



Reducing Stigma, Enhancing Mental Health Literacy, and Improving Accessibility
Surrounding Mental Health Resources for College Students

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Dedication

To my loves, you make all things possible. I love you.

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Executive Summary

Mental health is on the decline. At a community college in Southern California, 55% of students admit to suffering from anxiety, 42% have depression, and 16% have seriously considered or attempted suicide. However, less than a quarter have sought treatment due to the barriers of stigma, mental health literacy, and limited access to resources. Stigma involves hostile rhetoric, stereotypes, judgment, and a sense of undesirability that reduces self-worth, resulting in shame, inadequacy, and the discrediting belief of weakness (Brennan & Gorman, 2022; Cole & Ingram, 2019; Cuijpers et al., 2019). Limited mental health literacy encompasses misunderstandings and apprehensions about facing judgment or being misunderstood when seeking support and revealing mental health concerns (Broglia et al., 2021). Moreover, access to resources is a significant challenge; only 19.8% of 13,984 surveyed students from 19 colleges in eight countries had used mental health services in their lifetime (Bruffaerts et al., 2019).

The project aims to reduce stigma, enhance mental health literacy, and improve mental health resource accessibility. A user-friendly website was developed to enhance mental health literacy and provide easy access to mental health information. On campus and through the institution's social networking sites, uniquely designed advertisements with a QR code facilitated resource access and reduced stigma. Students completed an anonymous survey assessing advertising impact, user-friendly design, and QR code utility for accessing mental health resources. Weekly visits to the mental health resources page were tracked. Appointment scheduling with counseling services was monitored. Demographic data was collected. Ultimately, outcomes confirmed the effectiveness of strategies, with significant support for advertising methods and website usability in

reducing stigma, enhancing mental health literacy, and improving accessibility surrounding mental health resources for college students.

Problem Statement and Significance

On college campuses nationwide, mental health is of increasing concern (Gibbons et al., 2018). The lifetime prevalence rates of mental disorders are highest during the ages when students are attending college (Rith-Najarian et al., 2019). According to Brown (2018), most mental health issues emerge during the early stages of life, with 75% of lifelong mental disorders manifesting before the age of 25. The California Community College Chancellor's Office (2020a) reports that 74% of students at the local institution are under the age of 30. However, less than half of individuals with mental disorders are recognized and treated, leaving many with unmet needs (Ebert et al., 2017). The American College Health Association-National College Health Assessment (ACHA-NCHA) conducts a national research survey in the Fall and Spring of each year. The survey produced specific data for the community college in Southern California. At the institution, 55% of the students have felt overwhelming anxiety within the last twelve months, with only 16% stating they have been diagnosed or treated by a professional within the last twelve months (American College Health Association, 2019a). In addition, 42% of the students have felt so depressed that it was difficult to function within the last twelve months, with only 14% stating they have been diagnosed or treated by a professional within the last twelve months (American College Health Association, 2019a).

Moreover, 16% of the students have suicidality (including those who have seriously considered suicide and those who have attempted suicide) within the last twelve

months. No follow-up was performed to examine whether these students had been diagnosed or treated by a professional within the last twelve months (American College Health Association, 2019a). Identifying and breaking the barriers within the institution that lead to college students' knowledge deficit of available mental health resources is vital. If barriers are eliminated, college students' mental well-being will be impacted by increasing their self-help intention and promoting mental wellness (Zorrilla et al., 2019).

Deficits, Context, and Evidence

Barriers that lead to college students' knowledge deficit of available mental health resources result in minimal help-seeking behavior, increased mental health crises, increased suicide rates, increased dropout rates, and a decrease in college graduates (Bruffaerts et al., 2019; Cuijpers et al., 2019; Ray et al., 2019). Barriers are significant because concerns about college students' mental well-being have been on the rise. This topic is important because mental health troubles for the collegial population are noted throughout the literature (Bruffaerts et al.; Mortier et al., 2018; Pilar et al., 2019; Reid et al., 2021). College-age is a susceptible life stage when numerous mental health problems surface, and many from this population do not seek professional help for their mental health concerns (American College Health Association, 2019a; Ebert et al., 2017; Shea et al., 2019).

There is a documented mental health need in the undergraduate student population. Data from the American Colleges Health Association for undergraduate students between 2019 and 2022 indicates a decline in mental well-being. The decline in mental well-being includes anxiety, depression, and suicidality (American College Health Association, 2019b; American College Health Association, 2022). Undergraduate college

students suffering from anxiety have increased by 11% from 2019 to 2022, resulting in 18,917 students admitting to anxiety in 2022 (American College Health Association, 2019b; American College Health Association, 2022). Undergraduate college students suffering from depression have increased by 8% from 2019 to 2022, resulting in 14,635 students admitting to depression in 2022 (American College Health Association, 2019b; American College Health Association, 2022). Additionally, undergraduate college students suffering from suicidality have increased by 1% from 2019 to 2022, resulting in 3,198 students admitting to seriously considering or attempting suicide in 2022 (American College Health Association, 2019b; American College Health Association, 2022).

Furthermore, college students with mental disorders are twice as likely as other students to drop out without obtaining a degree (Cuijpers et al., 2019). Approximately 55% of the collegial population at the local institution admit to suffering from anxiety (American College Health Association, 2019a). From enrollment data, it is then estimated that 7,451 students at that institution are twice as likely than the other 6,097 students to drop out without obtaining a degree (American College Health Association, 2019a; California Community College Chancellor's Office, 2020b; Cuijpers et al.). Evidence shows that mental disorders during this period can have a profound negative effect on the development of college students, resulting in long-term adverse effects on their adult work performance, relationship functioning, and overall health (Cuijpers et al.). Additionally, Bruffaerts and colleagues (2019) expand on this evidence, stating that mental health problems among college students are also associated with adverse

outcomes such as lower academic functioning, relationship dysfunction, and labor market marginalization.

Essentially, undergraduate students experience difficulties adjusting to college life and may experience mental health problems for the first time. Mental health problems are no exception at the community college in Southern California. During undergraduate education, barriers will prevent students from seeking help for their mental health-related concerns (Ray et al., 2019). Thus, breaking college students' perceived barriers related to stigma, mental health literacy, and access to mental health services has significant implications for enhancing the delivery of interventions and promoting both individual and community well-being (Ray et al.; Shea et al., 2019).

Magnitude of Problem

Mental health concerns do not discriminate. Suicide ranks as one of the leading causes of death across the nation (Gary & Lotas, 2022). Mental health barriers have been identified across college campuses worldwide. Mortier and colleagues (2018) concluded that data on suicidal thoughts and behaviors are consistent across countries. Bruffaerts and colleagues (2019) examined surveys administered to full-time students in 19 colleges and universities in eight countries, totaling 13,984 participants. Of the participants, only 19.8% had utilized services related to their mental health in their lifetime (Bruffaerts et al.). Cole and Ingram (2019) shed light on a unique perspective regarding men's experience of gender role conflict and self-stigma regarding mental health. Specifically, the barrier of stigma predicts decreased social support and the use of professional help while also increasing avoidant behaviors among college men (Cole & Ingram).

Efforts of the Organization

While mental health concerns are not a new problem, educators are becoming increasingly aware of help-seeking barriers as mental health is discussed more openly. Finding appropriate resources is additionally challenging for students who need help navigating the college system. Some resources can be found through a labyrinth of specific clicks on the school's website. Currently, the college's website requires users to go through five precise clicks to reach a resource center, which is not user-friendly. For example, students must navigate the College homepage > student services > specialized counseling services > student health services > mental health resources, which only leads to five brief informational bulletin points. The campus and webpage do not include advertisements, trainings, seminars, educational resources, or quick links to access mental health resources. This is a barrier to the organization's access to much-needed mental health resources.

The Problem

Mental health is on the decline. At a community college in Southern California, 55% of students admit to suffering from anxiety, 42% have depression, and 16% have seriously considered or attempted suicide. However, less than a quarter have sought treatment due to the barriers of stigma, mental health literacy, and access to resources.

Environmental Context

A strengths, weaknesses, opportunities, and threats (SWOT) analysis was performed at the beginning of the project. The strengths suggest that the college has already taken steps to provide mental health resources to its students and that these resources are affordable if students know where to find them. Additionally, the college

can potentially market these resources effectively and economically. However, the weaknesses suggest that the college may face challenges in efficiently implementing and promoting its mental health resources. The lack of clear leadership and stakeholder interest could hinder progress, while outdated resources and a lack of marketing may limit the reach of these resources. Additionally, the need for IT updates and improvements to the Quick Response (QR) code system could pose technical challenges.

Moreover, the opportunities suggest that the college has the potential to make a positive impact on the mental health of its students and the broader community. By collaborating with community members and raising awareness of mental health issues, the college can help address a pressing need. A QR code system also has the potential to be a popular and effective tool for accessing mental health resources. QR codes are two-dimensional barcodes read through devices like smartphone cameras that store digital information, such as website links (Rivas & Schulzetenberg, 2023). Additionally, the availability of technology could significantly benefit the college and its students by potentially reducing dropout rates and increasing the use of the counseling center. Nevertheless, the threats suggest that the college may face challenges securing funding for its mental health resources and keeping up with technological developments. Moreover, the QR code system may become outdated over time, limiting its effectiveness. Finally, the sustainability of the mental health resources and the institution's ability to maintain them over the long term could also be a concern. See Appendix A.

Literature Review

Methods

A literature search was performed utilizing the following databases: PubMed, Cumulative Index of Nursing and Allied Health Literature (CINAHL), PsycArticles, Education Resource Information Center (ERIC), and Google Scholar. The initial search included the following keywords: Mental health, barriers, and college students. However, as the search progressed, a more expansive range of terms related to this subject matter became needed—the strategy developed due to the wide range of verbiage used regarding this topic. The final keyword search terms included: Mental health or mental illness or mental disorder or psychiatric illness, self-help or self-help barriers or help-seeking barriers, resources or self-efficiency or services or treatment seeking, QR code or quick response code, college students or university students or undergraduates or undergrad students, mental health literacy, and stigma. When searching keywords in the databases, time boundaries for the literature were set between the years 2017-2023; this resulted in 23 current and relevant articles for final review.

There are specific limits regarding this review. First, the review includes a particular demographic. The review will solely cover adult college students, excluding minors (those under eighteen years old) and adults not enrolled in college. Of the 23 articles used for the final review, 19 are quantitative, while four are qualitative.

Review

Twenty-three articles were synthesized to investigate the barriers that lead to college students' knowledge deficit of available mental health resources. The terms mental health problems, mental illnesses, and mental disorders are used interchangeably

throughout the literature and refer to mental disorders defined by the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013).

College student's mental well-being is an important topic because mental health troubles for the collegial population are noted throughout the literature (Bruffaerts et al., 2019; Mortier et al., 2018; Pilar et al., 2019; Reid et al., 2021). Brown (2018) explains that most mental health problems develop in early life, with 75% of lifetime mental disorders occurring by 25 years of age. According to the California Community College Chancellor's Office (2020a), 74% of students are younger than thirty years of age at the local institution. According to Broglia and colleagues (2021) and Pilar and colleagues (2019), up to 50% of college students met the diagnostic criteria for one or more mental illnesses and concluded that less than half would seek treatment. With minimal treatment-seeking effort, students' mental illnesses also impact their academic performance. Essentially, adult college students experience difficulties adjusting to college life and may experience mental health problems for the first time. At that time, the perceived barriers of stigma, mental health literacy, and access to resources prevented students from seeking help for their mental health-related problems (Ray et al., 2019). Identifying college students' barriers toward seeking psychological help will significantly impact improving the delivery of accessible interventions and promoting individual and community well-being (Shea et al., 2019).

According to Brown (2018) and Ebert and colleagues (2019), it has been found that students have a strong desire to address their mental health problems independently. Furthermore, studies have provided detailed insights into how students prefer to handle their mental health concerns. Cole and Ingram (2019) and Ebert and

colleagues (2017) discovered that students prefer assistance through self-help options, with internet-based intervention being the most favored approach. Gibbons (2018), Melcher (2020), and Priestley and colleagues (2021) highlighted details regarding internet-based interventions, including additional preferences such as user-friendly digital platforms with clear interfaces and outreach efforts centered around electronic self-help methods. Moreover, implementing internet-delivered self-help options has yielded positive outcomes (Newman et al., 2021; Ray et al., 2019). These studies revealed improvements in self-efficacy, increased utilization of self-help resources, and a greater future intention to utilize campus resources.

Students' strong preference for user-friendly internet-based solutions makes QR codes the optimal approach for improving resource quality. QR codes are integral to our daily routines, providing instant access to information on personal devices; they not only enhance knowledge, convenience, accuracy, and security but are also favored by most surveyed patients for their ease of use (Sharara & Radia, 2021). With 93% of adults in the United States engaging in online activities and 85% owning internet-connected smartphones, online tasks are highly efficient (Rivas & Schulzetenberg, 2023; Sharara & Radia). Despite QR codes' nearly three-decade existence, their usage has seen a significant increase. In 2022, approximately 89 million smartphone users in the United States scanned a QR code on their mobile devices, marking a 15% increase compared to 2021 and a 26% increase compared to 2020; this upward trend is expected to continue, with projections indicating that the number of users in the U.S. will surpass 100 million by 2025 (Ceci, 2023; Rivas & Schulzetenberg).

QR codes are easily recognizable and readable by most smartphone cameras serving a significant role in healthcare by securely maintaining records, protecting patient confidentiality, and offering a seamless way to access information (Rivas & Schulzetenberg, 2023; Sharara & Radia, 2021). QR codes can be incorporated into various materials like brochures, providing easy access to details by scanning and directing users to relevant websites. Moreover, QR codes facilitate data distribution to patients and enable easy updates without generating new codes (Sharara & Radia, 2021). Research shows that 94% of participants find scanning QR codes effortless and prefer them over typing URLs due to familiarity and simplicity, as well as reducing typing errors (Rivas & Schulzetenberg, 2023; Sharara & Radia, 2021). Overall, QR codes contribute to raising user awareness, reducing stigma, enhancing literacy, and improving accessibility in healthcare (Khanafar et al., 2022).

Evidence Synthesis

Barriers

Stigma

To identify the solution, there needs to be an understanding of the barriers. Identified key themes work hand in hand with perceived barriers leading to college students' knowledge deficit of available mental health resources. The first theme is stigma. Stigma encompasses a complex network of negative rhetoric, harmful stereotypes, judgment, and an undesirability that diminishes one's worth, perpetuating perceived judgments and negative perceptions, leading to shame, feelings of inadequacy, and the deeply discrediting belief of being weak (Brennan & Gorman, 2022; Cole & Ingram, 2019; Cuijpers et al., 2019; Okoli, 2023; Shea et al., 2019; Villatoro et al., 2022).

Stigma is a prevalent barrier hindering college students from seeking available mental health resources (Brennan & Gorman, 2022; Brown, 2018; Cage et al., 2018; Cole & Ingram, 2019; Ebert et al., 2019; Shea et al., 2019). College students may avoid seeking mental health resources because of social stigma, self-stigma, perceived consequences related to stigma, and cultural or familial factors related to stigma (Cage et al., 2018; Cole & Ingram, 2019; Ebert et al., 2019; Shea et al., 2019). In particular, college students often avoid seeking mental health resources due to the stigma surrounding mental health in society. Students fear potential judgment, labeling, and misunderstanding that may occur from their peers and professors. Concerns include being perceived as weak, incapable, or different and can often prevent them from seeking assistance. In other instances, college students with mental health concerns internalize negative beliefs and stereotypes about mental illness within themselves. The students may feel ashamed or guilty for experiencing psychological difficulties, leading them to avoid seeking help in order not to confirm those negative beliefs.

Additionally, college students may worry about the potential consequences of seeking mental health resources related to its stigma. The students often fear academic repercussions, such as being seen as incapable of handling their responsibilities or concerns about privacy and confidentiality. Furthermore, cultural or familial attitudes toward mental health stigma can influence an individual's decision to seek help. Some cultures may strongly emphasize self-reliance and view mental health issues as a personal weakness or mark of shame. These strong familial beliefs and expectations play a role in whether a college student feels safe seeking resources (Shea et al., 2019).

Mental Health Literacy

The next theme centers on mental health literacy. Many college students do not seek mental health resources due to limited mental health literacy, which refers to their knowledge and understanding of mental health issues (Broglia et al., 2021). The topics within this theme include lack of awareness, misconceptions, difficulty recognizing severity, and fear of judgment. Many students may not be aware of the signs and symptoms of mental health problems or may not recognize their own experiences as being related to mental health. This lack of awareness can prevent them from seeking appropriate resources. Limited mental health literacy can also contribute to misconceptions about mental health. Students may hold false beliefs that seeking help is unnecessary or that mental health issues are a sign of weakness. These misconceptions often discourage them from reaching out for resources.

Additionally, college students may struggle to differentiate between normal stress and emotional struggles versus more significant mental health concerns. They may downplay or dismiss their own experiences, assuming that what they are going through is part of the typical college experience. Broglia and colleagues (2021) and Brown (2018) described problems related to mental health literacy as students not knowing when to seek help and assuming their adverse emotions were “normal” feelings. Moreover, limited mental health literacy may contribute to fears of being judged by others. Students may worry about being perceived as “crazy” or weak if they seek mental health resources, further deterring them from seeking help.

Access

Insufficient access is another significant obstacle college students face when obtaining adequate mental health resources, posing considerable challenges to their overall well-being. Limited access to mental health services hinders students' ability to seek timely assistance for their mental well-being, potentially exacerbating their struggles. Extensive research has shed light on the distressing fact that many students possess limited awareness regarding various mental health resource options offered on their college campuses (Broglia et al., 2021; Reid et al., 2021; Shea et al., 2019). Consequently, a significant number of students remain unaware of the available mental health resources and services accessible to them within their educational institutions and surrounding communities. Insufficient awareness among college students creates a concerning situation where they struggle to identify where to seek help or access the necessary resources for addressing their mental health concerns. As a result, the combination of limited access and inadequate awareness further complicates their ability to effectively pursue the support they need.

Theoretical Framework

The theoretical framework utilized is based on the core concepts developed by psychologists Richar Ryan and Edward Deci, which is called the Self-Determination Theory (Deci & Ryan, 2015). The Self-Determination Theory claims that there are fundamental human needs that are common to all. Fundamental human needs include intrinsic and extrinsic factors for motivation. Intrinsic factors include motivation from within, values, curiosity, and interests. Increased access to mental health resources via a QR code supports and enhances college students' intrinsic factors such as motivation,

values, curiosity, and interests. The mental health resources within the quality improvement project are designed to address and alleviate mental health challenges that often interfere with motivation, values, curiosity, and interests. Mental health issues like depression, anxiety, and suicidality can significantly diminish students' motivation. Increased access to mental health resources will assist individuals in addressing these underlying concerns, developing strategies to boost motivation, and setting realistic goals.

Furthermore, through increased accessibility to mental health resources, individuals can gain clarity on their values and align their actions and choices accordingly. Moreover, mental health challenges may dampen students' curiosity and hinder their desire to explore new experiences or ideas. College students can regain their curiosity and open themselves to new possibilities by addressing and managing these challenges through mental health resources. Furthermore, mental health struggles can make it difficult for individuals to engage in activities they once enjoyed, especially those suffering from depression and suicidality. Increased access to mental health resources may help students identify triggers, develop coping mechanisms, and gradually reintegrate their interests back into their lives.

At the same time, exterior motivational influences such as others' opinions, reward systems, and budgets are extrinsic factors. Increasing access to mental health resources does not directly remove extrinsic factors such as others' opinions, reward systems, and budgets. However, accessing mental health resources will assist students in developing skills and strategies to navigate and manage these extrinsic factors effectively. For example, no one can control others' opinions. However, improved access to mental

health resources can provide college students with a safe space to explore and understand how others' opinions affect their well-being. Using the newly accessed resources, the students can develop coping mechanisms, set boundaries, and gain self-confidence to deal with external judgments. Reward systems, such as grades and professor or peer feedback, can create pressure and stress, affecting a student's mental health. Yet, with accessible mental health resources, college students can develop resilience, stress management techniques, and healthy coping mechanisms to navigate and respond to external reward systems in a balanced and self-care-oriented manner.

Additionally, financial limitations may be a significant source of stress and affect mental health access. Individuals with budget constraints can receive the help they need by expanding access to free options. Overall, increased access to mental health resources supports and assists college students facing mental health challenges, enabling them to address and overcome obstacles affecting their intrinsic and extrinsic factors. By addressing the internal aspects of mental health, individuals can better manage the impact of extrinsic factors on their overall well-being. Furthermore, by improving mental well-being, the quality improvement project may assist individuals to rediscover their motivation, values, curiosity, and interests, allowing them to lead more fulfilling lives.

The Self-Determination Theory's psychological framework underlines the understanding of human motivation, focusing on the "why" of human behavior (Duda & Appleton, 2016). Moreover, the theory communicates that people are determined by three psychological needs: Autonomy, competence, and relatedness (Deci & Ryan, 2015). The Self-Determination Theory defines autonomy as a need to feel self-governing and independent (Lopez-Garrido, 2023). Moreover, autonomy is the ability to control one's

future and involves self-intention and self-regulating one's behavior (Lopez-Garrido, 2023). College students who report hesitation about seeking resources prefer to handle problems independently and desire internet-based psychological resources via self-help (Ebert et al., 2019). The quality improvement project focuses on enhancing students' self-sufficiency and governing in a way that encourages independence.

In addition, the Self-Determination Theory defines competence as the need to be valuable in dealing with the surroundings (Lopez-Garrido, 2023). Increasing access to mental health resources will help break barriers of stigma, mental health literacy, and access, thereby increasing students' self-help intention. Mental health resources being readily available positively impacts students' self-help intention (Cole & Ingram, 2019; Ebert et al., 2017; Newman et al., 2021; Ray et al., 2019). Increased access to resources fosters a sense of empowerment, resilience, and personal agency among students. It encourages them to take proactive steps toward their mental well-being, such as utilizing self-help resources, seeking resources when needed, and developing healthy coping strategies. By addressing the barriers of stigma, mental health literacy, and access through increased availability of resources, students are more likely to recognize the importance of their mental health and take active steps towards self-care and seeking help when necessary (Ray et al.; Rith-Najarian et al., 2019).

The Self-determination theory suggests that humans thrive and grow, accomplishing goals and greater well-being under conditions that encourage fulfilling basic needs (Mancini, 2008). By supporting inclusive care, colleges can create mental health resources for these basic needs and inspire confidence. By fostering a culture of empathy and understanding and normalizing mental well-being, colleges can create a

supportive environment that breaks down the barriers associated with mental health stigma. This inclusive approach helps college students feel a sense of belonging and connect with others, leading to increased relatedness and overall well-being. Addressing mental health stigma and providing accessible resources are crucial steps in promoting a supportive community where individuals feel comfortable seeking help without fear of judgment or negative consequences. Increased awareness, innovative resources, and a focus on comradery further encourage college students to prioritize their mental well-being and cultivate a sense of belonging.

Relatedness is the capacity to feel a sense of belonging. The quality improvement project helps college students feel a sense of belonging and connect with others by breaking barriers affiliated with mental health stigma. Addressing mental health stigma and promoting a supportive environment where individuals feel comfortable seeking help without fear of judgment or negative consequences is essential. Increasing awareness, providing easily accessible resources, and fostering a culture of empathy and understanding will help reduce stigma and encourage college students to prioritize their mental well-being. Additionally, normalizing mental well-being and utilizing innovative resources encourages comradery.

The problem-solving measure will focus on the newly realigned key priorities shaping healthcare transformation, including the importance of community engagement (Hickey & Giardino, 2022). Breaking the barrier of poor access to mental health resources will be crucial in challenging and dismantling the barrier of stigma associated with mental health. Making mental health resources more available and normalized encourages college students to seek help without fear of judgment or discrimination.

When resources are easily accessible, it conveys that seeking mental health resources is a common and acceptable practice, just like going to the hospital with a broken bone.

Autonomy, competence, and relatedness align with the quality improvement project by helping students break the barriers of stigma, mental health literacy, and access to mental health care by enabling students to participate in health-promoting self-care measures. The quality improvement project and Self-Determination Theory assist college students in recognizing their intention to change and discovering essential inspiration for the change (Pickens, 2012).

Faith Integration

Integrating a Christian perspective into a mental health-centered quality improvement project offers significant advantages and invaluable support throughout the development process. Compassion, achieved through stigma reduction, and the instillation of hope are among the key benefits. Christian values such as compassion, empathy, and love for others were integral in driving project implementation, fostering an environment characterized by understanding, acceptance, and support. For instance, the project lead cultivated a sense of community among participants, promoting solidarity and mutual care, thus creating a supportive atmosphere where individuals felt valued and understood. By integrating Christian values, the team established an inclusive and effective framework for addressing mental health needs carefully, tackling not just symptoms but also underlying emotional and spiritual aspects.

A fundamental principle of Christianity is the message of hope, which inspired strategies and interventions during the project's development. Drawing upon biblical passages like Jeremiah 29:11, the team emphasized hope, resilience, and the potential for

transformation and growth. Practices such as prayer before meetings and mindfulness exercises reinforced this perspective, fostering a sense of empowerment and belief in positive change even during adversity.

Incorporating a Christian perspective significantly enhanced the value and guidance in implementing the mental health-centered quality improvement project. The recognition of inherent dignity and worth in every individual, as highlighted in Genesis 1:27, promotes person-centered care. By aligning project materials and approaches with this principle, the project lead demonstrated a commitment to compassion and understanding, enhancing the project's effectiveness and inclusivity.

Furthermore, the teachings of Christ emphasize compassion and love for others, encouraging stakeholders to approach mental health challenges with kindness and unwavering support, as stated in 1 John 4:7. Integrating a Christian perspective provides access to abundant faith-based resources, fostering compassion, combating stigma, and infusing hope, thereby offering continuous guidance and inspiration throughout the project's development process. By nurturing compassion and instilling hope, the project incorporates principles deeply rooted in the teachings of Christ, offering guidance in addressing mental health challenges from a faith-based approach.

Project Objectives

Table 1

Short-term Objectives

<p>Objective Number</p>	<p>Objective Details</p>
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1	Sixty percent of users will agree or strongly agree that advertisement efforts utilizing QR codes, posters, stickers, and faculty announcements helped reduce mental health <i>stigma</i> .
2	Sixty percent of users will agree or strongly agree that the user-friendly design of the website and QR code improved their mental health <i>literacy</i> by providing information that was easy to understand and simple to access and navigate.
3	There will be a 40% increase in students <i>accessing</i> available Mental Health resources at the institution between August 2023 through December 2023 compared to August 2022 through December 2022.
4	There will be a 20% increase in students who are treated utilizing on-campus mental health resources at the institution between August 2023 through December 2023 compared to August 2022 through December 2022.

Table 2

Long-term Objectives

Objective Number	Objective Details
1	The Fall 2024 survey conducted by ACHA-NCHA at the institution will

	show a 10% reduction in students reporting anxiety compared to the Fall 2022 survey.
2	The Fall 2024 survey conducted by ACHA-NCHA at the institution will Show a 10% reduction in students reporting depression compared to the Fall 2022 survey.
3	The Fall 2024 survey conducted by ACHA-NCHA at the institution will show a 5% reduction in students reporting suicidality compared to the Fall 2022 survey.

Quality Improvement Methods

The mental health-centered quality improvement project will be implemented on a college campus in Southern California to reduce stigma, enhance mental health literacy, and improve accessibility surrounding mental health resources for college students. IRB approval was received from CBU for the project (see Appendix B), and additional approval was granted by the institution (see Appendix C). With these approvals secured, the project lead will first collaborate with the student health services coordinator to clarify the resources available from the college. Open communication with student health services will provide valuable insight and feedback on the institution’s resources. Additionally, student health services will provide data regarding counseling appointments. The number of counseling appointments during the implementation phase will be compared to the corresponding data from the same time period the previous year.

Next, the project lead will collaborate with a professional graphic designer to create an improved website. This website aims to provide easy access to essential informational resources related to three prevalent mental health concerns at the local college: Anxiety, depression, and suicidality. Currently, the college's website requires users to go through five precise clicks to reach a resource center, which is not user-friendly. In contrast, the project's new website, built using Squarespace, will enhance mental health literacy, ensuring a seamless experience with just a single scan or click. The development of the website has been thoughtfully planned. A professional graphic designer and the project lead are crafting a user-friendly design to enhance the overall user experience. The project's website will provide detailed information on mental health resources, such as a direct link to the college's counseling center, telehealth information, emergency mental health services, and the 24/7 national suicide hotline number. The primary goal of the new website is to significantly increase access to self-help resources for students in need. Unlike the current mental health resource page on the institution's website, the new website will offer straightforward navigation, eliminating the need for users to go through a complex series of specific clicks. The user-friendly approach will make essential mental health information more accessible to those who need it.

Data collection for the project will involve using an anonymous and voluntary 10-question survey hosted on the website. To protect human subjects, all survey submissions will remain anonymous. Only the project lead will be granted access to the anonymous survey results, which will be securely transmitted through the Squarespace platform. The survey itself will be locked and accessible solely by the project lead, who will use a secure computer with a password login and store it in a locked office. The project lead

will conduct regular monitoring and analysis of survey results weekly. This analysis will be carried out using a spreadsheet on a secure computer, further ensuring the data's confidentiality and integrity (See Appendix D).

The current resources are not readily accessible to students due to the labyrinth of specific clicks. Recognizing the need for convenience and accessibility, a QR code will be created to access the new website directly. The project lead will collaborate with a professional graphic designer to create eye-catching stickers and posters featuring the QR code. These designs will be meticulously crafted to capture attention, decrease stigma, and ignite curiosity. The intention is to make mental health support visible throughout the campus, encouraging students to seek help and find solace within the community. The QR code acts as a gateway, providing easy access to resources that empower students with valuable information on mental health, thus enhancing their mental health literacy. Following the cohesive and professional design, 15 copies of 12x18 posters and 500 copies of 4x4 with 2x2 die-cut stickers will be sent to print. Once the stickers and posters are printed, they will be prepared for display throughout the college campus. Campus administration has approved all aspects of the project, including distributing posters and stickers. The 15 posters will be posted at central campus locations, ensuring visibility in high-traffic areas. Locations will include the cafeteria, library, bookstore, gym, STEM/MESA center, and campus directories scattered across the campus. Furthermore, stickers will be strategically placed in classrooms, campus centers, and student service locations, providing easy access to encourage students to explore resources and normalize mental health, thus decreasing stigma. Poster and sticker placement will ensure the QR

code is visible in higher occupancy areas, providing an easily accessible lifeline for those in need.

Furthermore, volunteer outreach will occur to recruit faculty members with direct student and Canvas access. The volunteers will ensure the QR code stickers are placed in the front of the classroom and verbalize their availability. The faculty volunteers will also keep track of the stickers, ensure their placement in the classroom, and notify the project lead if there is a need for additional stickers. Furthermore, the volunteers will regularly post announcements on Canvas referencing the updated website and display its QR code. Moreover, the volunteers will post the website and QR code in the student resource section of their Canvas shell.

The seamless integration of resources will establish a healthy support network, empowering students to progress in their mental health journey. This empowerment is a direct outcome of their heightened mental health literacy. In addition to faculty volunteers, outreach will include information technology (IT) and media. Included are IT and media experts who will ensure the success of this technology-centered mental health quality improvement project. Their unique skill set and expertise will be valuable in enhancing the project's data collection and advertising efforts. The IT department will supply the project lead with website data, including the number of page visits. The project lead will then compare the college's website access numbers from August 2022 to December 2022 with the analytics of the new website from August 2023 to December 2023. Moreover, to spread awareness and increase the reach of the quality improvement project, the QR code will be advertised on social networking sites by media. The QR code is a visual reminder for students that support is readily available. The support and

resources will provide access for students experiencing mental health concerns. The collaboration between students, faculty, staff, and the wider Southern California community will create a network of support and understanding. The website, stickers, and posters will become powerful tools for championing mental health awareness, reducing stigma, enhancing mental health literacy, and improving accessibility. The collective effort will create a significant step toward fostering a campus culture that prioritizes mental well-being, providing resources, and offering a lifeline to those in need of support.

Team Members and Roles

The quality improvement project will require diverse stakeholders, including the project lead, full-time faculty volunteers, a graphic designer, a student representative, counseling services, IT, media, and a mentor.

Table 3

Team Member Roles

Position	Responsibilities
Project Lead	<ul style="list-style-type: none"> - Develop a budget. - Collaborate with a graphic designer to create the website. - Collaborate with a graphic designer to design posters and stickers. - Create a QR code that aligns with the website. - QR code advertisement placement. - Educate faculty volunteers on project details and benefits.

<p>Full-time Faculty Volunteers</p>	<ul style="list-style-type: none"> - Ensure QR code stickers are placed in the front of the class, address the availability of the stickers, and place the QR code within their Canvas shell as an available resource. - Report back when additional stickers are needed.
<p>Graphic Designer</p>	<ul style="list-style-type: none"> - Collaborate with the project lead to create a website. - Collaborate with the project lead to design posters and stickers.
<p>Student Representative</p>	<ul style="list-style-type: none"> - Provide feedback and perspective as the project progresses.
<p>Student Health Services</p>	<ul style="list-style-type: none"> - Provide valuable insight and feedback related to students’ needs. - Provide data related to the number of counseling appointments.
<p>IT</p>	<ul style="list-style-type: none"> - Provide past webpage data (webpage visits). - Long-term- potentially integrate the quality improvement project website and design onto the college’s website for long-term effectiveness.
<p>Media</p>	<ul style="list-style-type: none"> - Provide valuable feedback on project advertisement efforts. - Open discussion about increasing advertising strategies. - Place the QR code on the institution's social media platforms.
<p>Mentor</p>	<ul style="list-style-type: none"> - Assists with defining the problem within the organization. - Directing communication needs.

	- Assisting with proper protocol throughout the project planning and implementation.
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Data Collection

Students participated in an anonymous voluntary survey when they accessed the project's resource website. The survey consisted of 10 questions, including three Likert scale questions related to objectives one through three. One of the questions assessed whether using advertisement efforts, such as QR codes, posters, stickers, and faculty announcements, had helped reduce mental health stigma. Another question was whether the user-friendly design of the QR codes and website resources improved students' mental health literacy by providing easily understandable information that was simple to access and navigate. Another question assessed whether the QR code helped access mental health resources. Students rated their responses on a scale of one to five, with one indicating "strongly disagree" and five indicating "strongly agree." See Appendix B for the complete list of survey questions.

The project lead tracked the times the mental health resources page was visited weekly from August 2023 through December 2023. This was completed as the website logs the number of times it is accessed. The project lead tracked the results using an Excel spreadsheet. These analytics provided insight into the number of times users had accessed the mental health resources. The project lead evaluated the college's website access number from August 2022 through December 2022 and compared it to the new website's analytics from August 2023 through December 2023. If the website access number was less than 100 by the end of week three, the project lead planned to take

proactive measures to increase awareness and engagement. To increase awareness and engagement, faculty volunteers would have been instructed to post an announcement in their Canvas courses weekly, including the QR code, and reference the announcement at the beginning and end of class. This targeted promotion would have helped more students access mental health resources.

The project lead tracked the number of appointments made with counseling services from August 2023 through December 2023. These numbers will be compared to the corresponding data from August 2022 through December 2022. Statistical analysis was conducted to determine whether there was a 20% increase in on-campus mental health resource utilization.

In addition to tracking the number of appointments, students participated in the same anonymous voluntary survey previously mentioned. Two questions related to the fourth objective were included. The first question in the survey inquired whether the user made an appointment with mental health services on campus, with a simple "yes" or "no" response. If the user answered "No," the second question asked why they did not make an appointment. The options include no available appointments, transportation problems, discomfort in discussing mental health concerns in person, and other similar options. For the complete list of survey questions, refer to Appendix B.

When students accessed the QR code, five anonymous demographic-related questions were available on the website for data collection. The collection of demographic data will aid in promoting accessibility within the student population by identifying any gaps. Demographic data included gender, age, ethnicity, the student's

primary mental health concern, and how long they have attended the local college (See Appendix D).

Regarding long-term objectives 1-3, data will not be collected and analyzed by the project completion date. To sustain the project and achieve these long-term goals, the project lead plans to establish a dedicated team to continue data collection and analysis within the institution and implement regular progress reviews to ensure continuous advancement toward the objectives.

Finances and Resources

Several factors were considered in the project budget, including preparation, education, material creation, design, printing, and distribution costs. The project lead and a graphic designer provided their labor as an ‘in-kind’ donation. Custom posters and stickers featuring innovative QR codes for advertising were designed through this donation. The institution covered the printing cost for 15 posters as an ‘in-kind’ donation. The printing cost for 500 stickers totaled \$200.00. The user-friendly website and development were also ‘in-kind’ donations from the project lead and graphic designer. The website has an annual cost of \$192.00 for the Squarespace platform/domain use. In addition to the contributions from the project lead and the graphic designer, volunteer time was also generously given as ‘in-kind’ donations by the various volunteers participating in the project (See Appendix E).

The updated website created through Squarespace will no longer be necessary after the first year, as the initial prototype should be seamlessly integrated into the college's website. This integration will ensure that the new layout and information align with the changes implemented by the project lead. Moreover, at that point, students can

scan the QR code to access the college's website directly, specifically the updated mental health resources page. Once the integration is complete, the responsibility for maintaining the website will be transferred to the IT department. Only routine maintenance will be required, similar to the regular upkeep performed by IT for the college's website. This streamlined approach ensures that the updated website serves its purpose effectively and aligns seamlessly with the existing infrastructure. It also guarantees that the IT department can efficiently manage and maintain the website in the long run.

The potential income generated from the project can be effectively measured by considering student retention rates. The primary focus of the QI project is to address the welfare and health of college students. Extensive research reveals that students with mental disorders are twice as likely to drop out without completing their degrees than their peers without such conditions (Cuijpers et al., 2019). Considering this information, it is concerning that 55% of students at the local institution admit to experiencing anxiety alone, while less than 25% have actively sought treatment. These statistics highlight the urgent need to prioritize student retention, as doing so will yield a substantial return on investment. Currently, the college has a total enrollment of 13,548 students (California Community College Chancellor's Office, 2020b). By conservatively estimating that only 50% of the students have a mental disorder, it is estimated that 6,774 students face such challenges. Considering that less than a quarter of these students seek treatment and are twice as likely to drop out, it becomes apparent that 5,081 students may not complete their education at the local college.

Furthermore, the estimated annual cost for students to attend the institution is approximately \$31,602 (San Bernardino Valley College, 2023). Thus, the potential

savings in the first year alone amount to \$130,569,762.00. By prioritizing stigma reduction, enhancing mental health literacy, improving accessibility, and tackling student retention, the college can profoundly enhance the well-being of its students and bolster its financial stability.

Final Results

The project's findings and analysis revealed promising results across various measures, indicating the effectiveness of the strategies implemented for the quality improvement project. Firstly, the use of advertising methods such as QR codes, posters, stickers, and faculty announcements received significant support from respondents, with 62.9% acknowledging that these methods played a role in reducing mental health stigma (See Figure 1). The high level of achievement highlights the successful accomplishment of short-term objective 1. Similarly, the user-friendly design of the website and QR code received positive feedback, with 85.7% of respondents noting it improved their mental health literacy by presenting information in an accessible and easy-to-understand manner (See Figure 2). The strong correlation indicates the achievement of short-term objective 2. Furthermore, the QR code played a crucial role in facilitating access to mental health resources, as noted by 74.3% of respondents (See Figure 3). Additionally, the substantial increase in webpage visits, from 612 to 1343, demonstrates a prominent 119.44% increase, illustrating the accomplishment of short-term objective 3 (See Figure 4).

Figure 1

Support for Advertising Methods to Reduce Stigma

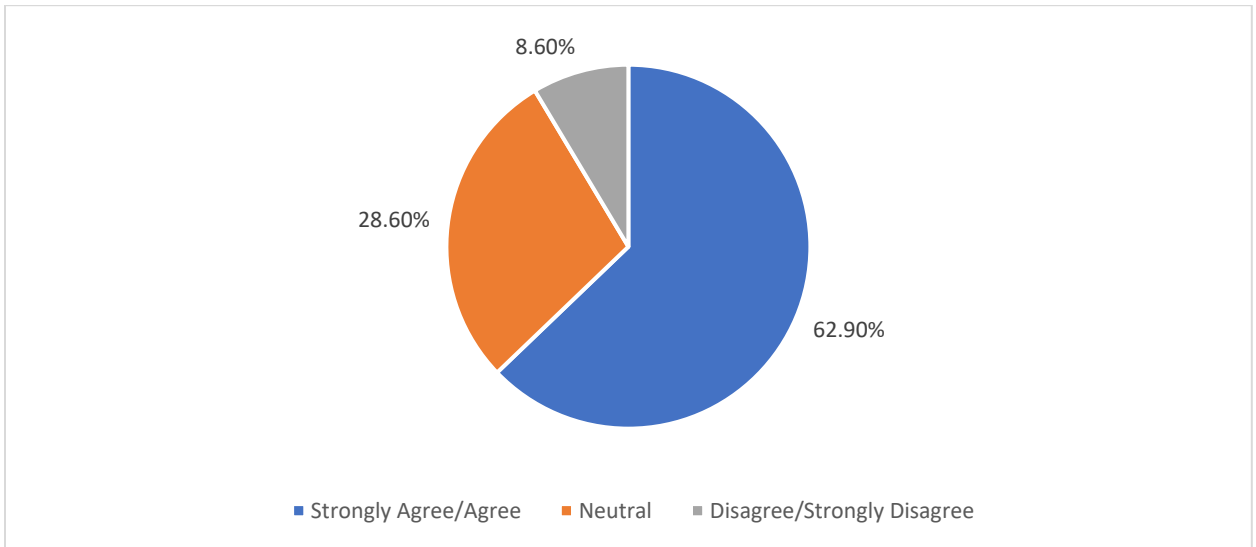


Figure 2

Support for Designs to Enhance Mental Health Literacy

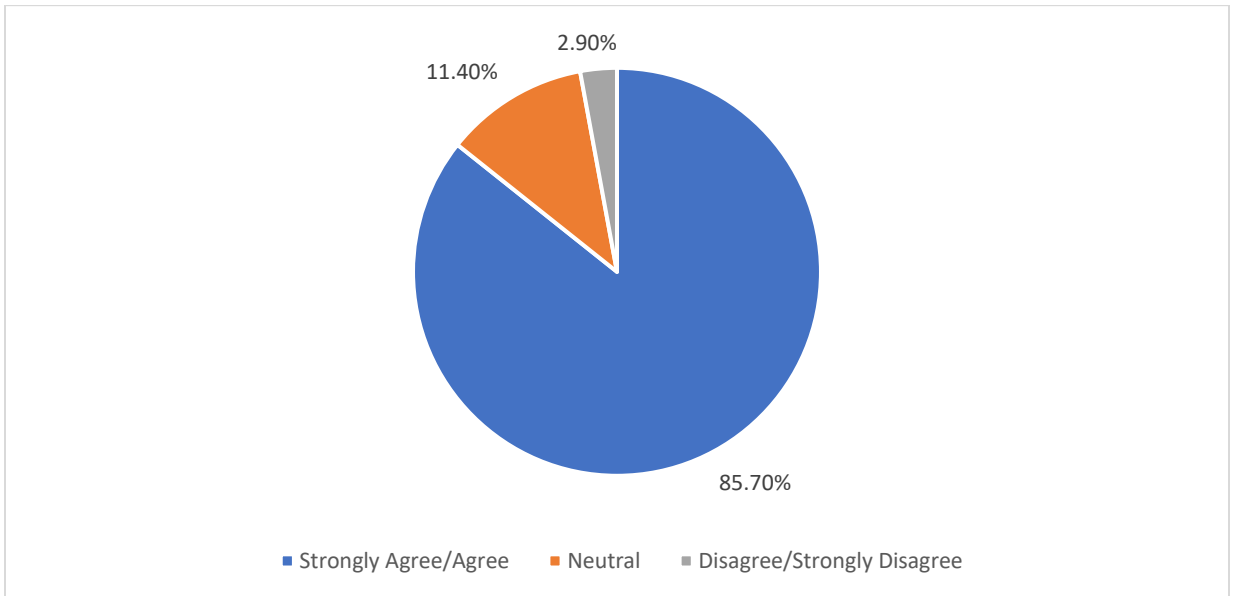


Figure 3

Support for the QR Code to Improve Accessibility

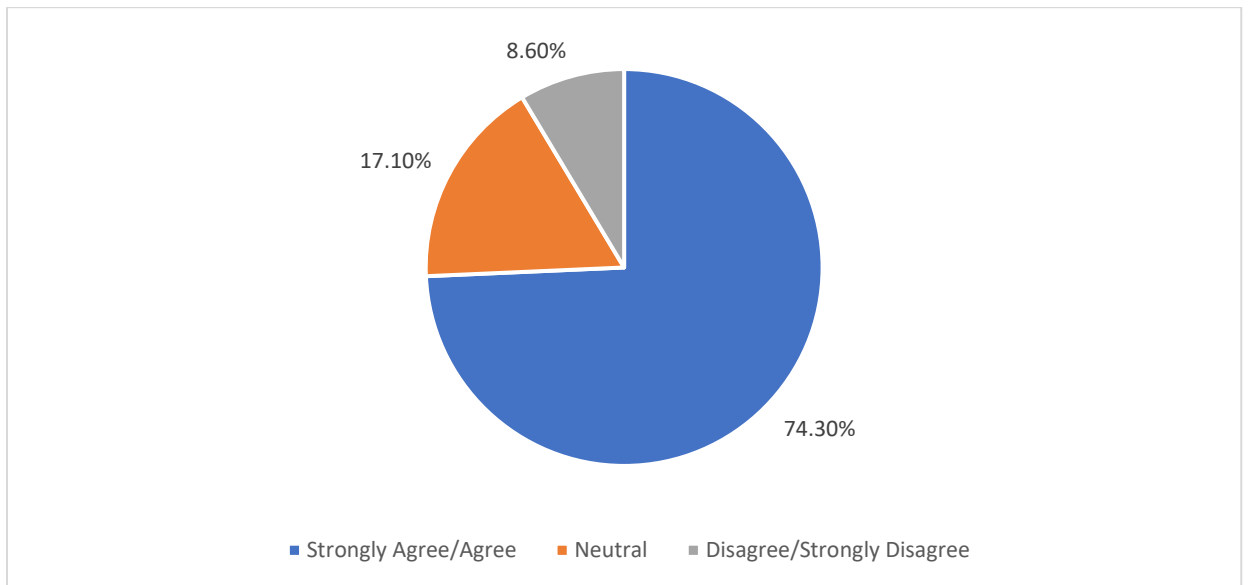
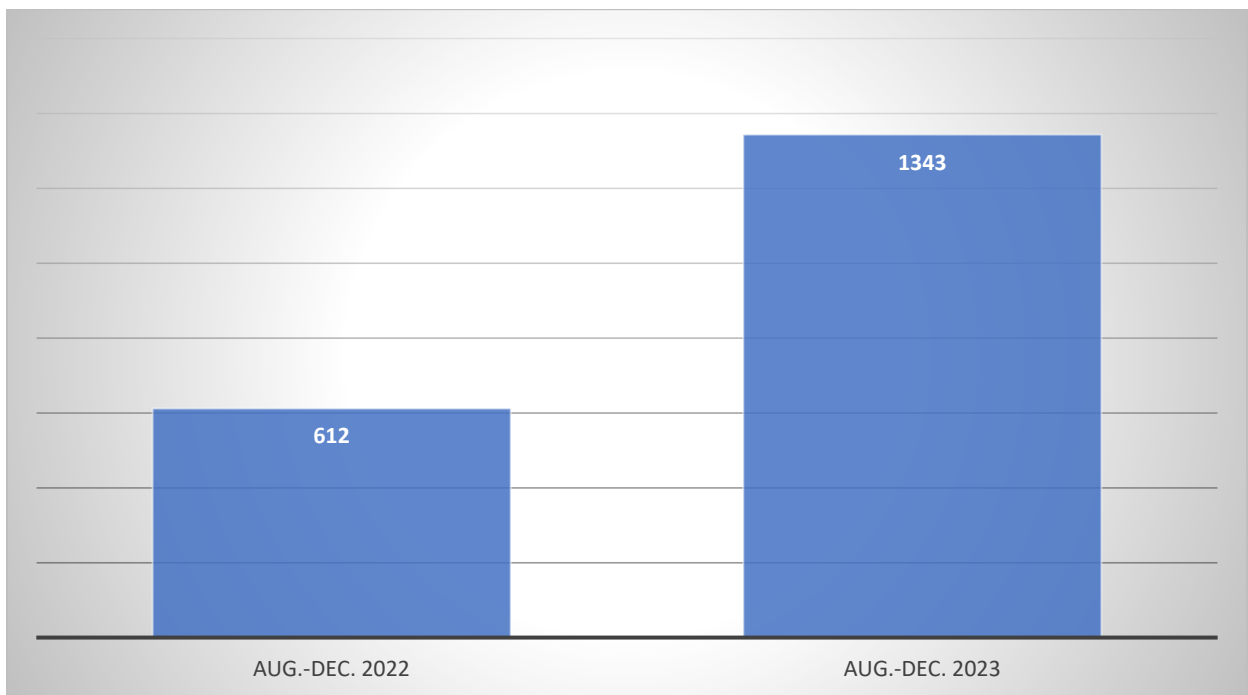


Figure 4

Total Webpage Visits Before and During Implementation



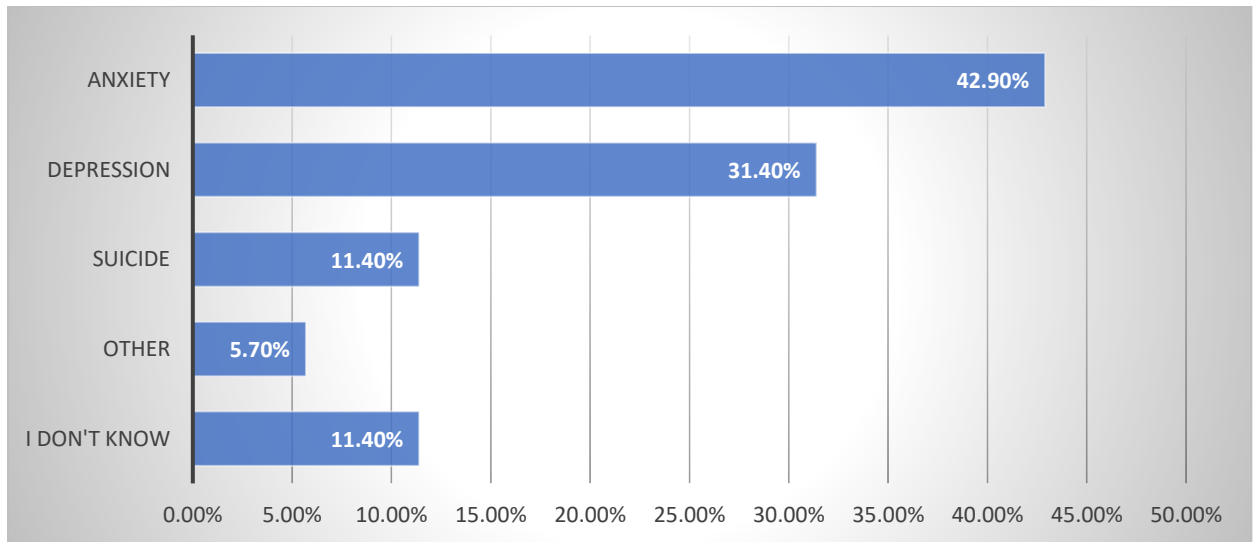
Short-term objective 4 presented a challenge, with 82.9% of respondents choosing not to schedule appointments with Mental Health services on campus, primarily due to discomfort in discussing mental health concerns in person (34.5% of respondents). From August to December 2022, there were 449 mental health counseling visits, but this decreased to 372 from August to December 2023. Several factors contributed to this decline, including the loss of a counseling associate who secured a full-time position, the introduction of two trainees who took time to build their caseloads, operating at total capacity with a resulting waitlist in November and December, and limitations on trainees managing only seven clients during their initial semester. The institution also faced challenges from multiple sick callouts. In-person space was limited, with only four counseling rooms available. Additionally, reliance on temporary professional experts persists due to the absence of full-time benefited counselors. Despite these efforts, short-term objective four was not achieved.

The demographic breakdown of respondents provides valuable insights into the target audience, with all respondents being students of the institution, predominantly female (60%), and primarily aged between 20-24. Anxiety emerged as the most prevalent mental health concern at 42.9%, followed closely by depression at 31.4%, highlighting the pressing need for accessible support services tailored to these prevalent issues (See Figure 5). The reluctance to schedule appointments poses significant risks to both short- and long-term objectives and sustainability. In the short term, it impedes the immediate goal of providing timely support to students requiring mental health services. Over time, this reluctance may inhibit trust in the institution's mental health resources and exacerbate student's mental health issues. Moreover, the hesitation to seek help may diminish the

project's sustainability by reducing the use of on-campus mental health services. To address this, a thorough review of implementation strategies is essential. For instance, virtual mental health services such as Zoom appointments and phone consultations could be beneficial. Exploring alternative support methods like online counseling or peer support groups could enhance accessibility and comfort for students seeking assistance. Additionally, efforts to destigmatize mental health discussions and foster an environment of openness and support within the institution are critical in overcoming barriers to seeking help.

Figure 5

Identified Mental Health Concerns



To achieve the long-term goals set for Fall 2024, the institution must maintain efforts aimed at raising mental health awareness, improving resource accessibility, and reducing stigma. It is crucial to enhance the support infrastructure by potentially increasing funding for counseling services, expanding the mental health professional team, and offering access to support groups or peer counseling programs. Creating a culture of open dialogue is also vital, where students feel comfortable discussing mental

health issues and seeking help. This can be promoted through open discussions, faculty and staff training, and policies prioritizing mental health and well-being. By prioritizing these initiatives, the institution can aim to reduce anxiety, depression, and suicidality among students, as evidenced by a Fall 2024 undergraduate student survey. Ultimately, this holistic approach will benefit individual students and foster a healthier and more supportive campus community overall.

Outcome Analysis

The Self-Determination Theory formed the core theoretical framework for the quality improvement project, offering valuable insights into fundamental human needs and motivation factors (Deci & Ryan, 2015). By integrating this theory, the project effectively confronted various factors influencing students' engagement with mental health resources. The project focused on intrinsic factors such as: Values, curiosity, and interests, aligning with its aim of promoting mental health awareness and reducing stigma. Initiatives such as QR codes enhanced access to mental health resources, directly supporting students' intrinsic motivation by addressing barriers to prioritizing mental well-being. Moreover, the theory's emphasis on autonomy, competence, and relatedness guided the project's efforts to address students' psychological needs. By implementing initiatives to break stigma, enhance mental health literacy, and improve resource accessibility, the project created a supportive environment where students felt empowered to seek help and prioritize their mental well-being. Cultivating empathy, understanding, and inclusivity further fostered students' resilience, self-confidence, and a sense of belonging. The Self-Determination Theory was pivotal in shaping the project's strategies and approach. It provided a structured framework for understanding and

addressing mental health stigma and literacy, ultimately contributing to the project's success in promoting mental well-being among students.

Biblical and Faith Perspective

Integrating a Christian perspective into the mental health-centered quality improvement project profoundly impacted its implementation and outcomes. The project created an environment of understanding and acceptance by embracing Christian values such as compassion, empathy, and love for others. This emphasis on fostering a supportive community where individuals feel valued and significantly understood influenced how stakeholders engaged with the project and its objectives. Drawing upon biblical principles like hope and resilience and recognizing the inherent dignity of every individual guided the project's approach, focusing on facilitating positive transformation and growth. Prayer and mindfulness exercises further reinforced this perspective, empowering stakeholders and instilling belief in positive change. Furthermore, aligning project materials and approaches with Christian values enhanced the project's effectiveness and inclusivity. By promoting person-centered care and addressing stigma, the project demonstrated a commitment to addressing mental health challenges comprehensively. This approach acknowledged the symptoms and the emotional and spiritual aspects of individuals' well-being. By nurturing compassion and fostering hope, the project embodied principles deeply rooted in the teachings of Christ, providing continuous guidance and inspiration throughout its development and implementation. Integrating a biblical/faith perspective significantly influenced the project's principles, strategies, and outcomes. It provided a moral compass and framework for decision-making, creating an environment characterized by empathy, support, and empowerment.

By viewing mental health challenges through this lens, the project addressed them from a holistic and compassionate perspective, resulting in improved outcomes and well-being for all involved.

Implications for Practice

The Quality Improvement project has significant implications for nursing practice, education, and research concerning mental health support for college students. The project provides insights into effective strategies for reducing mental health stigma, enhancing literacy, and improving resource access in nursing practice. Nurses can learn to engage with students more effectively by collaborating with student health services and utilizing technology such as QR codes and user-friendly websites. This includes recognizing the importance of accessible platforms for information dissemination and resource access.

Integrating the project's findings into the nursing core curriculum can benefit education. Nurses in training can understand the significance of addressing mental health stigma, enhancing literacy, and ensuring resource accessibility. Teaching strategies for collaborating with other healthcare professionals and leveraging technology for improved patient outcomes can be emphasized. Additionally, from a research perspective, the project offers valuable data on the effectiveness of interventions in reducing mental health stigma and increasing resource access. Future research should expand on these findings to explore additional strategies or evaluate long-term outcomes, advancing mental health support in college settings on a consistent and long-term basis.

Implementing this information in current nursing practice can lead to concrete improvements in patient outcomes and organizational systems. Nurses can adopt similar

strategies in their practice settings, like collaborating with campus health services to assess available resources and enhancing access through QR codes and other technology-driven solutions. By fostering a culture that prioritizes mental well-being and reduces stigma, nurses can create supportive environments conducive to student health and academic success.

To effectively share the promising outcomes of the Quality Improvement project targeting mental health initiatives on college campuses, a comprehensive approach was utilized to reach a broad audience. This entails compiling project findings, methodologies, and results into a comprehensive document suitable for submission to peer-reviewed journals specializing in mental health, education, and quality improvement. Potential publication targets include peer-reviewed journals. Additionally, the project can be presented at relevant conferences to engage directly with professionals and stakeholders in the field. Engagement with professional networks and participation in relevant groups and forums dedicated to mental health, education, and quality improvement should also be prioritized to share updates and findings. Furthermore, collaboration with other institutions or organizations working on similar initiatives should be pursued to amplify the project's reach and impact. Opportunities for collaboration with regional and state-wide colleges, community mental health organizations, and national associations devoted to student mental health and well-being will be explored. Through strategic dissemination via these channels, the aim will be to share successes and contribute meaningfully to the broader conversation on mental health promotion and quality improvement in higher education settings.

Recommendations

Several key strategies are necessary to ensure that the institution's strategic plan drives continuous and effective change. Firstly, maintaining ongoing collaboration with the student health services coordinator is essential. This collaboration facilitates consistent assessment of existing resources to ensure they align with identified needs and enable a proactive approach to addressing mental health challenges. Secondly, sustaining a user-friendly website and QR code infrastructure would require regular maintenance and updates. Continuing to monitor website traffic and gather user feedback would be crucial for making timely adjustments to enhance user experience and ensure resource accessibility would remain pertinent. Additionally, faculty engagement plays a pivotal role in sustaining momentum and nurturing a campus culture that prioritizes mental well-being. Integrating discussions on mental health awareness into curriculum and classroom activities reaffirms the institution's dedication to supporting students' mental health needs over the long term.

Moreover, maximizing existing strengths, such as affordable resources and effective marketing potential, facilitates ongoing promotion and advocacy efforts. This guarantees the continuous visibility and effectiveness of mental health initiatives. Despite potential challenges like funding constraints and technological advancements, proactive measures such as exploring alternative funding sources and staying up-to-date with emerging technologies aid in mitigating these risks, ensuring the project's sustainability. The QI project can consistently uphold its impact by aligning with the institution's overarching strategic plan, fostering collaborative partnerships, harnessing technological innovations, and maintaining consistent community engagement. Ultimately, this effort

contributes to cultivating a healthier and more supportive campus environment for all students.

For those considering a similar QI project, it is crucial to understand the struggles students face in accessing, understanding, and using mental health resources. Through various strategies, the project aims to reduce stigma, enhance mental health literacy, and improve accessibility surrounding mental health resources for college students. A comprehensive assessment of existing resources in partnership with student health services is essential. Then, creating or updating a user-friendly website for easy access to mental health information is vital, supplemented by anonymous user feedback surveys and website analytics to improve responsiveness. Moreover, integrating QR codes into campus advertisements simplifies resource access while promoting literacy. Faculty involvement in promoting the project within classrooms is pivotal for stigma reduction. Collaboration with IT and media experts amplifies technology and social media efforts, expanding the project's reach. The aim is to foster a more supportive campus culture that prioritizes mental well-being, increasing student access to mental health resources.

Conclusion

In conclusion, addressing the barriers related to mental health resources for college students is crucial. These barriers include stigma, limited mental health literacy, and overall accessibility. College is a critical phase of development where mental disorders often onset, significantly impacting academic performance (Cuijpers et al., 2019; Ebert et al., 2019). Many students face challenges in seeking help, with a significant portion unaware of how to access mental health services (Rith-Najarian et al., 2019). Alarming, less than a quarter of students at the institution experiencing mental

health issues received treatment in the past year (American College Health Association, 2019a), highlighting the urgent need for action.

The project's findings reveal promising results, highlighting the effectiveness of its implemented strategies. Advertising methods such as QR codes, posters, stickers, and faculty announcements significantly reduced mental health stigma, with 62.9% of respondents positively acknowledging their impact. The user-friendly design of the updated website and QR code improved mental health literacy, with 85.7% of respondents positively acknowledging their impact. Additionally, the QR code facilitated access to mental health resources for 74.3% of respondents and a substantial increase in webpage visits, from 612 to 1343, marking a 119.44% rise.

To address these issues effectively, colleges must reduce stigma, enhance mental health literacy, and improve the accessibility of resources. By identifying and dismantling barriers such as stigma, literacy, and accessibility, institutions can promote student well-being and nurture a campus culture of mental wellness. Collaboration and proactive measures are key to creating an inclusive environment that prioritizes students' mental health needs.

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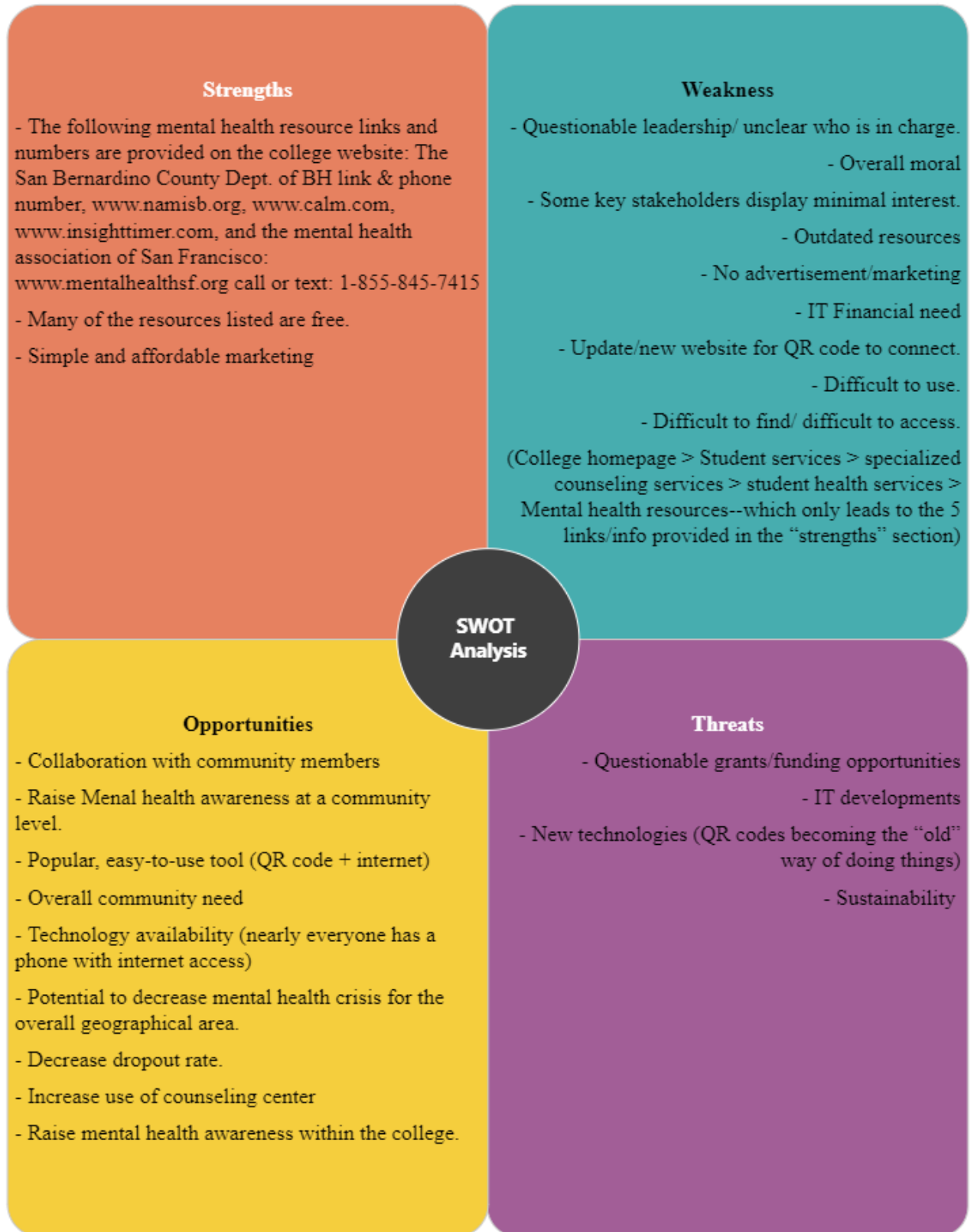
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Appendix A

SWOT Analysis



Appendix B

CBU IRB Approval

IRB 011-2324-DNP

Institutional Review Board
To: Espree Foscolos
Cc: Institutional Review Board; Deanna Jung

Thu 8/10/2023 10:31 AM

You forwarded this message on Thu 8/10/2023 4:15 PM

CC: Institutional Review Board

RE: IRB Review

Designation: Not IRB Human Subjects Research

Project: 011-2324-DNP

Date Complete Checklist/Application Received: 8/7/23

Principle Investigator: Espree Foscolos

Co-Principal Investigator: NA

Faculty Advisor: Deanna Jung

College/School: College of Nursing

IRB Determination: Not research with human participants (including quality improvement projects) – IRB review has determined that this project does not meet the federal guidelines for research with human participants (definitions available in the IRB handbook), and is thus not regulated by the IRB. This project may, however, be subject to other regulations (i.e., institutional, local, state). We will retain a copy of your submission and this determination letter.

Future correspondence: If you have any questions about this determination, please refer all queries to irb@calbaptist.edu, being sure to include all PIs, Co-PIs, and Faculty Advisors (as relevant) as well as the assigned IRB number.

Date: August 10, 2023

Reply Reply all Forward

Appendix C

Institution IRB Approval



Office of Research, Planning,
and Institutional Effectiveness
sresearch@valleycollege.edu

July 5, 2023

RE: Improving Mental Health Resources for College Students

Dear Ms. Foscolos,

The San Bernardino Valley College (SBVC) Office of Research, Planning, and Institutional Effectiveness (RPIE) has reviewed the documents in your request to implement a quality improvement project on campus to **increase student access to mental health resources by streamlining current resources that are student-friendly and technologically current**. You have been granted approval based upon the project scope submitted to RPIE and the determination by the IRB Committee at your primary institution, **California Baptist University**, that your intended project does not meet the federal requirements of research needing IRB Review. If you make any changes to your project scope or related objectives, please notify the SBVC Office of Research, Planning, and Institutional Effectiveness as soon as possible and provide us with all updated documents.

The purpose of this review procedure is to protect the rights, privacy, and welfare of SBVC students, faculty, and staff whose data is used in research studies. This includes archival data as well as data from participation in surveys, interviews, and observation. The SBVC IRB procedure requires all researchers who request the privilege of using SBVC students or faculty as subjects have prior approval from their schools of origin and adhere to all ethical standards.

If you have any further questions, please feel free to contact me at sresearch@valleycollege.edu.

Sincerely,

A handwritten signature in black ink, appearing to read 'Joanna M. Oxendine'.

Joanna M. Oxendine, Ed.D.
Dean,
Research, Planning, & Institutional Effectiveness with Grants Oversight

Appendix D

Anonymous Survey Questions

1. Advertising with QR codes, posters, stickers, and faculty announcements helped reduce mental health *stigma*.
 - 5- Strongly agree
 - 4- Agree
 - 3- Neutral
 - 2- Disagree
 - 1- Strongly disagree.
2. The user-friendly QR code and website design enhanced my *mental health literacy* by providing easily accessible and understandable information.
 - 5- Strongly agree
 - 4- Agree
 - 3- Neutral
 - 2- Disagree
 - 1- Strongly disagree.
3. The QR code helped *access* mental health resources.
 - 5- Strongly agree
 - 4- Agree
 - 3- Neutral
 - 2- Disagree
 - 1- Strongly disagree.
4. Did you make an appointment with mental health services on campus?

- Yes
 - No
5. Why didn't you make an appointment if you answered "No" to the above question?
- No convenient appointment times.
 - The waiting time for an appointment was too long.
 - Transportation problems
 - Discomfort discussing mental health concerns in person.
 - Other
6. What is your top mental health concern?
- Anxiety
 - Depression
 - Suicide
 - Other
 - Unsure
7. What gender were you born as?
- Female
 - Male
8. What is your age?
- 19 or less
 - 20 to 24
 - 25 to 29
 - 30 to 24

- 35 to 39
- 40 to 49
- 55 +

9. How long have you attended San Bernardino Valley College?

- Less than 1 year
- 1 – 2 years
- 3 – 4 years
- 5 years or more
- I am *not* a student.

10. What is your Ethnicity?

- Asian
- Black/African American
- Filipino
- Hispanic
- Multiple races
- Native American/Alaskan Native
- Pacific Islander
- Unknown/Other
- White

Appendix E

Finances

QUANTIT Y	DESCRIPTION	UNIT PRICE	TOTAL
15	Custom 12X18 posters	'In-kind' donation	0
500	Custom 4X4 with 2X2 die-cut stickers	\$0.40	\$200.00
1	Squarespace Domain	\$192/year	\$192.00
20	Faculty volunteers to allow QR code stickers to be available within their classroom	'In-kind' donation	0
2	Open communication with IT and media to display the QR code on the institution's website and social media	'In-kind' donation	0
1	Graphic designer for website, sticker, and poster design	'In-kind' donation	0
6	Introduction and debriefing with college faculty during monthly meetings (up to 30 minutes)	'In-kind' donation	0
SUBTOTAL			392.00
SALES TAX (7.75%)			14.70
SHIPPING & HANDLING			0
TOTAL			406.70