sharon Ross, Associate Professor, Department of Health and Human Development

Jay Darr, Associate Dean of Students for Wellness, Division of Student Affairs

Dissertation Director: Maximilian Schuster, Assistant Professor of Practice, Department of
Educational Foundations, Organizations, and Policy

Copyright © by Jason T. Miller

2022

College Student Well-Being: Using Websites as a Strategy for Campus-Wide Education and Support Efforts

Jason T. Miller, EdD

University of Pittsburgh, 2022

This study explored the topic of college student well-being and campus-wide initiatives aimed at facilitating positive health and lifestyle behaviors through educational efforts. A university-branded website was created with an aim of increasing students' understanding of well-being. Student perceptions of the website's impact on their knowledge, as well as potential behavioral changes, were measured. In addition, utility of the website and its features were tested, and cultural relevance of the offered information and resources was assessed.

Educational interventions that center on students' knowledge of well-being concepts can positively impact various behaviors and outcomes that develop during the college years and carry through the lifespan (Lothes, 2020). To address growing challenges associated with college students' well-being, higher education institutions are encouraged to engage in interdisciplinary, campus-wide initiatives (ACHA, 2020; CAS, 2018). The development of a website dedicated to the topic of well-being provided practitioners at the University of Pittsburgh an opportunity to engage in cross-collaborative work to educate, empower, and support the health and wellness needs of its students.

Using quantitative methods, a study of 114 undergraduate students was conducted. Through a two-part protocol, respondents were asked to perform a full review of the website followed by completion of a 21-question survey, comprising multiple choice and Likert scale items

with some open response. Data analysis incorporated a mix of descriptive statistics and qualitative content analysis, and results were presented in alignment to four guiding inquiry questions.

The study revealed several key findings. First, following use of the website, students reported increases of knowledge and awareness of well-being. Second, they indicated feeling motivated and/or intending to take positive actions toward supporting their well-being. Third, user feedback suggests website features that explain the “what” and “how to” of well-being provided the most utility. Finally, results indicated that relevance and applicability of the website’s information and resources varies across social identities, highlighting the need for more tailored content.

Findings from this study show promise in the use of websites as a tool for campus-wide education and support efforts, and implications for professional practice are discussed. Limitations and considerations for future research conclude the dissertation.

Table of Contents

Preface.....	xiv
1.0 Framing of the Problem of Practice	1
1.1 Broader Problem Area.....	1
1.2 Problem of Practice Statement.....	4
1.3 Positionality and Reflexivity	4
1.4 Organizational System	5
1.5 Division Mission & Connection to the Problem Area	7
1.6 Constraints and Facilitators to the Problem.....	9
1.7 Root Causes to the Problem.....	10
1.7.1 Theoretical understanding	11
1.7.2 Collaboration	12
1.7.3 Curriculum design	12
1.7.4 Teaching / learning methods	12
1.7.5 Healthy U initiative	13
1.7.6 Marketing strategy.....	13
1.8 Stakeholders	14
1.9 Primary Stakeholders and Secondary Stakeholders.....	16
1.10 Stakeholder Power vs. Interest.....	18
1.11 Stakeholder Power Dynamics.....	19
1.12 Impact of Change	20
2.0 Review of Supporting Knowledge	22

2.1 Descriptions and Models for Understanding Well-Being	23
2.1.1 Defining well-being	23
2.1.2 Dimensions of well-being	24
2.1.2.1 Physical well-being.....	25
2.1.2.2 Emotional well-being	25
2.1.2.3 Intellectual well-being	26
2.1.2.4 Spiritual well-being.....	26
2.1.2.5 Environmental well-being	26
2.1.2.6 Financial well-being.....	26
2.1.2.7 Occupational well-being.....	27
2.1.2.8 Social well-being.....	27
2.1.3 Multidimensional models	27
2.1.3.1 Swarbrick’s Eight Dimensions of Wellness.....	28
2.1.3.2 Mayol’s Nine Dimensions of Wellness	29
2.1.4 Summary.....	29
2.2 Outcomes Associated with Well-Being	30
2.2.1 Physical outcomes	30
2.2.2 Psychological outcomes.....	31
2.2.3 Academic and occupational outcomes.....	32
2.2.4 Summary.....	33
2.3 Well-Being Education & Promotion Initiatives.....	34
2.4 Initiative Design	35
2.5 Key Components.....	35

2.5.1 Definition of well-being & description of dimensions.....	35
2.5.2 Wellness models.....	36
2.5.3 Assessments.....	37
2.6 Implementation Strategy	38
2.6.1 Leadership & collaboration	38
2.6.2 Mission, vision, and goals	39
2.6.3 Marketing & communications	39
2.6.4 Evaluation & accreditation	40
2.7 Exemplar Institutions.....	41
2.7.1 Wake Forest University	41
2.7.2 University of Notre Dame.....	42
2.7.3 University of Minnesota.....	44
2.7.4 Summary.....	45
2.8 Context Review	46
2.9 Conclusion	48
3.0 Theory of Improvement and Implementation Plan.....	50
3.1 Theory of Improvement.....	50
3.2 Systems Drivers	52
3.2.1 Primary drivers	52
3.2.2 Secondary drivers	53
3.3 Change Ideas	54
3.4 Proposed Change Idea	55
3.5 PDSA Cycle	56

3.5.1 Plan	57
3.5.2 Do	58
3.5.3 Study.....	59
3.5.4 Act.....	59
3.6 Predictions	60
3.7 Methods and Measures	61
3.7.1 Study design	61
3.7.2 Sampling strategy.....	62
3.7.3 Recruitment	63
3.7.4 Survey instrument.....	63
3.7.5 Data analysis	64
3.8 Summary	65
4.0 PDSA Results.....	66
4.1 Project Timeline.....	67
4.2 Study Respondents	68
4.3 Findings	71
4.3.1 Inquiry question #1: Does the information on the website increase students’ knowledge of well-being?.....	72
4.3.2 Inquiry question #2: Does engagement with the website content lead toward positive health or lifestyle behaviors?	73
4.3.3 Inquiry question #3: What features or information on the website provide the most utility, as well as what is missing from the website that will improve its utility?	78

4.3.4 Inquiry question #4: Do students find the website’s information and resources to be culturally relevant?	85
5.0 Discussion and Implications.....	88
5.1 Findings and Discussion Related to the Research	88
5.1.1 Websites are an effective tool for raising students’ awareness and increasing their understanding of well-being.....	89
5.1.2 Students experience enlightenment upon being provided a broad overview of well-being.	90
5.1.3 Increased knowledge of well-being elicits varying actions or plans toward positive health and lifestyle behaviors.....	91
5.1.4 Emotional well-being and physical well-being remain areas of greatest interest/concern.	92
5.1.5 Descriptions and illustrations, tips/guidelines for practice, and campus resources for supporting well-being provide the most utility to students.....	93
5.1.6 Educational, self-help tools for students’ well-being require a scaled, campus-wide approach.	94
5.1.7 Relevance of the website content varies across social identities, necessitating more tailored information and resources.	94
5.2 Implications for Practice.....	95
5.2.1 Continuously develop the Thrive @ Pitt website.	96
5.2.2 Deliver more health & wellness education programs at scale.....	96
5.2.3 Expand efforts to serve specific interests and identities.....	97
5.3 Limitations and Future Research	97

5.4 Conclusion	99
Appendix A PDSA Form	101
Appendix B Proposed PDSA Cycle Timeline: Development of a University Website Dedicated to Well-being at Pitt	103
Appendix C Online Survey Instrument	104
Appendix D Survey Questions Chart.....	110
Bibliography	116

List of Tables

Table 1. Stakeholders Connected to the Problem of Practice.....	15
Table 2. Grouping of Primary and Secondary Stakeholders.....	16
Table 3. Change Idea and Study Project Timeline	68
Table 4. Study Sample Demographics	70
Table 5. Survey Items and Results Aligned with Inquiry Question #1	73
Table 6. Survey Items and Results Aligned with Inquiry Question #3	83

List of Figures

Figure 1. Root Causes Fishbone Diagram	11
Figure 2. Stakeholder Power vs. Interest Grid.....	19
Figure 3. Driver Diagram.....	51

Preface

To all the friends, family, and colleagues that were part of this journey, I am forever grateful of your love and support. I would like to express my deepest appreciation to the members of my dissertation committee. Dr. Maximilian Schuster, like the greatest coaches I've had throughout my career as an athlete, you helped me achieve my goals by maintaining high standards for excellence and quality of work. You kept me focused on the task at hand and remained patient and committed to shepherding me through the academic process. I feel like a champion again and share this honor with you. Dr. Jay Darr, thank you for welcoming me into your place of practice, for entrusting me to lead others in this work, for being a great role model, and for continuously challenging me academically and professionally. Dr. Sharon Ross, I admire your knowledge and expertise as a researcher and appreciate the additional suggestions and insights you provided through various stages of this process. Thank you for being down to earth, approachable, receptive, and supportive of my ideas; it was a joy working with you.

I would like to acknowledge the additional support and contributions by colleagues who helped make this work possible. My sincere thanks to the many talented individuals throughout the university community and particularly within the Division of Student Affairs. I am indebted to my coworkers within the Department of Campus Recreation and owe special thanks to my previous supervisor, Marilyn Ross, and current supervisor, Jill Krantz, for their support and flexibility while pursuing this degree. I'm lucky to have such a great team of people who step in to carry the extra load when help is needed. To my friend and mentor, Dr. Brian F. Hamluk, you are one of the most insightful and genuine people I've known. Thank you for your kindness, your sound advice, and your willingness to connect at any time; I look up to you more than you'll ever

know. To my EdD program colleagues, Dr. Bianca DeJesus and Dr. Emiola J. Oriola, my friendships with you are indelible and the bonds we formed gave me strength throughout the program. I would also like to extend my deepest gratitude to my friend and colleague, Bernadette J. Smith. It's pleasure to work with you day in and day out, and I'm so proud of what we have accomplished together in pursuit of advancing the health and well-being of our university community. This dissertation is not complete without your countless time and effort.

I am privileged to have a strong family support system; without them this accomplishment would be nearly impossible. Thank you to my father-in-law and mother-in-law, Charles and Marty Payne, for remaining supportive and excited about my work, and for assisting with home responsibilities in my absence. Thank you to my parents, Robert and Nancy Miller, for also helping with various responsibilities and for always being available to lend an ear when I needed some time and space to talk. Thank you for teaching me the value of hard work and remaining committed to achieving goals no matter how tall the task. To my children, Jacob and Jenna Miller, thank you for being my biggest fans and giving me the extra motivation to push through. I'm so proud of how helpful and responsible you were during all the times I was away. I hope this accomplishment inspires you to do great things in life. Remember, if you set a goal and work hard toward it, you will almost always achieve it. To my wife, Megan, I cannot put into words how much you mean to me. You are a fantastic mother and spouse, and your work ethic is second to none. You challenge and inspire me in every way, and I am so thankful to have you in my life. You carried extra burdens so I could put undivided attention toward my work. This accomplishment is as much yours as it is mine. I love you.

Finally, to the learning support student who questioned his abilities yet decided to be bold and courageous, congratulations, you did it.

1.0 Framing of the Problem of Practice

1.1 Broader Problem Area

In recent years, student well-being has become one of the most critical issues throughout higher education (ACHA, 2019). The ongoing needs of college students, coupled with rising issues among today's population, have caused both practitioners and administrators to focus more intently on this topic. Snapshots of national data help to paint the picture, whereas over one-third of college students report at least one mental health problem while just over one-third report positive mental health (Eisenberg & Lipson, 2019). Sixty-five percent of college students experience overwhelming anxiety (ACHA, 2019). Over one-half of college students do not meet the recommended amount of weekly exercise (ACHA, 2019; U.S. Department of Health and Human Services, 2018), and the prevalence of overweight and or obesity among this age group continues to climb along with the rest of the U.S. population (Manchester, 2020). Furthermore, it is argued that students today socialize less than previous generations (Eagan et al., 2014), and 65% of today's students report feeling very lonely (ACHA, 2019). Increasing percentages of students report financial worries (Stolzenberg et al., 2019), and less than one half of college students indicate feeling prepared for their future careers (McGraw-Hill Education, 2018).

Broader societal issues and events have also taken a toll on college students, adversely impacting their well-being in various ways. Nationally, ongoing civil unrest involving matters of social justice, politics and the like have drawn attention and concern from students, increasing their levels of stress and distrust, and negatively impacting their overall enjoyment of campus life (Feng, 2022). Globally, a once-in-a-century pandemic has shaken up the college experience, ushering in

flood a new challenges and acuity of concerns from mental health to academic performance to career futures (Aucejo et al., 2020; CCMH, 2021). The impact of these issues is observed firsthand in my place of practice at the University of Pittsburgh. For example, the killing of George Floyd (The New York Times, 2022), happening in the wake of local tragedies such as the Tree of Life synagogue attack (Robertson et al., 2018) and shooting of Antwon Rose Jr. (Barajas, 2018) sparked outrage and calls for change by students and the broader campus community (University of Pittsburgh Division of Student Affairs, n.d.-a). At the same time, data from internal reports including Gallup surveys and feedback from the university's Year of Engagement efforts (University of Pittsburgh, n.d.) revealed that our students were struggling in a variety of ways and attributed much of their adverse college experience to current social, political, and public health issues.

All the above are just a few examples of the challenges college students currently face. This is a major concern, because the emerging adult years represent a crucial time for enduring learning and development in one's life. If college students' well-being is negatively impacted, their potential for growth and success may be adversely affected. Well-being has correlations to many health and performance-related outcomes that emerge during the college years and carry through the lifespan (e.g., Coffey et al., 2016; Lothes, 2020). Supporting and enhancing college student's well-being is not only necessary to help them navigate the challenges of today; it also lays the foundation for building a healthy and vital life for tomorrow and beyond.

A growing body of literature supports the benefits and necessity to focus on students' well-being as a means to lifelong happiness and success. As such, increasing numbers of practitioners and administrators within higher education have developed a vested interest in this topic (Travia et al., 2019; Watts, 2017). This occurrence gives promise to addressing public health concerns on

a widespread scale and offers another vehicle through which more desirable student outcomes can be attained and the development of more positive health and lifestyle behaviors can be established. Just as improvements to one's overall well-being cannot be achieved through attention to one area, student success cannot be facilitated through a single campus unit or standalone effort. Addressing and improving the well-being of students requires the expertise and collaboration of many campus stakeholders (ACHA, 2020; Cowen, 1991; Fullerton, 2011; Watts, 2017).

A collaborative and integrated approach (or collective impact) (ACHA, 2020), can increase students' knowledge of well-being concepts, which leads to the development of self-efficacy and the adoption of healthy lifestyle behaviors (Gieck & Olsen, 2007; Hattie et al., 2004; Von Ah et al., 2004), all of which contribute to various forms of student success, including but not limited to physical health (Coffey et al., 2016; Gieck & Olsen, 2007), psychological functioning (Hermon & Hazler, 1999), academic performance (Horton & Snyder, 2009), and occupational success (Baldwin et al., 2017). Given the challenges facing today's college students, it is essential for practitioners and administrators to engage in strategic, collaborative efforts that support and enhance well-being. Student well-being is a universal issue that pertains to and affects the entire campus community, thus requiring shared ownership among a growing body of stakeholders. Interdisciplinary collaborations and campus-wide initiatives that focus on increasing students' knowledge of well-being, including the adoption of more positive reinforcing behaviors, fosters desirable outcomes and various forms of success that are observed during the college years and beyond, an axiom that is paramount to the mission of higher education.

1.2 Problem of Practice Statement

Throughout the Division of Student Affairs at the University of Pittsburgh, students are not provided a broad understanding of well-being. This presents obstacles as they navigate their college experience and develop various health and lifestyle habits during their emerging adult years. Without a consistent and comprehensive understanding of well-being, and knowledge of the ways in which their well-being is affected, students are at higher risk for developing poor health and lifestyle habits or conditions that can persist and/or worsen throughout the lifespan.

1.3 Positionality and Reflexivity

Employed by the Division of Student Affairs, I currently serve as the assistant director and second in command for the Department of Campus Recreation, reporting directly to the executive director. My primary responsibilities include oversight and management of all facilities and operations, which account for over 500,000 square feet of university property including fitness centers, basketball courts, swimming pools, indoor and outdoor playing fields, and several other fitness/recreation spaces. I am the supervisor to five full-time staff, who have function-specific responsibilities, and oversee their management of over 150 student employees that help support our operations. In addition, I serve as the primary point of contact for all non-capital projects, manage all marketing and communication efforts, provide strategic leadership for the department, and contribute to various division-wide initiatives.

The information provided in this section is based on observations and first-hand experiences in working for the division over 10+ years. My reflexivity (Finlay, 2002) or framing

of the problem is informed by my position, professional knowledge, historical context, and research relative to this dissertation in practice work. As such, these factors guided my understanding and approach to describing the division's organizational system and power dynamics, identification of stakeholders, listing of root causes, and development of change ideas for addressing the problem. Finally, over the span of time from when this work first started, several organizational changes occurred including additions or movement of staff to realignment of division units. For the purposes of this dissertation in practice, I present these structural elements as they were at the time of researching and identifying my problem of practice.

1.4 Organizational System

The Division of Student Affairs at the University of Pittsburgh supports the needs, interests, and development all full-time and part-time undergraduate and graduate students. This is demonstrated through a variety of programs, services, and resources that are available as part of enrollment. Functions and scope of the division range from campus life activity such as student organizations, fitness and recreation, special events, and leadership programs to support services such as counseling, clinical health, career development, campus policy, and parent/family resources. Each program or service, which are typically administered through individual departments, is designed to foster the development and success of all students, as well as meet specific, individual needs. The division is comprised of 15 budgetary units (or departments), which account for roughly 200 full-time and part-time employees:

- Campus Recreation
- Career Center

- Counseling Center
- Cross Cultural and Leadership Development
- Interfaith Dialogue & Engagement
- Marketing & Communications
- New Student Programs
- Parent and Family Resources
- Pitt Arts
- PittServes
- Residence Life
- Student Conduct
- Student Health
- Student Life
- Student Unions

The division's power dynamics are generally defined by a hierarchical structure (University of Pittsburgh Division of Student Affairs, n.d.-b), starting with senior staff who provide overall leadership for the division. This consists of a vice provost for student affairs, a dean of students, three associate deans, and several department directors (University of Pittsburgh Division of Student Affairs, n.d.-c). While all division matters fall under purview of either the vice provost for student affairs or the dean of students, the associate deans hold leadership and oversight of numerous departments or program areas. directors provide leadership and oversight of individual departments, which are comprised of various professional staff including associate and assistant directors, managers, or coordinators. And the business and operational functions of these departments are supported by various administrative and technical support staff. Understanding

the reporting structure and power dynamics of the division is important because I am addressing an organizational-wide issue that pertains to numerous stakeholders. I discuss this in detail as well as my plan for improvement in following sections.

1.5 Division Mission & Connection to the Problem Area

Complementing the University's academic excellence, the Division of Student Affairs' programs and services are focused on developing the whole student. Well-being is a central tenant of the division and a priority focus for each of the units that comprise it. The division's FY19-22 strategic plan (University of Pittsburgh Division of Student Affairs, n.d.-d) is built on three guiding principles, student wellness, student development, and student engagement, all of which support the overarching goal of student success.

Related to these principles, there are a few existing programs and services within the division that teach and promote some concepts related to well-being. For example, the University Counseling Center (UCC) has several well-being-themed education and outreach initiatives, including individual and group counseling, resiliency and strengths-based trainings, and informational sessions focused on mental health related topics (University of Pittsburgh UCC, n.d.). These initiatives focus heavily on the psychological and social aspects and do not cover all areas that impact well-being. The Student Health Service (SHS) offers health education programs, such as nutrition counseling, substance abuse classes, and peer-led education of health-related topics (University of Pittsburgh SHS, n.d.). Though more expansive in design, these health education efforts are primarily rooted in the physical domain of well-being. Within the department of Campus Recreation, numerous programs and services contribute to students' well-being, such

as intramurals, club sports, group fitness classes, and access to fitness centers, but the connections to well-being are not expressed through any of the programs' curricula (University of Pittsburgh Campus Recreation, n.d.).

Other units within the division also provide services that connect to well-being including career development and job placement assistance through the Career Center (University of Pittsburgh Career Center, n.d.), spiritual identity and practice through the Office of Interfaith Dialogue and Engagement (University of Pittsburgh OID, n.d.), and community engagement through the Office of PittServes (University of Pittsburgh PittServes, n.d.). None of these programs or services explicitly acknowledge their contribution to well-being, including intersections to other units' efforts that support specific areas of well-being. Indeed, many of the programs and services that are delivered through each of these units produce outcomes that impact students' well-being, but it is not clear if the personnel that comprise these units draw such connections through their work or consider this in their strategic planning efforts.

Healthy U (University of Pittsburgh Healthy U, n.d.), which was a division-wide initiative launched in 2012, had strong potential to integrate efforts and enable a campus-wide initiative for teaching and promoting well-being on a widespread scale, but it did not grow in scope, and thus has little notoriety among the student body. In addition, the Healthy U initiative does not have shared ownership throughout the division, and currently only one department manages the few programs and events that run under its name. The importance of increasing student's knowledge of well-being is not recognized consistently throughout the division, and thus has not prioritized a concerted, campus-wide education and promotion effort.

1.6 Constraints and Facilitators to the Problem

Dynamics within the division present numerous barriers that account for the problem I have identified. The disintegrated (or siloed) nature of each department is perhaps the biggest constraint. This, as Manning et al. (2014) explain, is due to a variety of structural conditions that are established at the institutional level. As such, administrative and functional areas of the division are decentralized, resulting in specific goals, objectives, and day-to-day priorities that are unique to each department. Consequently, as each department is responsible for field-specific areas that support the student experience and their development, it is not surprising that few shared strategic initiatives exist around well-being. In addition, staff are typically consumed with fulfilling the core responsibilities of their unit, which leaves little time or opportunity for collaboration. Staff from each department also take pride in demonstrating expertise and/or proficiency in their area, so it is not uncommon for programs or services to be developed in house, rather than outsourced or in partnership with other units. The “functional silos” model (Manning et al., 2014) that largely characterizes the division is a default that impedes interdisciplinary collaboration.

A few departments are integrated physically (i.e., Student Health and Counseling located inside the University Wellness Center), but it is unclear what programs, services, or philosophies they share. There also appears to be some duplication of services or initiatives, such as wellness-themed education curricula being developed by numerous departments at the same time. This is noteworthy, because the systems that support student well-being can be made more efficient through collaborations and more integration of services. Finally, the dynamics between various units do not appear synergistic; perhaps this is due to a difference of philosophies and/or management styles among leadership. This is a larger organizational issue that will need to be considered when designing and implementing a change effort.

Though fragmentation and numerous barriers exist throughout the division, there are structures in place that present opportunities for improvement and collaboration. For example, there are a number of existing division-wide or multi-unit groups (e.g., SA programmers committee, mental health task force) that collaborate in some capacity. Engagement with these groups offer a chance to raise awareness of the issues, generate interest, and build relationships that will lead to support and collaboration. There are also division-wide committees that have representation and contribution from numerous department; this can also be a way to elevate the problem's level of priority and gain buy-in.

1.7 Root Causes to the Problem

As described above, the Division of Student Affairs has many programs, services, and resources that support students' holistic development, but there are gaps and operational inefficiencies that may inhibit students' well-being potential. Figure 1 includes a fishbone diagram that presents several root causes to the problem I am addressing.

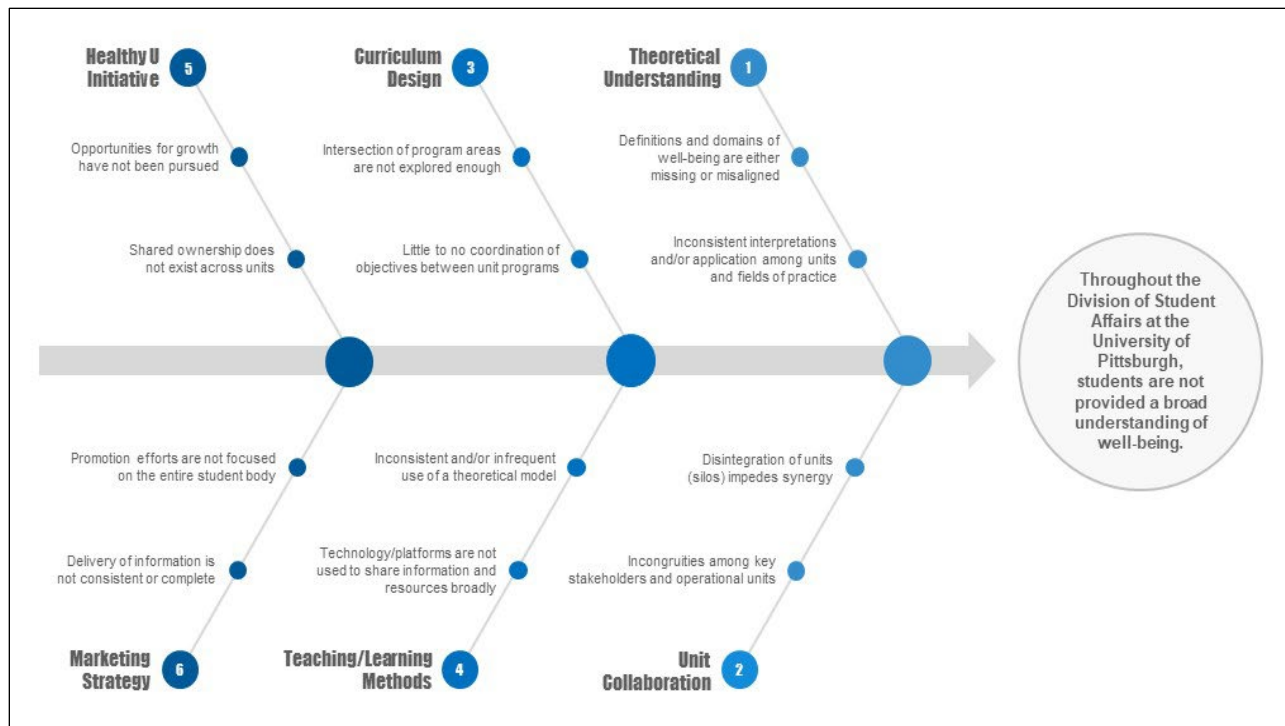


Figure 1. Root Causes Fishbone Diagram

1.7.1 Theoretical understanding

Whereas several units within the division are committed to supporting the holistic development of students through their programs and services, there is misalignment or incongruities in how the concept of well-being is understood and thus delivered. Examples include formal definitions, domains (or areas) that comprise well-being, and theoretical (or wellness) models.

1.7.2 Collaboration

Factors related to collaboration are perhaps some of the greatest root causes to the problem. In fact, many institutions identify collaboration related issues as one of their biggest challenges to implementing effective campus well-being efforts (Hartman et al., 2018). Within the Division of Student Affairs, some of these factors are structural, such as physical separation or disintegration of units, while other factors are interpersonal, such as the relationships and philosophies of practice among stakeholders. And although student well-being is identified as a key priority for the division, there are few shared strategic plans or objectives between units.

1.7.3 Curriculum design

Related to the above, units' curricula that drive various well-being related programs are not aligned. This is not to say that division units should be offering the same programs; the variety of division programs and services that support students' well-being is major strength. However, there is little interdisciplinary collaboration at the programmatic level, including little to no strategic coordination of units' program objectives. In addition, it is not clear to what degree unit programs are designed, delivered, and assessed in accordance with the division's strategic goals for student wellness (or well-being).

1.7.4 Teaching / learning methods

Across programs and services throughout the division there are a variety of tools and methods (e.g., definitions, theoretical model) that units use to deliver programs and teach concepts

related to well-being. These tools and methods vary among units and likely lead to inconsistencies in how students understand and manage their well-being. Moreover, many of these programs and services are delivered in-house using traditional teaching methods, such as in-person seminars. And while these can be effective strategies for achieving enduring learning, they are limiting in the number of students that can be reached, as well as the amount of information that can be shared.

1.7.5 Healthy U initiative

As described earlier, the concept of Healthy U encompasses several key underpinnings necessary for supporting, enhancing, and increasing students' knowledge of well-being on a campus-wide scale. But the initiative remains under the purview of one unit, and thus has not expanded in scale, nor can it be considered a division-wide effort.

1.7.6 Marketing strategy

Marketing efforts focused on students' holistic well-being are sparse. Aside from advertisements for special events and general marketing that promote the core services of each unit, there are no mechanisms designed to raise awareness and inform students of programs, services, and best practices for supporting and enhancing one's total well-being. In addition, there are currently no collaborative marketing efforts, as each unit generates materials internally to promote their own programs and services. Finally, cross-promotion of unit programs and services, including sharing of accompanying marketing materials are scant, as no structured system for doing so exists.

1.8 Stakeholders

The range of stakeholders related to this problem is broad and can be arranged into two categories (see Table 1). The first category consists of groups and individuals within the Division of Student Affairs. Examples include staff from the Counseling Center, Student Health Service, Campus Recreation, and other units. Division leadership, including department directors, associate deans, the dean of students, and the vice provost for student affairs are also included in this list. The second category, other stakeholders, consists of groups and individuals outside the division, such as the student body, student interest groups, student leaders, parents, and other university faculty and staff.

Table 1. Stakeholders Connected to the Problem of Practice

Division of Student Affairs Stakeholders	Other Stakeholders
University Counseling Center	Students
Director	Student Body
Leadership Staff	Student Organizations
Coordinators/Programmers	Student Leaders
Student Health Service	Parents and Guardians
Executive Director	University Faculty/Staff
Leadership Staff	Administrators
Health Educators	Professors
Campus Recreation	
Executive Director	
Leadership Staff	
Coordinators/Programmers	
Student Affairs Senior Leadership	
Vice Provost for Student Affairs	
Dean of Students	
Associate Deans	
Department Directors	
Other Division Units	
Department Coordinators/Programmers	

1.9 Primary Stakeholders and Secondary Stakeholders

The stakeholders listed above can also be categorized into groups of “primary” and “secondary” based on their sphere of influence and/or professional or personal interests (see Table 2).

Table 2. Grouping of Primary and Secondary Stakeholders

Primary “Key” Stakeholders	Secondary Stakeholders
University Counseling Center Director	Campus Recreation Coordinators/Programmers
University Counseling Center Leadership Staff	Student Affairs Department Directors
University Counseling Center Coordinators/Programmers	Student Affairs Department Coordinators/Programmers
Student Health Service Executive Director	Parents and Guardians
Student Health Service Leaderships Staff	Other University Faculty/Staff
Student Health Service Health Educators	
Campus Recreation Executive Director	
Campus Recreation Leadership Staff	
Vice Provost for Student Affairs	
Dean of Students	
Student Body	
Student Organizations	
Student Leaders	

The primary stakeholders are those whose work is directly connected to student well-being and/or have the power to influence decisions and facilitate action. For example, coordinators

within the Counseling Center or Student Health Service, who teach or promote well-being concepts their offices' programming, have a vested interest in the topic but do not have direct authority to make decisions or launch initiatives that would impact the broader problem. Conversely, directors from units such as the Counseling Center and Student Health Service have both institutional accountability for student well-being and authority to institute programmatic changes and/or initiate campus-wide efforts. In addition, senior leadership, such as associate deans, the dean of students, or vice provost for student affairs, who may not be intimately involved with programming or interventions focused on student well-being, should be considered key stakeholders due to their positional authority and ability to support and prioritize division-wide initiatives. Collectively, each of these positions within the division play a key role in supporting students' well-being.

Because this topic is centered on students, they too must be viewed as primary stakeholders, as they are the key subject and beneficiaries of this work. They can also provide valuable, first-hand feedback of any implemented change efforts. It can be assumed that there are varying levels of interest among the student body. Whereas some students may feel deeply connected to this topic, other students may be indifferent or disinterested. Nonetheless, the entire student body must be considered a primary stakeholder, as the problem I am addressing directly impacts all of them. In addition to the student body, there are numerous student organizations and individual student leaders that should be considered primary stakeholders. Examples include mental health advocacy groups, student government leaders, and perhaps other related interest or social groups. Their passion and interest in this topic can help raise awareness among the study body, advance work at the ground level, and elevate priorities at the division leadership level.

Secondary stakeholders are those whose work is indirectly connected to student well-being or those who have moderate interest and/or moderate power to influence decisions in this realm. Examples include coordinators from units within the division, whose programming are not directly focused on well-being, but have overlaps (or intersectionality). Also, department directors whose programs and initiatives are not centered within fields of health and well-being but could support such efforts and/or incorporate some interdisciplinary strategies into their units' operational plan. Various faculty and staff from units outside the Division of Student Affairs may have an interest due to their research agenda, professional role, or responsibility center's (RC) strategic priorities. Finally, for obvious reasons, parents and guardians should also be included in the list of stakeholders.

1.10 Stakeholder Power vs. Interest

A stakeholder Power vs. Interest grid provided in Figure 2 helps to illustrate where various individuals or groups fall on the problem area continuum. This tool is not only useful for identifying the interest and power dynamics surrounding this topic but may also be helpful in determining how to engage various stakeholders in a change effort.

Stakeholder Power vs. Interest	
Interest	High
	<ul style="list-style-type: none"> ○ Student Health Service Health Educators ○ University Counseling Center Leadership Staff ○ University Counseling Center Coordinators/Programmers ○ Campus Recreation Leadership Staff ○ Student Health Service Leadership Staff ○ Student Organizations ○ Student Leaders ○ Parents & Guardians
Low	Low
	<ul style="list-style-type: none"> ○ Campus Recreation Coordinators/Programmers ○ Student Affairs Department Coordinators/Programmers ○ Other University Faculty/Staff
Power	
High	

Figure 2. Stakeholder Power vs. Interest Grid

1.11 Stakeholder Power Dynamics

The dynamics among stakeholders are widespread; in some cases, they are well-recognized, whereas in others it is not as clear. For example, as mentioned earlier, a hierarchical system exists with the Division of Student Affairs. This makes it easy to identify who the key decision makers are, and ultimately determine who may hold more power and influence as a stakeholder. Conversely, considering the student body and student organizations, it is not known

how much power resides, or how many students or student organizations it would take to influence change. Also, while high interest and high-power stakeholders (i.e., Counseling Center director, Student Health director, Campus Recreation director) will likely be important facilitators to the initiative, it is unknown who among these individuals holds the most power or influence and/or who may champion any proposed ideas to address the problem. Finally, as implementation of a change effort ensues, it will be important to consider and facilitate the power dynamics among all stakeholders. To be most effective, the change effort should be approached and embraced as a shared, division-wide initiative; it cannot be owned any single individual or stakeholder group (ACHA, 2020; CAS, 2018).

1.12 Impact of Change

The Division of Student Affairs' FY19-22 strategic plan (University of Pittsburgh Division of Student Affairs, n.d.) focus on three main areas, student wellness, student development, and student engagement. The overarching goal is student success, which is measured by “retention, academic performance, graduation, satisfaction, campus climate, sense of belonging, career placement, workplace engagement, and well-being” (p. 1). As I demonstrate in the next section of my review of scholarly and professional knowledge, well-being has corelates to all of these areas, and can serve as a method or catalyst to support and/or positively influence each one. Amplifying efforts that focus on students' knowledge and practice toward positive well-being would not only augment the division's strategic plan, but it may also lead to higher levels of success in the various forms expressed above. Increasing student's knowledge of well-being offers a grounded and

feasible approach for achieving these outcomes. And to do so, a collaborative, campus-wide effort is necessary.

2.0 Review of Supporting Knowledge

Student well-being has been a longstanding priority throughout higher education (e.g., Travia et al., 2019). The ongoing needs of college students, coupled with rising issues such as mental and physical health, social and community well-being, career readiness and financial worries among today's population, have caused both practitioners and administrators to focus more intently on this topic. These issues are of critical concern because they impact a variety of outcomes related to student development, success, and overall health both during the college years and beyond (e.g., Lothes, 2020; Nelson et al., 2008). An effective approach to supporting and enhancing students' well-being is through education and promotion efforts. Research shows that education and promotion of wellness (or well-being) concepts can positively impact a variety of student outcomes including, but not limited to, physical health (Coffey et al., 2016; Gieck & Olsen, 2007), psychological functioning (Hermon & Hazler, 1999), academic performance (Horton & Snyder, 2009), and occupational success (Baldwin et al., 2017). In addition, increasing students' knowledge of well-being concepts develops self-efficacy, which fosters the adoption of healthy lifestyle habits that can carry through the lifespan (e.g., Von Ah et al., 2004).

Due to its positive impacts on development, success, and overall health, practitioners and administrators should prioritize efforts that aim to teach and promote well-being concepts to all students. Campus-wide well-being initiatives that engage numerous stakeholders and areas of expertise are a recommended best practice (Fullerton, 2011; Watts, 2017), and available frameworks and guidelines should be used to aid such efforts (e.g., CAS, 2018). Student well-being is shared responsibility of many, and initiatives must demonstrate a campus-wide commitment. Through a collaborative approach, partnerships can be formed, operational

efficiencies can improve, increasing needs can be met, students' potential can be realized, and an embedded culture dedicated to supporting and promoting well-being can be established throughout the university community.

The purpose of this review of scholarly and professional knowledge is to explore the benefits of teaching and promoting well-being concepts to college students, while identifying strategies and tactics for establishing effective campus-wide initiatives. I begin by examining definitions of well-being, as well as illustrative models that have been created to help understand its multidimensionality and the various domains that comprise it. I offer a definition and model that would be suitable to adopt. Next, I explore numerous outcomes related to student well-being, their importance to the mission of higher education, and discuss how education and promotion efforts can further support student development and success. Finally, I discuss essential components of education and promotion frameworks, and analyze a few exemplar institutions that have campus well-being initiatives in place. I provide a summary of best practices, tools, and resources that would be useful for designing a well-being education and promotion initiative within my place of practice.

2.1 Descriptions and Models for Understanding Well-Being

2.1.1 Defining well-being

Dunn (1961), who introduced the concept of wellness (alternatively termed well-being) explained it as a method of functioning that requires attention to and balance of life and environmental aspects in an effort to maximize one's potential; it is a pursuit of "zest for life" (p.

4) that exists on a continuum. Though a range of definitions exist for well-being, the Centers for Disease Control (CDC, 2018) summarize it as “judging life positively and feeling good” (p. 2). As with the notion of wellness, well-being accounts for a variety of factors (e.g., physical health, mental health, relationships). Comparisons throughout the literature highlight common characteristics of wellness and well-being, and for the topics discussed in this paper, these terms are used interchangeably. First, well-being is a subjective condition that manifests itself in different ways depending on contexts and individuals’ circumstances (Adams et al., 1997; Diener et al., 2009; Roscoe, 2009). Second, well-being is comprised of, and impacted by, numerous interrelated domains (or dimensions) (Hettler, 1980; Prilleltensky et al., 2015; Rath & Harter, 2014; Sweeney & Witmer, 1991). Third, the state of well-being is often associated with a desired or optimal condition, expressed by positive emotions, satisfaction, or higher levels of functioning (Dunn, 1961; NIRSA et al., 2020; Seligman, 2011; Witmer & Sweeney, 1992). This considered, I offer the following definition drawn from these concepts for this dissertation in practice:

Well-being is an overall outcome of various individual health or lifestyle behaviors and indicators, combined with broader social (or community) determinants. It accounts for various interrelated domains that comprise both subjective and objective factors and is best measured by one’s fulfillment and satisfaction of these domains collectively.

2.1.2 Dimensions of well-being

Pioneers of the wellness movement, including Travis (1975), Hettler (1976, 1980), and Ardell (1977), expanded on Dunn’s (1961) work and helped conceptualize wellness as a multidimensional construct that encompasses numerous dimensions (or domains). Each domain represents an area or grouping of factors that account for our overall health and well-being. All

domains of well-being are interconnected, meaning that changes in one area will affect changes in other areas (Myers et al., 2000). Hence, to achieve an optimal state of well-being, we should seek to improve and maintain balance, or harmony, across all domains (Dunn, 1961; Horton & Snyder, 2009; Swarbrick, 1997). Practitioners within higher education refer to dimensions of wellness and their definitions to educate and promote well-being concepts to students. They can also be used by counselors and related professions to help identify strengths or weakness when designing interventions (Myers et al., 2000; Swarbrick, 1997). By learning about the individual domains, students can gain a deeper and broader understanding of well-being concepts and move in a direction toward positive behaviors and the adoption of more positive health and lifestyle habits. Although various categorizations of wellness and well-being have been offered, a list of eight common dimensions is found throughout the literature. A synthesis of each dimension from Hettler (1976), Mayol (2012), Mayol et al. (2017), Roscoe (2009), and Swarbrick (2012) follows.

2.1.2.1 Physical well-being

Physical well-being is the knowledge and practice toward positive health conditions. It involves the adoption of proactive measures such as regular physical activity, good nutrition, utilization of preventative health care, and abstaining from harmful behaviors such as alcohol consumption, tobacco, and drug use.

2.1.2.2 Emotional well-being

Emotional well-being is the knowledge and pursuit toward optimal psychological functioning. It involves the recognition of our thoughts and feelings in relation to our sense of self, relationships, life circumstances and reality, and aids our ability to manage stress, overcome adversity, reduce feelings of negativity, and approach life in a positive manner.

2.1.2.3 Intellectual well-being

Intellectual well-being is the engagement in mentally stimulating activities that allow for the acquisition, application, and sharing of knowledge for the progress of humanity. It involves continuous learning in scholastic, cultural, community, and interest-related settings that develop cognitive skills such as creativity, logic and reasoning, reflection, problem solving, and communication.

2.1.2.4 Spiritual well-being

Spiritual well-being is the awareness and practice in honoring the meaning and purpose of our existence. It involves the adoption or development of a personal belief system around the wonders of life and sharing it in community with others, nature, the universe, or a higher power.

2.1.2.5 Environmental well-being

Environmental well-being is our awareness and contribution toward preserving the sustainability and prosperity of life. It involves adopting and advocating measures that increase access to clean air, nutritious food, sanitary water, adequate clothing, shelter, and safety in both micro-environments (e.g., home, school, work) as well as macro-environments (e.g., community, city, country, world).

2.1.2.6 Financial well-being

Financial well-being is our knowledge and obtainment of economic resources to meet practical needs and live comfortably. It involves proper management of finances, maintaining a balanced budget, and setting and working toward goals based on a standard of living.

2.1.2.7 Occupational well-being

Occupational well-being is the practice of enriching our lives through employment, volunteer work, and vocational interests. It involves the development and application of skills and talents through activities such as school, hobbies, work, and community service.

2.1.2.8 Social well-being

Social well-being is our awareness and contribution to the betterment of society through positive relationships with friends, colleagues, family, the community, and surrounding environments. It involves the development of interpersonal skills, engagement in social circles, building of support systems, and maintaining safe and suitable living conditions.

2.1.3 Multidimensional models

For well-being education and promotion efforts to be effective, it is necessary to incorporate a variety of teaching methods (Sadeghi & Heshmati, 2019). A traditional and well-tested approach is through the use of multidimensional models, also known as wellness or theoretical models. Wellness models highlight the numerous areas that account for overall well-being, and help individuals gain a deeper understanding of each domain. They are multidisciplinary (Myers, et. al., 2000), meaning they have applicability to numerous fields and professions. Thus, wellness models can serve as a unifying framework for practitioners to develop programs and initiatives that teach well-being concepts and encourage the adoption of healthy lifestyle behaviors among college students.

Health and wellness promotion is a central tenet of multidimensional models (Swarbrick, 1997). Using models, practitioners can help students learn about the various domains of well-

being, engage in self-assessments, identify strengths and weaknesses, and develop plans for enhancing their overall well-being (Myers & Sweeney, 2004). A primary goal of health and wellness promotion is to help individuals develop knowledge and skills that lead to healthy lifestyle behaviors (Butler, 2001). In addition, those that work in the wellness professions stress the importance of taking proactive measures toward health and well-being (Hermon & Hazler, 1999). This is especially important for those that work with student populations because college is a time where poor health habits can develop (Franzidis & Zinder, 2019; Ridner et al., 2016). The incorporation of a wellness model into well-being education and promotion efforts can be an effective way to raise awareness and foster the adoption of healthy behaviors and lifestyle choices among college students.

2.1.3.1 Swarbrick's Eight Dimensions of Wellness

Swarbrick (1997) introduced a model for mental health patients that stressed the importance of proactive approaches through a holistic wellness routine. Focusing on positive strengths, self-management, and balance of healthy habits, Swarbrick (1997) claimed that individuals were able to “maintain a level of physiological balance that affects his or her physical, social, spiritual, and emotional well-being” (p. 2). This model was updated to reflect seven dimensions of wellness: (a) physical, (b) emotional, (c) intellectual, (d) environmental, (e) spiritual, (f) social, and (g) occupational (Swarbrick, 2006), and eventually an eighth (h) financial (Swarbrick, 2012). Swarbrick's work in the field of wellness is particularly important because it integrates the field of psychology and mental health with wellness practices, focusing specifically on positive, proactive steps toward well-being. The Eight Dimensions of Wellness is a suitable model for teaching well-being concepts and promoting healthy lifestyle behaviors to college

students. It is simple, easy to interpret, covers all core areas of well-being, and is utilized by numerous professions within higher education (NIRSA, 2014).

2.1.3.2 Mayol's Nine Dimensions of Wellness

Mayol (2012) presented a similar model, using the same eight dimensions as reflected by Swarbrick (2012), and added a ninth dimension by dividing physical wellness into separate domains of exercise and nutrition. This minor change is significant, because nutrition is often overlooked when teaching well-being concepts to students (Lua & Wan Putri, 2012). In addition, research suggests that as college students develop poor dietary habits, they run the risk of overweight and obesity (Nelson et al., 2008), which can lead to serious diseases and health conditions later in life (CDC, 2020). For these reasons, nutrition should be presented as a key aspect of well-being. Mayol's (2012) Multidimensional Wellness model can be held in comparison with Swarbrick's (2012) Eight Dimensions of Wellness, and given its additional focus on the dimension of nutrition, could provide more utility in teaching well-being concepts and promotion of healthy lifestyle behaviors to college students.

2.1.4 Summary

The use of models and descriptions of dimensions, along with an adopted definition, are important elements in understanding the multifaceted, and often misconceived, concept of well-being. And while these adopted elements will vary across institutions, it is important to note that their overall functions serve the same purpose, to raise knowledge and awareness of one's health and well-being. In addition to helping with comprehension, they can be useful in facilitating cohesion across units through universal adoption of common language, terminology, and theory.

Finally, these foundational elements can be useful tools for practitioners in the design and delivery of programs, services, and curricula that teach and promote well-being concepts, which as I explain in the next section, have numerous positive implications for college students.

2.2 Outcomes Associated with Well-Being

Student well-being connects to a variety of outcomes including physical, psychological, academic, and occupational areas. Education and promotion efforts that increase students' knowledge and awareness of well-being concepts can help develop self-efficacy (Gieck & Olsen 2007; Hattie et al., 2004; Von Ah et al., 2004), which positively impacts these outcomes, and leads to higher levels of achievement and success in college and throughout the lifespan (Lothes, 2020; Mayol et al., 2017). Instilling this knowledge and developing self-efficacy during the college years is crucial, because this marks a time when many lifelong health habits are formed (Mareno & James, 2010; Nelson et al., 2008). Structured programming or curricula that teach and promote well-being concepts using a multidimensional approach can be an effective way to not only help students establish balanced, healthy lifestyles, it can also foster positive outcomes that account for various forms of student success (Gibbs & Larcus, 2015; Hettler, 1980).

2.2.1 Physical outcomes

Many positive outcomes are associated with physical activity and proactive health practices, and extensive literature supports the benefits of traditional health education and health promotion efforts (Butler, 2001). Similarly, well-being centered education and promotion efforts

can lead to many of the same positive physical health outcomes (Beauchemin et al., 2018). A multidimensional approach that incorporates supplemental tools, such as wellness models, is an effective strategy. For example, students who engaged in coursework that taught wellness concepts using Hettler's (1976) Six Dimensions of Wellness model reported increases in knowledge and self-efficacy, and as a result, experienced increases in general exercise activity, decreases in body fat, and overall improved adherence to a healthy lifestyle approach (Gieck & Olsen, 2007). In addition, the use of models to encourage adherence to healthy lifestyle behaviors has been shown to result in other physical health outcomes including fewer doctor visits, fewer health conditions, and overall better physical health later in life (Coffey et al., 2016). Positive physical outcomes can also positively impact other areas of well-being. For instance, student who engage in higher levels of physical activity tend to score higher on measures of emotional intelligence and mental health (Bhochhibhoya et al., 2014). The importance of promoting proactive physical health practices to college students cannot be overstated, as the emerging adult years represent a time when developing obesity, unhealthy diet, and poor physical activity habits are at greater risk (Nelson et al., 2008). Coordinated well-being education and promotion efforts can help reduce these risks, foster more positive outcomes, and contribute to the overall development and success of students.

2.2.2 Psychological outcomes

Students who develop an understanding of well-being concepts are more likely to be psychologically equipped to manage life challenges and maintain healthy lifestyle behaviors. Higher levels of psychological functioning are associated with higher levels of well-being (Keyes, 2007), and the development of cognitive strengths (e.g., agency, confidence) are directly related to the development of self-efficacy (Ackerman, 2020; Bandura, 2005). Students who demonstrate

higher levels of self-efficacy report higher levels of positive health behaviors (Von Ah et al., 2004). Therefore, well-being education and promotion efforts that increase students' knowledge and self-awareness, can build confidence and a greater sense of empowerment, leading to improved health and lifestyle behaviors, and an overall better state of well-being. The use of wellness models as a teaching instrument offers an effective approach for facilitating the development of cognitive strengths. Hermon and Hazler (1999) found that adherence to wellness practices and ideology is positively correlated to a number of factors including stress management, sense of worth, control, emotional responsiveness and management, concluding that "experiencing success in these self-regulating tasks seems to be associated with higher levels of psychological functioning" (p. 342). As the college years represent a sensitive time in cognitive development and psychological-related challenges (Bonnie et al., 2015; Lederer & Oswalt, 2017), practitioners have a responsibility to provide opportunities that enable students to focus on, and enhance, aspects of their mental well-being; education and promotion efforts offer a viable medium for doing so.

2.2.3 Academic and occupational outcomes

Increasing student's knowledge of well-being concepts can foster both academic achievement while in college and occupational success after. Research shows that students who are more engaged in their collegiate experience are more likely to report higher academic achievement and success after college (Mayhew et al., 2016). Well-being education and promotion efforts have the potential to increase student engagement (Mayol et al., 2017). Thus, well-being focused initiatives that are enriching and encourage participation offer a valuable contribution to the academic and occupational success of students. Students who can maintain a balance of all areas of well-being will likely experience higher levels of academic and occupational success.

Using a modified version of Hettler's (1976) Six Dimensions of Wellness model, Horton and Snyder (2009) found that those who reported adherence to wellness concepts also had higher grade point averages (GPA). This suggests that as students improve their lifestyle behaviors, as guided by well-being concepts, their grades and academic achievement are likely to improve as well. Along with academic success, the authors also suggest a strong correlation between knowledge of and adherence to well-being concepts and success after college.

The development of self-efficacy can also contribute to academic and occupational success. Baldwin (2017) identified a correlation between gainfully employed students and their self-efficacy, suggesting that students with higher levels of self-efficacy may result in greater occupational success after college. In addition, higher levels of self-efficacy account for higher levels of satisfaction and confidence, which may influence the academic experience (Hermon & Hazler, 1999), as well as student retention rates (Coffey et al., 2016). Self-efficacy is an essential skill for academic achievement and occupational success. Through well-being education and promotion efforts, practitioners have an opportunity to work with students, as well as faculty and administrators, to become aware of these positive effects, and work to develop skills that lead to greater levels of achievement and success while in college and after.

2.2.4 Summary

Knowledge of well-being concepts can lead to a variety of positive outcomes for college students. Education and promotion efforts help build students' self-efficacy, leading to behavior change, the adoption of healthy lifestyle habits, and various forms of success. And while programming, curricula, and educational tools are effective strategies for facilitating these

outcomes, it is equally important to incorporate a strategic, coordinated effort that engages multiple campus stakeholders to broaden student reach and maximize total impact.

2.3 Well-Being Education & Promotion Initiatives

Fostering students' learning of well-being concepts requires a strategic, coordinated effort. Well-being education and promotion initiatives will look different across institutions due to variables such as school size, available resources, and needs of the student body. Nonetheless, student well-being should be regarded as a shared responsibility that pertains to numerous stakeholders, and initiatives should be designed with a campus-wide approach in mind (ACHA, 2019, 2020; Watts, 2017). Because student well-being is a shared responsibility, leaders of such efforts should seek campus partnerships and engage in interdisciplinary work (Cowen, 1991). Whether championed by a single unit, or embraced by an entire campus community, well-being education and promotion initiatives should be designed for mass consumption, incorporate a mix of programs and mechanisms that allow for the exploration of concepts, and be tailored to meet the individualized interests and needs of each student.

There are several benefits associated with well-being education and promotion initiatives. First, strategically designed programs and services can help expand campus reach and awareness. Increased awareness and engagement with well-being-focused programming encourages student exploration and can contribute to a positive and satisfying college experience (Hermon & Hazler, 1999). Second, well-being centered initiatives facilitate student development, success, and self-efficacy by encouraging students to be managers of their own health (Hettler, 1984). Third, well-being education and promotion initiatives, which can include any variety of programs, services, or

resources, encourage healthy lifestyle choices and can lead to the adoption of long-term, positive health habits (Franzidis & Zinder, 2019). Finally, campus-wide well-being initiatives create opportunities for collaboration across disciplines and units, which allows for the sharing and distribution of resources (Fullerton, 2011) as well as the reduction or duplication of services (Hettler, 1984). This is important because increased efficiencies help curtail common operational challenges such as financial constraints (Harrington, 2016) and limited human and capital resources (Hartman et al., 2018). This section reviews components of successful well-being initiatives and highlights exemplar campus-wide education and promotion efforts at several institutions.

2.4 Initiative Design

As practitioners and campus leaders move toward instituting a well-being education and promotion effort, there are several features of the initiative design that should be considered. The following includes two main areas: (a) key components and (b) implementation strategy.

2.5 Key Components

2.5.1 Definition of well-being & description of dimensions

Although the topic of student well-being is studied widely throughout higher education, there are many variations of definitions and the dimensions that comprise it (Beauchemin et al.,

2018). This lack of standardization can cause confusion among students and create additional challenges for practitioners as they work to teach and promote well-being concepts throughout campus. Thus, it is important, particularly during the early stages of initiative design, that a definition of well-being is adopted by the leadership group. In addition, identifying the various domains (or dimensions) that comprise well-being and providing a description for each area is equally important. Describing the domains, and providing real life examples, helps students understand its multidimensional structure, develop a broader understanding of this complex concept, and can further assist their ability to assess, support, and enhance their own well-being (Roscoe, 2009). As the examples show later in this section, it is not as important that popular or widely used definitions and domain descriptions be used. Rather, it is most important that all stakeholders rally around a definition and descriptions that work best for the institution and the campus-wide efforts that will be put into place.

2.5.2 Wellness models

To augment an adopted definition of well-being and descriptions of dimensions, the use of a multidimensional model (or wellness model) is recommended. Wellness models further help students understand the multidimensional nature of well-being and provide utility to practitioners in program and curriculum design (Gieck & Olsen, 2007). Some scholars argue that many multidimensional models are theoretical, suggesting that well-being education and promotion efforts should seek to incorporate empirically tested models (Beauchemin et al., 2018; Roscoe, 2009). This is juxtaposed by other research and literature that shows the use of wellness models, regardless of being empirically tested or not, can be effective tools for educating, raising awareness, and fostering behavior change that leads to positive outcomes (e.g., Hettler, 1984;

Horton & Snyder, 2009; Swarbrick, 1997). Thus, the use of multidimensional models should be considered an essential component of well-being education and promotion initiatives. As with the definition and descriptions of dimensions, practitioners and administrators should be mindful in determining which wellness model to use for their education and promotion efforts.

2.5.3 Assessments

Assessment instruments can be a powerful tool for well-being education and promotion initiatives. Wellness (or well-being) assessments help both practitioners and students identify strengths and areas of improvement within certain domains and can be used to track progress toward specific goals (Brown et al., 2015; Marenco & James, 2010). There are a variety of assessments tied to wellness models (e.g., Adams et al., 1997; Brown & Applegate, 2012; Mayol et al., 2017; Myers et al., 1998; National Wellness Institute, 1983; Travis, 1981), which could be used for such purposes. However, in determining which wellness assessment to use, practitioners must consider the applicability to their programs and curriculum, and the theoretical frameworks from which they are built (Roscoe, 2009). In their scoping review of wellness promotion courses in university settings, Beauchemin et al. (2018) found inconsistencies with the use of assessments, suggesting that some institutions used instruments that were not directly related to wellness concepts. The authors also discussed the use of wellness assessments in research settings, suggesting the tracking of progress must move beyond pre/post outcomes. This considered, if practitioners and administrators should decide to incorporate an assessment into their well-being education and promotion efforts, they should (a) choose or design one that measures well-being as defined by the institution, (b) aligns with the constructs of the selected theoretical model, and (c) is used routinely to assess and track students' progress over time.

2.6 Implementation Strategy

As practitioners and campus partners work to implement a campus-wide well-being initiative, it is imperative to incorporate a strategic plan. Implementation strategies will vary from institution to institution, but trends and best practices can be identified in the literature and throughout higher education. Frameworks and guidelines that describe these best practices can serve as valuable tools for designing and implementing such initiatives. The American College Health Association (ACHA) and the Counsel for the Advancement of Standards in Higher Education (CAS) offer frameworks specific to advancing well-being on college campuses. The following includes a synthesis of strategic guidelines found in The Healthy Campus Framework (ACHA, 2020), Cross Functional Framework for Advancing Health and Well-being (CAS, 2018), Standards of Practice for Health Promotion in Higher Education (ACHA, 2019), and the Framework for a Comprehensive College Health Program (ACHA, 2016).

2.6.1 Leadership & collaboration

A campus-wide initiative focused on student well-being requires the collective efforts of stakeholders throughout the university community. This enables practitioners to leverage resources and create a network of services and expertise that maximizes efficiencies and impact. The group of leaders instituting the work should represent a diversity of perspectives and disciplines and comprise a variety of individuals with direct knowledge in the field, or those with expertise in an area that will help advance the initiative; representation from the student body must also be included. This group, also known as the backbone organization, will be responsible for envisioning and executing the campus-wide effort. In addition, the backbone organization will be

responsible for ensuring that programs and services are complimentary and not duplicative, and must identify the human, financial, and technological resources needed to successfully carry out the initiative. The efforts should be guided by a charge from senior administration, or an individual with authority and/or influence in the field. Finally, all team members must be formally acknowledged for their contributions.

2.6.2 Mission, vision, and goals

Purposeful mission, vision, and goals are fundamental elements of a campus well-being initiative. They should be designed in a way that showcases the initiative as both supportive and empowering to students and should aim to cultivate a culture of health and well-being throughout the campus community. The mission should outline the initiative's scope, purpose, and charge, and must be in alignment with the institution's mission. The mission, vision, and goals should emphasize well-being as critical to the student experience and success, and thus expressed as a priority of the institution. The mission, vision, and goals should be well-oriented to the framework(s) of choice and should identify how progress toward stated goals will be measured.

2.6.3 Marketing & communications

The programs, services, and efforts of a campus well-being initiative must be continuously marketed and communicated to the university community. Messages shall include regular updates surrounding efforts to advance well-being, including progress toward stated goals and impact on student development and success as defined by the institution. The backbone organization may decide to publish a quarterly or annual report that summarizes the group's work and achievements.

In addition to communicating to the broader public, tailored messages should be sent to targeted audiences (e.g., student body, faculty) to raise interest and develop affinity. To aid in the design and delivery of marketing and communication strategies, the backbone organization should develop a specific marketing and communications plan. Finally, a strong brand identity must be infused throughout. This includes consistent wording and nomenclature, distinct print and digital presence, a highly visible website, and use of social media and other technologies.

2.6.4 Evaluation & accreditation

Ongoing evaluation of campus well-being initiatives is essential. Assessments must track progress toward stated goals, determine efficiencies (and inefficiencies) of programs, services, and the initiative team, as well as measure their impact on student outcomes. Following a continuous improvement approach, members of the backbone organization should use data to identify trends, target goal areas, and make informed decisions. The evaluation of well-being initiatives should be guided by a structured assessment plan to help ensure that programs, services, and efforts are both aligned and data driven. Assessments should seek to collect data on a variety of areas including, but not limited to, student learning, development, success, risk behaviors, user experience, and quality of specific programs and services. Assessments should include a mix of quantitative and qualitative data and be structured multiple ways to gather feedback. Examples include surveys, focus groups, interviews, archives, and audience opinion research. Findings from the evaluations should be shared with the campus community and other stakeholders. Finally, the backbone organization may decide to pursue accreditation with local, state, or national associations, as doing so provides an opportunity to showcase and/or compare the quality and effectiveness of their initiative to national standards and other institutions.

2.7 Exemplar Institutions

Numerous institutions throughout the country have campus-wide efforts in place to support and enhance their students' well-being. Based on the criteria listed above, the following institutions demonstrate exemplar commitments to teaching and promoting well-being concepts and the adoption of positive health and lifestyle behaviors throughout the campus community. This is achieved through various methods which include, but are not limited to, a broad and clear definition of well-being, descriptions of the domains that comprise it, a theoretical wellness model, personal well-being assessments, available programs and services, and listings of resources and/or best practices for supporting and enhancing well-being in these various areas. The examples provided by each of these institutions can serve as models for developing and instituting a campus-wide well-being initiative at the University of Pittsburgh.

2.7.1 Wake Forest University

The Thrive initiative at Wake Forest University (Wake Forest University, n.d.-a) is an example of an institutional wide effort that places a priority on student well-being. Orchestrated through the Office of Well-being, which employs approximately ten professional staff, Thrive is dedicated to providing programs, services, and facilitating collaborations throughout campus. Examples of offered programs include resilience-themed retreats and workshops, peer education trainings, holistic wellness services (e.g., aromatherapy, massage therapy), and one-on-one well-being coaching. Wake Forest defines well-being as “an eight-dimensional balancing act that – when maintained properly – leaves us best able to cope with adversity through resilience, build rewarding relationships and live with a sense of purpose.” (Wake Forest University, n.d.-a, para.

1). The eight dimensions of wellness they refer to include (a) emotional, (b) environmental, (c) financial, (e) intellectual, (f) occupational, (g) physical, (h) social, and (i) spiritual. They provide a website is easy to navigate and houses much of the information students would need when looking to learn about and/or enhance their well-being. It appears that many of the available opportunities require some level of programming or hands-on professional support, and few resources available for self-discovery. Wake Forest has dedicated social media accounts that are rich with messaging and content related to well-being. The Thrive initiative has extremely strong and consistent branding, which emanates throughout all marketing and communications materials. In addition to their on-campus efforts, Wake Forest is the founder and organizer of the Well-being Collaborative (Wake Forest University, n.d.-b), a multidisciplinary, multi-institutional effort to support and promote student well-being throughout higher education. Through collaborative work and an annual Well-being Assessment, the Collaborative engages in research and develops tools and resources for advancing well-being on college campuses. Wake Forest is a leader in the field of student well-being, as demonstrated by their on-campus and off-campus efforts.

2.7.2 University of Notre Dame

The University of Notre Dame's initiative (University of Notre Dame, n.d.-a) is delivered through the Division of Student Affairs, which clearly identifies student well-being as an institutional priority. Starting with their departmental structure, the division demonstrates a collaborative commitment to well-being by presenting departments as an integrated force. This includes the Center for Student Support and Care, the McDonald Center for Student Well-being, the University Counseling Center, University Health Services, and RecSports. The McDonald Center for Student Well-being (McWell) employs five professional staff and provides programs,

services, and resources for students to learn about and focus on their well-being. Examples include alcohol education, substance use risk & reduction, sleep practices, and other workshops. McWell also manages four restorative spaces on campus that are available for students to reserve for studying, socializing, or relaxing. One of the more novel programs they offer are mini grants, which students can apply for to help support well-being-based events on campus. McWell refers to eight dimensions of wellness (a) emotional, (b) environmental, (c) financial, (d) intellectual, (e) occupational, (f) physical, (g) social, (h) spiritual, and describes well-being as “not achieving perfection in all areas of life [but that] well-being is a balancing act . . . The more you know about the factors that influence the eight aspects of your well-being, the easier the balancing act becomes.” (University of Notre Dame, n.d.-b, para.1). In addition to their on-campus programming, McWell manages a robust website, complete with information and resources specific to well-being. There are individual webpages dedicated to each dimension of wellness that provide a thorough explanation of each domain, as well as a list of on-campus, local, and national resources for enhancing that area of wellness. In addition, their website offers several self-assessment tools. Examples include a well-being assessment, alcohol assessment, resilience assessment, happiness assessment, self-compassion assessment, and the VIA Character Strengths Survey. These resources are notable, because they provide students with accessible tools for self-learning, identifying strengths and areas of improvement, and developing a broader understanding of well-being concepts. This is important, because self-discovery and developing self-efficacy is one of the best ways to help students establish healthy, balanced lifestyles (Gieck & Olsen, 2007; Hattie et al., 2004; Lothes, 2020; Von Ah et al., 2004). McWell also manages a few social media accounts and newsletters, which provides additional opportunities to engage students. Finally, Notre Dame appears to routinely evaluate their campus well-being efforts, focusing on data-driven

decisions. They are one of the few institutions that demonstrate a commitment to continuous improvement through the publication of semester and annual reports. It is clear that supporting students' well-being and their knowledge of this topic is a priority at Notre Dame, and the initiatives delivered through McWell are helping to lead the charge.

2.7.3 University of Minnesota

The University of Minnesota demonstrates a robust commitment to increasing student's knowledge of well-being concepts. Coordinated through the Earl E. Bakken Center for Spirituality & Healing (University of Minnesota, n.d.-b), well-being is presented as a priority for all members of the university community. The center, which employs dozens of professional staff, faculty, and student assistants, frequently refers to their cross-campus and community partnerships and the importance of integrative practices in advancing well-being. The center presents mission, vision, and values statements, and offers a clear description of well-being, describing it as "a state of balance or alignment in body, mind and spirit. In this state, we feel content; connected to purpose, people and community; peaceful and energized; resilient and safe" (University of Minnesota, n.d.-b, para. 1). A primary pillar of the center's well-being efforts is education. There are a slew of learning opportunities, including online modules and resources, presentations and lectures, a student well-being guide, and for-credit courses and degree programs. The center also manages social media accounts and newsletters which are updated and published routinely with useful information. In addition, the center features a recently released online learning platform, Wellbeing U (University of Minnesota, n.d.-d), which contains a catalogue of free courses designed around well-being topics. A main feature of Minnesota's well-being education and promotion efforts is the Taking Charge of Your Health & Wellbeing initiative (University of Minnesota, n.d.-c), an

interactive website that is the result of a multi-year, granted funded project aimed at providing a platform that allows for self-guided exploration and learning of well-being concepts. Within the site they provide a thorough overview of well-being and refer to a six-dimensional model comprising the domains of (a) health, (b) relationships, (c) security, (d) purpose, (e) community, and (f) environment. Notable aspects of the Taking Charge of Your Health & Well-being initiative include a comprehensive well-being assessment, an online guided goal setting tool, and an interactive model that allows the user to explore each dimension of wellness at a deeper level. In addition, the website contains a variety of tips and best practices for maintaining well-being, as well as topic-specific articles, all relevant to well-being. One peculiarity is the website does not link to any on campus resources. This may be due to the initiative's design in encouraging user exploration and self-guided learning. The initiative is supported by a panel of over 70 experts, all within the health and wellness professions. The University of Minnesota's well-being initiative is proof of an institutional-wide commitment to teaching and promoting well-being throughout campus and extending into the community.

2.7.4 Summary

Campus-wide initiatives are an essential part of well-being education and promotion efforts. Practitioners and administrators must view student well-being as a shared responsibility that involves numerous stakeholders, and that cooperative, interdisciplinary work is needed to achieve widespread impact. In developing campus well-being initiatives, key components such as definitions, models, and assessments must be universally adopted, and the use of guiding frameworks to help structure strategic planning should be considered. Benchmarking of institutions can inform best practices and inspire ideas. Well-being initiatives are unique to each

institution, designed to fulfill the mission, vision, and goals as identified by the backbone organization, and will continuously evolve as supporting programs and outcomes are routinely evaluated.

2.8 Context Review

This review of scholarly and professional knowledge further highlights several issues concerning my problem of practice. First, relating to existing programs that attempt to teach or promote well-being concepts, numerous key components are missing. For example, at the University of Pittsburgh, neither the Counseling Center or Student Health Service formally define well-being, nor do any other units throughout the division, and the informal definitions that any unit currently offers are not in alignment with each other. In addition, a few units, mainly the Counseling Center and Student Health Service, refer to a multidimensional model (i.e., eight dimensions of wellness), but the application of this model and its accompanying dimensions are not incorporated consistently throughout current education and promotion efforts. The division-wide adoption of a formal definition for well-being, along with increased use of a multidimensional model and descriptions of dimensions, would be useful for creating a campus-wide initiative while helping students develop a broader understanding of well-being.

Second, well-being related programs and services within the division lack structure and processes that would support current or new education and promotion efforts. For example, as the Department of Campus Recreation delivers its programs (e.g., group fitness, personal training) to students, they could also cover certain topics of well-being and help students understand how participation in their unit's offered activities contribute to overall well-being. The same process

could apply for many other programs and units within the division (e.g., Career Center, Interfaith and Dialogue, PittServes). The integration of services and coordination of programs is an essential component of a campus-wide approach to raising students' awareness, increasing knowledge, and fostering the adoption of positive health and lifestyle habits.

Third, the setting of goals and tracking of student outcomes through well-being education and promotion efforts is not represented well throughout the division. Through the division's annual plan process, each unit is responsible for setting objectives and reporting outcomes specific to divisional goals. As the literature shows, there are numerous positive student outcomes related to well-being. This presents an opportunity for units, or a collaboration of units, to include well-being outcome objectives to further support the division's annual plan and goals. In addition, current assessment of students' well-being or their knowledge of well-being concepts is limited. Except for the Counseling Center, which uses the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) (Warwick Medical School, n.d.) for students to measure and track levels of subjective well-being, the division does not have a mechanism to gauge students' overall well-being or knowledge of well-being concepts. Units within the division might consider adopting one of several available assessments mentioned in the literature, develop an internal assessment that evaluates these areas.

Fourth, in teaching and promoting well-being concepts to students, the division does not take a campus-wide approach. As the literature has shown, initiatives focused on student well-being must consider a broad range of stakeholders and require contributions by numerous areas of expertise. Current programs or efforts that attempt to teach and promote well-being concepts reside within individual units and do not engage in much interdisciplinary work. In addition, current efforts do not have a strategic plan in place or adhere to any frameworks for advancing well-being

on campus. As demonstrated by national associations and exemplar institutions, strategic planning and frameworks are essential components of campus-wide well-being initiatives.

Finally, existing marketing and communication efforts to raise knowledge and awareness of well-being concepts are inadequate and must be bolstered. Again, as demonstrated by exemplar institutions and available frameworks, a strong marketing and communications strategy is essential to instituting a successful campus-wide well-being initiative. This includes branding, messaging, print materials, and digital information platforms such as websites and social media accounts.

2.9 Conclusion

Student development and success are standard principles of higher education. Ample literature shows the connection to students' state of well-being in relation to their development and success both during and after college. Increased knowledge and awareness of well-being concepts can lead to higher levels of purpose and achievement, and ultimately higher states of satisfaction and happiness. Campus-wide efforts that aim to teach and promote well-being concepts to the entire student population are necessary. Such efforts must consider a wide range of stakeholders and require collaboration from various levels and areas of expertise. Strategic planning must be included in this work, and existing frameworks and exemplar institutions offer guides for developing successful campus-wide initiatives. Ongoing assessment and evaluation of campus well-being efforts, along with students' knowledge of well-being concepts and their overall level of well-being, are essential practices. As campus initiatives and students' knowledge and state of well-being are evaluated, changes to programs and curriculum should be guided by data and other findings. Following a continuous improvement approach, practitioners and campus

leaders can create structures that demonstrate a campus-wide commitment to well-being, while helping students learn and develop positive health and lifestyle behaviors that carry through the college years and beyond.

3.0 Theory of Improvement and Implementation Plan

3.1 Theory of Improvement

By coordinating efforts across the Division of Student Affairs and aligning approaches to teaching and promoting well-being to students, the delivery of related programs and services will become consistent and synchronized. This addresses the problem of students not having (or not being provided) a broad understanding of well-being, and in doing so, can lead to the adoption of more positive health and lifestyle behaviors, which as previously described, impacts numerous outcomes both during the college years and throughout the lifespan. The problem of students not having a consistent and broad understanding of well-being is influenced by larger organizational factors (or root causes). These factors can be influenced through incremental change efforts. Following an improvement science approach (Hinnant-Crawford, 2020), these factors can be influenced through coordinated interventions (or change efforts). Figure 3 provides an illustration of the primary goal (or aim) for addressing the problem, drivers that are connected to the aim, and change ideas that can impact the drivers to achieve the stated goal.

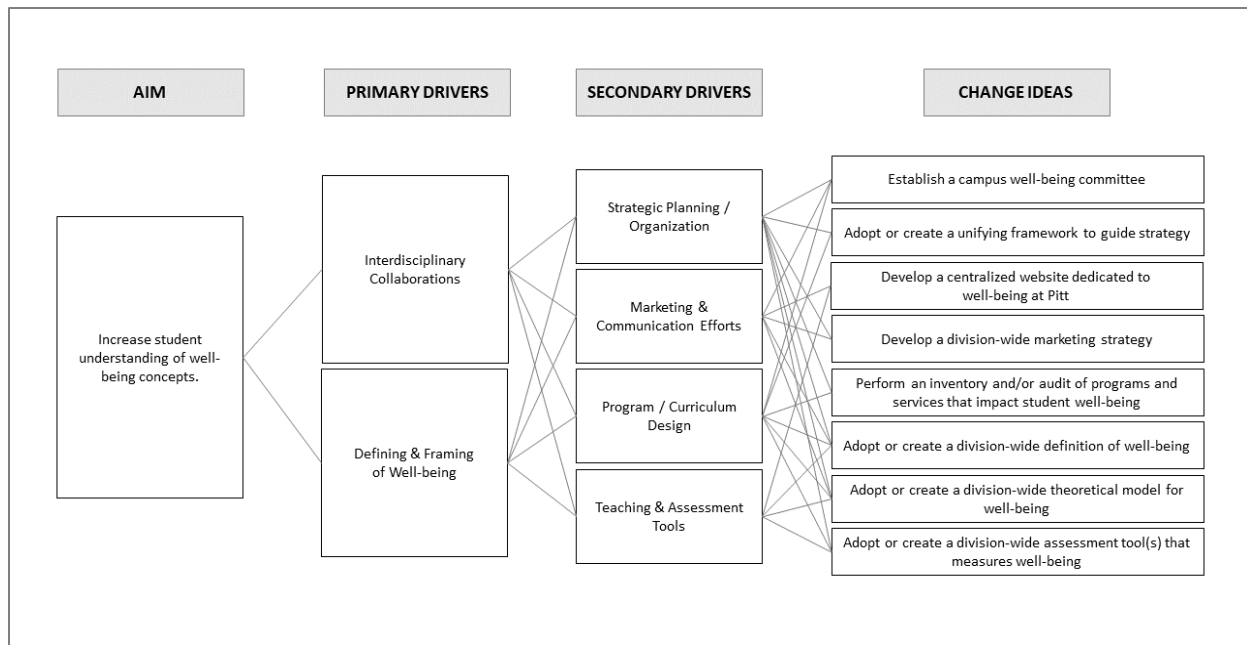


Figure 3. Driver Diagram

As depicted, the aim pertains to the identified problem of practice, the drivers represent larger, organizational structures or conditions that account for the problem, and the change ideas are individual efforts that can impact the drivers to improve the overall problem (Hinnant-Crawford, 2020; Perry et al., 2020). Over time, through a series of change efforts, the goal of increasing students' knowledge of well-being can be achieved. To situate this in a timebound context, the following aim statement is provided:

At the conclusion of this project, 60% or more of surveyed students will agree or strongly agree that their understanding of well-being increased due to available educational resources or programs.

3.2 Systems Drivers

Influencers (or inhibitors) of the problem can be organized into two types of drivers, primary and secondary. Primary drivers involve factors or circumstances that directly impact the problem. They are typically larger in scope and require effort from multiple areas to impact change. Secondary drivers are smaller in scope, but still exist as larger, foundational elements within the organization (Perry et al., 2020). Changes to the secondary drivers can be designed to directly impact the primary drivers, ultimately achieving the aim that is targeted to address the identified problem.

3.2.1 Primary drivers

Two primary drivers that were identified are (a) interdisciplinary collaboration, and (b) defining and framing of well-being. The influence of these drivers to the overall problem and their ability to impact change is important. First, the current state of interdisciplinary work, both within the division and throughout the university, exists as a barrier to increasing and improving students understanding of well-being. An example is the independent (or siloed) approach that each unit takes toward well-being education and promotion efforts. Multiple units such as the University Counseling Center (UCC), Student Health Service (SHS), Campus Recreation, Residence Life, and various task forces deliver programs and services that are focused on well-being (or wellness). Though well-intended, and beneficial for the students who engage with each program, this siloed approach creates operational inefficiencies and misalignment toward divisional objectives that impact various shared outcomes. However, within these challenges exist great opportunity. By coordinating efforts centered on student well-being, particularly those dealing with education and

promotion, division-wide objectives can be designed, implemented, and measured more acutely, thereby positively impacting desired student outcomes.

The second primary driver concerns how well-being is defined and framed throughout the division and delivered to the campus community. As discussed in the review of supporting knowledge, well-being is a broad, multifaceted concept with numerous understandings, both across disciplines and within higher education. Within the Division of Student Affairs, well-being was neither clearly defined nor was there a shared conceptual understanding across units. These inconsistencies cause confusion among students as they explore various resources and/or participate in different programs throughout the division. The downstream effects of this may lead to students forming insufficient or inconsistent comprehensions of well-being, which will affect their ability to develop complete, positive health and lifestyle behaviors. Establishing a common understanding of well-being and how it is framed within the context of division objectives will result in improved student knowledge and may lead to more positive outcomes and greater overall success.

3.2.2 Secondary drivers

The secondary drivers are component parts of the primary drivers, and to advance toward the desired aim, each one must be regarded as an important factor that contributes to the identified problem (Perry et al., 2020). Considering the problem at hand, four secondary drivers were identified: (a) strategic planning and organization, (b) marketing and communication efforts, (c) program/curriculum design, and (d) teaching and assessment tools. Though it is not always the case (Hinnant-Crawford, 2020), these four secondary drivers are related to each of the primary drivers, which means they have the potential to impact both.

First, the strategic planning and organization driver concerns how various division staff view matters related to student well-being and how they operationalize their departments efforts through programming, services, or resources. Second, marketing and communication efforts include the dissemination of information to the broader campus community, the use of division-wide branding and identity standards, the development of creative and innovative methods to reach students and generate interest, and the orchestration of agenda-specific campaigns and events. Third, program and curriculum design consider all of the programs and services that impact student well-being, including those that pertain to specific areas (or domains). It also involves the proper management of programs and services to reduce duplication, attention to alignment across units, and contribution to a system of services that exist on a continuum. And fourth, teaching and assessment tools include various practitioner strategies and best practices, as well as the use of systems, methods, and assessments that allow for the evaluation and tracking of students' well-being. Focusing on these secondary drivers and making improvements in each area will directly impact the primary drivers and aid in achieving the goal of improving students' understanding of well-being.

3.3 Change Ideas

Change ideas are several specific, actionable efforts that lead to incremental advancements toward addressing the overall problem (Hinnant-Crawford, 2020; Perry et al., 2020). Just as secondary drivers impact primary drivers, change ideas help impact one or several secondary drivers (Hinnant-Crawford, 2020). As illustrated by the driver diagram in Figure 3, there are several change efforts (or interventions) that could be implemented to affect the secondary and

primary drivers, increase coordination throughout the division, and ultimately lead to improvements in students' understanding of well-being. While numerous efforts could be applied to affect change of the identified problem, one change idea was implemented and tested for this dissertation in practice.

3.4 Proposed Change Idea

The proposed change for this intervention involved the development of a university website dedicated to the topic of well-being. It serves as a central hub of information and resources for increasing knowledge and awareness, improving accessibility to programs and services, empowering students to take charge of their own health and well-being.

The use of digital platforms, such as websites, are an inexpensive and effective tool to distribute information on a mass scale that is accessible to anyone. As described earlier, several exemplar institutions that demonstrate a campus-wide commitment to teaching and promoting well-being to their student body offer such websites (University of Minnesota, n.d.-c; University of Notre Dame, n.d.-b; Wake Forest University, n.d.-a). A website dedicated to well-being at the University of Pittsburgh further aligns unit programs and efforts, allows for easier navigation of, and access to, available campus resources and programs, increases students understanding of well-being, and demonstrates a university-wide commitment to supporting students' health, wellness, and success.

The website contains pertinent information, such as a definition and conceptualization of well-being, descriptions of the domains (or dimensions) that comprise it, and research supported guidelines and best practices that can be put into practice. It also contains links to a multitude of

relevant campus resources for exploring, supporting, and enhancing one's well-being. To achieve successful development of the website as it was proposed, a few elements that were presented as change ideas in Figure 3 needed to be incorporated. These elements were (a) the creation or adoption of a universally accepted definition of well-being and (b) the creation or adoption of a universally accepted theoretical (or wellness) model. As described in the review of supporting knowledge, these are among several foundational elements necessary for effective campus-wide approaches to educating and supporting students' well-being. It must be noted that the development and implementation of these elements including a formal definition, theoretical model, and tips/guides for practice required commitments from numerous stakeholders and tapping in to existing interdisciplinary work. The contributions from these individuals and groups were integral to the success of this project.

3.5 PDSA Cycle

To test the effectiveness of this change idea I ran it through one PDSA cycle that involved the planning (P), implementation (or doing) (D), assessment (or studying) (S), and refinement (or acting) (A) based on findings from my research protocol. A PDSA sheet that summarizes this cycle is provided in Appendix A and a PDSA cycle timeline is included in Appendix B. The inquiry questions that guided this work are as follows:

1. Does the information on the website increase students' knowledge of well-being?
2. Does engagement with the website content lead toward positive health or lifestyle behaviors?

3. What features or information on the website provide the most utility, as well as what is missing from the website that will improve its utility?
4. Do students find the website's information and resources to be culturally relevant?

3.5.1 Plan

A substantial part of this plan involved the design of the website. In the planning process, I needed to determine what information will be included on the site, as well as how it will be presented and function for the user. Through my research and benchmarking of exemplar institutions, I identified key features and information that should be included in the initial design. These primary elements and/or pages include (a) a homepage that provides snapshot information with links to other pages within the site; (b) a page that provides a clear definition and thorough description of well-being; (c) a page that explains the benefits, or outcomes, of enhanced well-being; (d) a model that illustrates the areas, or domains, that comprise and support well-being; (e) definitions, or descriptions, of each area of well-being, along with tips and resources for supporting that area; and (f) a page that includes a comprehensive list of campus programs, services, and resources available to students for supporting their well-being. Finally, in designing the website, attention was given to the overall appearance, menu, and link structure, ensuring that it was aesthetically pleasing and easy to navigate, while adhering to principles of universal design for accessibility (Rowland et al., 2010).

In addition to the overall design, I needed to determine what platform the website would be built on. The Division of Student Affairs currently uses Wordpress and most other University websites run on Drupal. Both platforms are content management systems (CMS), which make it easy for an individual with novice web development skills to build and manage a site. While either

platform was suitable, Drupal was the selected platform for this project. I had to consider the relatively large scope and short time frame of this project and planned to leverage multiple university resources and professional support throughout the development process.

3.5.2 Do

The next step that followed was the development of content for the site and individual pages. This included elements such as written text, links, images, and other web graphics. A useful way to accomplish this thoroughly and efficiently was through creating a website content outline. A content outline serves as a rough draft of the site, typically in the form of a word processing document, before it is added to the CMS. In addition to my research, I worked with colleagues and departments throughout the university to source information and gather ideas as I build the content outline. This collaborative work took place in informal settings as well as during structured group meetings and was instrumental in creating a high-quality product. After the content outline was created, I initiated the website build. Due to the amount of estimated time that would be required for this project, I anticipated needing assistance to complete this work. In doing so, I needed to apply my time and technical skills accordingly but also needed to act in the capacity of a project manager. Leaning on the talents and expertise of a small project team dedicated to this work was paramount to the project's success.

Once a working prototype of the website was created, I ran it through an internal review. I solicited feedback from the same individuals and groups that helped me source the information and resources. Through this process I was able to identify areas that needed further development and took initial note of potential strengths and weaknesses specific to this change effort. It is important to note that the development of this website will be ongoing, as new information,

features, and design elements should be added continually to provide a product that is fresh with new content and not static. Findings from my study and review of this change effort helped inform which new features and/or information could be added for the next iteration (or PDSA cycle), I discuss this in detail in the following chapters.

Finally, after the internal review and final edits, I coordinated deployment for public viewing. This involved steps such as running the site through an internet security scan, uploading to a server, assigning it to a specified domain, and setting it up with various site performance and user analytics tools. A scheduled soft launch of the site ensued, allowing for live testing while on the public domain, followed by a period of edits to the existing content. Once the website met satisfactory expectations, I coordinated a formal launch with some general marketing efforts to raise awareness and drive traffic to the site.

3.5.3 Study

To assess this change effort, I incorporated quantitative research methods. This approach allowed me to capture data and assign numerical values to various outcomes while evaluating the overall effectiveness of my change intervention. Details of this plan are provided in the methods and measures section below, results and findings from the study are presented in the following chapters.

3.5.4 Act

Through this study, I hoped to determine if the use of a website as an educational tool (a) increases students' understanding of well-being and/or (b) leads to any actions toward positive

health or lifestyle behaviors. The data and insights gained will help guide the design of what may be the next PDSA cycle, as well as inform ongoing improvement efforts to support and enhance student well-being at the University of Pittsburgh. These implications for professional practice and opportunities for future research are presented in the last chapter.

3.6 Predictions

I anticipated study data to reveal that the website is an effective tool for increasing one's understanding of well-being; this includes being able to define well-being more clearly, as well as developing a broader awareness of well-being as a multidimensional construct. In addition, I predicted that some participants of the study would reveal that the newly acquired knowledge from use of the website led to an action toward improving their well-being. Due to its subjective characteristics and wide range of factors that comprise well-being, I expected to see a variety of ideas or potential actions that participants reported. I did not predict specific actions, but I did anticipate trends to emerge with more attention given to certain areas of well-being over others. I presumed that students would generally decide to focus too much on one or a few areas of well-being and not enough on others, which could raise questions for future inquiry.

Through this study, I also expected to receive critical feedback on the website's utility. While there may be features and information on the website that users report as helpful, I anticipated that some data would suggest certain parts of the website are not useful and/or missing information. Finally, in considering individual interests and social identities, I anticipated mixed results. Whereas data from individuals or demographic groups may suggest the information and resources provided are useful, others might suggest otherwise. For example, did the website's

information and resources appeal more, or less, based on race, gender, or ability? As I collected and review this data, I needed to pay close attention to what various demographics reveal, as ensuring equitability and utility for all in this change effort is crucially important.

3.7 Methods and Measures

The change idea for this improvement science dissertation in practice was the development of a university website that broadly educates students on the concept of well-being. This study explored various aspects of the topic, including defining and framing of well-being, explanation of outcomes associated with well-being (i.e., why well-being matters), and guidelines, tips, and campus resources for supporting and enhancing one's well-being. The purpose of this study was to evaluate the effectiveness of education and promotion initiatives aimed at increasing knowledge of well-being, specifically through digital, mass communication platforms such as websites. In addition, this study was intended to measure if an increase in knowledge of well-being concepts led toward any positive health or lifestyle behaviors. Finally, the study sought to identify what features or information provided the most utility to users and determine if the website content was culturally relevant to students based on various demographic factors.

3.7.1 Study design

To accomplish the goals of this study, I administered a quantitative survey of currently enrolled undergraduate students at the University of Pittsburgh, Pittsburgh campus. A quantitative approach was warranted because it allowed for efficient, mass collection of data which could be

used to assess programmatic impact or effectiveness across a population (Schuh et al., 2016). Because the population under study was so large, I surveyed a sample of the undergraduate student body. To ensure statistical significance of results that are representative of the whole population (Sriram, 2017), I set a target sample size of no less than 100 respondents. Participant data were deidentified and select demographic information was collected for analysis across groups. The demographic categories included (a) year in school, (b) gender, (c) sexual orientation, (d) race/ethnicity, and (e) ability, which includes physical, cognitive, and other related identifiers.

3.7.2 Sampling strategy

Participants were asked to self-report on two types of questions: (a) opinion or satisfaction, measuring the website's utility in describing and helping to better understand well-being; and (b) behavioral, measuring impact or actions taken due to knowledge gained through the website. Overall, the survey results helped reveal effectiveness of the intended change effort and will inform future iterations that can be implemented for continuous improvement.

The survey followed a retrospective approach, asking participants to report on their "knowledge, awareness, skills, confidence, attitude, or behaviors" after engaging with the website content (Klatt & Taylor-Powell, 2005, p. 1). A retrospective survey is more efficient than a pre-post survey format (Klatt & Taylor-Powell, 2005), and perhaps ideal for measuring a small test of change, as they only require participants to be surveyed once, which reduces length of the study as well as time commitment and overall burden on participants. This strategy fit well with the selected change intervention, as recruited participants followed a straightforward protocol that requires two steps, first ensuring that all sections and content of the website were reviewed and second, completion of the survey questions.

3.7.3 Recruitment

Participant recruitment was executed through a variety of methods. For the online survey, a call-to-action (CTA) was embedded on the website with a link to the Qualtrics platform. This method allowed the study to be advertised continuously throughout its duration. In addition to the website CTA, student participants were recruited through a variety of other methods, including flyers, newsletters, and social media. To ensure a participant response that was inclusive of the target population, these recruitment methods were distributed broadly throughout various parts of campus. Additional recruitment efforts were planned, such as direct outreach to student interest clubs and organizations, but due to the high rate of responses these were not needed. As a recruitment and participation incentive, a \$5 Starbucks gift card was offered upon full completion of the study.

3.7.4 Survey instrument

For the survey instrument, I administered an online survey that evaluated effectiveness of the website, focusing primarily on participants gained knowledge and/or actions toward positive well-being, and secondarily on the website's utility as well as cultural relevance (or applicability) for users. The survey was administered using Qualtrics and consisted of 21 questions: five multiple choice, fifteen Likert scale with some open response, and one open ended. Five standard form questions were also included to collect demographic information. The Likert scale questions followed a six-point format, using strongly disagree, disagree, somewhat disagree, somewhat agree, agree, and strongly agree responses. The decision to use Likert scale questions for most of the assessment is merited because it is a popular and effective method for capturing opinions or

attitudes on an item, as well as a range or level of agreement across each item (Hinkin, 1998; Maurer & Pierce, 1998). In addition, Likert scale questions can be used to evaluate changes in awareness and self-efficacy (Maurer & Pierce, 1998), which helped to inform any correlations between increased knowledge of well-being and positive health or lifestyle behaviors. A copy of the survey protocol is provided in Appendix C and a survey questions chart that aligns individual survey items to the four inquiry questions is provided in Appendix D. Aligning the survey items this way allowed for both direct informing and gathering of supporting evidence for each inquiry question.

The survey was accessible through a sharable link and was displayed as either a hyperlink or QR code depending on the study recruitment materials. Prior to formal launch, piloting of the survey was conducted using a small sample of individuals that are representative of the target population. Following feedback from this pilot group, necessary changes were made to correct any errors and/or improve design.

3.7.5 Data analysis

Data analysis involved a mix of descriptive and inferential statistics. Sriram (2017) explains that a descriptive approach characterizes or portrays only the sample that data has been collected from, whereas an inferential approach allows the researcher to draw conclusions about the population via data provided by the sample. Incorporating both methods of analysis was useful for several reasons. First, an inferential approach provides a depiction of potential outcomes for the student body should the change intervention be implemented at a large scale. For example, if the study revealed that an educational website is an effective tool for raising awareness and empowering students to adopt more positive health and lifestyle behaviors, then a strong case can

be made to invest more in such resources, as well as deploy and market them broadly throughout the campus community. Second, a descriptive approach affirmed or eliminated any anticipated outcomes experienced by those who participated in the study and revealed any new or unanticipated outcomes. Finally, insights provided by both forms of analysis helped to answer the inquiry questions driving this research, as well as exposed strengths and weaknesses of the intervention to inform future iterations of this change idea.

3.8 Summary

Empowering student success is the primary goal for the University of Pittsburgh's Division of Student Affairs. Factors related to well-being contribute largely to students' success both during the college years and beyond. By coordinating efforts and aligning operational and programmatic approaches to well-being, the Division of Student Affairs has an opportunity to further impact student outcomes and success. Increased knowledge of well-being concepts provides one avenue for fostering such results. Thus, focusing on improving our students understanding of their well-being is of great importance. The change ideas presented in this paper offer practical approaches for impacting the secondary and primary drivers that account for the problem I have discussed. The selected intervention of developing a website focused on well-being presented both opportunity and potential for influencing change that can be measured, analyzed, and refined over one or numerous improvement cycles.

4.0 PDSA Results

This study involved the development of a university branded website dedicated to the topic of well-being and tested its effectiveness in increasing students understanding of well-being. Four inquiry questions guided this research:

1. Does the information on the website increase students' knowledge of well-being?
2. Does engagement with the website content lead toward positive health or lifestyle behaviors?
3. What features or information on the website provide the most utility, as well as what is missing from the website that will improve its utility?
4. Do students find the website's information and resources to be culturally relevant?

These questions helped guide the study's design, data collection and analysis, which in turn provided useful insights pursuant to the selected change idea and identified problem of practice. Inquiry questions one and two are focused on the problem of practice and positive outcomes associated with increased knowledge of well-being (or wellness) concepts. Inquiry question three is focused on the selected change effort (i.e., the website), including its design, information, tips, and resources. Inquiry question four is focused on the subjectivity of well-being, presuming that the applicability of offered information and resources may vary across demographic characteristics. Together, collection and analysis of the data through these four viewpoints helped provide a clearer picture of the problem of practice and effectiveness of the change idea.

4.1 Project Timeline

A general overview of the project timeline is provided in Table 3. And while planning and implementation of this study followed the improvement science method (Hinnant-Crawford, 2020), it is important to note that much of this work was conducted in conjunction with some ongoing university efforts. Two primary examples include the provost's Year of Engagement committee that identified a need to improve visibility and access to campus resources, and the newly formed Campus Well-being Consortium (formerly Mental Health Task Force) that reorganized its efforts to focus more broadly on students' holistic wellness (i.e., all areas that impact well-being). This study was dependent on the collaboration and support by these groups and various campus constituents. As such, certain actions were executed in conjunction with said partners and corresponding initiatives. The project timeline that spans February 2021 through March 2022 reflects the existing interdisciplinary work that both regulated and enabled several of the study's milestones.

Table 3. Change Idea and Study Project Timeline

Date	Action
February 2021	Proposed change idea approved
March 2021	Project team assembly and kickoff
April 2021 – May 2021	Website content development, including brand (Thrive @ Pitt) and url (thrive.pitt.edu) selection
June 2021	Formal launch of the website
July 2021 – December 2021	Ongoing work (content additions, design revisions, etc.)
January 2022	IRB study application submitted
February 2022	Study gained IRB approval
February 2022 – March 2022	Survey launch and data collection

4.2 Study Respondents

Over the duration of the study period (February 2022 – March 2022) the survey collected a total of 251 responses. Survey data from 114 respondents was used for analysis of this study. The remaining 137 responses were deemed unusable for various reasons including incomplete surveys ($n = 27$), attempted hacks ($n = 85$), and insufficient responses or non-Pitt/Undergraduate Student affiliations ($n = 25$).

Of the 114 respondents, a variety of undergraduate students (i.e., Year at University) are represented, including first year ($n = 30$), second year ($n = 40$), third year ($n = 28$), and fourth year ($n = 16$). There was not any fifth year+ undergraduate students represented in the sample.

Most of the respondents were women ($n = 98$), compared with men ($n = 13$), transgender ($n = 1$), or self-described ($n = 1$). One respondent ($n = 1$) elected to not indicate their gender. On

the basis of sexuality, 75% of respondents identified as straight ($n = 86$), while 25% of the sample identified with a non-dominant sexual orientation ($n = 28$).

As for racial/ethnic identities, White students ($n = 71$) comprised the majority, followed by Asian ($n = 23$), multiracial ($n = 11$), Black or African American ($n = 4$), and Hispanic or Latinx ($n = 2$) students. Three respondents ($n = 3$) elected to not indicate their race/ethnicity.

And while 75% of respondents identified as having no known disabilities ($n = 86$), 19% indicated having at least one disability ($n = 22$), with psychiatric or psychological disability ($n = 14$) being the most frequent selection. Six students ($n = 6$) elected to not indicate their ability status.

Table 4 provides additional details on the sample's demographics, and findings relative to the respondents' social identities are presented in the next section under Inquiry Question #4.

Table 4. Study Sample Demographics

Characteristic	Respondents	% of Sample
<i>Year at University</i>		
1 st Year	30	26%
2 nd Year	40	35%
3 rd Year	28	25%
4 th Year	16	14%
5 th Year+	0	0%
<i>Gender</i>		
Woman	98	86%
Man	13	11%
Transgender	1	1%
Self-Described: (Any other non-dominant gender)	1	1%
Prefer to Not Answer	1	1%
<i>Sexual Orientation</i>		
Bisexual	15	13%
Gay	3	3%
Lesbian	2	2%
Heterosexual (straight)	86	75%
Self-Described: (Any other non-dominant sexual orientation)	2	2%
Prefer to Not Answer	6	5%
<i>Race(s)/Ethnicity(ies)</i>		
Asian	23	20%
Black or African American	4	3%
Hispanic or Latinx	2	2%

Table 4 (continued)

<i>Race(s)/Ethnicity(ies)</i>		
Native American or Alaska Native	0	0%
Native Hawaiian or Pacific Islander	0	0%
White	71	62%
Biracial or Multiracial	11	10%
Prefer to Not Answer	3	3%
<i>Ability Status</i>		
Physical or Mobility Disability	1	1%
Chronic Disease or Medical Condition	1	1%
Psychiatric or Psychological Disability	14	12%
Intellectual or Developmental Disability	0	0%
Learning Disability	1	1%
Blind or Low Vision	0	0%
Deaf or Hearing Loss	1	1%
Multiple Disabilities	4	4%
No Known Disabilities	86	75%
Prefer to Not Answer	6	5%

4.3 Findings

Analysis of the online survey data is provided in this section. Survey item results are presented in accordance with each inquiry question they align to, reflected in the survey questions chart in Appendix D. Key findings from the data reveal that following use of the website,

respondents understanding of well-being increased and they felt motivated or intended to take positive steps toward supporting their well-being. In addition, features or information that provided the most utility to users were identified. Finally, results indicate that certain demographic variables (or social identities) may impact relevance and applicability of the website's content for some users.

4.3.1 Inquiry question #1: Does the information on the website increase students' knowledge of well-being?

Across all aligned survey items, the results indicate that student's knowledge of well-being increased after utilizing the website. Data from four six-point Likert scale survey items answered this inquiry question, whereas one item directly aligned to the question, and three items provided supporting evidence. Descriptive statistics show consistency across all statements with students expressing high levels of agreement with each of the measures. First, and most directly aligned with this inquiry question, nearly all respondents ($n = 112$, 98%) indicated they had a better understanding of well-being after using the Thrive @ Pitt website. Next, a related item revealed similar results, whereas nearly all respondents ($n = 111$, 97%) agreed that after using the website the concept of well-being encompasses more than they originally thought. A third item measured appeal of this topic, and most respondents ($n = 108$, 95%) agreed their level of interest in well-being increased after using the website. Finally, a fourth item measured if they felt more equipped to manage their well-being after using the Thrive @ Pitt website. Again, most respondents ($n = 108$, 95%) agreed. A comparison of these four survey items, including frequency (n), percentage of respondents (%), mean (M), and standard deviation (SD) values are presented in Table 5.

Table 5. Survey Items and Results Aligned with Inquiry Question #1

Item	<i>n</i>	%	<i>M</i>	<i>SD</i>
After using the Thrive @ Pitt Website, I have a better understanding of well-being.	112	98	5.07	.83
The concept of well-being encompasses more than I originally thought.	111	97	5.06	.93
After using the Thrive @ Pitt website, I became more interested in this topic.	108	95	4.78	.98
After using the Thrive @ Pitt website, I feel more equipped to manage my well-being.	108	95	4.84	.91

In summary, results from the above survey items provide strong evidence that the information on the website did increase students' knowledge of well-being. Moreover, the website appeared to broaden understanding of well-being and the various areas that comprise it. The results also suggest that upon using the website students became more interested in the topic and felt more equipped to manage their well-being. The impact (or outcomes) this increased knowledge had on users of the website was captured by other survey items that inform the following inquiry question.

4.3.2 Inquiry question #2: Does engagement with the website content lead toward positive health or lifestyle behaviors?

Study results indicate that the website's information and resources did facilitate movement toward positive health or lifestyle behaviors. And while this study is unable to verify or track specific behaviors, several survey items, including qualitative feedback from respondents, provide

evidence of the website's effect on users' awareness, motivation, intention or plans to act on their well-being following engagement with the website content.

Data from five survey items answered this inquiry question; three of the five survey items directly align to the question and two indirectly related items provided supporting evidence. First, descriptive statistics show nearly all respondents ($n = 109$, 96%) agreed that after using the Thrive @ Pitt website, they planned to take positive action toward supporting or enhancing their well-being. Qualitative content analysis (Zhang & Wildemuth, 2009) of open responses to this item reveal the most common plans or intended actions. Categories were created by identifying keywords or phrases in each response which were then grouped with other similar keywords and phrases. Through this exercise several themes (or categories) emerged to include a range of intended actions, these include utilizing the website's information and resources (10%); investing (or focusing) more time for "myself" (9%); increased attention to emotional well-being (9%); increased attention to physical well-being (9%); utilizing the website's tips and guidelines (9%); and balancing routines or time management (8%). Along with the above intended actions, other common responses included sentiments such as increased awareness of well-being and its multidimensionality (11%) and increased interest or motivation to focus on one's well-being (8%). The following quotes are representative of the various comments that account for the themes presented above:

- I didn't think of this holistic approach before seeing it all laid out in one place.
- Knowing what I can do to help improve my well-being makes me want to more.
- After reading each pillar, it made me more aware of how important the different aspects of my well-being truly are. With that being said, I plan to pay more attention to my well-being and follow the tips posted on this page.

Several comments included remarks concerning barriers or challenges to focusing on their well-being (9%), primarily concerning time and daily stresses of life. This theme suggests that while students may agree that tending to their well-being is important, and perhaps desirable, other life factors may prevent them from acting on the items they wish or plan to give attention to. Finally, some respondents (6%) provided neutral or indifferent viewpoints following use of the website, offering statements such as “it didn’t cause me to act differently”; “it’s easier to read about [improving well-being] than actually do it”; and “I use other resources [outside of the website]”. This result means that for these few individuals use of the website did not influence their current wellness routine or instigate movement toward new or additional positive health or lifestyle behaviors.

A follow up (part b) to this item asked respondents when they intended to take said positive actions, whereas most ($n = 96$, 84%) indicated they planned to do so immediately or within the next one to four weeks. Some respondents ($n = 18$, 16%) answered tentatively, selecting within the next three to six months ($n = 7$), within the next year ($n = 1$), or at some point, but unsure when ($n = 10$). No respondents ($n = 0$) indicated they had no intention of taking positive action toward supporting or enhancing their well-being. These results are consistent with the qualitative data presented above, and further demonstrate that use of the website led toward some sort of positive action or plan for most respondents while having minimal or no impact for a generally small percentage.

A second item that directly aligns with this inquiry question shows most respondents ($n = 104$, 94%) agreed that after using the Thrive @ Pitt website, they planned to put into practice one or more tips/guidelines offered on the website. Qualitative content analysis of open responses to this item revealed common tips/guidelines or areas of well-being respondents intended to act on.

The two most frequently cited areas included emotional well-being (16%) and physical well-being (14%), accounting for nearly 1/3 of the comments. These results are representative of a common theme found throughout the study's findings, in that many respondents identified both a need and intention to invest more time or effort to these two areas. In addition, every other pillar of well-being was mentioned throughout the comments, this includes social well-being (6%), intellectual well-being (6%), occupational well-being (5%), spiritual well-being (4%), financial well-being (3%), and environmental well-being (3%). The variety of responses is indicative of users increased or broadened awareness of the numerous areas that comprise and impact well-being, as well as the enlightenment many experienced through engagement with the website. The following quotes support these findings and show some of the ways respondents were able to make connections to various aspects of well-being, including their plans to act through specific tips or guidelines:

- I found the spiritual well-being tips very helpful. I have never identified as a spiritual person or gone to a place of worship really, but I realize I can do other things like mediation and journaling to gather my thoughts.
- I really like the tip on the Occupational Well-Being page where it says to 'find a mentor to champion your growth.' I think I am going to look into programs that offer mentoring for next fall.

A portion (20%) of open responses mentioned plans to focus on overall well-being via general use of the tips/guidelines listed throughout the website, submitting comments such as "I wrote down some of the tips given so I can focus more on my own well-being."; "Some great tips and guidelines were suggested and I think some may work for me!"; and "The tips were the most helpful part of the site." Other comments related to use of the offered tips/guidelines included positive sentiments of the website's helpful information and resources (9%). Some respondents

mentioned barriers or challenges to putting the tips/guidelines into practice (8%) or neutral/indifferent feedback (5%) that signified no intention to use the tips/guidelines, providing remarks such as “It’s harder to put into action what you have read”; “All the tips were useful, it’s just finding the time to integrate them into a daily routine.”; and “I have good self-care tools that work for me, so I’ll probably just continue to use the ones I have in place.” Consistent with responses to the first survey item aligned to this inquiry question, results from this item support findings that while the website’s information and resources had a negligible effect for a few, it did have some sort of impact for most in moving them toward positive health or lifestyle behaviors.

A third item that directly relates to this inquiry question asked respondents if, after using the Thrive @ Pitt website, were there any aspects of well-being they planned to give more attention to, selecting all that apply. As with the results in the previous item above, emotional well-being (21%) and physical well-being (16%) were the most frequently selected aspects. Every other aspect also received selections, each accounting for at least 7% of the total responses, which included spiritual well-being (14%), social well-being (13%), financial well-being (11%), intellectual well-being (9%), occupational well-being (9%), and environmental well-being (7%). Comparison of the selections from this item to the aspects cited in the item above shows general consistency of the areas respondents most frequently intended to give attention to, as well as the breadth or variety of well-being aspects respondents identified as needing attention. This also provides further support in validating claims that use of the website facilitated movement toward positive health or lifestyle behaviors.

Data from two additional survey items provide supporting evidence in determining if use of the website facilitated movement toward positive health or lifestyle behaviors. First, most respondents ($n = 109$, 96%) agreed that after using the website, they felt motivated to improve

their well-being. Second, most respondents (n = 108, 95%) agreed that they intended to use the Thrive @ Pitt website in the future to support or enhance their well-being. While the results from both survey items do not reveal specific actions or plans that followed use of the website, they do indicate an interest and impetus to act at some point.

Altogether, results from the five survey items presented above suggest that engagement with the website content does lead users toward positive health or lifestyle behaviors. And while the results do not verify, track, or measure the degree of such actions, ample evidence demonstrates specific areas of focus and/or plans respondents intended to take following engagement with the website. In addition, the results from these items indicate that as use of the website raised awareness of well-being and the various areas that comprise it, respondents were driven to give more attention to certain areas of interest with emotional, physical, and overall well-being emerging as the most common categories. Finally, analysis of the responses indicate that use of the website helped students gain a deeper appreciation for this topic, including the importance of tending to oneself, and that putting into practice recommended tips and guidelines are useful strategies for supporting and enhancing one's well-being.

4.3.3 Inquiry question #3: What features or information on the website provide the most utility, as well as what is missing from the website that will improve its utility?

Results for this survey item demonstrate that the website is a useful tool for supporting and/or enhancing students' well-being. Features and information that were most favorable among respondents included pages that define and/or explain the concept of well-being, as well as describe the various aspects that comprise and impact it. In addition, graphics such as the pillars model that illustrate the multidimensionality of well-being and its component parts were useful in

helping students develop a broader understanding of the topic. Individual webpages for each pillar of well-being that provide actionable tips and guidelines were useful, as well as the listing of specific campus resources for supporting each area. The pillars of emotional well-being and physical well-being were of most interest to students and the accompanying information and resources for these areas were found to be most helpful compared to other areas. Respondents expressed satisfaction with the site's overall design and organization, and frequently cited an attainment of knowledge, awareness, or empowerment following engagement with the website content. Common suggestions to improve the website's utility included the addition of more tips/guidelines and resources for supporting each area of well-being, more supplemental content and interactive features such as videos and testimonials, and more campus-wide marketing of the website to raise students' awareness of this educational, self-support tool.

A mix of quantitative and qualitative data from nine survey items answered this question. First, two survey items gauged what areas of well-being on the website were of greatest interest and most helpful to students. One survey item asked respondents to indicate what pages on the Thrive @ Pitt website they spent the most time on. Emotional well-being (18%) and physical well-being (13%) were the most frequently selected pages. A second survey item asked respondents what pages on the Thrive @ Pitt website they found most helpful. Again, emotional well-being (14%) and physical well-being (13%) were the most frequently selected pages. Taken together, these two survey items revealed that emotional well-being and physical well-being are of acute interest or concern to students, and the information and resources listed on the accompanying webpages provided utility in these areas.

Continuing with results from these two survey items, the next frequently selected pages that users spent the most time on were what is well-being (10%); homepage (9%); and pillars of

well-being (9%). This is consistent with the next frequently selected pages that users found helpful, which include the pillars of well-being (12%) and what is well-being (10%). These combined results demonstrate that in addition to focusing on areas of primary concern (i.e., emotional, physical), students were generally interested in learning about the concept of well-being and also found the foundational pages, ones that provide an overview and/or definitions of well-being, were helpful in gaining a broader understanding of the topic. Qualitative content analysis of open responses aligned to these two survey items provide supporting evidence, whereas nearly 1/3 of comments cited an attainment of new knowledge (13%); the description/definition of well-being & the pillars model (10%); and general quality or quantity of information (8%). Included below is a sample of comments referencing these foundational pages and the utility they provided students:

- The pages offered clear definitions that provided a helpful way to think about wellbeing I hadn't considered.
- I learned how many different types of well-being there are and how they all work together to bring harmony to my overall well-being.
- The overview of the pillars of well-being was very helpful. I didn't realize well-being could be broken down into different pillars. I [also] liked seeing the broad definition of well-being.

Data from the second survey item showed that resources (9%), was the fifth most frequently selected page that respondents identified as being helpful, accounting for 11% of open response comments. Common comments around the utility of this page included the following remarks:

- Resources was a helpful section because rather than just being informed . . . I was able to learn about where to develop these pillars.

- There are many resources on campus that I did not know about, and these sections on the website helped explain it in detail and made me click on many more links burying myself in the information.

This finding highlights the website's utility in not only increasing students' knowledge and awareness, but also in equipping them with additional tools for connecting to campus resources, further empowering them to take charge of their well-being.

Another theme that emerged from respondents' comments to the website's utility was its general relevance and/or applicability to the user (26%). Many spoke positively of the website's overall purpose, as well as the information and resources found within individual pages, providing statements such as "They showed me tips and tricks on how to feel better about my health and wellness." and "[These pages] gave me the information that I had been searching for in order to be more conscious of living a balance lifestyle." In addition, a number of comments pertained to the website's utility in assisting with specific personal interests or challenges (17%). Some examples include:

- I've been finding it hard to find a church group on campus and there is a comprehensive list of Independent Student Religious Groups linked in the spiritual wellbeing page.
- My physical and emotional well-being are the areas I have the most difficulty in, so I found some really helpful information on those pages.
- I have not received a lot of education on how to handle my finances as an adult and i found it helpful in learning how to manage my money.

These results demonstrate that the website was effective in helping students become more attuned to all aspects of their well-being while also being able to target specific areas of concern for themselves.

Other open responses that related to the website's utility pointed to its design and organization (8%), receiving comments such as "It gave a broad overview . . . The mix of quotes, pictures, and links showed me a lot of info." and "[It] provided lots of info while still being concise." There were also a variety of miscellaneous comments (5%) that offered generally positive sentiments. Finally, while very few neutral or indifferent (2%) comments were received, some of the critical feedback included remarks such as "[The] first three pages listed were long and introductory." and "I can get the same information online or through my healthcare provider." For this small percentage of users, it is evident that the website did not provide any utility in supporting and/or enhancing their well-being.

Next, five six-point Likert scale survey items measured general utility of specific pages or features of the website. Overall, respondents almost entirely agreed that the website's various features provide utility in supporting their well-being. Descriptive statistics reveal consistency across all items and identify the most useful website features (see Table 6). First, almost all respondents ($n = 111$, 97%) agreed that the Thrive @ Pitt website provides a clear definition of well-being. Second, all but two respondents ($n = 112$, 98%) agreed that the pillars model is useful for illustrating the various areas that comprise and support well-being. This item also received a strong mean score ($M = 5.32$), which demonstrates that using the pillars model as an illustration is a highly effective way for students to grasp the general concept of well-being. Third, nearly all respondents ($n = 112$, 98%) agreed that the benefits associated with high levels of well-being (listed on the Thrive page) help clarify the importance of this topic. And while this item received

high levels of agreement, it did capture the lowest mean score ($M = 5.15$) across all five items. This hints that the formatting and/or information on this page could be further evaluated to determine user comprehension of the content and/or areas for improvement. Fourth, almost all respondents ($n = 111, 97\%$) agreed that the individual pillars pages offer useful tips for supporting and/or enhancing aspects of their well-being. Fifth, all but one respondent ($n = 113, 99\%$) agreed the listing of resources makes it easier to find campus resources for supporting and/or enhancing their well-being. This result, which also had a strong mean score ($M = 5.24$) is affirming of the content analysis of open responses in the survey items mentioned above. Furthermore, it highlights the value of providing such a feature on the website and implies that investing additional efforts to expand and enhance the listing of campus resources for students' self-guided use would be advantageous.

Table 6. Survey Items and Results Aligned with Inquiry Question #3

Item	<i>n</i>	%	<i>M</i>	<i>SD</i>
The Thrive @ Pitt website provides a clear definition of well-being.	111	97	5.19	.76
The pillars model is useful for illustrating the various areas that comprise and support well-being.	112	98	5.32	.80
The benefits associated with high levels of well-being (listed on the Thrive page) help clarify the importance of this topic.	112	98	5.15	.79
The individual pillars pages offer useful tips for supporting and/or enhancing aspects of my well-being.	111	97	5.18	.84
The listing of resources makes it easier to find campus resources for supporting and/or enhancing my well-being.	113	99	5.24	.82

An eighth survey item measured overall utility of the website and revealed that all but one ($n = 113$, 99%) respondent agreed that the Thrive @ Pitt website is a useful tool for supporting students' well-being. This result is noteworthy, because it demonstrates that the website provides value and some level of utility to practically any student that engages with it. Further support of this claim is provided through qualitative content analysis of open responses to a ninth survey item that asked respondents what suggestions they had for the Thrive @ Pitt website that will make it better, whereas over half (56%) indicated satisfaction with the website by offering nothing or no comment (37%) or overall positive feedback (19%). Some specific suggestions called for additions to the existing information, tips, or resources (13%), while others focused on new content/features (10%) and design elements (7%), offering ideas such as videos, testimonials, events/workshops, and more interactive content. One theme that warrants additional attention pertains to marketing & promotion (9%) of the website, in that several respondents suggested it be advertised broadly to students, leaving comments such as "I would advocate for this website so that more people know about this site and what it has to offer since personally I did not know about this." While this survey item was focused on measuring utility of the website, this particular result speaks to the importance of marketing at scale so all students can become aware and use it for their benefit. This feedback highlights the need for Student Affairs to incorporate a robust marketing and communications strategy for Thrive @ Pitt that puts the website and its resources in front of students while also making it more visible and discoverable through various digital mediums such as social media and internet search. Finally, the remainder of open responses to this item included miscellaneous suggestions or comments (5%) such as expanding the target audience beyond students and giving more attention to severe issues or specialized needs. Altogether, the suggestions received through this survey item, as well as the themes that emerged through content

analysis, identified several strengths and some areas for improvement (both of which can be further developed) that will enhance the website's utility for users.

4.3.4 Inquiry question #4: Do students find the website's information and resources to be culturally relevant?

Study results indicate that students generally found the website's information and resources to be culturally relevant. However, disaggregation of data reveal that some identity groups found the website's content to be less relevant, particularly on the basis of gender and race/ethnicity. And while the results show less relevance for non-dominant identities across all demographic categories, minimal statistical differences were observed when comparing variables for certain identities such as year in school, sexual orientation, and ability status. One exception to this statistical consistency of variables was found within the ability status category, where those identifying with a psychiatric or psychological disability found the website's information and resources to be considerably less relevant.

Data from one survey item answered this question, providing evidence from multiple angles. First and most generally, almost all respondents ($n = 105$, 95%) agreed that the information and resources listed on the Thrive @ Pitt website are applicable to their social identities (e.g., race, gender, ability, etc.). At a glance, this result suggests that the website's content is relevant, and thus useful, to any given student. Disaggregation of data provides deeper insights to this initial finding. A breakdown of mean scores by year in school includes 1st year ($M = 5.03$); 2nd year ($M = 4.79$); 3rd year ($M = 5.18$); and 4th year ($M = 4.81$). The variance across these scores is generally small, which implies relevance of the website content is not impacted by a student's year in school. Similarly, sexual orientation did not seem to impact applicability of the website's information and

resources, whereas the mean scores of heterosexual (straight) ($M = 5.01$) students was nearly the same as students identifying with any other non-dominant sexual orientation ($M = 4.96$). One outlier included students who identified as gay ($M = 4.67$), which initially suggests the website is not as relevant to this sub-group. But given the small sample size ($n = 3$) of this variable, it is not possible to make any assumptions of this finding. Moreover, respondents who selected prefer to not answer ($n = 6$) regarding their sexual orientation accounted for a comparatively low mean score ($M = 4.00$). No additional information was captured from these individuals, and so no connections can be made regarding their relation or impact to other variables within this category.

Ability status is another identity that reflected some telling results related to applicability of the website's information and resources. Generally, there were no major differences between those with no reported disabilities ($M = 4.98$) and individuals who have one or more disability ($M = 4.86$). Consistent with some other identity categories, it appears ability status does not impact relevance of the website's content. However, those identifying as having a psychiatric or psychological disability ($n = 14$) scored lower ($M = 4.64$) compared to all other disability categories, which suggests the website was not as applicable and useful to these individuals. Furthermore, some respondents that preferred to not answer ($n = 6$) also scored lower ($M = 4.67$) on this item. But with the limited information available for this variable, no connections can be made in relation to the rest of the data.

Two social identities had clear variances among their variables. First, when comparing the mean scores of those who identified as woman ($M = 5.03$) or man ($M = 4.31$), there was a notable difference, whereas men found the website's information and resources to be less relevant than women. Given the small sample of men ($n = 13$) that participated in the study, it is hard to draw any conclusions, but it is obvious that men's experience with the website content was different

than women. This also implies that overall experiences around well-being may differ along gender lines, and that some information and resources may need to be tailored to meet the needs or interests of various identities within this category. Second, data around race/ethnicity revealed similar results. Respondents identifying as White ($M = 5.08$) reflected a higher mean score than those identifying with any other non-dominant race/ethnicity ($M = 4.52$). This shows that students with minoritized racial or ethnic identities found less relevance, or utility, in the website's content than students with a dominant (or white) race/ethnicity. A breakdown of select races/ethnicities provides further insights to this finding, whereas the mean scores of Asian ($M = 4.52$), Black or African American ($M = 4.50$), and Hispanic or Latinx ($M = 4.50$) respondents were all low compared to White ($M = 5.08$) respondents. In addition, the similarity of values across these three variables suggests that relevance or applicability of the website's information and resources is not dependent on specific minoritized races/ethnicities (e.g., Asian), but rather a matter of associating with a non-dominant racial/ethnic identity. One outlying variable included those who identified as biracial or multiracial ($M = 5.08$) which captured nearly the same mean score as White ($M = 5.08$) respondents. Given the limited information available, such as the specific races/ethnicities that account for each respondent's biracial or multiracial identity, no conclusion can be made for this result.

In summary, the results from this survey item show that relevance of the website's content does vary across demographic categories. And while students generally agree that the website's information and resources is culturally relevant, specific social identities (e.g., gender, race/ethnicity, psychiatric or psychological disabilities) may impact applicability and utility for users with these associations.

5.0 Discussion and Implications

The purpose of this quantitative study was to determine if the use of a website as an educational tool was effective for increasing students' knowledge of well-being and to assess if engagement with the information and resources led toward any positive health or lifestyle behaviors. The study also sought to identify features and/or information that provided the most utility to users, as well as evaluate relevance of the website's content based on various social identities. Key research findings are discussed in this chapter, including their relation to existing literature and supporting knowledge. Personal observations related to the study's findings are provided along with implications for professional practice. Study limitations, including opportunities for future research, are also presented.

5.1 Findings and Discussion Related to the Research

The following contains a summary of key findings from the study, including the researcher's reflections and connections to supporting knowledge and literature. The themes or statements presented below represent a combination of answers to the four inquiry questions that structured this study, as well as new or focal areas that emerged through analysis of the results.

5.1.1 Websites are an effective tool for raising students' awareness and increasing their understanding of well-being.

Numerous findings from this study demonstrate that students' knowledge of well-being increased upon engaging with the Thrive @ Pitt website. While most students responded favorably to all survey items, measures focused on heightened awareness or increased knowledge of well-being were among the items that received the strongest scores. This speaks to my observations as a practitioner and researcher and reinforces the main point of my problem of practice that students do not have a broad understanding of well-being. Using a website as a platform to organize and present information on the multifaceted topic of well-being was proven by this study to be an effective method that addresses this issue. The findings from this study also contribute new knowledge to the field, as limited scholarly literature exists around health and wellness or well-being education and the use of digital platforms such as websites.

In connecting back to the review of exemplar institutions (University of Minnesota, n.d.-b; University of Notre Dame, n.d.-a; Wake Forest University, n.d.-a), studying their websites for well-being were integral to identifying key features and information to include on the Thrive @ Pitt website. This highlights a broader point about campus-wide well-being education and promotion initiatives; institutions that are leading the way in demonstrated commitments to supporting or enhancing students' well-being are doing so through a variety of methods and approaches. In other words, the website serves as a tool to augment student learning and self-help, but it is not the sole solution. Numerous strategies need to be incorporated to facilitate desired outcomes (Sadeghi & Heshmati, 2019).

5.1.2 Students experience enlightenment upon being provided a broad overview of well-being.

In addition to the study's evidence that students' knowledge increased, results indicate that many experienced enlightenment (i.e., lightbulb moments) through their newly acquired understanding of well-being. This finding was observed consistently through open responses, where students demonstrated a change from limited or no awareness to new or broadened awareness, expressing a newfound cognizance and appreciation for the topic. This speaks to the impact new learnings can have on an individual's mindset and relates to supporting literature that show the development of knowledge and awareness around well-being concepts fosters the growth of cognitive strengths such as confidence and agency (Ackerman, 2020; Bandura, 2005), contributing to overall self-efficacy in pursuing more positive health and lifestyle behaviors (Gieck & Olsen 2007; Hattie et al., 2004; Von Ah et al., 2004). These results reinforce the value of wellness education and promotion work in higher education and emphasize the need to bolster programmatic and outreach efforts at the ground level. Finally, existing literature that explore the multidimensionality and interconnectedness of domains show that changes in one area often led to changes in other areas (e.g., Myers et al., 2000). Findings from this study suggest that students became more aware of these connections. While it cannot be determined if this connecting-of-the-dots resulted in higher levels of well-being for respondents, it did reveal an increased attentiveness and interest toward holistic wellness practices.

5.1.3 Increased knowledge of well-being elicits varying actions or plans toward positive health and lifestyle behaviors.

Building upon the point above, findings from this study suggest that increases in knowledge of well-being, through use of the website, leads toward positive health and lifestyle behaviors. This aligns with previous research that tested wellness concept knowledge, self-efficacy, and behavioral outcomes through various educational interventions (Baldwin et al., 2017; Coffey et al., 2016; Gieck & Olsen, 2007; Hermon & Hazler, 1999; Horton & Snyder, 2009;). For this study, all Likert scale items that focused on behavior change captured strong scores of agreement among students. Another survey item that identified areas of well-being respondents intended to give more attention to revealed consistency in comparison to these Likert scale items. Furthermore, qualitative data from open responses present specific actions and plans students intended to take following use of the website. This provides further support of the claim that an increase in knowledge facilitates behavior change (Gieck & Olsen 2007; Hattie et al., 2004; Von Ah et al., 2004).

A challenge with these findings is the results do not allow for validation of students' reported plans or actions. In other words, it is hard to determine if, how, when, and for how long any positive behaviors took place. Relatedly, the results do not show if use of the website created lasting, enduring learning for students. These points raise the question, even as one's knowledge increases, does it actually facilitate movement toward positive health or lifestyle behaviors? It is difficult to validate casual relationships beyond what respondents shared in the results. Future research that might help address these questions would be incorporation of the transtheoretical (stages of change) model (Prochaska & Velicer, 1997). Targeted survey items could measure what stage of change (i.e., precontemplation, contemplation, preparation, action, maintenance, or

termination) respondents are in following use of the website. Grouping students into these various stages may help identify their likelihood for behavioral change, as well as further validate the reported plans or actions they intend to take. All this considered, my research shows that immediately upon using the Thrive @ Pitt website, most students felt some level of interest, motivation, or intention to act.

5.1.4 Emotional well-being and physical well-being remain areas of greatest interest/concern.

Results from numerous survey items consistently revealed that students have the most interest and/or concern when it comes to the physical and emotional aspects of their well-being. This is not surprising as current data from both scholarly research and national studies consistently cite issues of physical health and especially mental (emotional) health as major factors impacting college students' well-being (e.g., ACHA, 2019; Manchester, 2020). In addition, results from the study show that respondents found the website's information and resources to be most useful in supporting the areas of physical and emotional well-being. This is encouraging, because it demonstrates the website's utility in addressing the inflation of related issues seen throughout higher education in recent years. This also contributes to existing knowledge and may help inform current educational-intervention methods used in related fields. Future research in this area presents a variety of opportunities for both scholars and practitioners. Qualitative data from open responses further support these findings and highlight the need for more information, tips/guidelines, and resources on the website for students' use. A common thread throughout demonstrated that the material presented on the website was suitable for gaining a general understanding of well-being, but more content was desired around the "how to" of well-being.

This discovery fits nicely with the point around behavioral impacts; perhaps to further facilitate positive health and lifestyle change for students, more content and features can be added to the website. Testing future iterations and comparing data to this study would be advantageous to this body of work.

5.1.5 Descriptions and illustrations, tips/guidelines for practice, and campus resources for supporting well-being provide the most utility to students.

This study revealed specific features that are most useful for understanding and supporting well-being. Several survey items containing both quantitative and qualitative data identified pages that define and describe well-being were helpful, as they broke this complex topic down into digestible, component parts allowing for a comprehensive view. This approach of dimensionalizing wellness (or well-being) is grounded with the seminal works these concepts are built on (Ardell, 1977; Dunn, 1961; Hettler, 1976; Travis, 1975). In addition, the pillars of well-being model, used to illustrate the component parts (or dimensions) of well-being, was deemed effective; so much so it accounted for one of the strongest scores across all survey items. This aligns with existing literature that relies on the use of multidimensional models to describe wellness or well-being (Hettler, 1976; Mayol, 2012; Swarbrick, 2012) and presents an opportunity for future research to empirically test the model that was developed for this work. The listing of tips, guidelines, and campus resources for supporting specific areas of well-being were also identified as features that were most useful. This is notable because it demonstrates the website's ability to not only inform and educate students, but also equip and empower them with the tools and skills for self-help.

5.1.6 Educational, self-help tools for students' well-being require a scaled, campus-wide approach.

While results from this study demonstrate the utility and effectiveness of educational websites as a self-help tool, findings raise the importance of incorporating a coordinated marketing effort targeted toward the entire campus community. Throughout several survey items that contained open response sections, respondents frequently commented that they were unaware of this resource and/or it should be shared broadly to the student body for their awareness and benefit. Although the Thrive @ Pitt website was the selected changed idea for this dissertation in practice, it formally launched and received moderate marketing attention through various Student Affairs mediums prior to the study. The fact that many respondents were not aware of the website, highlights the need for a larger scale marketing strategy that casts a net for the whole student body. This aligns with scholarly and professional knowledge (e.g., Fullerton, 2011; Watts, 2017), exemplar institutions (e.g., University of Minnesota, n.d.-b), and unifying frameworks for advancing health and well-being within higher education (ACHA, 2016; ACHA, 2020; CAS, 2018) that call for additional human and technical resources and widespread interdisciplinary collaboration.

5.1.7 Relevance of the website content varies across social identities, necessitating more tailored information and resources.

Study findings indicate that depending on an individual's social identities, the website may have more or less applicability for the user. For example, students who identified with a non-dominant race/ethnicity (e.g., Asian, Black or African American, Hispanic or Latinx) found the

website's content to be less relevant than White students. And although all respondents still largely agreed that the information and resources is culturally relevant, it raises questions around the website's applicability and overall utility based on demographic factors. Another finding that warrants attention involves gender, whereas men found the website content to be markedly less relevant than women. This may be a circumstance of masculinity, which implies that additional and different content may be necessary to meet men's specific interests and needs (Bowman & Filar, 2018). Respondents that identified with a psychiatric or psychological disability found the website's information and resources to be considerably less relevant than others, which also suggests that supplemental content in this area may be useful in addressing acute interests or concerns. Finally, findings hint that relevance of the website's content may vary for individuals based on sexual orientation, particularly those who identify as gay. Given the small sample size no determination could be reached. Additional attention or research focused on any of these areas or demographics in general would further inform this part of the work. Altogether, findings from this study revealed that social identities do impact relevance of the website's information and resources, even if minimally. This highlights the importance of offering content that is both applicable to the general user, as well as targeted to specific interests, identities, or needs.

5.2 Implications for Practice

This research raised several key findings relative to education and support of students' well-being. Provided below are three main themes for focus, including specific ideas and strategies for continuing to address these areas in professional practice.

5.2.1 Continuously develop the Thrive @ Pitt website.

In its current state, the Thrive @ Pitt website contains sufficient content to educate and assist students in their pursuit of all aspects of positive well-being. Enhancing the site's features will improve its utility and impact for students. This includes the addition of more information and campus resources, as well as new content such as videos, social media, and other interactive features. Along with educational elements that present the “what is” and “how to” of well-being, self-assessment tools that allow for the measurement and tracking of individual domains and overall well-being would be useful. Ongoing work of this project should lean on the expertise and interests of various individuals and groups connected to this topic. Doing so will ensure equity and variety of content, while building synergy and consistency within the organizational system. Altogether, continuous development and creation of a platform that serves as a one-stop-shop for all things pertaining to students' well-being, fueled by university stakeholders, should be the guiding standard for the Thrive @ Pitt website.

5.2.2 Deliver more health & wellness education programs at scale.

In addition to efforts such as a centralized website, support of students' well-being should be carried out through a variety of scaled approaches. Some examples include annual campaigns, signature events, unification of curricula, and division-sponsored seminars or courses. One recent study showed the benefits of self-guided online learning using a massive open online course (MOOC) format (Yaden et al., 2021). Incorporating such strategies would reach more students, allow for promotion from numerous angles, and provide more options for learning and supporting one's well-being.

5.2.3 Expand efforts to serve specific interests and identities.

As exemplified by this research, one's overall assessment of their well-being differs from individual to individual. And while there are many objective factors, well-being is a largely subjective construct. This means a "one size fits all" approach to supporting students' well-being is not the best strategy. Along with general information and campus-wide initiatives intended for the whole student body, interest-specific efforts should be incorporated. The addition of content dedicated to issues of diversity, equity, and inclusion, contributions from or engagements with subject matter experts, or even the offering of a well-being concierge to assist students with specific or needs are just a few examples. Applying this strategy to professional practice ensures equity in supporting all students.

5.3 Limitations and Future Research

While the review of supporting knowledge and results from this study demonstrated that the use of a website is an effective tool for increasing students' understanding of well-being as well as empowering them to pursue more positive health and lifestyle behaviors, there are some limitations that need to be recognized. Along with these limitations, suggestions for future research are offered.

One limitation involves the sample sizes of certain demographic groups. While this study captured data from a variety of identities, including year in school, gender, sexual orientation, race(s)/ethnicity(ies), and ability status, the composite sample does not match the university's current student population (University of Pittsburgh OEDI, 2022). Some demographic groups in

particular were underrepresented in this study. First, of the 114 respondents whose data was used for this research, only 13 identified as male. This low percentage of male respondents could be indicative of a variety of factors such as recruitment and/or interest in this topic. Future research aimed at capturing a larger number of males or a study focused solely on men's well-being (or masculinity in well-being) would strengthen this work. Second, representation of certain marginalized identities, namely Black/African American; Hispanic/Latinx; and gay were so small that no conclusions could be reached for these groups. It would be beneficial to expand this research to focus on specific demographic groups or marginalized identities as a whole. Furthermore, obtaining a sample that is more representative of the school's demographics would strengthen this study. Targeted recruitment efforts aimed at these identity groups is a strategy that could be implemented. Examples include direct outreach to all male residence floors, race or ethnicity focused student organizations, and LGBTQIA+ groups.

A second limitation concerns the impact of change of this educational intervention. While the results provide strong evidence that students' both experienced an increase in knowledge and planned to engage in more positive health or lifestyle behaviors following use of the website, this study did not measure the degree of change and/or lasting impacts. Future research that could advance this work might utilize different study designs such as a pre-post survey that would measure occurrence of any outcomes before and after the intervention, or a longitudinal study that would track and monitor outcomes and/or behaviors over time. Additionally, incorporating a mixed methods approach or qualitative study that utilizes participant interviews or focus groups to gather more details and user-specific data may help with this part of the research.

5.4 Conclusion







This dissertation in practice focused on the topic of college student well-being and campus-wide approaches to empowering their pursuit of positive health and lifestyle behaviors. A review of scholarly and professional knowledge identified key elements to campus-wide approaches for supporting students' well-being and discussed various outcomes associated with wellness or well-being themed educational interventions. The use of websites as a campus-wide education and self-support tool were identified as a viable strategy for facilitating these outcomes while addressing the identified problem of practice that students at the University of Pittsburgh were not provided a broad understanding of well-being. A branded website, Thrive @ Pitt, was created and a quantitative study was conducted to measure its effectiveness in increasing students understanding of well-being and to assess if this increased knowledge led toward any positive health or lifestyle behaviors. Using descriptive statistics and qualitative coding analysis strategies, major findings revealed that upon engaging with the website's information and resources, students' knowledge of well-being increased, and they intended to pursue more positive health and lifestyle behaviors. These findings align with existing research and contribute new knowledge to the topic of college student well-being and campus-wide approaches to advancing students' health and wellness. Implications for professional practice highlight areas for growth and augmentation, including continuous development of the Thrive @ Pitt website, delivering more health and wellness education programs at scale, and offering more information and resources to meet the needs of all students, particularly those with marginalized identities. Finally, the limitations of this study present several opportunities for future research including more in depth focus on social identities and measurement of behavioral changes.

My career has been dedicated to serving others in the fields of health and wellness; well-being has become the guiding lens and overall outcome that drives much of my work. This dissertation in practice has equipped me with additional knowledge and skills to continue my professional calling, and I hope this body of work continues to serve for the benefit of students, practitioners, researchers, and university communities.

Appendix A PDSA Form

PDSA Form				
Test Title:	Thrive @ Pitt Website	Date:	7/14/2021	
Tester:	Jason T. Miller	Cycle #:	1	
What Change Idea is being tested?	Development of a website dedicated to supporting students' well-being at Pitt	Driver:		
What is the overall GOAL of the test?	Does the information and resources offered on the website (a) increase students' knowledge, and/or (b) lead toward positive health or lifestyle behaviors?			
<div style="display: flex; justify-content: space-between;"> <div style="width: 65%;"> 1) PLAN Details: Describe the who/what/where/when for the test. Include your data collection plan. </div> <div style="width: 30%; background-color: #d9ead3;"> 2) DO Briefly describe what happened during the test, surprises, difficulty getting data, obstacles, successes, etc. </div> </div>				
Who > Primary: Undergraduate Students; Secondary: Graduate Students, Faculty, Staff, Community Members What > Thrive @ Pitt (thrive.pitt.edu); Retrospective Quantitative Survey (Likert Scale + Some Open Response) Where > Online Platform (Website); Online Survey (Qualtrics); Campus-Wide Recruitment When > Summer 21 & Fall 21 (Website Build); Spring 22 (Study = Recruitment & Data Collection)				
Questions: Questions you have about what will happen. What do you want to learn?	Predictions: Make a prediction for each question. Not optional.	Data: Data you'll collect to test predictions.		What were your results? Comment on your predictions in the box below. Were they correct? Record any data summaries as well.

PDSA Form (continued)

Does the information on the website increase students' knowledge of well-being?	Most students will report that the information provided increased their knowledge of well-being concepts.	(a) Online Survey		
Does engagement with the website content lead toward positive health or lifestyle behaviors?	Some students will report that upon using the website, the information and resources provided led to one or more positive actions.	(a) Online Survey		
What features or information on the website provide the most utility, as well as what is missing from the website that will improve its utility?	Most students will report that the information is adequate, while some students will report that the website is missing information and/or clarity. Some students will report that the website is missing features that will make it easier to use, more attractive to users.	(a) Online Survey		
Do students find the information on the website to be culturally relevant?	Some students will report that the website is missing features and information that provide utility and make it more applicable to various demographics and identities.	(a) Online Survey		
4) ACT Describe modifications and/or decisions for the next cycle; what will you do next?			3) STUDY What did you learn?	
				

Appendix B Proposed PDSA Cycle Timeline: Development of a University Website Dedicated to Well-being at Pitt

	Task	Start	End	Status	Mar '21	Apr '21	May '21	Jun '21	July '21	Aug '21	Sep '21	Oct '21	Nov '21	Dec '21	Jan '22	Feb '22	Mar '22	Apr '22	May '22
Plan	Website Project Proposal																		
Plan	Project Team Recruitment																		
Plan	Project Kickoff Meetings																		
Plan	CMS Platform Selection																		
Plan	Solicit Information & Resources																		
Do	Website Content Outline																		
Do	Build Content into CMS Platform																		
Do	Domain Selection & Website Security Scan																		
Do	Soft Launch of Website																		
Do	Internal Review & Revisions/Additions																		
Do	Coordinate Formal Launch of Website																		
Do	Develop Survey Protocol																		
Study	IRB Approval																		
Study	Launch Online Survey																		
Study	Study Recruitment & Participation																		
Study	Review Survey Data																		
Act																			

Appendix C Online Survey Instrument

Thank you for taking this anonymous survey and providing feedback on the Thrive @ Pitt website. The information you provide will be used solely for research and improvements to the website.

Before proceeding with this survey, please certify you have visited and read through the following pages on the website:

- Homepage
- What is Well-being
- Thrive
- Pillars of Well-being
 - Physical Well-being
 - Emotional Well-being
 - Intellectual Well-being
 - Spiritual Well-being
 - Environmental Well-being
 - Financial Well-being
 - Occupational Well-being
 - Social Well-being
- Resources

☐ I certify I have read through the pages listed above

1. How did you learn about (or what caused to you visit) the Thrive @ Pitt website?

- ☐ I learned about it through marketing of the Thrive @ Pitt initiative (e.g., on-campus events/tabling, newsletter, social media, other websites)
- ☐ I learned about it through a campus program, class, or department
- ☐ I learned about it through word of mouth (e.g., friend, colleague, advisor)
- ☐ I was asked to participate in, or saw an advertisement for, this study
- ☐ I discovered it through internet search

2. How much time have you spent on the Thrive @ Pitt website?

- ☐ Less than 5 minutes
- ☐ Around 5-10 minutes
- ☐ Around 15-30 minutes
- ☐ More than 30 minutes

3. What pages on the Thrive @ Pitt website did you spend the most time on? (select all that apply)

- ☐ Homepage
- ☐ What is Well-being
- ☐ Thrive
- ☐ Pillars of Well-being
 - ☐ Physical Well-being
 - ☐ Emotional Well-being
 - ☐ Intellectual Well-being
 - ☐ Spiritual Well-being
 - ☐ Environmental Well-being
 - ☐ Financial Well-being
 - ☐ Occupational Well-being
 - ☐ Social Well-being
- ☐ Resources

4. What pages on the Thrive @ Pitt website did you find most helpful? (select all that apply)

- ☐ Homepage
- ☐ What is Well-being
- ☐ Thrive
- ☐ Pillars of Well-being
 - ☐ Physical Well-being
 - ☐ Emotional Well-being
 - ☐ Intellectual Well-being
 - ☐ Spiritual Well-being
 - ☐ Environmental Well-being
 - ☐ Financial Well-being
 - ☐ Occupational Well-being
 - ☐ Social Well-being
- ☐ Resources

Please explain (open response)

5. After using the Thrive @ Pitt website, are there any aspects of well-being you plan to give more attention to? (select all that apply)

- ☐ Physical Well-being
- ☐ Emotional Well-being
- ☐ Intellectual Well-being
- ☐ Spiritual Well-being
- ☐ Environmental Well-being
- ☐ Financial Well-being
- ☐ Occupational Well-being

- ☐ Social Well-being
- ☐ Other (please describe)
- ☐ N/A

Please indicate your level of agreement with the following statements.

6. The Thrive @ Pitt website provides a clear definition of well-being.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

7. The pillars model is useful for illustrating the various areas that comprise and support well-being.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

8. The benefits associated with high levels of well-being (listed on the Thrive page) help clarify the importance of this topic.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

9. The individual pillars pages offer useful tips for supporting and/or enhancing aspects of my well-being.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

10. The listing of resources makes it easier to find campus resources for supporting and/or enhancing my well-being.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

11. The concept of well-being encompasses more than I originally thought.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
------------------------------	-----------------	------------------------------	---------------------------	--------------	---------------------------

12. After using the Thrive @ Pitt website, I have a better understanding of well-being.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
------------------------------	-----------------	------------------------------	---------------------------	--------------	---------------------------

13. After using the Thrive @ Pitt website, I became more interested in this topic.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
------------------------------	-----------------	------------------------------	---------------------------	--------------	---------------------------

14. After using the Thrive @ Pitt website, I felt motivated to improve my well-being.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
------------------------------	-----------------	------------------------------	---------------------------	--------------	---------------------------

15. After using the Thrive @ Pitt website, I feel more equipped to manage my well-being.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
------------------------------	-----------------	------------------------------	---------------------------	--------------	---------------------------

16. After using the Thrive @ Pitt website, I plan to take positive action toward supporting or enhancing my well-being

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
------------------------------	-----------------	------------------------------	---------------------------	--------------	---------------------------

Please explain (open response)

17. After using the Thrive @ Pitt website, I plan to put into practice one or more tips/guidelines offered on the website.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

Please explain (open response)

18. I find the information and resources on the Thrive @ Pitt website to be applicable to my social identities (examples: gender, race, ability, etc.)

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

19. The Thrive @ Pitt website is a useful tool for supporting students' well-being.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

20. I intend to use the Thrive @ Pitt website in the future for information and resources to support or enhance my well-being.

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------	-------	----------------

21. What suggestions do you have for the Thrive @ Pitt website that will make it better?

Open response

22. Please indicate your year in school.

- ☐ 1st Year
- ☐ 2nd Year
- ☐ 3rd Year
- ☐ 4th Year
- ☐ 5th Year+

- ☐ Graduate Student
- ☐ Not a Student

23. Please indicate your gender (select all that apply)

- ☐ Woman
- ☐ Man
- ☐ Non-binary / Third Gender
- ☐ Transgender
- ☐ Gender non-conforming
- ☐ Prefer to Self-Describe
- ☐ Prefer to Not Answer

24. Please indicate your sexual orientation

- ☐ Bisexual
- ☐ Gay
- ☐ Lesbian
- ☐ Heterosexual (straight)
- ☐ Prefer to Self-Describe
- ☐ Prefer to Not Answer

25. Please indicate your race(s)/ethnicity(ies) (select all that apply)

- ☐ Asian
- ☐ Black or African American
- ☐ Hispanic or Latinx
- ☐ Native American or Alaska Native
- ☐ Native Hawaiian or Pacific Islander
- ☐ White
- ☐ Biracial
- ☐ Multiracial
- ☐ Prefer to Self-Describe
- ☐ Prefer to Not Answer

26. Please indicate your ability status. (select all that apply)

- ☐ Physical or Mobility Disability
- ☐ Chronic Disease or Medical Condition
- ☐ Psychiatric or Psychological Disability
- ☐ Intellectual or Developmental Disability
- ☐ Learning Disability
- ☐ Blind or Low Vision
- ☐ Deaf or Hearing Loss
- ☐ Other (please describe)
- ☐ No Known Disabilities
- ☐ Prefer to Not Answer

Appendix D Survey Questions Chart

Inquiry Questions

1. Does the information on the website increase students' knowledge of well-being?
2. Does engagement with the website content lead toward positive health or lifestyle behaviors?
3. What features or information on the website provide the most utility, as well as what is missing from the website that will improve its utility?
4. Do students find the information on the website to be culturally relevant?

Question	Rationale	Relationship to IQ
1. How did you learn about (or what caused to you visit) the Thrive @ Pitt website?	This question allows the researcher to identify where participants learned about the study and/or how they became involved. In addition, it allows the researcher to gauge effectiveness of the marketing strategy that was implemented to recruit participants.	
2. How much time have you spent on the Thrive @ Pitt website?	Data from this question will allow the researcher to identify the various amounts of time, as well as an average amount of time, study participants spent on the website. In addition, data from this question could be cross- tabulated with data from other survey questions to reveal any trends or variances across variables. For instance, level of agreement on the website's utility or increased understanding of well-being in comparison to amount of time spent on the website.	
3. What pages on the Thrive @ Pitt website did you spend the most time on? (select all that apply)	This question allows the researcher to identify the pages and information that were most widely consumed among study participants, which may serve as an indicator on what pages or information provided the most or least utility in raising awareness, increasing knowledge, and connecting to campus resources for supporting or enhancing students' well-being. Website pages, design elements, and information, identified by a review of exemplar institutions, serve as the answer selections for this question (Wake Forest University, n.d.-a; University of Notre Dame, n.d.-a; University of Minnesota, n.d.-b).	3

Survey Questions Chart (continued)

4. What pages on the Thrive @ Pitt website did you find most helpful? (select all that apply) (please explain)	Closely related to the item above (Q3), this question allows the researcher to directly identify specific pages, design elements, and information that provide the most or least amount of utility in raising awareness, increasing knowledge, and connecting students to campus resources for supporting or enhancing their well-being. Data from this question will help verify the review of exemplar institutions (Wake Forest University, n.d.-a; University of Notre Dame, n.d.-a; University of Minnesota, n.d.-b), as well as inform revisions or additions for future PDSA cycles.	3
5. After using the Thrive @ Pitt website, are there any aspects of well-being you plan to give more attention to? (select all that apply)	This question allows the researcher to identify what aspects of well-being are most concerning (or of interest) to students. Data from this question will provide insights in comparison to literature on the current state of college students' well-being (e.g., ACHA, 2019; Eisenberg & Lipson, 2019), and reveal specific areas [of students' well-being] that may require additional campus resources and support, as well as inform revisions for future PDSA cycles.	2
6. The Thrive @ Pitt website provides a clear definition of well-being.	This question allows the researcher to determine if the selected definition of well-being (NIRSA et al., 2020), and the way it is presented on the website, is effective in helping students understand the concept. A well-conveyed definition has been identified as a key component in education and promotion efforts (ACHA, 2020; CAS, 2018; Travia et al., 2019) and has significant implications in helping students develop a better and more broad understanding of well-being (Roscoe, 2009).	3
7. The pillars model is useful for illustrating the various areas that comprise and support well-being.	Related to the question above, this question will help the researcher to determine if the selected model is effective in helping students better understand the concept of well-being. Wellness (or well-being) models have been identified as a key component in education and promotion efforts (Travia et al., 2019; Swarbrick, 1997) and could have significant implications in helping students develop a better and more broad understanding of well-being (Hermon & Hazler, 1999; Hettler, 1984; Witmer & Sweeney, 1992).	3
8. The benefits associated with high levels of well-being (listed on the Thrive page) help clarify the importance of this topic.	This question allows the researcher to evaluate if the website's information helps students draw meaningful connections to the benefits (or positive outcomes) associated with higher levels of well-being. The review of supporting knowledge shows that increases in knowledge of well-being concepts can lead to the development, or movement towards, more positive health and lifestyle behaviors (Von Ah et al., 2004). Data from this question may further support the literature, as well as affirm the value of various well-being education and promotion efforts.	3

Survey Questions Chart (continued)

<p>9. The individual pillars pages offer useful tips for supporting and/or enhancing aspects of my well-being.</p>	<p>Moving from theory to practice, this question allows the researcher to evaluate if the tips (or practices) listed on the website are relevant and applicable to students for supporting or enhancing their well-being. In addition, it will help the researcher gauge if the website's features and information help extend beyond raising awareness and knowledge, and lead to interest in taking action toward one's health and well-being. While much of the literature discussed in the review of supporting knowledge deals with the general concept of wellness (or well-being) education and promotion (e.g., Franzidis & Zinder, 2019) or campus-wide approaches (e.g., ACHA, 2019, 2020). Ample literature and specific, science-supported practices or behaviors exist and can be used help guide individuals on the "how to" of well-being; many of the tips on the individual well-being pillars pages provide examples of such practices (e.g., CDC, 2022)</p>	<p>3</p>
<p>10. The listing of resources makes it easier to find campus resources for supporting and/or enhancing my well-being.</p>	<p>Related to the item (Q9) above, this question deals with the actions colleges students can take, utilizing campus resources, to support or enhance their well-being. Furthermore, college students are often not aware of various campus resources or claim that certain campus resources are not enough (or adequate) for supporting their well-being. This question will allow the researcher to determine if the website helps fill these voids while addressing ongoing challenges related to college students' well-being (ACHA, 2019; Eisenberg & Lipson, 2019; Watts, 2017).</p>	<p>3</p>
<p>11. The concept of well-being encompasses more than I originally thought.</p>	<p>This item (Q11) is directly connected to the stated problem of practice and the selected change idea, and it aligns specifically with inquiry question 1. Data from this question will allow the researcher to draw connections to the website's utility and one of its intended learning outcomes for students, which is to broaden their awareness and understanding of the many factors that impact, and are influenced by, well-being (e.g., Mayol, 2012; Prilleltensky et al., 2015).</p>	<p>1</p>

Survey Questions Chart (continued)

12. After using the Thrive @ Pitt website, I have a better understanding of well-being.	This item (Q12) is directly connected to the stated problem of practice and the selected change idea, and it aligns specifically with inquiry question 1. Data from this question will allow the researcher to measure students' understanding of well-being and their use of the website. In other words, this question will allow the researcher to determine if the website increases students' knowledge, and thereby understanding, of well-being. This is critical to the researcher's work, because a review of the literature suggests that increases in knowledge of wellness (or well-being) concepts leads to, or facilitates, the adoption or more positive health and lifestyle behaviors (e.g., Coffey, 2016, Gieck & Olsen, 2007; Von Ah et al., 2004).	1
13. After using the Thrive @ Pitt website, I became more interested in this topic.	This question allows the researcher to determine if the website, as both an intervention and marketing tool, appeals to students. Data from this question may help further support the researcher's efforts to determine if the website increases students understanding of well-being, whereas an increase in interests may be indicative of (or a result of) increased knowledge. In addition, as levels of interest are measured, data from this question may further support the informing of inquiry question 2, on the inference that interest (or increases in interest) in the topic of well-being is a factor that contributes to action(s) toward positive health and lifestyle behaviors (e.g., Coffey, 2016; Gieck & Olsen, 2007).	1
14. After using the Thrive @ Pitt website, I felt motivated to improve my well-being.	This item (Q14) connects inquiry questions 1 and 2 based on claims that increases in knowledge of wellness (or well-being) concepts builds self-efficacy (or confidence) in adopting more positive health and lifestyle habits (Gieck & Olsen, 2007; Hattie et al., 2004; Von Ah et al., 2004). Data from this item will allow the researcher to begin to evaluate if an increased understanding of well-being, as gained by using the website, is associated with facilitating (or motivating) students to take action in supporting or enhancing their well-being.	2
15. After using the Thrive @ Pitt website, I feel more equipped to manage my well-being.	Data from this question will provide insights that help inform inquiry questions 1, 2, and 3. Whereas positive, negative, or neutral responses may be indicative of students' (a) increased (or not) knowledge of well-being, (b) movement toward more positive behaviors, or (c) overall utility of the website including its information, tips, and resources. Data from this question may be particularly helpful in further supporting insights gained from other survey questions. For example, Q12 (IQ 1), Q16 (IQ 2), and Q10 (IQ 3).	1

Survey Questions Chart (continued)

<p>16a. After using the Thrive @ Pitt website, I plan to take positive action toward supporting or enhancing my well-being. (please explain)</p> <p>16b. I plan to do this...</p>	<p>This question is directly connected to inquiry question 2. Whereas research suggests that increases in knowledge of wellness (or well-being) concepts can lead to the development or pursuit of positive health and lifestyle behaviors (e.g., Coffey, 2016, Gieck & Olsen, 2007; Von Ah et al., 2004), data from this question will allow the researcher to test these claims and begin to determine if a website is an effective educational tool for facilitating positive behavioral outcomes for students.</p>	<p>2</p>
<p>17. After using the Thrive @ Pitt website, I plan to put into practice one or more tips/guidelines offered on the website. (please explain)</p>	<p>Related to the item above (Q16), this question allows the researcher to gain deeper insights on outcomes (or behaviors) associated with increased knowledge of well-being. Data from this question will help compare findings from studies discussed in the review of supporting knowledge that involve wellness (or well-being) education (e.g., Gieck & Olsen, 2007; Hermon & Hazler, 1999; Horton & Snyder, 2009), as well as identify any trends among participants' reported behaviors.</p>	<p>2</p>
<p>18. I find the information and resources on the Thrive @ Pitt website to be applicable to my social identities (examples: gender, race, ability, etc.)</p>	<p>This question is directly connected to inquiry question 4 and will allow the researcher to determine if the website, including its design, information, tips, or resources are relevant, and thus useful, to students based on their social identities. In addition to answering inquiry question 4, data from this item (Q18), will provide insights that could be useful in identifying edits to the website as well as guiding the development and implementation of future PDSA cycles.</p>	<p>4</p>
<p>19. The Thrive @ Pitt website is a useful tool for supporting students' well-being.</p>	<p>A review of institutions that demonstrate exemplar commitments to campus-wide well-being education and promotion, reveal that a dedicated website which contains information, tips, and links to campus resources, is an essential component of the broader strategy (Wake Forest University, n.d.-a; University of Notre Dame, n.d.-a; University of Minnesota, n.d.-b). Data from this question (Q19) will provide insights that allow the researcher to test these claims, as well as determine if the website developed for this study is an appealing and perhaps effective tool for support or enhancing students' well-being. In addition, data from this question, broken down across various demographic categories, can help further inform answering of inquiry question 4.</p>	<p>4</p>

Survey Questions Chart (continued)

<p>20. I intend to use the Thrive @ Pitt website in the future for information and resources to support or enhance my well-being.</p>	<p>This question provides insights that further support answering of inquiry questions 2 and 4. As it relates to any actions toward positive health or lifestyle behaviors (IQ 2), data from this item (Q20) may help the researcher infer if use of the website results in any movement or intention toward such behaviors. In addition, data from this question, broken down across various demographic categories, can help further inform answering of inquiry question 4.</p>	<p>2</p>
<p>21. What suggestions do you have for the Thrive @ Pitt website that will make it better?</p>	<p>This question is directly connected to inquiry question 3 and will allow the researcher to identify areas for improvement, as well as new ideas related to design, information, tips, resources, etc. for website edits and potential future PDSA cycles.</p>	<p>3</p>

Bibliography

- Ackerman, C. E. (2020, December 21). *What is self-efficacy theory in psychology?* Positive Psychology. <https://positivepsychology.com/self-efficacy/>
- Adams, T., Bezner, J., & Steinhardt, M. (1997). The conceptualization and measurement of perceived wellness: Integrating balance across and within dimensions. *American Journal of Health Promotion*, 11(3), 208–218. <https://doi.org/10.4278/0890-1171-11.3.208>
- American College Health Association (ACHA). (2016). *Framework for a comprehensive college health program*. <https://www.acha.org/guidelines>
- American College Health Association (ACHA). (2019, October). *Standards of practice for health promotion in higher education*. https://www.acha.org/documents/resources/guidelines/ACHA_Standards_of_Practice_for_Health_Promotion_in_Higher_Education_October2019.pdf
- American College Health Association (ACHA). (2019). *National college health assessment II: Reference group executive summary spring 2019*. https://www.acha.org/documents/ncha/NCHA-II_SPRING_2019_US_REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf
- American College Health Association (ACHA). (2020). *The healthy campus framework*. https://www.acha.org/App_Themes/HC2020/documents/The_Healthy_Campus_Framework.pdf
- Ardell, D. B. (1977). *High level wellness: An alternative to doctors and drugs*. Rodale Press, Inc.
- Aucejo, E. M., French, J., Ugalde Araya, M. P., & Zafar, B. (2020). The impact of Covid-19 on student experiences and expectations: Evidence from a survey. *Journal of Public Economics*, 191, 1–15. <https://doi.org/10.1016/j.jpubeco.2020.104271>
- Baldwin, D. R., Towler, K., Oliver II, M. D., & Datta, S. (2017). An examination of college student wellness: A research and liberal arts perspective. *Health Psychology Open*, 4(2), 1–9. <https://doi.org/10.1177/2055102917719563>
- Bandura, A. (2005). The primacy of self-regulation in health promotion. *Applied Psychology: An International Review*, 54(2), 245–254. <https://doi.org/10.1111/j.1464-0597.2005.00208.x>
- Barajas, J. (2018, June 22). *What we know about the police shooting death of Antwon Rose Jr.* PBS News Hour. <https://www.pbs.org/newshour/nation/what-we-know-about-the-police-shooting-death-of-antwon-rose-jr>

- Beauchemin, J., Gibbs, T., & Granello, P. (2018). Wellness promotion courses in university settings: A review of the outcome research. *Building Healthy Academic Communities Journal*, 2(1), 36–49. <http://dx.doi.org/10.18061/bhac.v2i1.6344>
- Bhochhibhoya, A., Branscum, P., Taylor, E. L., & Hofford, C. (2014). Exploring the relationships of physical activity, emotional intelligence, and mental health among college students. *American Journal of Health Studies*, 29(2), 191–197. [https://doi.org/10.1016/S1728-869X\(09\)60008-3](https://doi.org/10.1016/S1728-869X(09)60008-3)
- Bonnie, R. J., Stroud, C., & Breiner, H. (Eds.). (2015). *Investing in the health and well-being of young adults*. The National Academies Press. <https://doi.org/10.17226/18869>
- Bowman, J. M., & Filar, D. C. (2018). *Masculinity and student success in higher education*. Routledge.
- Brown, C., & Applegate, B. (2012). Holistic Wellness Assessment for young adults. *Journal of Holistic Nursing*, 30(4), 235–243. <https://doi.org/10.1177/0898010112453327>
- Brown, C., Applegate, E. B., & Yildiz, M. (2015). Structural validation of the Holistic Wellness Assessment. *Journal of Psychoeducational Assessment*, 33(5), 483–494. <https://doi.org/10.1177/0734282914564037>
- Butler, J. (2001). *Principles of health education & health promotion* (3rd ed.). Wadsworth
- Center for Collegiate Mental Health (CCMH). (2021, February 1). *Covid-19 impact on college student mental health*. https://ccmh.psu.edu/index.php?option=com_dailyplanetblog&view=entry&year=2021&month=02&day=01&id=9:part-1-of-5-covid-19-s-impact-on-college-student-mental-health
- Centers for Disease Control and Prevention (CDC). (2018, October 31). *Well-being concepts*. <https://www.cdc.gov/hrqol/wellbeing.htm>
- Centers for Disease Control and Prevention (CDC). (2020, September 17). *The health effects of overweight and obesity*. <https://www.cdc.gov/healthyweight/effects/index.html>
- Centers for Disease Control and Prevention (CDC). (2022, June 3). *Healthy weight, nutrition, and physical activity*. <https://www.cdc.gov/healthyweight/index.html>
- Coffey, J. K., Wray-Lake, L., Mashek, D., & Branand, B. (2016). A multi-study examination of well-being theory in college and community samples. *Journal of Happiness Studies*, 17, 187–211. <https://doi.org/10.1007/s10902-014-9590-8>
- Council for the Advancement of Standards in Higher Education (CAS). (2018). *Advancing health and well-being: Cross-functional framework*. https://www.cas.edu/blog_home.asp?display=86

- Cowen, E. L. (1991). In pursuit of wellness. *American Psychologist*, 46(4), 404–408. <https://doi.org/10.1037/0003-066X.46.4.404>
- Diener, E., Scollon, C. N., & Lucas, R. E. (2009). The evolving concept of subjective well-being: The multifaceted nature of happiness. In E. Diener (Ed.), *Social indicators research series: Vol. 39. Assessing well-being: The collected works of Ed Diener* (pp. 67–100). Springer Science + Business Media. https://doi.org/10.1007/978-90-481-2354-4_4
- Dunn, H. L. (1961). *High level wellness*. R.W. Beatty.
- Eagan, K., Stolzenberg, E. B., Ramirez, J. J., Aragon, M. C., Suchard, M. R., & Hurtado, S. (2014). *The American freshman: National norms fall 2014*. Cooperative Institutional Research Program. <https://www.heri.ucla.edu/monographs/TheAmericanFreshman2014.pdf>
- Eisenberg, D. & Lipson, S. (2019). *The Healthy Minds Study: 2019 fall data report*. Healthy Minds Study. https://healthymindsnetwork.org/wp-content/uploads/2020/08/f2019_HMS_national_final.pdf
- Feng, K. (2022, May 3). *Political upheaval has taken a toll on mental health*. The Clarion. <https://www.theonlineclarion.com/news/2022/05/03/political-upheaval-has-taken-a-toll-on-mental-health/>
- Finlay, L. (2002). “Outing” the researcher: The provenance, process, and practice of reflexivity. *Qualitative Health Research*, 12(4), 531–545. <https://doi.org/10.1177/104973202129120052>
- Franzidis, A. F., & Zinder, S. M. (2019). Examining student wellness for the development of campus-based wellness programs. *Building Healthy Academic Communities Journal*, 3(1), 56–66. <http://dx.doi.org/10.18061/bhac.v3i1.6575>
- Fullerton, D. S. (2011). A collaborative approach to college and university student health and wellness. *New Directions for Higher Education*, (153), 61–69. <https://doi.org/10.1002/he.427>
- Gibbs, T., & Larcus, J. (2015). Wellness coaching: Helping students thrive. *Journal of Student Affairs*, 24, 23–33.
- Gieck, D. J., & Olsen, S. (2007). Holistic wellness as a means to developing a lifestyle approach to health behavior among college students. *Journal of American College Health*, 56(1), 29–35. <https://doi.org/10.3200/JACH.56.1.29-36>
- Harrington, S. (2016). “America’s healthiest campus®”: The OSU well-being strategy model. *American Journal of Health Promotion*, 30(3), 2–4. <https://doi.org/10.4278/ajhp.30.3.tahp>

- Hartman, C. L., Evans, K. E., Barcelona, R. J., & Brookover, R. S. (2018). Constraints and facilitators to developing collaborative campus wellness partnerships. *Recreational Sports Journal*, 42, 130–144.
- Hattie, J. A., Myers, J. E., & Sweeney, T. J. (2004). A factor structure of wellness: Theory, assessment, analysis, and practice. *Journal of Counseling and Development*, 82(3), 354–364. <https://doi.org/10.1002/j.1556-6678.2004.tb00321.x>
- Hermon, D. A., & Hazler, R. J. (1999). Adherence to a wellness model and perceptions of psychological well-being. *Journal of Counseling and Development*, 77(3), 339–343. <https://doi.org/10.1002/j.1556-6676.1999.tb02457.x>
- Hettler, B. (1976). *Six Dimensions of Wellness model*. National Wellness Institute. <https://cdn.ymaws.com/www.nationalwellness.org/resource/resmgr/pdfs/sixdimensionsfactsheet.pdf>
- Hettler, B. (1980). Wellness promotion on a university campus. *Family & Community Health*, 3(1), 77–95.
- Hettler, B. (1984). Wellness: Encouraging a lifetime pursuit of excellence. *Health Values: Achieving High Levels of Wellness*, 8(4), 13–17.
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 1(1), 104–121. <https://doi.org/10.1177/109442819800100106>
- Hinnant-Crawford, B. N. (2020). *Improvement science in education: A primer*. Myers Education Press.
- Horton, B. W., & Snyder, C. S. (2009). Wellness: Its impact on student grades and implications for business. *Journal of Human Resources in Hospitality & Tourism*, 8(2), 215–223. <https://doi.org/10.1080/15332840802269858>
- Keyes, C. L. M. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychologist*, 62(2), 95–108. <https://doi.org/10.1037/0003-066X.62.2.95>
- Klatt, J., & Taylor-Powell, E. (2005). *Quick tips: Using the retrospective post-then-pre design*. Program Development and Evaluation. University of Wisconsin-Extension. <https://comm.eval.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=d592f29e-041f-48de-ac92-c49ff0106f51&forceDialog=0>
- Lederer, A. M., & Oswalt, S. B. (2017). The value of college health promotion: A critical population and setting for improving the public's health. *American Journal of Health Education*, 48(4), 215–218. <https://doi.org/10.1080/19325037.2017.1316692>

- Lothes, J. (2020). Teaching wellness in a college physical education course: Pre/post outcomes over the semester. *Building Healthy Academic Communities Journal*, 4(1), 28–47. <http://dx.doi.org/10.18061/bhac.v4i1.7267>
- Lua, P. L., & Wan Putri, W. D. (2012). The impact of nutrition education interventions on dietary habits of college students in developed nations: A brief review. *Malaysian Journal of Medical Sciences*, 19(1), 4–14.
- Manchester, R. (2020). How has the health of college students changed in the last 50 years? *Journal of American College Health*, 68(8), 795–797.
- Manning, K., Kinzie, J., & Schuh, J. H. (2014). *One size does not fit all: Traditional and innovative models of student affairs practice*. Taylor & Francis Group.
- Mareno, N., & James, K. S. (2010). Further validation of the body-mind-spirit wellness behavior and characteristic inventory for college students. *Southern Online Journal of Nursing Research*, 10(5).
- Maurer, T. J., & Pierce, H. R. (1998). A comparison of Likert scale and traditional measures of self-efficacy. *Journal of Applied Psychology*, 83(2), 324–329. <https://doi.org/10.1037/0021-9010.83.2.324>
- Mayhew, M. J., Rockenbach, A. N., Bowman, N. A., Seifert, T. A. D., & Wolniak G. C. (2106). *How college affects students* (3rd ed.). Jossey-Bass.
- Mayol, M. H. (2012). *Wellness: The total package* (2nd ed.). Kendall Hunt Publishing Company.
- Mayol, M. H., Scott, B. M., & Schreiber, J. B. (2017). Validation and use of the multidimensional wellness inventory in collegiate student-athletes and first-generation students. *American Journal of Health Education*, 48(5), 338–350. <https://doi.org/10.1080/19325037.2017.1345669>
- McGraw-Hill Education. (2018). *2018 future workforce survey: Spring 2018*. <https://s3.amazonaws.com/ecommerce-prod.mheducation.com/unitas/corporate/promotions/2018-future-workforce-survey-analysis.pdf>
- Myers, J. E., Sweeney, T. J., & Witmer, J. M. (1998). *The wellness evaluation of lifestyle*.
- Myers, J. E., Sweeney, T. J., & Witmer, J. M. (2000). The wheel of wellness counseling for wellness: A holistic model for treatment planning. *Journal of Counseling & Development*, 78(3), 251–266.
- Myers, J. E., & Sweeney, T. J. (2004). The indivisible self: An evidence-based model of wellness. *Journal of Individual Psychology*, 60(3), 234–245.

- National Wellness Institute. (1983). *Lifestyle Assessment Questionnaire* (2nd ed.).
- Nelson, M. C., Story, M., Larson, N. I., Neumark-Sztainer, D., & Lytle L. A. (2008). Emerging adulthood and college-aged youth: An overlooked age for weight-related behavior change. *Obesity*, 16(10), 2205–2211. <https://doi.org/10.1038/oby.2008.365>
- NIRSA. (2014, July). *Model for valuing health & well-being in collegiate recreation*. https://nirsa.net/nirsa/wp-content/uploads/NIRSA_HealthWellbeing_Model-Final3.pdf
- NIRSA, NASPA, & ACHA. (2020, November). *Inter-association definition of well-being*. <https://j7y8m8g8.rocketcdn.me/nirsa/wp-content/uploads/inter-association-well-being-definition-2011b.pdf>
- Perry, J. A., Zambo, D., & Crow, R. (2020). *The improvement science dissertation in practice*. Myers Education Press.
- Prilleltensky, I., Dietz, S., Prilleltensky, O., Myers, N. D., Rubenstein C. L., Jin, Y., & McMahon, A. (2015). Assessing multidimensional well-being: Development and validation of the I COPPE scale. *Journal of Community Psychology*, 43(2), 199–226. <https://doi.org/10.1002/jcop.21674>
- Prochaska, J. O., & Velicer, W. F. (1997). The transtheoretical model of health behavior change. *American Journal of Health Promotion*, 12(1), 38–48. <https://doi.org/10.4278/0890-1171-12.1.38>
- Rath, T., & Harter, J. (2014). *Wellbeing: The five essential elements*. Gallup Press.
- Ridner, S. L., Newton, K. S., Staten, R. R., Crawford, T. N., & Hall, L. N. (2016). Predictors of well-being among college students. *Journal of American College Health*, 64(2), 116–124. <https://doi.org/10.1080/07448481.2015.1085057>
- Robertson, C., Mele, C., & Tavernise, S. (2018, October 27). *11 killed in synagogue massacre; suspect charged with 29 counts*. The New York Times. <https://www.nytimes.com/2018/10/27/us/active-shooter-pittsburgh-synagogue-shooting.html>
- Roscoe, L. J. (2009). Wellness: A review of theory and measurement for counselors. *Journal of Counseling and Development*, 87(2), 216–226. <https://doi.org/10.1002/j.1556-6678.2009.tb00570.x>
- Rowland, C., Mariger, H., Siegel, P. M., & Whiting, J. (2010). *Universal design for the digital environment: Transforming the institution*. EDUCAUSE Review, 45(6), 14–28. <http://www.educause.edu/ero/article/universal-design-digital-environment-transforming-institution>

- Sadeghi, R., & Heshmati, H. (2019). Innovative methods in teaching college health education course: A systematic review. *Journal of Education and Health Promotion*, 8(103), 1–13. https://doi.org/10.4103/jehp.jehp_357_18
- Schuh, J. H., Biddix, J. P., Dean, L. A., & Kinzie, J. (2016). *Assessment in student affairs*. Jossey-Bass.
- Seligman, M. (2011). *Flourish*. Free Press.
- Sriram, R. (2017). *Student affairs by the numbers: Quantitative research and statistics for professionals*. Stylus Publishing, LLC.
- Stolzenberg, E. B., Aragon, M. C., Romo, E., Couch, V., McLennan, D., Eagan, M. K., & Kang, N. (2019). *The American freshman: National norms fall 2019*. Cooperative Institutional Research Program. <https://www.heri.ucla.edu/monographs/TheAmericanFreshman2019.pdf>
- Swarbrick, P. (1997, March). A wellness model for clients. *Mental Health Special Interest Section Quarterly*, 20(1), 1–4.
- Swarbrick, M. (2006). A wellness approach. *Psychiatric Rehabilitation Journal*, 29(4), 311–314. <https://doi.org/10.2975/29.2006.311.314>
- Swarbrick M. (2012). A wellness approach to mental health recovery. In A. Rudnick (Ed.), *Recovery of people with mental illness* (pp. 30–38). Oxford University Press.
- Sweeney, T. J., & Witmer, J. M. (1991). Beyond social interest: Striving toward optimal health and wellness. *Individual Psychology*, 47, 527–540.
- The New York Times. (2022, May 19). *How George Floyd died, and what happened next*. <https://www.nytimes.com/article/george-floyd.html>
- Travia, R. M., Larcus, J. G., Andes, S., & Gomes, P. G. (2019). *Framing well-being in a college campus setting*. American College Health Foundation. https://www.acha.org/documents/ACHF/Framing_Well-Being_In_College_Campus_Settings_Whitepaper.pdf
- Travis, J. W. (1975). *Wellness Inventory*. Wellness Publications.
- Travis, J. W. (1981). *The Wellness Inventory*. Wellness Associates.
- University of Minnesota. (n.d.-a). *A focus on wellbeing*. <https://www.csh.umn.edu/about-us>
- University of Minnesota. (n.d.-b). *Earl E. Bakken center for spirituality & healing*. <https://www.csh.umn.edu/>

University of Minnesota. (n.d.-c). *Taking charge of your health & wellbeing*.
<https://www.takingcharge.csh.umn.edu/>

University of Minnesota. (n.d.-d). *Wellbeing U*. <https://www.thebigknow.com/wellbeing-u>

University of Notre Dame. (n.d.-a). *McDonald center for student well-being*.
<https://mcwell.nd.edu/>

University of Notre Dame. (n.d.-b). *Your well-being*. <https://mcwell.nd.edu/your-well-being/>

University of Pittsburgh. (n.d.). *Year of engagement*. <https://www.yearofengagement.pitt.edu/>

University of Pittsburgh Campus Recreation. (n.d.). *Campus recreation*.
<https://www.studentaffairs.pitt.edu/campus-recreation/>

University of Pittsburgh Career Center. (n.d.). *Career center*.
<https://www.studentaffairs.pitt.edu/cdpa/>

University of Pittsburgh Division of Student Affairs. (n.d.-a). *Racial justice, diversity, equity, and inclusion action plan*. <https://www.studentaffairs.pitt.edu/dean/diversity-equity-and-inclusion-action-plan/>

University of Pittsburgh Division of Student Affairs. (n.d.-b). *Organization chart*.
<https://www.studentaffairs.pitt.edu/dean/about/orgchart/>

University of Pittsburgh Division of Student Affairs. (n.d.-c). *Senior staff*.
<https://www.studentaffairs.pitt.edu/dean/about/seniorstaff/>

University of Pittsburgh Division of Student Affairs. (n.d.-d). *Annual plan ay18-ay21*. Internal Student Affairs report: unpublished.

University of Pittsburgh Healthy U. (n.d.) *Healthy U*.
<https://www.studentaffairs.pitt.edu/healthyu/>

University of Pittsburgh OEDI. (2022, July 13). *Student Diversity Dashboard*.
<https://www.diversity.pitt.edu/social-justice/student-dashboard>

University of Pittsburgh OID. (n.d.). *Interfaith dialogue and engagement*.
<https://www.studentaffairs.pitt.edu/oid/>

University of Pittsburgh PittServes. (n.d.) *PittServes*.
<https://www.studentaffairs.pitt.edu/pittserves/>

University of Pittsburgh SHS. (n.d.). *Student health service*.
<https://www.studentaffairs.pitt.edu/shs/>

- University of Pittsburgh UCC. (n.d.). *University counseling center*.
<https://www.studentaffairs.pitt.edu/cc/>
- U.S. Department of Health and Human Services. (2018). *Physical activity guidelines for Americans* (2nd ed.) https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf
- Von Ah, D., Ebert, S., Ngamvitroj, A., Park, N., & Kang D.H. (2004). Predictors of health behaviours in college students. *Journal of Advanced Nursing*, 48(5), 463–474.
<https://doi.org/10.1111/j.1365-2648.2004.03229.x>
- Wake Forest University. (n.d.-a). *Office of wellbeing*. <https://thrive.wfu.edu/>
- Wake Forest University. (n.d.-b). *Wellbeing collaborative*.
<https://wellbeingcollaborative.wfu.edu/>
- Warwick Medical School. (n.d.). *The Warwick-Edinburgh Mental Wellbeing Scales – WEMWBS*.
<https://warwick.ac.uk/fac/sci/med/research/platform/wemwbs/>
- Watts, P. (2017). A new model for campus health: Integrating well-being into campus life. *Leadership Exchange*, 15(3), 10–15.
- Witmer, J. M., & Sweeney, T. J. (1992). A holistic model for wellness and prevention over the life span. *Journal of Counseling & Development*, 71, 140–148.
- Yaden, D. B., Claydon, J., Bathgate, M., Platt, B., & Santos, L. R. (2021). Teaching well-being at scale: An intervention study. *PLoS ONE*, 16(4), 1–10.
<https://doi.org/10.1371/journal.pone.0249193>
- Zhang, Y., & Wildemuth, B. M. (2009). Qualitative analysis of content. In B. Wildemuth (Ed.), *Applications of social research methods to questions in information and library science* (pp. 308–319). Libraries Unlimited.