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Investigating the Impact of College Stress and Utilization of Campus Wellness Services
Through an Occupational Health Lens

By

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This thesis is submitted in fulfillment of the requirements for the Elizabethtown College
Honors Program

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**Investigating the Impact of College Stress and Utilization of Campus Wellness Services
Through an Occupational Health Lens**

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Stress is a universal experience. For many people attending college during the period of emerging adulthood, stress can be a pressing daily occurrence. Shearer et al. (2016)[1] put it succinctly: “college is stressful” (p. 233). As a college student majoring in occupational therapy, I have both studied and experienced the pressure and effects of stress on myself and my peers. With the prevalence of stress throughout college campuses and methods to combat this stress, there is limited research regarding the reason that students participate in wellness options. I am doing research on the wellness options that students select and their primary and secondary motivators for participation. In addition to my own personal research, I have completed a literature review analyzing and evaluating prior research and commentary regarding this topic. While there are studies on student knowledge of health and wellness (Shearer et al., 2016) asking students how college could better serve their wellness endeavors and what students perceive as benefits of a college’s wellness offerings, more research on the topic is warranted. Through examination of current literature about college students’ stressors, I weighed the statistics surrounding mental health and stressors in the college population (American College Health Association (ACHA), 2015, 2017, 2019) and then integrated the dimensions and components of health and wellness into survey research to investigate what students in higher education are doing to cope with stress.

In addition to the literature review, I conducted a quantitative survey using Microsoft Forms to better understand the stress and anxiety levels, amount of sleep, and the wellness strategies students use on their campus. From there, the participants answered questions on the primary and secondary motivators behind their participation, which stem from the components

and dimensions of wellness. Using a combination of descriptive statistics and visual analysis, I was able to make sense of the data. Before revealing these results and discussing them further, it is important to establish the rich tapestry of literature that grounds the research.

Literature Review

Defining of key terminology is essential in framing this study and in providing a lens through which the study was informed, that of occupational therapy. From here, health and well-being are discussed. The impact of stress on health and wellness follows, focusing on mental health and the provisions of service. The theory of emerging adulthood is discussed and opens into the mental health and the college student along with stress and the college student. From here, the local college population will be evaluated, previous wellness intervention approaches will be reviewed, followed by the local college's wellness interventions, before ending with a summation of the literature.

Defining Occupational Therapy

Occupational therapy (OT) is a health field that provides services to individuals and populations to promote quality of life in the pursuit of daily activities across the health and disease continuum (AOTA, 2014). Habilitation, rehabilitation, and promotion of health and wellness for clients who may or may not have disability-related needs are some of the main roles of the occupational therapy practitioner (AOTA, 2014) since the profession was established over 100 years ago (Reed, 2019). Habilitation and health promotion are closely linked in their focus to teaching new skills which can foster improved functional ability or healthy lifestyles.

Rehabilitation occurs when an individual has lost an ability due to a disease process, injury or developmental delay, requiring the re-teaching and learning of lost skills. OT provides holistic

services to clients in schools, clinics, hospitals, and homes, among a myriad of other sites (AOTA, 2014).

The governing body for occupational therapy practice in the United States is The American Occupational Therapy Association (AOTA). Under their direction, many official documents and position papers convey the stance and responsibilities of OT's role in the American healthcare system. *The Occupational Therapy Practice Framework, 3rd Ed.* (2014) is one such document and is a guiding source for the purview of practice, definitions, and terminology related to the occupational therapy process. Within the framework is a detailed, seminal exposition of the domain of practice. Here, occupational therapy is formally defined as "the therapeutic use of everyday life activities (occupations) with individuals or groups for the purpose of enhancing or enabling participation in roles, habits, and routines in home, school, workplace, community, and other settings (AOTA, 2014, S1). This means that there is therapeutic intent behind each occupation in which a person participates, like cooking dinner, driving a car, or playing a board game, and these occupations either improve or allow for participation in roles like brother, employee, student, and friend. Furthermore,

occupational therapy practitioners use their knowledge of the transactional relationship among the person, [their] engagement in valuable occupations, and the context to design occupation-based intervention plans that facilitate change or growth in client factors (body functions, body structures, values, beliefs, and spirituality) and skills (motor, process, and social interaction) needed for successful participation (AOTA, 2014, S1).

Occupational therapy practitioners, either therapists or assistants, integrate the complex interplay which occurs between a person, their occupations, and the context through which the activities are lived out within the scope of their service provision. This allows the therapist to create an everyday life activity or occupation-based intervention that will result in a change in client factors and skills needed to be functionally independent and successful in carrying out desired daily activities. Body functions, body structures, client factors, and skills all meaningfully contribute to participate, modify, and interact in the environment their occupation occurs.

Occupations promote habits and routines that make up an individual's daily schedule within the context of the physical and social environments. For the occupation of a student, there are required activities outside of those necessary to live and survive. These activities are called instrumental activities of daily living (IADLs) and are more complex in their interactions with others. For a student, some important IADLs might include health management and maintenance, religious and spiritual activities and expression, and driving and community mobility. Occupational therapy services are provided with specific, individual outcomes in mind for each client based upon their skill needs and motivations. Habilitation goals focus on gaining new skills while rehabilitation objectives address occupational limitations which inhibit functional independence (AOTA, 2014). Health and wellness promotion are about improving or increasing a person's control of their health (AOTA, 2017). By working in client-specific environments, focusing on their wants and needs, and understanding the interactions between the occupations, client factors, and environment, the occupational therapist can facilitate client engagement that leads to a healthy and fulfilling lifestyle. An understanding of health and well-being is pivotal at this juncture to fully understand the complexity of the person and the ways they interact with their environment.

Defining Health and Well-Being

While occupational therapy practitioners work with individuals at all stages of the health and disease process, our governing body supports the promotion of health, well-being, and social participation as important tenets to a quality life (AOTA, 2017). The seminal definition of health, defined by the World Health Organization (1948) is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. *Health* is defined as a multifaceted experience which includes dimensions of wellness, is a resource, and is a by-product of a person and their interaction with the environment (Housman & Odum, 2016). Occupational therapy is also heavily called upon for education and prevention strategies to limit unhealthy outcomes. This comes in the form of self-improvement measures, screenings, and preventing deteriorating health (AOTA, 2014).

There are many facets to health, often called the components of health or the dimensions of wellness. Hettler (n.d.) penned a holistic model called the Six Dimensions of Wellness, which includes emotional, social, spiritual, occupational, physical, and intellectual aspects. More recently, the Substance Abuse and Mental Health Services Administration (SAMHSA) have added two more dimensions to Hettler’s original six and include occupational (paid employment and volunteerism) and financial (Department of Health and Human Services USA, 2016). Similar to the dimensions of wellness are the components of health of which six exist and include physical health, psychological health, social health, intellectual health, spiritual health, and environmental health (Housman & Odum, 2016). Aspects of health and wellness are similar in nature and support one another on the continuum of health and wellness (Appendix A). For the purpose of this inquiry, the terminology will be utilized in a condensed form (Table 1). The health components and wellness dimensions are facets of everyday human life and are a

necessary consideration in the holistic service provision of occupational therapy. Within the realm of treatment, OT can address any and all holistic needs of the client.

Table 1

Condensed Terminology of Components and Dimensions of Health and Wellness

Components of Health (H) Dimensions of Wellness (W)	Definition
Emotional (W)	Awareness and acceptance of a person's own feelings.
Psychological (H)	Ability to cope with life's challenges
Intellectual (H, W)	Partaking in stimulating, engaging, and creative tasks that increase knowledge or skill.
Social (H, W)	Engaging in the community and developing fulfilling relationships with others.
Spiritual (H, W)	Finding purpose and meaning behind a person's life.
Occupational (W)	Satisfaction obtained from employment.
Physical (H, W)	Need to be physically active and take care of one's health.
Environmental (H, W)	Supporting well-being through the conditions and people around a person's home, work, and leisure.
Financial (W)	Satisfaction of a person's current and future financial situation.

Note. These definitions were created by combining the definitions of the components of health and the dimensions of wellness (Housman & Odum, 2016; Hettler, n.d.; Department of Health and Human Services USA, 2016)

Provision of Services

Occupational therapists address the emotional and social domains of an individual, emphasizing a person's own influence over mind and body, and additionally recognizing that mental health is impactful in the therapy process (AOTA, 2017). In fact, positive psychosocial factors can improve a client's outcome by providing a stable ground to facilitate the occupational therapy process (AOTA, 2017). Acknowledging and accepting the situation allows a client to restore or create adaptive mental functioning. Since people are occupational beings, it is important to take into consideration what they consider to be meaningful and how history and current health status affects their involvement with functioning (AOTA, 2017). Since the holistic approach is the foundation of occupational therapy, the profession has always focused on the health of the whole person. Targeting psychosocial factors, vital aspects of health and wellness, is an essential component of the therapy process. Through the use of occupations and activities benefiting mental wellbeing, a therapist can improve a client's quality of life (AOTA, 2017). Occupational therapists have the ability to adapt the client's environment to support engagement and can educate clients on how to promote positive psychosocial factors in daily life (AOTA, 2017). Through this process, a more positive outlook, increased hopefulness, and resiliency are built, thus leading to more effective problem solving and ability to adjust to change (AOTA, 2017). One population of individuals who are affected by stress and potential occupational health and wellness concerns are full-time college & university students who generally fall within the emerging adulthood age range.

Emerging Adulthood and the College Population

Arnett (2000) is the seminal author on the framing of emerging adulthood, defined as ages 18 to 29 where the defining feature is high levels of change. In the modern age, there has been a shift in the way that people in their 20's to 30's engage in pivotal life events and occupations. The average age for marriage has been rising steadily since the 1970's (Arnett, 2000). Similar trends are seen for starting a family. In 1940, only 14% of people went on to obtain higher education (Arnett, 2000), but by 2017 that number has risen to 70% (Zorotovich & Johnson, 2019). Before, people would graduate high school, get married, move into a house, and have children. Now, more people than ever go to college or learn a trade after high school, are waiting longer to get married, have children, and settle down. Monumental changes occur from teenage years through the twenties, changes that impact the rest of a person's life. Arnett (2000) proposed the theory of emerging adulthood, a culturally constructed period, for the ages of 18 to 25. Emerging adults do not see themselves as adults or adolescents, likely due to instability in housing, career, relationships, and schooling. This age group focuses on developing responsibility, making decisions, developing oneself and forming their identity. The title of young adult assumes that the person accepts and is ready to be an adult, while many feel like they are growing into the role of adult, thus the term emerging adulthood (Arnett, 2000). College students fall into this age range and have to balance life's unpredictability and identity formation while navigating the complex rigor of higher education.

Health and Wellness: The Impact of Stress

A factor that has a large influence on mental health is stress, which is defined as "a state of physical or psychological strain which imposes demands for adjustment upon the individual"

(Corsini, 2016, p. 951). This disconnect challenges a person's ability to cope (WHO, 2013). Not only does stress affect all people regardless of gender, age, or social status, it also can lead to physical and/or mental health problems such as heart disease, depression and/or anxiety (Shearer et al., 2016). The service provision includes health promotion, establishing routines and patterns, and occupational engagement, and aims to prevent the potential harmful negative effects of stress. Occupational therapy practitioners provide services to those with physical and/or mental health needs with the goal of promoting mental wellbeing in all people, to optimize function, and maximize quality of life (AOTA, 2017). Physical health is the need to be physically active and to take care of one's health. An example of physical health promotion might include going to the gym for stress relief or to build muscle mass. For the purpose of this inquiry, psychological health and wellness will be the desired aspect of exploration. As occupational therapy knows the person as a holistic being, several facets of health and wellness impact psychological health and wellbeing. Case in point, addressing physical aspects of health and wellness also have a direct impact on the psycho emotional being. Working out and performing physical tasks releases endorphins, those feel-good chemicals that improve mood (Hou et al., 2015). Thus, even when building body mass or increasing endurance, psychological effects result from physical health.

Psychological health encompasses a client's self-awareness, problem solving, and contributions to their community (AOTA, 2017). Occupational therapists emphasize recovery and wellness through participation in specific occupations, such as instrumental activities of daily living which encompass health management and maintenance for example. Utilizing performance-based assessments, analysis of the client, and evidence-based knowledge, occupational practitioners view the client from a distinctively occupationally focused approach, potentially unearthing reasons for client challenges. OTs can also implement alternative

strategies to assist in goal attainment and are able to connect the dots between other professions and services. Since occupational therapists see beyond the immediate environment and diagnosis, they are able to assist clients to build routines that support positive mental health outcomes.

Stress and the College Student

Stress and stress-related disorders plague college campuses (Shearer et al., 2016). While stress in small quantities is beneficial, continuous chronic stress levels are a foundation for the formation of poor health, negative coping strategies, poor relationships, and declining academics (Dvořáková et al., 2017). This stress level can manifest biological and physiological changes. Stress is a universal experience shared by many students in higher education (Table 2). In a research inquiry with college students that examined how positive affect changes and mindfulness predict adaptation to stress, findings revealed that college students secreted higher levels of cortisol, which is directly correlated with stress perception, during the academic semester (Hou et al., 2015). There has been an increasing trend in stress levels and sources of stress. The NCHA national data reports that, any time in the last 12 months, 88% of students felt overwhelmed by all they had to do (ACHA, 2019). This trend has flattened, but student stress in other areas has increased. More students reported being stressed from academics, where the percentage went from 47% in 2015 to 52.7% in 2019 (ACHA). Additionally, students are increasingly reporting having multiple stressors in their lives. This increase potentially demonstrates that students are more conscientious of their environment on top of the responsibilities required of their roles as a student, friend, family member, campus community member, or significant other.

Table 2*Comparing ACHA National Stress Data by Year*

ACHA Data on Stress (National)	2015: %	2017: %	2019: %
Reported any time within the last 12 months:			
Felt overwhelmed by all you had to do	86.7	88.4	88
Within the last 12 months, any of the following been traumatic or very difficult to handle			
Academics	47	49.8	52.7
Reporting 3 or more of the items listed	50.4	51.9	57.6

Note. Data was compiled from the ACHA NCHA Spring 2015, 2017, and 2019 surveys (ACHA, 2015, 2017, 2019).

Not only is higher education stressful, but the timing of the stress can cause harmful consequences. The demands of academics, social obligations, and high school-to-college transition process correlate with the age range that mental disorder development peaks (Huang et al., 2018). More stress can build in anticipation of the future. After graduation, students begin the process of entering early to middle adulthood which has a more diverse array of stressful occurrences marked by a decline in mental and physical well-being (Hou et al., 2015). Since college occurs around the age range that most mental disorders are developing, this can exacerbate the effects of the empirically acknowledged middle adulthood decline.

Unsurprisingly, stress has been noted as a risk factor by researchers that not only increases the experience and symptoms of mental disorders, but also the number of disorders a person has (Hou et al., 2015; Huang et al., 2018; Hubbard et al., 2018; Shearer et al., 2016). Mental

disorders can derail a person's life, resulting in impairments to numerous domains including self-care (activities of daily living [ADL] occupation), social (environment), work and home life (occupations), and a person's sense of self (Huang et al., 2018).

Other than academics, stress can also be related to career-related issues, death of a family member or friend, family problems, intimate relationships, other social relationships, finances, health problems of a family member or partner, personal appearance, personal health issues, sleep difficulties, among other factors (ACHA, 2015, 2017, 2019). Interestingly, Hubbard et al. (2018) found that, despite the high risk of stress and mental health problems, students exhibit an alarmingly low rate of help-seeking behavior, behaviors where a person is in psychological distress and receives professional assistance, as only eight to 38 percent reached out for assistance from professionals. Additionally, these researchers found eight academic performance related stressors which included not having enough time, future anxiety, pressure to succeed, time management, life balance, academic difficulties, test anxiety, and pressure to attend college (2018). In a research study of college students that examined cortisol levels, results showed the hypothalamic- pituitary- adrenocortical (HPA) axis, known for the sympathetic "fight or flight" response, could manifest stress into a physical reaction through neuroendocrine response (Hou et al., 2015). This physical stress can bring about negative affect and emotional reactions, such as anger, anxiety, or depression. Additionally, significant positive correlations between all stressors, all other symptoms, and all mental health symptoms in women and with a few exceptions in men were also discovered (Hubbard et al., 2018). Hubbard et al. researched 564 students ages 18 to 24, 67.2% were female and 57.4% were white. The researchers were interested in discovering categories of stressors and how they related to mental health issues, the difference between those who reached out for help and their stressors and mental health symptoms and seeing what

stressors and mental health symptoms nonhelp-seekers experienced. Hubbard et al. found that interpersonal and intrapersonal stressors seem to impact a majority of college students and often manifest mental health symptoms, including anxiety, depression, eating disorders, and overall distress. Despite these negative and life-altering effects, students are still reluctant to seek help despite stigma reduction and increased willingness to ask for help over the past few years (Hubbard et al., 2018).

Mental Health of the College Student

From an occupations perspective, college may be seen as a chance to have fun, grow, learn, find yourself, and establish life-long friends, all while positioning yourself for employment, internship, or graduate school acceptance (Hill et al., 2016). However, those currently in college are aware of the darker undertones of college life that decrease overall health and well-being such as mental breakdowns, panic attacks, sleep deprivation, exhaustion, anxiety, and stress (Nisa & Nizami, 2014).

College mental health trends over the past four years demonstrate the increasingly common occurrence of mental health disorders and symptoms. The American College Health Association (ACHA) is an organization of college health professionals with the common goal of promoting student health and wellness. The ACHA surveys member institutions' students across the nation twice a year with the National Collegiate Health Assessment (NCHA). These assessments cover demographic information, health, disease and injury prevention, academics, safety and violence, illicit substance use, sexual behavior, nutrition and exercise, mental health, and sleep. The data details areas of concern for this group (Table 3) from the Spring 2015, 2017, and 2019 Undergraduate Student Reference Group. According to the most recent NCHA survey

(2019), 57.6% of college students reported more than average to tremendous levels of stress (ACHA, 2019). Dvořáková et al. (2017) noted that the first year of college is not only correlated in mental and physical health declines, but also decreases in life satisfaction (2017). The researchers studied 109 first year undergraduate students from a large, public institution. The student's age range was between 18 and 19, 66% female, and 50% Caucasian (Dvořáková et al., 2017). The researchers hypothesized that the students who participated in the mindfulness program would have an increased intrapersonal and interpersonal awareness, better outcomes in mental health and wellness, and more positive health behaviors. The results suggested that implementing a mindfulness program could work as a preventative measure against stress related declines in health.

If mental disorders are not treated, students could suffer from diminished self-esteem and academic performance, social withdrawal, and negatively impacted occupational and lifestyle tract (Huang et al., 2018). Huang et al. (2018) performed a meta-analysis of randomized control trials and interventions in institutions of higher education pertaining to mental disorders. The researchers utilized 110 studies and interventions and found on a college campus and found that specialty interventions that targeted anxiety and depression had high effect sizes, verifying their effectiveness. Additionally, through the research process, Huang et al. noted that 75% of people diagnosed with a mental disorder had their first onset by age 25 (2018). That onset occurs directly in the age range of a college student, during emerging adulthood.

According to the NCHA national data, students are already experiencing a decrease in self-esteem which is impacting their ability to participate in their role as a student. Over the past few years, a disturbing trend is emerging. These students are reporting an increase in loneliness, exhaustion, hopelessness, and anxiety. Additionally, an increased number of students are also

being treated for mental disorders, which is demonstrated by the decreasing trend of “receiving no treatment” which has gone from 75.7% in 2015 to 67.1% in 2019 (ACHA, 2015, 2019). This means that there has been an increase in treatment for mental health from 24.3% in 2015 to 32.9% in 2019. While it is positive to see an increase in students receiving treatment, it also suggests that there could be more students undiagnosed and untreated for disorders. Additionally, it could also suggest that there is an overall increase in the number of students who have mental disorders.

Table 3

Comparing NCHA National Mental Health Data by Year

NCHA Data on Mental Health (National)	2015: %	2017: %	2019: %
Reported anytime within the last 12 months:			
Felt things were hopeless	49.5	52.2	57.5
Felt very lonely	60.5	64.4	67.6
Felt exhausted (not from physical activity)	82.4	84.8	85
Felt overwhelming anxiety	57.7	62	66.4
In the past 12 months, have been diagnosed or treated by a professional			
No treatment	75.7	70.4	67.1
Anxiety	15.8	20.9	24
Depression	13.2	17	20
Both anxiety and depression	9.8	13.5	16.6

Note. Data was compiled from the ACHA NCHA Spring 2015, 2017, and 2019 surveys (ACHA, 2015, 2017, 2019).

The Population at a Small, Private Liberal Arts School in the Northeast

While the national collegiate data is beneficial for college trending, specific college/university data is also helpful in context. The institution of higher education in this research study administers the NCHA every other spring semester on odd years to its undergraduate students (ACHA [de-identified college/university], 2015, 2017, 2019, p. 19).

Table 4

Comparing De-identified College ACHA Mental Health Data by Year

NCHA Data on Mental Health (De-identified)	2015: %	2017: %	2019: %
Reported anytime within the last 12 months:			
Felt things were hopeless	53.8	54.5	53.8
Felt very lonely	67.9	64.7	65.9
Felt exhausted (not from physical activity)	87.8	86.8	81.9
Felt so depressed that it was difficult to function	40	40.4	40.9
Felt overwhelming anxiety	64.7	62	66.8
In the past 12 months, have been diagnosed or treated by a professional			
No treatment	68.4	67.6	62
Anxiety	22.5	21.9	27.9
Depression	17.7	20.1	21.4
Both anxiety and depression	15.2	15.5	16.5

Note. Data was compiled from the de-identified institution's ACHA NCHA Spring 2015, 2017, and 2019 surveys (ACHA [de-identified], 2015, 2017, 2019).

Results pertaining to mental health from the de-identified institution demonstrates exhaustion, loneliness and being overwhelmed to be shared experiences (Table 4). These results follow similar trends to the national NCHA data. The percentages of students who reported any time in the last 12 months that they felt things were hopeless, felt very lonely, or felt exhausted were within a few percent of each other. The national and de-identified data demonstrated similar trends in overwhelming anxiety. Additionally, the de-identified institution has over 5% fewer students receiving no treatment for any mental disorder. This demonstrates that this institution of higher education aligns similarly to the national college student experience while posing an apparent higher percentage of students with diagnosed mental disorders.

Table 5

Comparing De-identified College ACHA Stress Data by Year[2]

NCHA Data on Stress (De-identified)	2015: %	2017: %	2019: %
Reported anytime within the last 12 months			
Felt overwhelmed by all you had to do	91.6	91.2	88.7
Within the last 12 months, any of the following been traumatic or very difficult to handle			
Academics	43	45.3	44.5
Reporting 3 or more of the items listed	50.2	48.6	54

Note. Data was compiled from the de-identified institution's ACHA NCHA Spring 2015, 2017, and 2019 surveys (ACHA [de-identified], 2015, 2017, 2019).

Results pertaining to stress from the de-identified college/university further established being overwhelmed in areas beyond just academics (Table 5). While the de-identified institution

reported a decline in the percentage of students that felt overwhelmed, this percentage is higher than the national data. Additionally, while the percentage of students who are reporting 3 or more stressors are lower than the national percentage, the de-identified institution is seeing an increase in the percentage of student responses in this question.

Intervention Approaches

Considering the stress on student's mental health and physical wellbeing, there are existing promotion, prevention, and interventions that researchers have evaluated. A meta-analysis which examined different mindfulness programs found that programs that were guided and held many sessions over a longer period of time were more effective than shorter, non-guided programs (Huang et al., 2018). Shorter term, unguided interventions had smaller effect sizes compared to longer term, guided interventions. This same relationship was found by *The Center for Collegiate Mental Health* (2017), whereby longer interventions allowed for reflection and multiple opportunities for trial and error before regrouping (Huang et al., 2018). In a research study evaluating mindfulness training and animal-assisted therapy in college students, findings showed that students who participated in mindfulness training had higher levels of heart rate variability, which is a measure of how the body modifies a stress response. Additionally, mindfulness made the participants more self-aware. Even in a short amount of time, positive results of mindfulness training have been seen in as little as four sessions (Shearer et al., 2016). Mindfulness is one proven intervention which has been used to combat stress.

Mindfulness has been defined in a variety of different ways in the research. Most studies agree that it encompasses a non-judgmental attitude along with staying in the present moment (Caldwell et al., 2010; Hou et al., 2015; Kerrigan et al., 2017; Shearer et al., 2016). Additionally,

mindfulness seeks to improve interpersonal and intrapersonal awareness (Dvořáková et al., 2017). Others discuss Buddhist roots of Eastern practices and acceptance of all feelings, pleasant, unpleasant, or other (Kerrigan et al., 2017), while still others identify mindfulness as an adaptive coping strategy (Shearer et al., 2016). The most common mindfulness program in the research was mindfulness-based stress reduction (MBSR) from Kabat-Zinn which is designed to increase self-awareness, overall health, and healing (Kerrigan et al., 2017). The effects of mindfulness practices are intended to change a person's mindset through the use of a non-judgmental stance pertaining to the self and past actions and endeavoring to let negative emotions go. To replace these, a caring attitude focusing on sensation, thought, and emotion is substituted (Dvořáková et al., 2017). These new feelings are intended to manifest stress management and emotional regulation skills. This idea of stress-buffering also includes emotional wellbeing, improved relationships, and positive health behaviors (Dvořáková et al., 2017).

Koru Mindfulness is another mindfulness program that is MBSR adjacent (Rogers, 2013). Koru is an abdominal breathing, guided imagery, and insight meditation program designed for the emerging adult population and is conducted in four sessions (Greeson et al., 2014). The goals of Koru are similar to MBSR. The program provides methods to quickly decrease stress and anxiety, encourages the growth of positive qualities such as self-compassion, and provides a person with motivation to continue practicing. Greeson et al. (2014) found that Koru was similar to many adult focused mindfulness programs as it significantly lowered perceived stress and increased sleep quality, mindfulness, and self-compassion. Koru had a high retention rate, likely due to the brevity of the intervention length. The study also postulated that, using Koru, emerging adults can develop healthier coping mechanisms to decrease negative self-talk.

In a qualitative study at a high ranked university that examined the practicality and acceptance of a pilot MBSR program, findings showed that mindfulness meditation has positive effects on depressive and anxiety symptoms along with improving overall quality of life (Kerrigan et al., 2017). Movement based mindfulness practices, such as yoga, Pilates, Tai Chi, and Gyrokinesis also bring about lower psychological distress (Caldwell et al., 2010; Huang et al., 2018; Kerrigan et al., 2017). Another study of movement-based courses found that yoga increased mindfulness more than simple seated methods and participants also experienced a decrease in stress levels (Caldwell et al., 2010). In a research study evaluating the effect of mindfulness on student stress, mindfulness also brought about an increased awareness of self through self-regulation, self-efficacy, mood, and a decrease in stress perception. The mindfulness intervention had statistically significantly lower state anxiety compared to other groups in the study. Mindfulness, the researchers found, has been correlated with numerous positive traits such as openness, emotional intelligence, self-esteem, optimism, and life satisfaction (Shearer et al., 2016). Another research study within the college population that examined the practicality and effectiveness of MBSR on first year student's wellness discovered that those in the mindfulness intervention focused on emotional regulation reported higher quality of life and lower depression, anxiety, and sleep issues compared to the control group. The program had high attendance, and students even rated the program highly and would recommend it to others. The approach to this study was to give students healthy methods to confront challenges associated with the college experience, creating a positive cycle that aids students in decision making (Dvořáková et al., 2017).

In a qualitative, survey based inquiry with college students that looked at four domains (intrapersonal, interpersonal, performance, and financial) that cause stress, findings isolated

specific identified stressors that significantly contribute to a student's mental health status such as interpersonal and intrapersonal stressors, which predicted anxiety, depression, substance use, and eating disorders (Hubbard et al., 2018). While the researchers found interventions and programming on body image and nutrition, they also found that there was a lack of programming about confidence, self-esteem, and relationships, which are parts of the interpersonal and intrapersonal domains (Hubbard et al., 2018). Hou et al. (2015) evaluated cortisol levels in students before, during, and after an exam in both a mindfulness group and a control group. The researchers found that mindfulness increases were associated with a decrease in cortisol secretion and anxiety symptoms. Interestingly, those who quickly depressed the initial fight or flight reaction from the hypothalamus, pituitary, and adrenal (HPA) axis activation had notable positive mindfulness changes (2015). Yet another college-based inquiry that examined stressors found that academic stress such as lack of time for studying, leisure, and rest could cause strain and increase anxiety and depressive symptoms in students (Shearer et al., 2016). Stress not handled correctly led to a decrease in college adjustment and declines in mental and physical health and wellbeing. Those under more stress were more likely to rely on negative coping strategies involving drugs and alcohol. Low levels of mindfulness were linked to increased severity of mental disorder symptoms, anxiety, depression, problems regulating emotions, and negative affect. Most interestingly, the researchers found that college students of any gender tended to utilize emotion related coping strategies, thus encouraging future research into adaptive coping strategies involving emotion (Hubbard et al., 2018).

Wellness Offerings and Interventions at The Proposed Research Institution

While there are studies on student's knowledge of health and wellness (Shearer et al., 2016), my study evaluates the use and motivators for students who partake in a college's

wellness offerings and activities. The de-identified institution has a variety of wellness offerings, such as a gym, fitness classes, student health services, off campus health services, a gym relaxation room, private counseling, group counseling, psychiatrist services, the counseling services relaxation room, intramural sports, division sports, a dance club, and the chaplain's office. The question exists, from this pool of services, what are students using and what are their primary and secondary motivators for participating in these wellness offerings?

Summation of Literature Review

Student motivators for participation in wellness are hugely beneficial to learn for occupational therapists as a person is the only one who knows their motivation and reasoning for participation. Since the emerging adult population is all about identity formation, evolving, and changing, the activities they choose and stick to could tie into their adult development and growth into the person they want to become. Additionally, for an institution, a study such as this can influence the development of new programs, expand the current programs, and allow the institution to promote these wellness offerings in a way that appeals to emerging adults.

Students in higher education are stressed and thereby vulnerable to experiencing anxiety and depression. Local statistics of college/university students follow the NCHA trends, appearing stressed most about social interactions and academics, while demonstrating a decreased likelihood of seeking assistance to help them cope. Occupational therapy is a holistic, client centered profession that focuses on helping people achieve what they need and want to do and is perfectly suited for a mental health intervention per domain tenets from American Occupational Therapy Association, which advocate for therapist's skillset to be used in this health arena. It is with an occupational health lens that this work endeavors to discover what

students are doing to alleviate stress. Many interventions have been framed as useful for stress reduction and well-being of the college student. Help-seeking interventions include counseling, group therapy sessions, use of the chaplain's office, and visits to the campus nurse. Mindfulness based interventions include stress reduction (MBSR), Koru Mindfulness, movement programs, and group therapy. Physical interventions include dance clubs, intramural sports, gym group and individuated classes.

The problem isolated in this instance is the prevalence of stress among the college age, emerging adult population and the lack of research on their perception and use of wellness interventions. A survey was designed to examine psychosocial wellness, use of wellness interventions, when the interventions are used, and perceived benefits of the interventions. The purpose of this quantitative inquiry is to better understand what students are utilizing to help cope with stress.

Research questions include:

- (1) What are the components and dimensions of wellness that motivate emerging adults to use wellness interventions?
- (2) What campus programs/ activities do subjects report using?
- (3) What is the frequency of use of campus programs/ activities?
- (4) What are the most frequently endorsed category of motivators that are used by students?

Methodology

In this methodology I will discuss the need for approval from the Internal Review Board (IRB) for my research with human subjects. Participant selection and inclusionary/exclusionary

criteria will be detailed. Next, elaboration on the quantitative method and data collection measure will be discussed. Finally, data analysis techniques will be detailed.

This study requires the submission of the project to the Institutional Review Board (IRB), which evaluates proposed research studies that involve either human or animal participants (Digiacinto, 2019). An IRB is required to have human research subjects participate in a study, survey, or any other method of research, and is meant to protect the rights of the participants in the study (Digiacinto, 2019). For my study, an expedited IRB was approved from Elizabethtown College prior to recruitment and execution of the study.

The purpose of this quantitative inquiry was to evaluate the utilization of health and wellness strategies of full-time college students in the emerging adult age range. This study utilized a quantitative survey method, which involves research data expressed as numbers (Haertel, 2010) as the research methodology. Direct interviews would not only take significantly longer, but it would be highly likely that I would get fewer responses than I would get through a survey. For my data, quantitative surveys were the best method to analyze the categories of wellness in which the emerging adult population participates. I used descriptive statistics and visual analysis to make sense of the data. Additionally, this method worked best for the way the survey was designed.

The purpose of the survey research was to see what students on a small college campus are using to promote wellness. My 67-question survey was shaped by survey construction methodology from Creswell (2009) and from the NCHA survey. The questions were arranged by demographics, then each section by wellness intervention. Microsoft Forms was utilized to create the survey and to also manage the data in spreadsheets to create descriptive statistics, and visual

forms demonstrating student participation in wellness interventions. If the student did not participate in a given aspect of health/wellness, then the survey automatically took the student on to the next section. This is using a technique called filter bias, as a person who has not participated in a particular wellness intervention will not be asked further questions pertaining to the topic (Habib et al., 2014). There were 13 wellness interventions participants were asked about: gyms, fitness classes, student health services, off campus health services, a gym relaxation room, private counseling, group counseling, psychiatrist services, the counseling relaxation room, intramural sports, division sports, a dance club, and the chaplain's office. In each section following the participation question, the survey then asked how frequently each student participated in each wellness intervention, followed by two questions on wellness motivators, their primary and secondary reasons for participating (Appendix B). The survey can be found at the end of this paper. These questions had the same 9 wellness categories of emotional, psychological, intellectual, social, spiritual, occupational, physical, environmental, and financial, in the same order from which to choose (Appendix B). The final two questions allowed students to submit any other clubs or jobs that they participate in along with any leadership positions that they hold.

The opening demographic questions were informed by the NCHA survey and Research Design by Creswell (2009). The order of the survey questions was designed by order bias, where participant demographics are asked first, followed by the questions that pertain to the topic of the survey (Habib et al., 2014). Questions such as preferred identified gender, major, and second major were nominal, whereas the categorical values were used to identify participants (Creswell, 2009). Questions such as college entry year, average number of hours of sleep, age, and average number of course credits were ordinal, meaning they could be ordered by number (Habib et al.,

2014). The question stating “how often would you say things were difficult or overwhelming to manage” was an interval scale, where the question contained properties of both ordinal and nominal questions. This would make the answer “daily” a 10 while “not at all” would be a 1.

The population of the survey send was to the seniors and juniors of a de-identified institution in Pennsylvania. Inclusionary criteria required participants to be: (1) consenting, (2) English-speaking, (3) undergraduate students, (4) between the ages of 18 and 29, and (5) taking more than 12 credits. Exclusionary criteria were applied if: (1) the student was under the age of 18, (2) a part-time student, or (3) a graduate student. Informed consent was given via participation in and completion of the survey. If participants decide at any point to discontinue participation, they could opt out of the survey at any time. Microsoft Forms only accepts completed forms; thus the 114 responses were all complete. Group counseling was the only wellness intervention that received no data aside from indications that the service was not utilized.

Participants in the study ranged in age from 18 to 23, which fell within what Arnett (2000) termed emerging adulthood, 75% of respondents were female while 20% were male. Participants initially included students who would graduate in either May, August, or December of the year 2020, but in subsequent recruitment emails this was expanded to include students graduating in 2021 as to bolster the participant numbers.

Study Procedures and Data Collection

The survey was sent by a faculty surveyor at the de-identified institution to facilitate confidentiality. Participants were given from March 11th, 2020 to March 30th, 2020 to fill out the survey. The first send to participants who were to graduate in 2020 was sent on March 11th.

A reminder email was sent out on March 17th. The final send on March 23rd contacted only students that intended to graduate in 2021. The number of respondents obtained during each send was 33, 22, and 59 with the final total being 114. The overall response rate was 15.3%. Response rates for surveys can be as low as 2% and as high as 60 to 70% (Creswell, 2009). The 67-question survey took between 1 minute and 40 seconds to 24 minutes to complete with an average length of 8 minutes. All data was retained and none of the 114 data points were thrown out. Surveys were conducted online through school email addresses and as previously stated, the survey was hosted on Microsoft Forms and conducted through school email addresses; the resulting data, which was password protected and accessible only by the primary investigator, was analyzed through Microsoft Excel. This proved beneficial as the de-identified institution moved to remote, online learning due to the COVID-19 pandemic. The online nature of the survey allowed the study to continue despite the institution's closure.

A survey was selected as the method of data collection due to its ease of access while also utilizing the fewest resources out of any available method. The survey was efficient, brief, and could be completed on the participant's own time. The most important factor was the convenience of taking the survey on any electronic device with internet access either on or off campus. The de-identified college suspended courses on March 12th due to outlying circumstances and sent most students home by March 15th, but the utilization of an online survey instead of a paper survey allowed the study to continue as planned. Additionally, this new pool of research knowledge will greatly benefit the scientific community as a whole as it gives insight into the reasons behind emerging adult wellness participation.

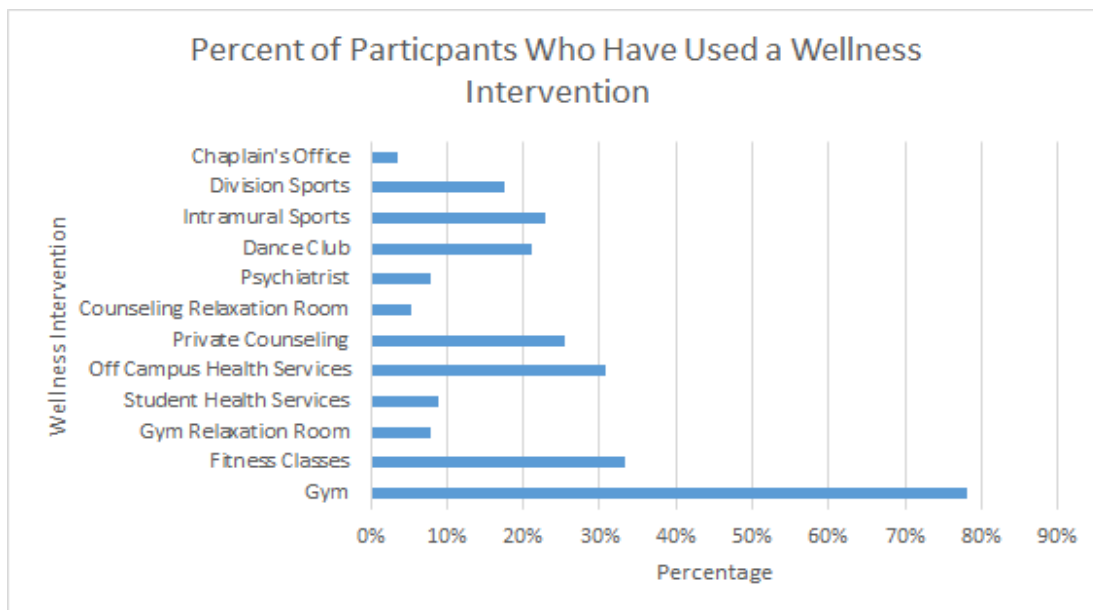
Results

What Campus Programs/ Activities do Subjects Report Using?

Students reported use of all campus wellness interventions except for group counseling. The wellness intervention with the highest participation was the gym with 78% of student usage, and the smallest was the chaplain's office with 3.5% of student involvement (Figure 1). The mean participation for this data set was 21.94%, Emerging adults participate mostly in the gym, followed by fitness classes (33%), off campus health services (31%), and private counseling (25%). The least used interventions were student health services (9%), the gym relaxation room and psychiatrist (8%), the counseling relaxation room (5%), and the chaplain's office (4%). Most students chose coping strategies that were physical in nature, followed by mind. Mind and body coping strategies are often the two most recognizable health and wellness interventions.

Figure 1.

Percent of Participants that have Used Each Wellness Intervention

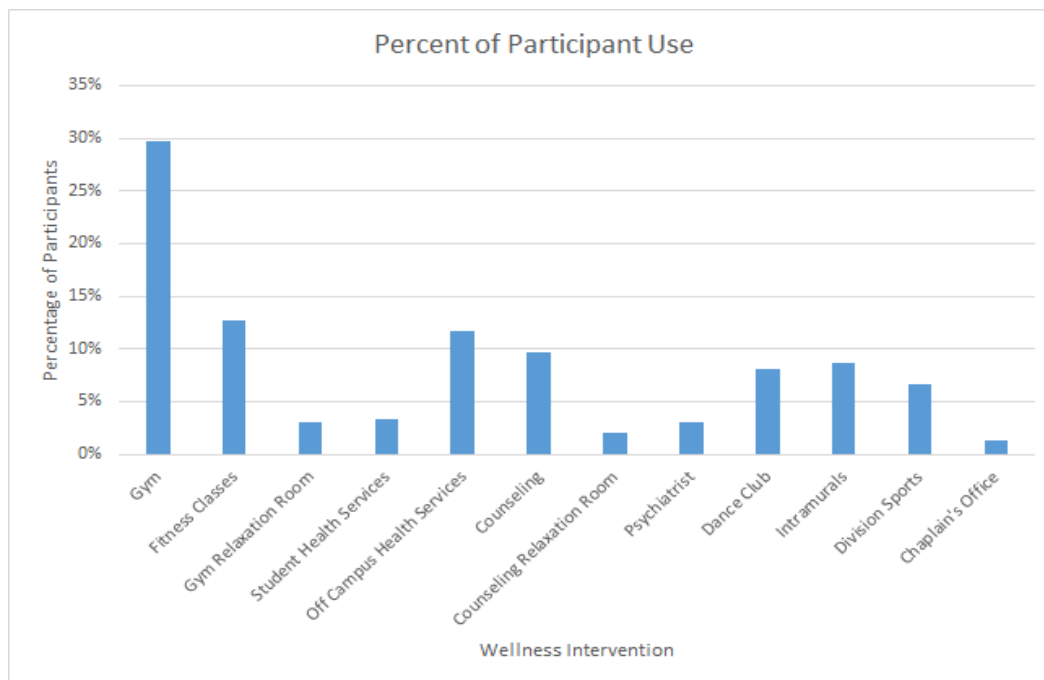


What is the Frequency of Use of Campus Programs/ Activities?

Frequency of participation varied by wellness intervention. Overall, the wellness intervention participated in the most was the gym at 30%, followed by fitness classes at 13%, off campus health services at 12%, counseling at 10%, intramurals at 9%, the dance club at 8%, division sports at 7%, the gym relaxation room, psychiatrist, and student health services at 3%, the counseling relaxation room at 2%, and the chaplain's office at 1% (Figure 2).

Figure 2.

Percent of the Survey Population that Participated in Each Wellness Intervention

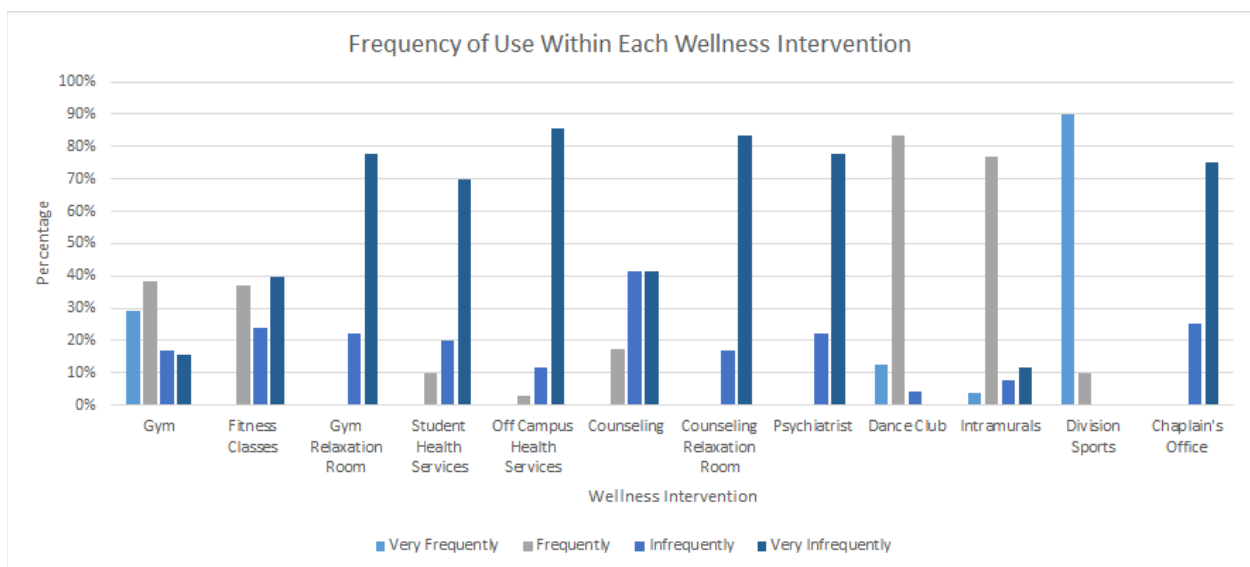


Survey responses were grouped into four categories, very frequently which combined daily and every other day, frequently which combined a few times a week and weekly, infrequently which combined a few times a month and monthly, and very infrequently combined a few times a year and yearly (Figure 3). Only four wellness interventions were used very

frequently. These were division sports at 90%, the gym at 29%, the dance club at 13%, and intramural sports at 4%. Wellness interventions that were utilized frequently include the dance club at 83%, intramural sports at 77%, the gym at 38%, fitness classes at 37%, counseling at 17%, division sports and student health services at 10%, and off campus health services at 3%. Wellness interventions that were used infrequently include counseling at 41%, the chaplain’s office at 25%, fitness classes at 24%, the gym relaxation room and psychiatrist at 22%, student health services at 20%, the counseling relaxation room and the gym at 17%, off campus health services at 11%, intramural sports at 8%, and dance club at 4%. Wellness interventions that were utilized very infrequently were off campus health services at 86%, counseling relaxation room at 83%, gym relaxation room and psychiatrist at 78%, chaplain’s office at 75%, student health services at 70%, counseling at 41%, fitness classes at 39%, the gym at 16%, and intramural sports at 12%.

Figure 3.

Frequency of Use Within Each Wellness Intervention, Out of 100%.



The gym had an interesting spread, in total all four categories were well represented. Overall, the “frequent” categories had 67% while the “infrequent” categories had 33%. The only other wellness intervention to have all four categories was intramurals, where the “frequent” categories had 81% of responses while the “infrequent” categories had 20% of responses. The categories with most of the spread toward or entirely in the frequent categories were division sports with 100%, dance club with 96%, intramurals with 81%, and the gym with 67%. The categories with most of the spread toward or entirely in the infrequent categories were the gym relaxation room, counseling relaxation room, psychiatrist, and chaplain’s office with 100%, off campus health services with 97%, student health services with 90%, counseling with 82%, and fitness classes with 63%.

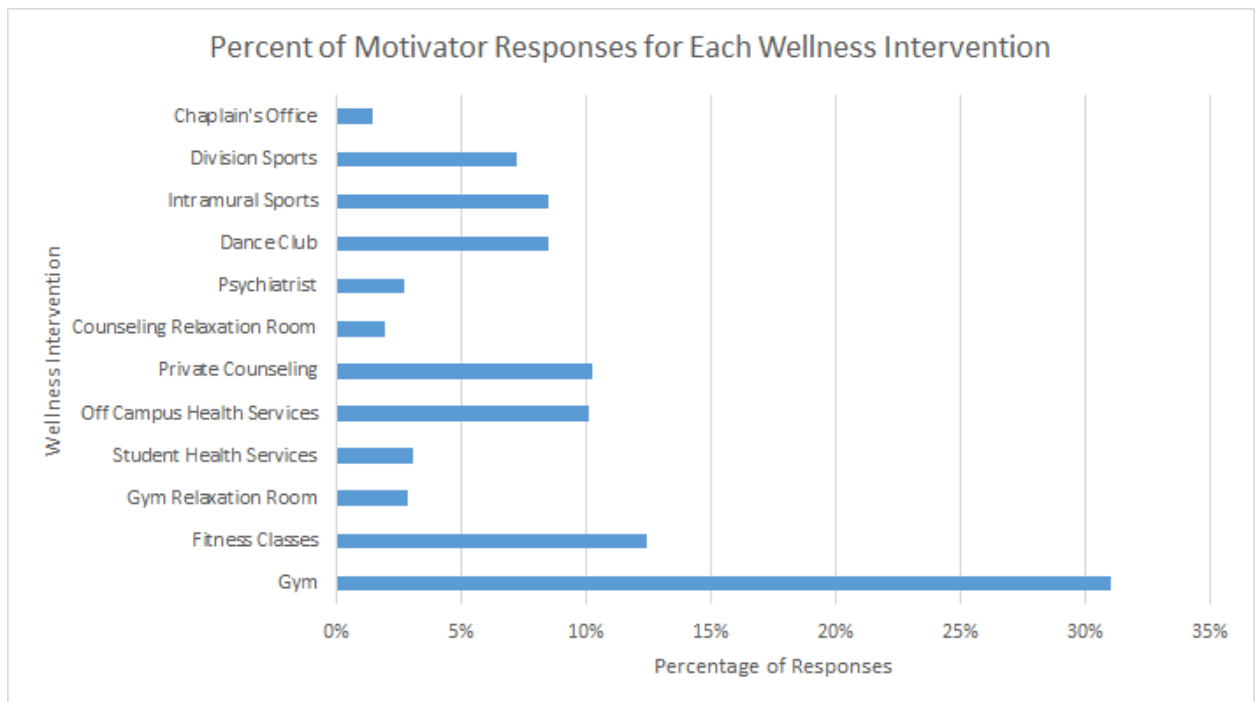
What are the Components and Dimensions of Wellness that Motivate Emerging Adults to Use Wellness Interventions?

Evaluating the total responses to “which of the following most closely resembles your primary motivator for using this service” and “Which of the following, if any, most closely resembles your secondary motivator” garnered 555 motivators. In total, among both primary and secondary wellness motivators, the wellness intervention to garner the most responses was the gym. Overall the numbers appear similar to the numbers from Figure 2 only with one key difference. Off campus health services, which accounts for 12% of student participation, and counseling, which accounts for 10% of student participation, switch in order (Figure 4). Counseling accounts for 10.3% of motivator responses while off campus health services accounts for 10.1% of motivator responses. The slight increase of total motivators for private counseling over off campus health services is interesting, as it could be denoting that private

counseling provides more than one wellness benefit, and that students participate in counseling for more than one type of wellness benefit.

Figure 4.

The Percent of Responses for Each Wellness Intervention by Number of Motivators.

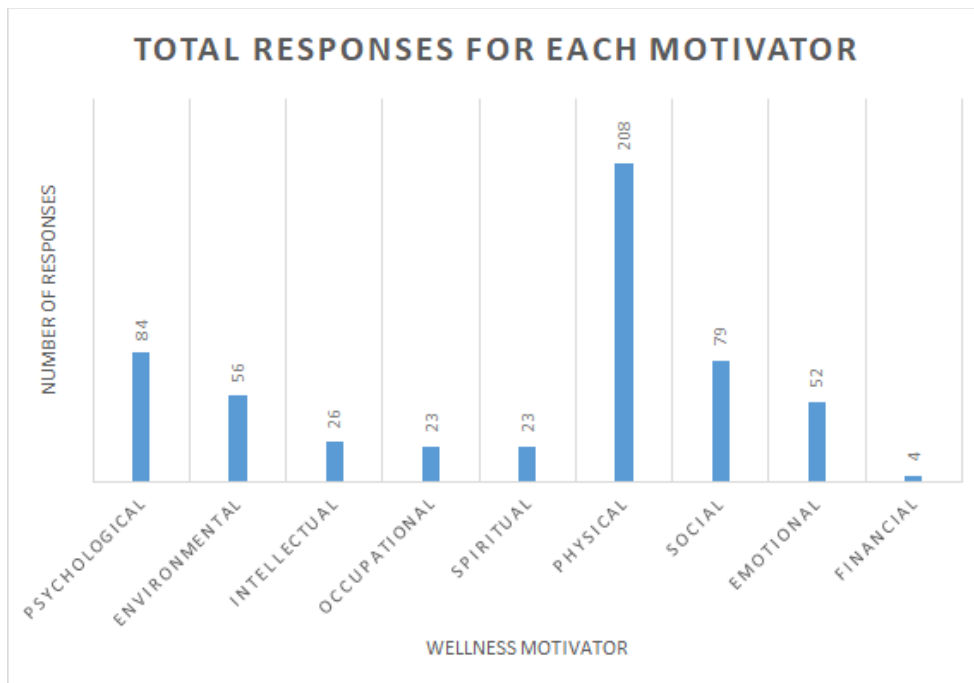


Solely evaluating the wellness motivators from the 114 students that participated in 299 wellness interventions that selected 555 wellness motivators demonstrates that physical wellness was by far the most motivating reason for participation with 208 responses (Figure 5). Physical wellness is 11 responses shy from matching the exact number of responses of the 3 next most selected wellness motivators combined. These are psychological wellness with 84 responses, social wellness with 79 responses, and environmental wellness with 56 responses. The next most selected wellness motivator was emotional wellness with 52 responses. The least selected motivators were intellectual wellness with 26 responses, occupational and spiritual wellness with

23 responses each, and financial wellness with 4 responses. The vast majority of students (37.4%) participated in physical wellness interventions, followed by psychological interventions (15.4%).

Figure 5.

Total Responses for Each Wellness Motivator.



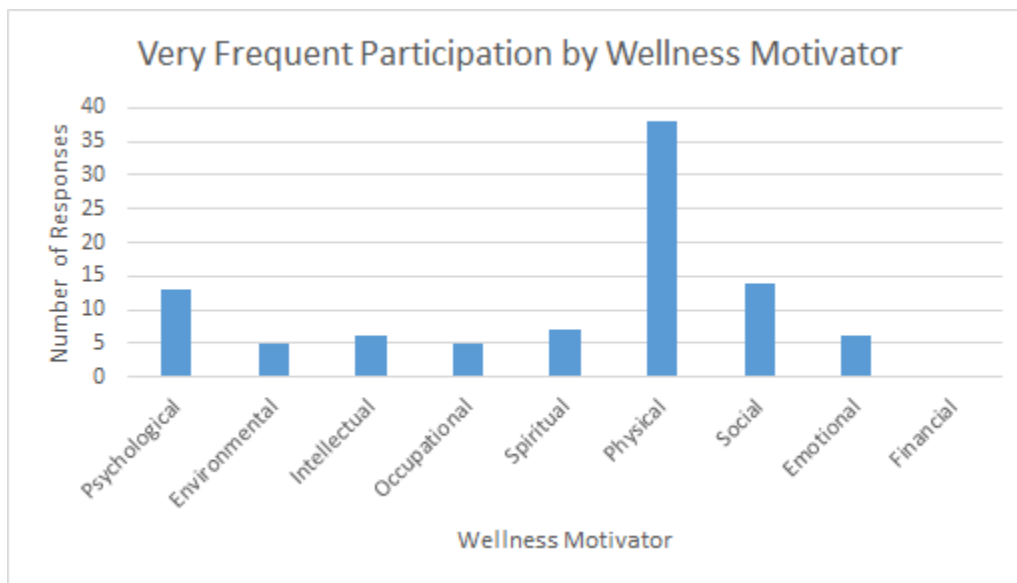
What is the Most Frequently Endorsed Category of Motivators that are Used by Students?

Breaking down the results further into their frequency of use reveals some data of interest. For very frequent participation, which accounted for 94 student responses, or 16.9% of the 555 responses, found that physical wellness to be the most notable motivator (Figure 6). Physical wellness had 38 responses accounted for 40.43% of all very frequent responses. Other motivators with higher response rates include social wellness with 14 responses which accounted for 14.89% of very frequent responses and psychological wellness with 13 responses which

accounted for 13.83% of very frequent responses. Other wellness motivators with lower response rates in the very frequent response include spiritual wellness with 7 responses, or 7.45% of responses, emotional and intellectual wellness with 6 responses, or 6.38% of responses, environmental and occupational wellness with 5 responses, or 5.32% of responses, and financial wellness with no responses.

Figure 6.

Very Frequent Participation by Wellness Motivator

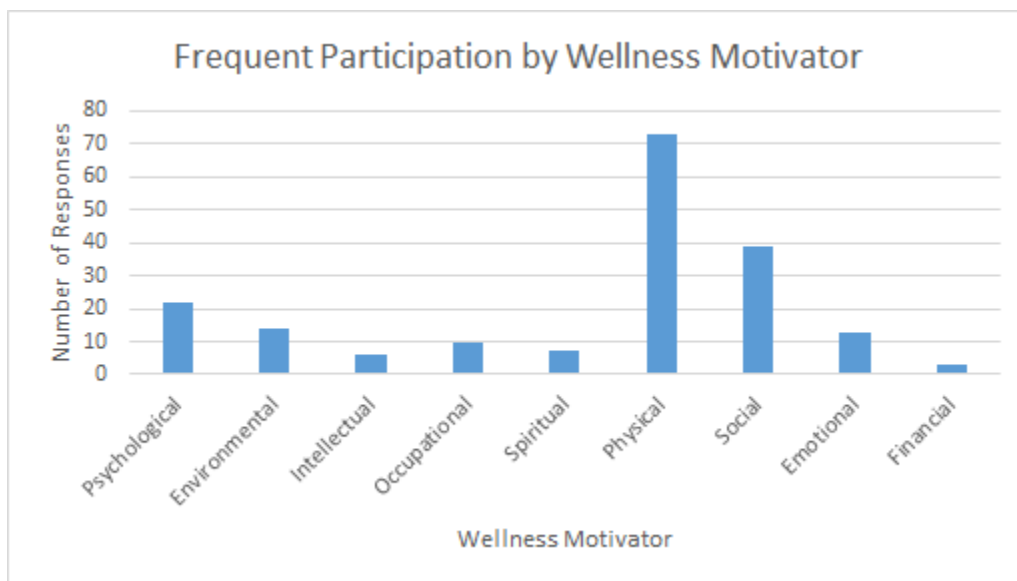


For frequent participation, which accounted for 187 student responses, or 33.69% of the 555 responses, found that physical wellness to be the most notable motivator (Figure 7). Physical wellness had 73 responses which accounted for 39.04% of all frequent responses. Other motivators with higher response rates include social wellness with 29 responses which accounted for 20.86% of frequent responses and psychological wellness with 22 responses which accounted for 11.76% of frequent responses. Other wellness motivators with lower response rates in the frequent response include environmental wellness with 14 responses, or 7.49% of responses,

emotional wellness with 13 responses, or 6.95% of responses, occupational wellness with 10 responses, or 5.35% of responses, spiritual wellness with 7 responses, or 3.74% of responses, intellectual wellness with 6 responses, or 3.21% of responses, and financial wellness with 3 responses, or 1.60% of responses.

Figure 7.

Frequent Participation by Wellness Motivator

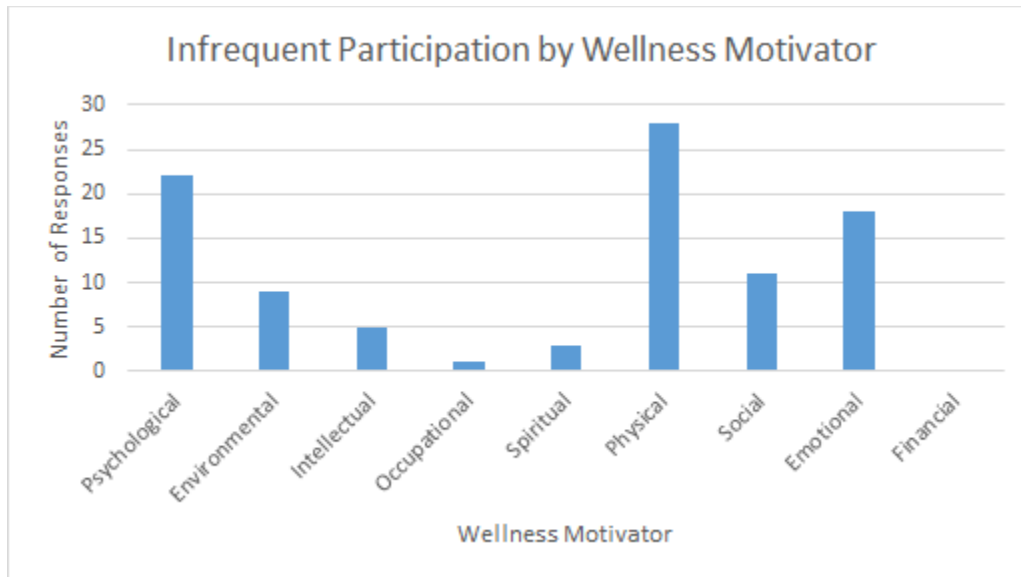


For infrequent participation, which accounted for 97 student responses, or 17.47% of the 555 responses, found that physical wellness to be the most notable motivator followed closely behind by psychological wellness (Figure 8). Physical wellness had 28 responses which accounted for 28.87% of all infrequent responses and psychological wellness had 22 responses which accounted for 22.68% of all responses. Other motivators with higher response rates include emotional wellness with 18 responses, or 18.56% of all responses, social wellness with 11 responses, or 11.34% of responses, and environmental wellness with 9 responses, or 9.28% of responses. Other wellness motivators with lower response rates in the infrequent response

include intellectual wellness with 5 responses, or 5.15% of responses, spiritual wellness with 3 responses, or 3.09% of responses, occupational wellness with 1 response, or 1.03% of responses, and financial wellness with no responses.

Figure 8.

Infrequent Participation by Wellness Motivator



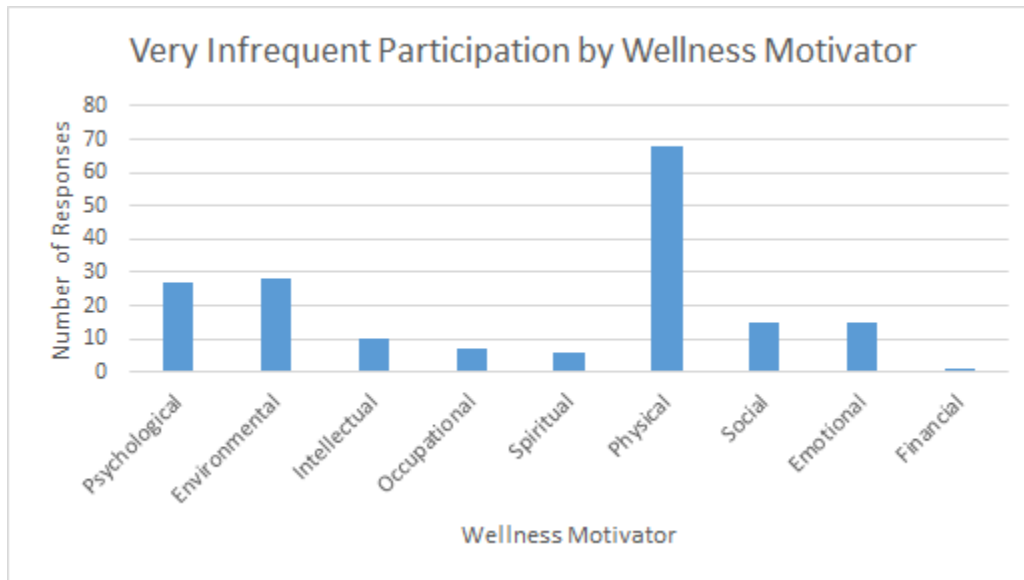
For very infrequent participation, which accounted for 177 student responses, or 31.89% of the 555 responses, found physical wellness to be the most notable motivator (Figure 9).

Physical wellness had 68 responses which accounted for 38.42% of all very infrequent responses. Other motivators with higher response rates include environmental wellness with 28 responses, or 15.82% of responses, psychological wellness with 27 responses, or 15.25% of responses, and social and emotional wellness with 15 responses each, or 8.47% of responses. Other wellness motivators with lower response rates in the very infrequent response include intellectual wellness with 10 responses, or 5.65% of responses, occupational wellness with 7

responses, or 3.95% of responses, spiritual wellness with 6 responses, or 3.39% of responses, and financial wellness with 1 response, or 0.56% of responses.

Figure 9.

Very Infrequent Participation by Wellness Motivator



Certain wellness interventions can lend themselves to varying frequencies of participation. Additionally, this means a student may participate in a certain experience either whenever it is offered, whenever it is convenient for them, or whenever it becomes available.

Clubs, Jobs, and Leadership Positions

Of the 114 participants, 86 of them were involved in other clubs and jobs, which accounted for 76% of the total responses. In total, these students participated in 266 clubs and jobs. That's 33 fewer clubs and jobs than the 299 wellness interventions that these students participated in. Of the 86 students, 69% of them held leadership positions. These students held

92 leadership positions. An assumption can be made that leadership comes with another layer of stress in an already busy day in the life of a college and university student.

Discussion

Findings

This study aimed to uncover what the components and dimensions of wellness that motivate emerging adults to use wellness interventions, the campus programs/ activities that subjects report using, the frequency of use of campus programs/activities, and the most frequently endorsed category of motivators that are used by students. The results suggest that students are motivated by physical wellness interventions such as the gym, fitness classes, and off campus health services, mostly participating in wellness for physical wellness, psychological wellness, and social wellness. Additionally, students participate in wellness frequently (a few times a week to weekly) and very infrequently (a few times a year to yearly). It is interesting to note that in all frequencies, physical wellness is always the most prominent motivator. I anticipated that emotional or psychological wellness would be closer to physical wellness due to the emphasis on physical and mental wellness overall in the literature. However, this was not the case as physical wellness far superseded the mental wellness motivators. Had I had more time and would continue work on this project into my graduate year, I would've been interested in creating a mindfulness intervention to implement. Additionally, the wide gap between the most common frequencies is particularly interesting. It potentially suggests a few considerations. First, that the wellness interventions lend themselves to certain frequencies of participation. Second, that students only have a set amount of time for certain interventions. Or third, that these interventions are only offered a limited number of times or in a way that makes access difficult.

What is, to me, shocking about the data is how physical accounts for 37.48% of the overall response rate, followed by psychological wellness at over half of that number at 15.14%. Even adding emotional wellness and psychological wellness together (24.51%) leaves physical wellness still 12.97% above these motivators. This demonstrates that physical wellness is potentially the most motivating wellness trait. However, it could also be the wellness motivator most accessible to students due to time constraints or the most advertised method of wellness on the de-identified campus of inquiry. Most of the focus or understanding of wellness follows the notion that there are two more commonly understood categories of health, those of physical and mental/psychological. Additionally, this could simply indicate that for this population of emerging adults, physical management of stress is impactful, and mind and body are seemingly captured. Under this way of thinking, it would make sense to see the results demonstrate that these two wellness motivators were the top two chosen by students. Additionally, this may indicate that students are most familiar with participating in these types of interventions as these students have been doing so for most of their lives growing up or that they are perhaps the least intimidating to emerging adults.

Most of my literature review on interventions revolves around mindfulness based stress reduction (MBSR), physical interventions that increased wellness, or meditation practices (Caldwell et al., 2010; Dvořáková et al., 2017; Hou et al., 2015; Hubbard et al., 2018; Kerrigan et al., 2017; Nisa & Nizami, 2014; Rogers, 2013; Shearer et al., 2016). In a study by Maharaj (2018) that studied the effect of all wellness motivators except for psychological on academic performance and what supports would be needed to assist these students, found that students particularly struggled with financial and emotional wellness and that counselors and wellness workshops would be the primary way to benefit these students. The study had 60 participants

between the ages of 18 and 25 with half of the participants male and the other half female. Of the 60 participants, 42% experienced difficulties with financial wellness (Maharaj, 2018) while the NCHA data from the de-identified institution from 2019 suggests that 29.8% of students experience similar issues (NCHA [de-identified], 2019). Additionally, 33% of the participants experienced difficulties with emotional wellness. Maharaj found that 58% of the students experienced moderate to severe effects from stress while compared to the 62% of survey participants who were overwhelmed by stress frequently or very frequently. Maharaj also found that 53% of the participants felt that their stress levels negatively influenced their academic performance as compared to the 44.5% from the de-identified institution that cited academics as a source of stress (NCHA [de-identified], 2019). Maharaj found that 57% of the students had negative coping strategies to stress including smoking cigarettes and drinking alcohol. For what could be done to benefit student wellness, 52% of students suggested wellness workshops while 40% suggested counselors (Maharaj, 2018).

Compared to the study by Maharaj, there are similarities seen between the two data sets, most prominently in the moderate to severe effects from stress compared to the frequency of those overwhelmed by stress. Maharaj asked similar, yet different stress related questions to the ones in my study. The benefit to the de-identified institution is that both of these interventions are present on campus. Wellness workshops include access to fitness classes, career services, tutoring, financial aid and services, wellness education, and more. Counseling services are present on the campus physically and through some social media, but its location is off of the main paths normally traversed by students. While there is a degree of privacy expected from the waiting rooms and for the privacy and confidentiality of the students, a more visible service center could prove beneficial. Protecting student privacy is imperative, but the more secluded

nature of counseling services, combined with the well-established stigma on mental health could potentially create a barrier to participation in this wellness intervention. Participant utilization of counseling and the psychiatrist have demonstrated positive wellness motivators such as psychological wellness, emotional wellness, and in physical wellness.

It appears that in my study, physical wellness far supersedes any other motivator type. Another study by Aly (2020) found positive psychosocial effects from participating in physical and social activities in decreasing anxiety symptoms. The study had 116 participants, 58.6% of them male, aged 19 to 22, and asked what physical outdoor activity they participated in. In the study by Aly, 60% participated in fitness, exercise, or recreation (2020) as compared to 50.50% of students in my study that participated in the gym, fitness classes, and dance club. In the study by Aly, 28% participated in sports (2020) while 15.38% of students in my study participated in division and intramural sports. Aly also found that 12% participated in social activities (2020). Aly additionally looked at hourly participation in physical activity, where the level of participation varied from 12 hours a week to 1 hour a week, with 67.2% of participants spending less than 4 hours per week outdoors engaged in an activity (2020). In my study, I looked at frequency of participation instead of total hours of participation. While none of the participants in the Aly study participated in an outdoor dance or yoga activity, 75.7% believed that dance or yoga would be a benefit to their health.

While my study did not look into depression and anxiety symptoms, in the study by Aly 43% of participants experienced some form of depression symptoms while 37.9% of participants experienced some form of anxiety symptoms (Aly, 2020). I looked into stress and found that 99% of students experienced some form of stress throughout the school year. The students in the Aly study self-reported being more willing to participate in an activity outdoors rather than

indoors, but it is important to note that the campus Aly performed this research on was located in the southern United States (2020). Despite that the indoor number of dance participation was not given, the study stated that dance was an activity partaken “frequently” by survey participants (Aly, 2020). Overall, the study found that participation in physical activities within a social context could increase participation. From evaluating the study by Aly, it could be beneficial to implement social participation into some of the other wellness interventions on campus, including the areas of environmental, financial, emotional, occupational, psychological, intellectual, and spiritual.

Another finding not surprising to me is that students on campus are very involved so it makes sense that they would have stress in their lives, but what is promising is that students are still taking the time to participate in their own wellness journey. Physical wellness options, such as the gym, fitness classes, student health services, and off campus health services are options that can be accessed multiple times a day at a student’s convenience or schedule. These wellness interventions are easier to participate in as the student can either schedule an appointment, show up to the interventions during the scheduled time, or go on their own time during operational hours. These interventions offer more convenience overall when compared to the more time intensive physical wellness interventions like dance club, division sports, and intramural sports.

Strengths and Limitations of the Study

Some strengths of my study are the reasonable survey capture which ended up garnering a 15% response rate. Research has shown response rates can be as low as 2% and as high as 60% for survey sends (Creswell, 2009). Another strength was the consistency and development of

survey, which was developed by literature review and empirical evidence. Finally, the survey captured many health and wellness options from the research institutions campus.

Some limitations I had are while the number of responses to the survey sent was reasonable, it would be beneficial to have a higher response rate to better determine what the population experiences. Next, due to time constraints I intentionally only captured two cohorts from the de-identified research campus. A capture of the entire student body would be recommended for future studies. Visual analysis & descriptive statistics only were utilized for this analysis again because of time constraints. In the future the use of SPSS for such aspects as examination of correlations between cohorts across the sample would be interesting.

Implications and Suggestions for Future Practice

Since physical wellness has already found significant success at the institution, it might be beneficial to consider investigating the application of the same techniques to the other wellness interventions. For example, there are two relaxation rooms. Would it be beneficial to combine these rooms as they each have different relaxation instruments? This might introduce students to additional wellness and relaxation material that they otherwise would not have encountered. Additionally, the institution is investing into a new wellness building with a strong focus on physical wellness. It might be prudent to investigate whether it would be beneficial to include counseling, the counseling relaxation room, and the psychiatrist in the new wellness building. While not intentional, creating a wellness building that only focuses on physical wellness may be perpetuating the stigma against mental health and psychological wellness. From previous studies, students already have been found to possess a negative help-seeking behavior, meaning that even in times that they should reach out for help, they do not (Hubbard et al.,

2018). Further research should be done on this topic to assess the viability and use if the location of campus wellness interventions affects student participation in the intervention. Additionally, it could be beneficial to research if a student's familiarity with the intervention has an effect on participation.

While not discussed in detail, an observation suggested that time intensive wellness interventions often had more than one significant wellness motivator. This suggests that interventions can be multifaceted. There were even some wellness interventions such as the gym relaxation room, counseling relaxation room, and psychiatrist that had three notable wellness motivators. A study could be done to evaluate if creating a new intervention that aims to target two or more wellness motivators would benefit the institution, or if modifying an existing wellness intervention could create additional benefit as well. There is already a potential advantage to a multifaceted program. Students have a limited amount of time in their schedules, so a dual intervention could potentially increase a student's overall wellness in less time than participating in two separate interventions. This would be an interesting study to perform on this institution's population.

Personally, I would like to evaluate in more depth the stress students feel prior to participation in a wellness intervention and compare stress levels post intervention. Additionally, it would be interesting to note or evaluate if individual students participate in more physical wellness, mental wellness, or both. Currently, it appears as if students are targeting physical wellness to a higher degree than other wellnesses. As an occupational therapy student, it would be interesting to see if students are aware of the types of interventions they participate in and how well rounded or holistic they are in their wellness interventions or even their lives.

Conclusion

This study found that students mostly participated in the gym, fitness classes, off campus health services, and counseling. This indicated that physical wellness interventions were utilized most often. The gym and division sports were used very frequently, the dance club, intramurals, gym, and fitness classes were used frequently, the counseling and chaplain's office were used infrequently, and the off campus health services, counseling relaxation room, gym relaxation room, psychiatrist, chaplain's office, student health services, counseling, and fitness classes were used very infrequently. The wellness motivator most used by students was physical wellness by a large margin, followed by psychological and social. In very frequent and frequent participation, physical, social, and psychological wellness were the most common responses. In infrequent participation, the most common wellness motivators were physical, psychological, and emotional. The most common wellness motivators for very infrequent participation was physical, environmental, and psychological. The students were very involved on campus on top of their involvement in wellness interventions.

Further research is warranted on this population as it relates to holistic participation in wellness and stress levels both prior and post wellness participation. Physical wellness is very well addressed, so applying the methods that make physical wellness work well to the other dimensions of wellness could be potentially beneficial and should be further evaluated. Finally, a study should be done where other facets of wellness are made easily identifiable, readily accessible, and available for longer operational hours that are flexible to allow students to choose when best works for them. This would be informative to further develop an information pool on emerging adults and their participation habits.

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Appendix A

Definitions of the Six Dimensions of Wellness (Hettler, n.d.), Eight Dimensions of Wellness (Department of Health and Human Services USA, 2016) and the Six Components of Health (Housman & Odum, 2016)

Definitions	Six Dimensions of Wellness	Six Components of Health	Eight Dimensions of Wellness
Emotional	“Recognizes awareness and acceptance of one’s feelings.” (p. 2) “it is better to be aware of and accept our feelings than to deny them. It is better to be optimistic in our approach to life than pessimistic.” (p. 2)		“Ability to cope effectively with life and create satisfying relationships.” (p. 2)
Social	“Encourages contributing to one’s environment and community. It emphasizes the interdependence between others and nature.” (p.1) “it is better to contribute to the common welfare of our community than to think only of ourselves. It is better to live in harmony with others and our environment than to live in conflict with them.” (p.1)	Sense of well-being that an individual achieves by forming emotionally supportive and intellectually stimulating relationships, [...] living in communities rather than isolation. [...] When social networks break down, health declines.” (p. 7)	“Developing a sense of connection, belonging, and a well-developed support system.” (p. 4)
Spiritual	“Recognizes our search for meaning and purpose in human existence.” (p. 2) “it is better to live each day in a way that is consistent with our values and beliefs than to do otherwise and feel untrue to ourselves.” (p. 2)	“The belief that one is a part of a larger scheme of life and that one’s life has purpose.” (p. 7)	“Expanding our sense of purpose and meaning in life. [...] it's the deepest part of you that gives meaning in your life.” (p. 4)
Physical	“Recognizes the need for regular physical activity” (p. 1) “It is better to consume foods	“Overall condition of the organ systems [...] [where] a healthy	“Recognizing the need for physical activity” (p. 4)

	and beverages that enhance good health rather than those which impair it.” (p. 1)	person’s systems function properly.” (p. 6)	
Occupational	“Recognizes personal satisfaction and enrichment in one’s life through work” (p.1) “It is better to develop functional, transferable skills through structured involvement opportunities than to remain inactive and uninvolved” (p.1)		“Personal satisfaction and enrichment from one’s work. [...] Developing occupational wellness allows you to communicate your values through whatever work you choose to do.” (p. 3)
Intellectual	“Recognizes one’s creative, stimulating mental activities.” (p. 1) It is better to stretch and challenge our minds with intellectual and creative pursuits than to become self-satisfied and unproductive. It is better to identify potential problems and choose appropriate courses of action based on available information than to wait, worry, and contend with major concerns later.” (p.2)	Ability to use problem solving and other higher-order thinking skills to deal effectively with life’s challenges. [...] Effective intellectual skills enable people to feel in control of their lives.” (p. 7)	“Recognizing creative abilities and finding ways to expand knowledge and skills.” (p. 3)
Psychological		“The ability to deal effectively with the psychological challenges of life.” (p.7)	
Environmental		“The conditions in which people live, work, and play. [...] Humans cannot achieve a high degree of wellness if their environment is polluted or unsafe.” (p. 7)	“Means good health by occupying pleasant, stimulating environments that support well-being.” (p. 3)
Financial			The satisfaction of your current and future financial situations” (p. 3)

Appendix B

Survey

Title of Survey: Student Motivation for Participation in Wellness

Description:

Informed Consent Form for Occupational Therapy Research

Title of project: Investigating the Impact of College Stress and the Utilization of Campus Wellness Services Through an Occupational Health Lens

Primary investigators: Hannah Paymer and faculty mentors Dr. Terri Reichley Dennehey, OTR/L, D. Ed. and Dr. Elizabeth Dalton, PhD.

Purpose of the study: The purpose of this quantitative inquiry is to evaluate utilization of health and wellness strategies of emerging adult full-time traditional college students.

Research questions include:

What are the components and dimensions of wellness that motivate emerging adults to use wellness interventions?

What campus programs/ activities do subjects report using?

What is the frequency of use of campus programs/ activities?

What is the most frequently endorsed category of motivators that are used by students?

Procedure to be followed: I, the participant, will be involved in a quantitative survey looking at utilization of health and wellness techniques and opportunities campus wide. The sample population for this study will include students enrolled full time in undergraduate programs who are between the ages of 18-29 at a de-identified college. The primary investigators will use the survey data to evaluate primary and secondary motivators for student participation in wellness offerings. I will be asked to take a survey. With my permission, the investigator will use this survey information to answer the research questions.

Benefits: I will not personally benefit from taking part in this research.

Duration/Time: The survey will require between 2 to 10 minutes for completion.

Statement of Confidentiality: A copy of the survey answers will be stored securely in the possession of the primary investigators. Only the primary investigators will know my identity. Furthermore, any research documents will be labeled with numeric codes to de identify participants and will be kept securely by the primary investigator. Every effort will be made to maintain the highest ethical standards, and the primary investigators will abide by both Family Educational Rights and Privacy Act and research confidentiality parameters. The investigators ask that I do not discuss the research with others outside of the study.

Right to Ask a Question or Decline from the Study: I may email questions regarding the study at any time. I can decline to participate in the survey at any time. The primary investigator can be asked questions via email at dennehyt@etown.edu

Compensation: I will not be financially compensated for my participation in this study

Voluntary Participation: Participation is voluntary. I may withdraw from completing the survey at any time.

Consent: I must be a full-time undergraduate student between the ages of 18 and 29 that attends the de-identified college.

Risks: There are no risks to participating in this survey. This is a minimal risk study that is defined as no greater risk than would occur in everyday life. Confidentiality is a presumed risk, but this has been accounted for via the use of a computer password access and de-identification of subjects.

If I have any questions concerning the research project, I may contact Terri Dennehy at (717)361-4753 or dennehyt@etown.edu. Should I have any questions about my participant rights involved in this survey I may contact the Elizabethtown College Institutional Review Board Submission Coordinator, Kyle Kopko via email at kopko@etown.edu

Administrator/Keeper of participation Forms:

Dr. Terri Reichley Dennehy

Professor of Occupational Therapy

Elizabethtown College

- I am 18 years of age or older.
- I have read the above information. I have asked questions and received answers. My organization is willing to participate in this study.
- A copy of this consent form has been provided to me.

By continuing to take the survey, you consent to participating in this survey.

Section 1: Demographics

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

1. What year did you start your college education?
 - 2015 or before
 - 2016
 - 2017

- 2018
 - 2019
2. What is your gender?
 - a. Female
 - b. Male
 - c. Non-binary
 - d. Prefer not to say
 3. What is your major?
 - Drop down list
 4. What, if any, is your second major?
 - a. Drop Down List
 5. What is your age?
 - 18
 - 19
 - 20
 - 21
 - 22
 - 23
 - 24
 - 25 to 29
 6. Within the 2019-2020 school year, how often would you say things were difficult or overwhelming to manage?
 - Daily
 - Every other day
 - A few times a week
 - Weekly
 - A few times a month
 - Monthly
 - A few times a year
 - Yearly
 - Once
 - Not at all
 7. Within the 2019-2020 school year, how many hours of sleep do you average?
 - Less than 4 hours
 - 5 hours
 - 6 hours
 - 7 hours
 - 8 hours
 - 9 hours

- 10 hours
 - 11 hours
 - 12 hours
 - More than 12 hours
8. Within the 2019-2020 school year, what is your average amount of course credits?
- 12
 - 13
 - 14
 - 15
 - 16
 - 17
 - 18
 - 19
 - 20

Section 2: Gym

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

9. Have you used the gym within the 2019-2020 school year?
- Yes
 - No
10. How often have you used the gym during the 2019-2020 school year?
- Daily
 - Every other day
 - A few times a week
 - Weekly
 - A few times a month
 - Monthly
 - A few times a year
 - Yearly
11. Which of the following most closely resembles your primary motivator for using the gym?
- To cope with any mental barriers
 - To participate in a space that supports wellness
 - To problem solve, expand knowledge or skills, or challenge yourself mentally
 - To enrich life through work
 - To search for meaning and find purpose

- To be physically active or take care of oneself
- To develop community and connect with others
- To become more self-aware and cope effectively with feelings
- To lead to financial stability

12. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

Section 3 Group Fitness Classes

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

13. Have you participated in group fitness classes during the 2019-2020 school year?

- a. Yes
- b. No

14. Which group fitness classes have you participated in?

- a. Body weight blast
- b. Core conditioning
- c. Couch to 5k
- d. Full body Tabata
- e. Group fit HIIT
- f. Move It
- g. Pilates
- h. Pound
- i. Spinning
- j. Strong by Zumba
- k. Yoga
- l. Zumba

15. How often do you attend group classes during the 2019-2020 school year?

- Daily
- Every other day

- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

16. Which of the following most closely resembles your primary motivator for going to group fitness classes?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

17. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

Section 4: Gym Relaxation Room

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

18. Have you used the gym relaxation room during the 2019-2020 school year?

- a. Yes
- b. no

19. How often have you used the gym relaxation room during the 2019-2020 school year?

- Daily

- Every other day
- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

20. Which of the following most closely resembles your primary motivator for using this service?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

21. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

Section 5: Student Health Services

Description; Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

22. Have you used Student Health Services at all during the 2019-2020 school year?

- a. Yes
- b. No

23. How often have you used this service during the 2019-2020 school year?

- Daily
- Every other day
- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

24. Which of the following most closely resembles your primary motivator for utilizing this service?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

25. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

Section 6: Off Campus Health Services

Description:

Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

26. Have you visited the Off-Campus Health Services during the 2019-2020 school year?

- a. Yes
- b. no

27. How often have you used this service during the 2019-2020 school year?

- Daily
- Every other day
- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

28. Which of the following most closely resembles your primary motivator for using this service?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

29. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

Section 7 Private Counseling

Description; Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

30. Have you used Private counseling services during the 2019-2020 school year?

- a. Yes
- b. No

31. How often have you used this service during the 2019-2020 school year?

- Daily
- Every other day
- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

32. Which of the following most closely resembles your primary motivator for going to the counseling office?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)
-

33. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

34.. Have you utilized Group Counseling services during the 2019-2020 school year?

- a. Yes
- b. No

35. How often have you attended group counseling during the 2019-2020 school year?

- Daily
- Every other day
- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

36. Which of the following most closely resembles your primary motivator for going to group counseling?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

37. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

Section 9: Counseling Relaxation room

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

38. Have you used the Counseling Relaxation room during the 2019-2020 school year?

- a. Yes
- b. no

39. How often have you used the counseling relaxation room during the 2019-2020 school year?

- Daily
- Every other day
- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

40. Which of the following most closely resembles your primary motivator for using the relaxation room?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

41. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

Section 10: Psychiatrist

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

42. Have you used the Psychiatrist services during the 2019-2020 school year?

- a. Yes
- b. no

43. How often have you used this service during the 2019-2020 school year?

- Daily
- Every other day
- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

44. Which of the following most closely resembles your primary motivator for seeing the psychiatrist?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

45. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)

- To lead to financial stability (financial)

Section 11: Dance Club

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

46. Have you participated in dance club during the 2019-2020 school year?

- a. Yes
- b. no

47. How often have you attended a dance club class during the 2019-2020 school year?

- Daily
- Every other day
- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

48. Which of the following most closely resembles your primary motivator for joining dance club?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

49. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)

- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

Section 12: Intramural sports

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

50. Have you participated in Intramural sports during the 2019-2020 school year?

- a. Yes
- b. no

51. What intramurals have you participated in during the 2019-2020 school year?

- Basketball
- Flag football
- Soccer
- Bowling
- Dodgeball
- Volleyball
- Tennis

52. How often have you participated in intramurals during the 2019-2020 school year?

- Daily
- Every other day
- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

53. Which of the following most closely resembles your primary motivator for participating?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

54. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)

- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

Section 13: Division Sports

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

55. Have you participated in a division sport during the 2019-2020 school year?

- Yes
- no

56. Which sport or sports do you play?

- Fill in the blank

57. How often have you participated in a sport during the 2019-2020 school year?

- Daily
- Every other day
- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

58. Which of the following most closely resembles your primary motivator for participating in sport?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

59. Which of the following, if any, most closely resembles your secondary motivator?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

Section 14: Chaplain's Office

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

60. Have you utilized the Chaplain's office during the 2019-2020 school year?

- Yes
- no

61. How often have you used this service during the 2019-2020 school year?

- Daily
- Every other day
- A few times a week
- Weekly
- A few times a month
- Monthly
- A few times a year
- Yearly

62. Which of the following most closely resembles your primary motivator for using this service?

- To cope with any mental barriers (psychological)
- To participate in a space that supports wellness (environmental)
- To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
- To enrich life through work (occupational)
- To search for meaning and find purpose (spiritual)
- To be physically active or take care of oneself (Physical)
- To develop community and connect with others (social)
- To become more self-aware and cope effectively with feelings (emotional)
- To lead to financial stability (financial)

63. Which of the following, if any, most closely resembles your secondary motivator?
- To cope with any mental barriers (psychological)
 - To participate in a space that supports wellness (environmental)
 - To problem solve, expand knowledge or skills, or challenge yourself mentally (intellectual)
 - To enrich life through work (occupational)
 - To search for meaning and find purpose (spiritual)
 - To be physically active or take care of oneself (Physical)
 - To develop community and connect with others (social)
 - To become more self-aware and cope effectively with feelings (emotional)
 - To lead to financial stability (financial)

Section 15: Additional Clubs, Jobs, or Activities

Description: Select the appropriate answer that most reflects your experience. You must be a full-time undergraduate student between the ages of 18 and 29 to take this survey. If you are under the age of 18, please exit this survey.

64. Are there any other clubs, activities, or jobs you have been involved in during the 2019-2020 school year?
- a. Yes
 - b. No
65. Please list the clubs, activities, and jobs you have participated in during the 2019-2020 school year.
(open response)
66. Do you have a leadership role in any clubs, jobs, or activities you are involved in during the 2019-2020 school year?
- a. Yes
 - b. no
67. Please list the leadership roles you have held during the 2019-2020 school year.
(open response)

**Investigating the Impact of College Stress and Utilization of Campus Wellness Services
Through an Occupational Health Lens**

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Investigating the Impact of College Stress and Utilization of Campus Wellness Services Through an Occupational Health Lens

Stress is a universal experience. For many people attending college during the period of emerging adulthood, stress can be a pressing daily occurrence. Shearer, Hunt, Chowdhury, and Nico (2016) put it succinctly: “college is stressful” (p. 233). As a college student majoring in occupational therapy, I have both studied and experienced the pressure and effects of stress on myself and my peers. With the prevalence of stress throughout college campuses and methods to combat this stress, there is limited research regarding the reason that students participate in wellness options. I am approaching this by doing my own research on the wellness options that students participate in and their primary and secondary motivator for participating. In addition to my own personal research, I have completed a literature review analyzing and evaluating prior research and commentary regarding this topic. While there are studies on student knowledge of health and wellness (CITE) asking students how college could better serve their wellness endeavors and what students perceive as benefits of a college’s wellness offerings, these studies are limited at best. Through examination of current literature about college students’ stressors, I intend to evaluate the facts of mental health and stressors in the college population and the dimensions and components of health and wellness that are used in college wellness offerings.

In addition to the literature review, I have conducted a survey that asks about stress levels, anxiety levels, amount of sleep, and the wellness strategies they use from the de-identified college. From there, the participants answered questions on the primary and secondary motivators behind their participation, which stem from the components and dimensions of wellness. From there, suggestions were extrapolated from the results. I plan to give the results to a private, de-identified college/university as a resource for future wellness endeavours and to

assess the reason students participate in wellness offerings. Before revealing these results and discussing them further, it is important to establish the rich tapestry of literature that grounds the research I have conducted, starting with the foundation of it all, occupational therapy. From here, health and well-being is discussed. The impact of stress on health and wellness follows, focusing on mental health and the provisions of service. The theory of emerging adulthood is discussed and opens into the mental health and the college student along with stress and the college student. From here, the local college population will be evaluated, previous wellness intervention approaches will be reviewed, followed by the local college's wellness interventions, before ending with a summation of the literature.

Defining Occupational Therapy

Occupational therapy (OT) is a health field that provides services to individuals and populations to promote quality of life in the pursuit of daily activities across the health and disease continuum (Cite). Habilitation, rehabilitation, and promotion of health and wellness for clients who may or may not have disability-related needs are some of the main roles of the occupational therapy practitioner (AOTA, 2014, S1) since the profession was established over 100 years ago (Reed, 2019). Habilitation and health promotion are closely linked in their focus to teaching new skills which can foster improved functional ability or healthy lifestyles. Rehabilitation occurs when an individual has lost an ability due to a disease process, injury or developmental delay, requiring the re-teaching and learning of lost skills. OT provides holistic services to clients in schools, clinics, hospitals, and homes, among a myriad of other sites (AOTA, 2014).

The governing body for occupational therapy practice in the United States is The American Occupational Therapy Association (AOTA). Under their direction, many official documents and position papers convey the stance and responsibilities of OT's role in the American healthcare system. *The Occupational Therapy Practice Framework, 3rd Ed.* (2014) is one such document and is a guiding source for the purview of practice, definitions, and terminology related to the occupational therapy process. Within the framework is a detailed, seminal exposition of the domain of practice. Here, occupational therapy is formally defined as “the therapeutic use of everyday life activities (occupations) with individuals or groups for the purpose of enhancing or enabling participation in roles, habits, and routines in home, school, workplace, community, and other settings (AOTA, 2014, S1). This means that there is therapeutic intent behind each occupation in which a person participates, like cooking dinner, driving a car, or playing a board game, and these occupations either improve or allow for participation in roles like brother, employee, student, and friend. Occupations promote habits and routines that make up an individual's daily schedule within the context of the physical and social environments. For the occupation of a student, there are required activities outside of those necessary to live and survive. These activities are called instrumental activities of daily living (IADLs) and are more complex in their interactions with others. For a student, some important IADLs might include health management and maintenance, religious and spiritual activities and expression, and driving and community mobility. Furthermore,

occupational therapy practitioners use their knowledge of the transactional relationship among the person, [their] engagement in valuable occupations, and the context to design occupation-based intervention plans that facilitate change or growth in client factors (body functions, body structures, values, beliefs, and

spirituality) and skills (motor, process, and social interaction) needed for successful participation (AOTA, 2014, S1).

Occupational therapy practitioners, either therapists or assistants, integrate the complex interplay which occurs between a person, their occupations, and the context through which the activities are lived out within the scope of their service provision. This allows the therapist to create an everyday life activity or occupation-based intervention that will result in a change in client factors and skills needed to be functionally independent and successful in carrying out desired daily activities. Body functions, body structures, client factors, and skills all meaningfully contribute to participate, modify, and interact in the environment their occupation occurs.[2]

Occupational therapy services are provided with specific, individual outcomes in mind for each client based upon their skill needs and motivations. Habilitation goals focus on gaining new skills while rehabilitation objectives address occupational limitations which inhibit functional independence (AOTA, 2014). Health and wellness promotion is about improving or increasing a person's control of their health (AOTA, 2017). By working in client-specific environments, focusing on their wants and needs, and understanding the interactions between the occupations, client factors, and environment, the occupational therapist can facilitate client engagement that leads to a healthy and fulfilling lifestyle. An understanding of health and well-being is pivotal at this juncture to fully understand the complexity of the person and the ways they interact with their environment.

Defining Health and Well-Being

While occupational therapy practitioners work with individuals at all stages of the health and disease process, our governing body supports the promotion of health, well-being, and social participation as important tenets to a quality life (AOTA, 2017). The seminal definition of health, defined by the World Health Organization (1948) is “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. *Health* is defined as a multifaceted experience which includes dimensions of wellness, is a resource, and is a by-product of a person and their interaction with the environment (Housman & Odum, 2016). Occupational therapy is also heavily called upon for education and prevention strategies to limit unhealthy outcomes. This comes in the form of self-improvement measures, screenings, and preventing deteriorating health (AOTA, 2014).

There are many facets to health, often called the components of health or the dimensions of wellness. Hettler (n.d.) penned a holistic model called the Six Dimensions of Wellness, which includes emotional, social, spiritual, occupational, physical, and intellectual aspects. More recently, the Substance Abuse and Mental Health Services Administration (SAMHSA) have added two more dimensions to Hettler’s original six, and include occupational (paid employment and volunteerism) and financial (Department of Health and Human Services USA, 2016). Similar to the dimensions of wellness are the components of health of which six exist and include physical health, psychological health, social health, intellectual health, spiritual health, and environmental health (Housman & Odum, 2016). Aspects of health and wellness are similar in nature and support one another on the continuum of health and wellness (Appendix A). For the purpose of this inquiry, the terminology will be utilized in a condensed form (Table 1). The health components and wellness dimensions are facets of everyday human life and are a

necessary consideration in the holistic service provision of occupational therapy. Within the realm of treatment, OT can address any and all holistic needs of the client.

Table 1

Condensed Terminology of Components and Dimensions

Components of Health (H)	Definition
Six & Eight Dimensions of Wellness (6W & 8W)	
Emotional (6W & 8W)	Awareness and acceptance of a person's own feelings.
Psychological (H)	Ability to cope with life's challenges
Intellectual (H, 6W, & 8W)	Partaking in stimulating, engaging, and creative tasks that increase knowledge or skill.
Social (H, 6W, & 8W)	Engaging in the community and developing fulfilling relationships with others.
Spiritual (H, 6W, & 8W)	Finding purpose and meaning behind a person's life.
Occupational (6W & 8W)	Satisfaction obtained from employment.
Physical (H, 6W, & 8W)	Need to be physically active and take care of one's health.
Environmental (H & 8W)	Supporting well-being through the conditions and people around a person's home, work, and leisure.
Financial (8W)	Satisfaction of a person's current and future financial situation.

Health and Wellness: The Impact of Stress

A factor that has a large influence on mental health is stress, which is defined as a response to pressure that is not aligned with current capabilities (citation). This disconnect challenges a person's ability to cope (WHO, n.d). Not only does stress affect all people regardless of gender, age, or social status, it also can lead to physical and/or mental health problems such as heart disease, depression and/or anxiety (citation). The service provision

includes health promotion, establishing routines and patterns, and occupational engagement, and aims to prevent the potential harmful negative effects of stress. Occupational therapy practitioners provide services to those with physical and/or mental health needs with the goal of promoting mental wellbeing in all people, to optimize function, and maximize quality of life (AOTA, 2017). Physical health is the need to be physically active and to take care of one's health. An example of physical health promotion might include going to the gym for stress relief or to build muscle mass. For the purpose of this inquiry, psychological health and wellness will be the desired aspect of exploration. As occupational therapy knows the person as a holistic being, several facets of health and wellness impact psychological health and wellbeing. Case in point, addressing physical aspects of health and wellness also have a direct impact on the psycho-emotional being. Working out and performing physical tasks releases endorphins, those feel-good chemicals that improve mood. Thus, even when building body mass or increasing endurance, psychological effects result from physical health.

Psychological health encompasses a client's self-awareness, problem solving, and contributions to their community (AOTA, 2017). Occupational therapists emphasize recovery and wellness through participation in specific occupations, such as instrumental activities of daily living which encompass health management and maintenance for example. Utilizing performance-based assessments, analysis of the client, and evidence-based knowledge, occupational practitioners view the client from a distinctively occupationally focused approach, potentially unearthing de-identified reasons for client challenges. OTs can also implement alternative strategies to assist in goal attainment and are able to connect the dots between other professions and services. Since occupational therapists see beyond the immediate environment

and diagnosis, they are able to assist clients to build routines that support positive mental health outcomes.

Provision of Services

Occupational therapists address the emotional and social domains of an individual, emphasizing a person's own influence over mind and body, and additionally recognizing that mental health is impactful in the therapy process (AOTA, 2017). In fact, positive psychosocial factors can improve a client's outcome by providing a stable ground to facilitate the occupational therapy process (AOTA, 2017). Acknowledging and accepting the situation allows a client to restore or create adaptive mental functioning. Since people are occupational beings, it is important to take into consideration what they consider to be meaningful and how history and current health status affects their involvement with functioning (AOTA, 2017). Since the holistic approach is the foundation of occupational therapy, the profession has always focused on the health of the whole person. Targeting psychosocial factors, vital aspects of health and wellness, is an essential component of the therapy process. Through the use of occupations and activities benefiting mental wellbeing, a therapist can improve a client's quality of life (AOTA, 2017). Occupational therapists have the ability to adapt the client's environment to support engagement and can educate clients on how to promote positive psychosocial factors in daily life (AOTA, 2017). Through this process, a more positive outlook, increased hopefulness, and resiliency are built, thus leading to more effective problem solving and ability to adjust to change (AOTA, 2017). One population of individuals who are affected by stress and potential occupational health and wellness concerns are full-time college & university students who generally fall within the emerging adulthood age range.

Emerging Adulthood and the College Population

Arnett (2000) is the seminal author on the framing of emerging adulthood, defined as ages 18 to 29 where the defining feature is high levels of change. In the modern age, there has been a shift in the way that people in their 20's to 30's engage in pivotal life events and occupations. The average age for marriage has been rising steadily since the 1970's, from 21 for women and 23 for men to 25 for women and 27 for men in the late 1990's (Arnett, 2000). Similar trends are seen for starting a family. In 1940, only 14% of people went on to obtain higher education but by the late 1990's, that number has risen to 60% (Arnett, 2000). Before, people would graduate high school, get married, move into a house, and have children. Now, more people than ever go to college or learn a trade after high school, are waiting longer to get married, have children, and settle down. Monumental changes occur from teenage years through the twenties, changes that impact the rest of a person's life. Arnett (2000) proposed the theory of emerging adulthood, a culturally constructed period, for the ages of 18 to 25. Emerging adults do not see themselves as adults or adolescents, likely due to instability in housing, career, relationships, and schooling. This age group focuses on developing responsibility, making decisions, developing oneself and forming their identity. The title of young adult assumes that the person accepts and is ready to be an adult, while many feel like they are growing into the role of adult, thus the term emerging adulthood (Arnett, 2000). College students fall into this age range and have to balance life's unpredictability and identity formation while navigating the complex rigor of higher education.

Mental Health of the College Student

From an occupations perspective, college may be seen as a chance to have fun, grow, learn, find yourself, and establish life-long friends, all while positioning yourself for employment, internship, or graduate school acceptance (Hill et al., 2016). However, those currently in college are aware of the darker undertones of college life that decrease overall health and well-being such as mental breakdowns, panic attacks, sleep deprivation, exhaustion, anxiety, and stress to name a few (Nisa & Nizami, 2014).

College mental health trends over the past four years demonstrate the increasingly common occurrence of mental health disorders and symptoms. The American College Health Association (ACHA) is a (what is this) and surveys college students twice a year with the National Collegiate Health Assessment (NCHA). These assessments cover demographic information, health, disease and injury prevention, academics, safety and violence, illicit substance use, sexual behavior, nutrition and exercise, mental health, and sleep. The data details areas of concern for this group (Table 2) from the Spring 2015, 2017, and 2019 Undergraduate Student Reference Group. According to the most recent NCHA survey (2019), 57.6% of college students reported more than average to tremendous levels of stress (ACHA, 2019). Dvořáková et al. (2017) noted that the first year of college is not only correlated in mental and physical health declines, but also decreases in life satisfaction (2017). If mental disorders are not treated, students could suffer from diminished self-esteem and academic performance, social withdrawal, and negatively impacted occupational and lifestyle tract (Huang, Nigatu, Smail-Crevier, Zhang, & Wang, 2018). Huang et al. (2018) studied (this) on a college campus and found that 75% of people diagnosed with a mental disorder had their first onset by age 25 (Huang et al., 2018). That onset occurs directly in the age range of a college student, emerging adulthood.[3][4][5]

Table 2

Comparing NCHA National Mental Health Data by Year[6]

NCHA Data on Mental Health (National)	2015: %	2017: %	2019: %
Reported anytime within the last 12 months:			
Felt things were hopeless	49.5	52.2	57.5
Felt very lonely	60.5	64.4	67.6
Felt exhausted (not from physical activity)	82.4	84.8	85
Felt overwhelming anxiety	57.7	62	66.4
In the past 12 months, have been diagnosed or treated by a professional			
No treatment	75.7	70.4	67.1
Anxiety	15.8	20.9	24
Depression	13.2	17	20
Both anxiety and depression	9.8	13.5	16.6

Stress and the College Student[7]

Stress and stress-related disorders plague college campuses (Shearer, Hunt, Chowdhury, & Nico, 2016). While stress in small quantities is beneficial, continuous chronic stress levels are a foundation for the formation of poor health, negative coping strategies, poor relationships, and declining academics (Dvořáková et al., 2017). This stress level can manifest biological and physiological changes. Stress is a universal experience shared by many students in higher education (Table 3). In a research inquiry with college students that examined how positive affect changes and mindfulness predict adaptation to stress, findings revealed that college students secreted higher levels of cortisol, which is directly correlated with stress perception, during the academic semester (Hou, Ng, & Wan, 2015).

Not only is higher education stressful, but the timing of the stress can cause harmful consequences. The demands of academics, social obligations, and high school-to-college transition process correlate with the age range that mental disorder development peaks (Huang et al., 2018). More stress can build in anticipation of the future. After graduation, students begin the process of entering early to middle adulthood which has a more diverse array of stressful occurrences marked by a decline in mental and physical well-being (Hou, Ng, & Wan., 2015). Since college occurs around the age range that most mental disorders are developing, this can exacerbate the effects of the empirically acknowledged middle adulthood decline. Unsurprisingly, stress has been noted as a risk factor by researchers that not only increases the experience and symptoms of mental disorders, but also the number of disorders a person has (Hubbard, Reohr, Tolcher, Downs, 2018; Shearer et al., 2016; Huang et al., 2018; Hou et al., 2015). Mental disorders can derail a person's life, resulting in impairments to numerous domains including self-care (activities of daily living [ADL] occupation), social (environment), work and home life (occupations), and a person's sense of self (Huang et al., 2018).

Table 3

Comparing ACHA National Stress Data by Year

ACHA Data on Stress (National)	2015: %	2017: %	2019: %
Reported any time within the last 12 months:			
Felt overwhelmed by all you had to do	86.7	88.4	88
Within the last 12 months, any of the following been traumatic or very difficult to handle			
Academics	47	49.8	52.7
Reporting 3 or more of the items listed	50.4	51.9	57.6

Other than academics, stress can also be related to career-related issues, death of a family member or friend, family problems, intimate relationships, other social relationships, finances, health problems of a family member or partner, personal appearance, personal health issues, sleep difficulties, and other[8] (ACHA, 2015, 2017, 2019). Interestingly, Hubbard et al. (2018) found that, despite the high risk of stress and mental health problems, students exhibit an alarmingly low rate of help-seeking behavior, behaviors where a person is in psychological distress and receives professional assistance, as only eight to 38 percent reached out for assistance from professionals. Additionally, these researchers found eight academic performance related stressors which included not having enough time, future anxiety, pressure to succeed, time management, life balance, academic difficulties, test anxiety, and pressure to attend college (2018). In a research study of college students that examined cortisol levels, results showed the hypothalamic- pituitary- adrenocortical (HPA) axis, known for the sympathetic “fight or flight” response, could manifest stress into a physical reaction through neuroendocrine response (Hou et al., 2015). This physical stress can bring about negative affect and emotional reactions, such as anger, anxiety, or depression. Additionally, significant positive correlations between all stressors, all other symptoms, and all mental health symptoms in women and with a few exceptions in men were also discovered (Hubbard et al., 2018). (2 sentences on framing the study & include participants) Interpersonal and intrapersonal stressors seem to impact a majority of college students and often manifest mental health symptoms, including anxiety, depression, eating disorders, and overall distress. Despite these negative and life-altering effects, students are still reluctant to seek help despite stigma reduction and increased willingness to ask for help over the past few years (Hubbard et al., 2018).

The Population at de-identified College/University

While the national collegiate data is beneficial for college trending, local college/university data is also helpful in context . The local institution of higher education in this research study administers the NCHA every other spring semester on odd years to its undergraduate students (ACHA [de-identified college/university], 2015, 2017, 2019, p. 19). In 2015, 238 students took the survey out of the 1,705 undergraduate students invited to take the survey. In 2017, 537 students took the survey out of the 1,673 undergraduate students invited to take the survey. In 2019, 385 students took the survey out of the 1,549 undergraduate students invited to take the survey. Results pertaining to mental health from the local college demonstrate exhaustion, loneliness and overwhelmingness to be shared experiences (Table 4). Results pertaining to stress from the de-identified college/university further establish overwhelmingness as an establishing trait in areas beyond just academics (Table 5).

Table 4

Comparing de-identified College ACHA Mental Health Data by Year

Local ACHA Data on Mental Health	2015: %	2017: %	2019: %
Reported anytime within the last 12 months:			
Felt things were hopeless	53.8	54.5	53.8
Felt exhausted (not from physical activity)	87.8	86.8	81.9
Felt very lonely	67.9	64.7	65.9
Felt so depressed that it was difficult to function	40	40.4	40.9
Felt overwhelming anxiety	64.7	62	66.8
Within the last 12 months, diagnosed or treated by a professional for the following			

Reporting none	68.4	67.6	62
Reporting anxiety	22.5	21.9	27.9
Reporting depression	17.7	20.1	21.4
Reporting depression and anxiety	15.2	15.5	16.5

Table 5

Comparing de-identified College ACHA Stress Data by Year

Local ACHA Data on Stress	2015: %	2017: %	2019: %
Reported anytime within the last 12 months			
Felt overwhelmed by all you had to do	91.6	91.2	88.7
Within the last 12 months, any of the following been traumatic or very difficult to handle			
Academics	43	45.3	44.5
Reporting 3 or more of the items listed	50.2	48.6	54

Intervention Approaches

In light of the stress on student's mental health and physical wellbeing, there are existing promotion, prevention, and interventions that researchers have evaluated. A meta analysis which

examined different types of interventions (for ???) found that interventions (what were they) that were longer and guided were more effective (Huang et al., 2018). Shorter term, unguided interventions had smaller effect sizes. This same relationship was found by *The Center for Collegiate Mental Health* (2017), whereby longer interventions allowed for reflection and multiple opportunities for trial and error before regrouping (Huang et al., 2018). In a research study evaluating mindfulness training and animal-assisted therapy in college students, findings showed that students who participated in mindfulness training had higher levels of heart rate variability, which is a measure of how the body modifies a stress response. Additionally, mindfulness made the participants more self aware. Even in a short amount of time, positive results of mindfulness training have been seen in as little as four sessions (Shearer et al., 2016). Mindfulness is one proven intervention which has been used to combat stress.

Mindfulness has been defined in a variety of different ways in the research. Most studies agree that it encompasses a non-judgemental attitude along with staying in the present moment (Kerrigan, Chau, King, Holman, Joffe, & Sibinga, 2017; Shearer et al., 2016; Caldwell, Harrison, Adams, Quin, & Greeson, 2010; Hou et al., 2015). Additionally, mindfulness seeks to improve interpersonal and intrapersonal awareness (Dvořáková et al., 2017). Others discuss Buddhist roots of Eastern practices and acceptance of all feelings, pleasant, unpleasant, or other (Kerrigan et al., 2017), while still others identify mindfulness as an adaptive coping strategy (Shearer et al., 2016). The most common mindfulness program in the research was mindfulness-based stress reduction (MBSR) from Kabat-Zinn which is designed to increase self-awareness, overall health, and healing (Kerrigan et al., 2017). The effects of mindfulness practices are intended to change a person's mindset through the use of a non-judgemental stance pertaining to the self and past actions and endeavoring to let negative emotions go. To replace these, a caring attitude focusing

on sensation, thought, and emotion is substituted (Dvořáková et al., 2017). These new feelings are intended to manifest stress management and emotional regulation skills. This idea of stress-buffering also includes emotional wellbeing, improved relationships, and positive health behaviors (Dvořáková et al., 2017).

Koru Mindfulness is another mindfulness program that is MBSR adjacent (Rogers, 2013). Koru is an abdominal breathing, guided imagery, and insight meditation program designed for the emerging adult population and is conducted in four sessions (Greeson, Juberg, Maytan, James, & Rogers, 2014). The goals of Koru are similar to MBSR. The program provides methods to quickly decrease stress and anxiety, encourages the growth of positive qualities such as self-compassion, and provides a person with motivation to continue practicing. Greeson et al. (2014) found that Koru was similar to many adult focused mindfulness programs as it significantly lowered perceived stress and increased sleep quality, mindfulness, and self-compassion. Koru had a high retention rate, likely due to the brevity of the intervention length. The study also postulated that, using Koru, emerging adults can develop healthier coping mechanisms to decrease negative self-talk.

In a qualitative study at a high ranked university that examined the practicality and acceptance of a pilot MBSR program, findings showed that mindfulness meditation has positive effects on depressive and anxiety symptoms along with improving overall quality of life (Kerrigan et al., 2017). Movement based mindfulness practices, such as yoga, pilates, Tai Chi, and Gyrokinesis also bring about lower psychological distress (citation). Another study of movement based courses found that yoga increased mindfulness more than simple seated methods and participants also experienced a decrease in stress levels (Caldwell et al., 2010). In a research study evaluating the effect of mindfulness on student stress, mindfulness also brought

about an increased awareness of self through self-regulation, self-efficacy, mood, and a decrease in stress perception. The mindfulness intervention had statistically significantly lower state anxiety compared to other groups in the study. Mindfulness, the researchers found, has been correlated with numerous positive traits such as openness, emotional intelligence, self-esteem, optimism, and life satisfaction (Shearer et al., 2016). Another research study within the college population that examined the practicality and effectiveness of MBSR on first year student's wellness discovered that those in the mindfulness intervention focused on emotional regulation reported higher quality of life and lower depression, anxiety, and sleep issues compared to the control group. The program had high attendance, and students even rated the program highly and would recommend it to others. The approach to this study was to give students healthy methods to confront challenges associated with the college experience, creating a positive cycle that aids students in decision making (Dvořáková et al., 2017).

In a qualitative, survey based inquiry with college students that looked at four domains (intrapersonal, interpersonal, performance, and financial) that cause stress, findings isolated specific identified stressors that significantly contribute to a student's mental health status such as interpersonal and intrapersonal stressors, which predicted anxiety, depression, substance use, and eating disorders (Hubbard et al., 2018). While the researchers found interventions and programming on body image and nutrition, they also found that there was a lack of programming about confidence, self-esteem, and relationships, which are parts of the interpersonal and intrapersonal domains (Hubbard et al., 2018). Hou et al. (2015) evaluated cortisol levels in students before, during, and after an exam in both a mindfulness group and a control group. The researchers found that mindfulness increases were associated with a decrease in cortisol secretion and anxiety symptoms. Interestingly, those who quickly depressed the initial fight or flight

reaction from the hypothalamus, pituitary, and adrenal (HPA) axis activation had notable positive mindfulness changes (2015). Yet another college based inquiry that examined stressors found that academic stress such as lack of time for studying, leisure, and rest could cause strain and increase anxiety and depressive symptoms in students (Shearer et al., 2016). Stress not handled correctly led to a decrease in college adjustment and declines in mental and physical health and wellbeing. Those under more stress were more likely to rely on negative coping strategies involving drugs and alcohol. Low levels of mindfulness were linked to increased severity of mental disorder symptoms, anxiety, depression, problems regulating emotions, and negative affect. Most interestingly, the researchers found that college students of any gender tended to utilize emotion related coping strategies, thus encouraging future research into adaptive coping strategies involving emotion (Hubbard et al., 2018).

Wellness Offerings and Interventions at The Proposed Research Institution

While there are studies on student's knowledge of health and wellness (cite), there are no studies evaluating the use and motivators for students to partake in a college's wellness offerings. The de-identified institution has a variety of wellness offerings, such as a gym, fitness classes, student health services, off campus health services, a gym relaxation room, private counseling, group counseling, psychiatrist services, the counseling services relaxation room, intramural sports, division sports, a dance club, and the chaplain's office. From this pool of services, what are students using and what are their primary and secondary motivators for participating in these wellness offerings?

Summation of Literature Review

Student motivators for participation in wellness are hugely beneficial to learn for occupational therapists as a person is the only one who knows their motivation and reasoning for participation. Since the emerging adult population is all about identity formation, evolving, and changing, the activities they choose and stick to could tie into their adult development and growth into the person they want to become. Additionally, for an institution, a study such as this can influence the development of new programs, expand the current programs, and allow the institution to promote these wellness offerings in a way that appeals to emerging adults.

Students in higher education are stressed and thereby vulnerable to experiencing anxiety and depression. Local statistics of college/university students follow the NCHA trends as a whole, appearing stressed most about social interactions and academics, while demonstrating a decreased likelihood of seeking assistance to help them cope. Occupational therapy is a holistic, client centered profession that focuses on helping people achieve what they need and want to do and is perfectly suited for a mental health intervention per domain tenets from American Occupational Therapy Association, which advocate for therapist's skillset to be used in this health arena. It is with an occupational health lens that this work endeavors to discover what students are doing to alleviate stress. Many interventions have been framed as useful for stress reduction and well-being of the college student. Help-seeking interventions include counseling, group therapy sessions, use of the chaplain's office, and visits to the campus nurse. Mindfulness based interventions include stress reduction (MBSR), Koru Mindfulness, movement programs, and group therapy. Physical interventions include dance clubs, intramural sports, gym group and individuated classes.

The problem isolated in this instance is the prevalence of stress among the college age, emerging adult population and the lack of research on their perception and use of wellness

interventions. A survey was designed to examine psychosocial wellness, use of wellness interventions, when the interventions are used, and perceived benefits of the interventions. The purpose of this quantitative inquiry is to understand what students are doing to cope utilizing available wellness options to the emerging adult population.

Research questions include:

- (1) What are the components and dimensions of wellness that motivate emerging adults to use wellness interventions?
- (2) What campus programs/ activities do subjects report using?
- (3) What is the frequency of use of campus programs/ activities?
- (4) What are the most frequently endorsed category of motivators that are used by students?

Methodology

In this methodology I will discuss the Internal Review Board (IRB), what quantitative data collection is, how I got from my research questions to my method of data collection, why a quantitative survey was the best method for my study, how I conducted the participant selection process, and define all terminology required.

This study requires the submission of the project to the Institutional Review Board (IRB), which evaluates proposed research studies that involve either human or animal participants (Digiacinto, 2019). An IRB is required to have human research subjects participate in a study, survey, or any other method of research, and is meant to protect the rights of the participants in the study (Digiacinto, 2019).

The purpose of this quantitative inquiry is to evaluate the utilization of health and wellness strategies of full time college students in the emerging adult age range. This study is using a quantitative survey method, which involves research data expressed as numbers (Haertel, 2010) as the research methodology. Direct interviews would not only take significantly longer, but it would be highly likely that I would get fewer responses than I would get through a survey. For my data, quantitative surveys were the best method to analyze the categories of wellness that the emerging adult population participates in. I used descriptive statistics and visual analysis to analyze the data. Additionally, this method worked best for the way the survey was designed. The purpose of the survey research was to see what students on a small college campus are using to promote wellness. The 67 question survey was shaped by Creswell (2009) and from the NCHA survey. The questions were arranged by demographics, then each section by wellness intervention. Microsoft Forms was utilized to create the survey and to also manage the data in spreadsheets to create descriptive statistics, and visual forms demonstrating student participation in wellness interventions. If the student did not participate, then the survey automatically took the student on to the next section. This is using a technique called filter bias, as a person who has not participated in a particular wellness intervention will not be asked further questions pertaining to the topic (Habib, Pathik, & Maryam, 2014). There were 13 wellness interventions participants were asked about: gyms, fitness classes, student health services, off campus health services, a gym relaxation room, private counseling, group counseling, psychiatrist services, the counseling services relaxation room, intramural sports, division sports, a dance club, and the chaplain's office. In each section following the participation question, the survey then asked how frequently each student participated in each wellness intervention, followed by two questions on wellness motivators, their primary and secondary reasons for participating. These questions had

the same 9 definitions from before pertaining to wellness motivators, in the same order. The final two questions allowed students to submit any other clubs or jobs that they participate in along with any leadership positions that they hold.

The opening demographic questions were influenced by the NCHA survey and Research Design by Creswell (2009). The order of the survey questions was designed by order bias, where participant demographics are asked first, followed by the questions that pertain to the topic of the survey (Habib, Pathik, & Maryam, 2014). Questions such as preferred identified gender, major, and second major were nominal, whereas the categorical values were used to identify participants (Creswell, 2009). Questions such as college entry year, average number of hours of sleep, age, and average number of course credits were ordinal, meaning they could be ordered by number (Habib, Pathik, & Maryam, 2014). The question stating “how often would you say things were difficult or overwhelming to manage” was an interval scale, where the question contained properties of both ordinal and nominal questions. This would make the answer “daily” a 10 while “not at all” would be a 1.

The population of the survey send was to the seniors and juniors of a de-identified institution. Participants had to be consenting, English-speaking undergraduate students between the ages of 18 and 29 taking more than 12 credits. Part time students could disrupt the data pool and the participants need to be undergraduates due to the NCHA undergraduate survey data used to support the creation of this study. Students under the age of 18 are excluded because they are considered children and are not covered in the scope of previous research on higher education. Informed consent will be given via participation in a survey. If participants decide at any point to discontinue participation, they may opt out of the survey at any time. Microsoft Forms only accepts completed forms, thus the 114 responses were all complete. Group counseling was the

only wellness intervention that received no data aside from indications that the service was not utilized.

Participants in the study ranged in age from 18 to 23, and 75% of respondents were female while 20% were male. Participants initially included students who would graduate in either May, August, or December of the year 2020, but in subsequent recruitment emails this was expanded to include students graduating in 2021 as to bolster the participant numbers and increase reliability. Participants were given from March 11th, 2020 to March 30th, 2020 to fill out the survey. The first send to participants who were to graduate in 2020 was sent on March 11th. A reminder email was sent out on March 17th. The final send on March 23rd contacted only students that intended to graduate in 2021. The number of respondents obtained during each send was 33, 22, and 59 with the final total being 114. The overall response rate was 15.3%. Response rates for surveys can be as low as 2% and as high as 60 to 70% (Creswell, 2009). The survey took between 1 minute and 40 seconds to 24 minutes to complete with an average length of 8 minutes. All data was retained and none of the 114 data points were thrown out. Surveys were conducted online through school email addresses and as previously stated, the survey was hosted on Microsoft Forms and conducted through school email addresses; the resulting data, which was password protected and accessible only by the primary investigator, was analyzed through Microsoft Excel. This proved beneficial as the de-identified institution moved to remote, online learning due to the COVID-19 pandemic. The online nature of the survey allowed the study to continue despite the institution's closure.

Pre-existing data on wellness use in the emerging adult age group was nonexistent, so data collection was a necessity for this study. A survey was selected as the method of data collection due to its ease of access while also utilizing the fewest resources out of any available

method. The survey was efficient, brief, and could be completed on the participant's own time. The most important factor was the convenience of taking the survey on any electronic device with internet access either on or off campus. The de-identified college suspended courses on March 12th due to outlying circumstances and sent most students home by March 15th, but the utilization of an online survey instead of a paper survey allowed the study to continue as planned. Additionally, this new pool of research knowledge will greatly benefit the scientific community as a whole as it gives insight into the reasons behind emerging adult wellness participation.

Results

What Campus Programs/ Activities do Subjects Report Using?

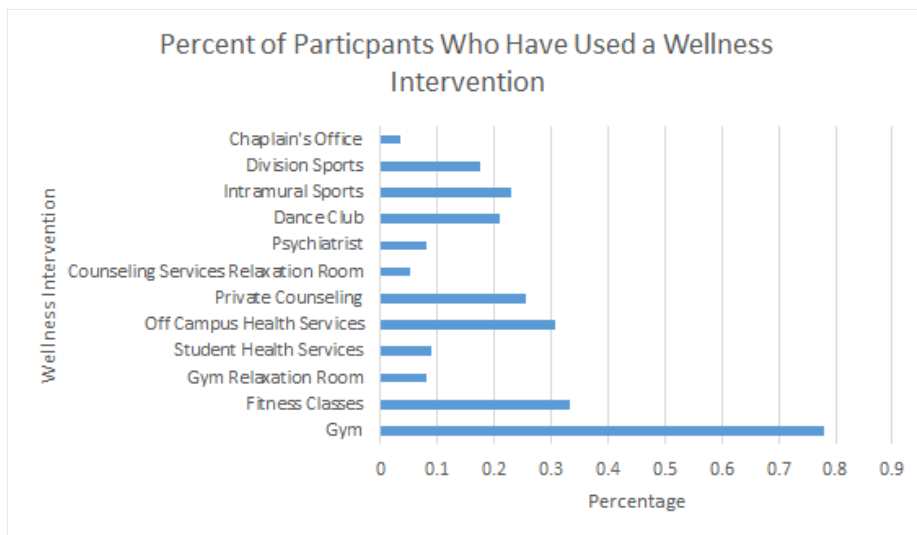


Figure 1. Percent of Participants that have Used Each Wellness Intervention

Figure 1 demonstrates the percent of participants that selected “yes” on the question titled “have you used this wellness intervention”. The wellness intervention with the highest participation was the gym with 78% of student usage, and the smallest was the chaplain’s office

with 3.5% of student involvement. Group counseling had a 0% participation rate, so it was not included in any of the calculations. The mean for this data set was 21.94%, the median 19.25%, and the range was 78% to 3.5%. Emerging adults participate mostly in the gym (89), followed by fitness classes (38), off campus health services (35), and private counseling (29). The least used interventions were student health services (10), the gym relaxation room and psychiatrist (9), the counseling services relaxation room (6), and the Chaplain's office (4). Most students chose coping strategies that were physical in nature. Following with physical, was the mind focused selections. Mind and body coping strategies are often the two most recognizable health and wellness interventions.

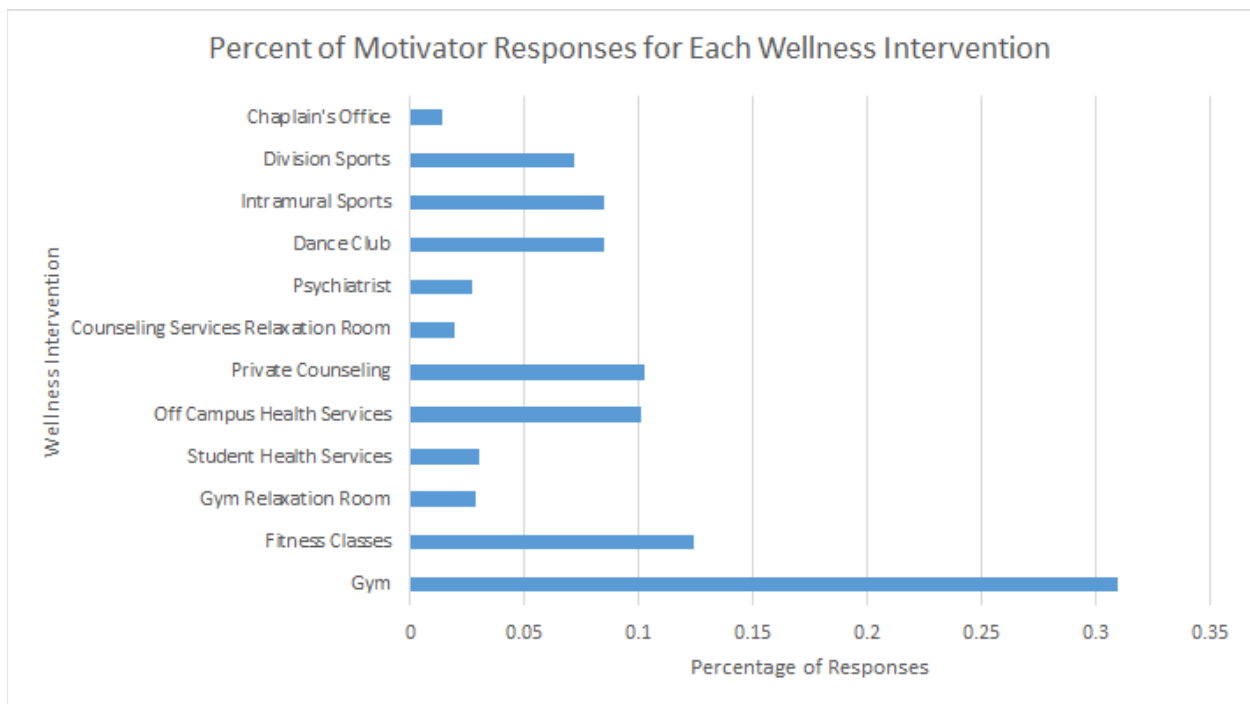


Figure 2. Percent of Responses for each Wellness Intervention by Number of Motivators

Figure 2 demonstrates the percentage breakdown of total responses to “which of the following most closely resembles your primary motivator for using this service” and “Which of

the following, if any, most closely resembles your secondary motivator”. The secondary motivation question was optional. What is interesting is that, with the secondary motivational data, private counseling received more responses than off campus health services. Even though Private counseling was utilized by 25% of students, it accounted for 10.3% of all responses in wellness motivators while Off Campus health services was utilized by 31% of students but only accounted for 10.1% of all wellness motivators. The slight increase of total motivators for private counseling over off campus health services is interesting, as it could be denoting that private counseling provides more than one wellness benefit, and that students participate in counseling for more than one type of wellness benefit.

What is the Frequency of Use of Campus Programs/ Activities?

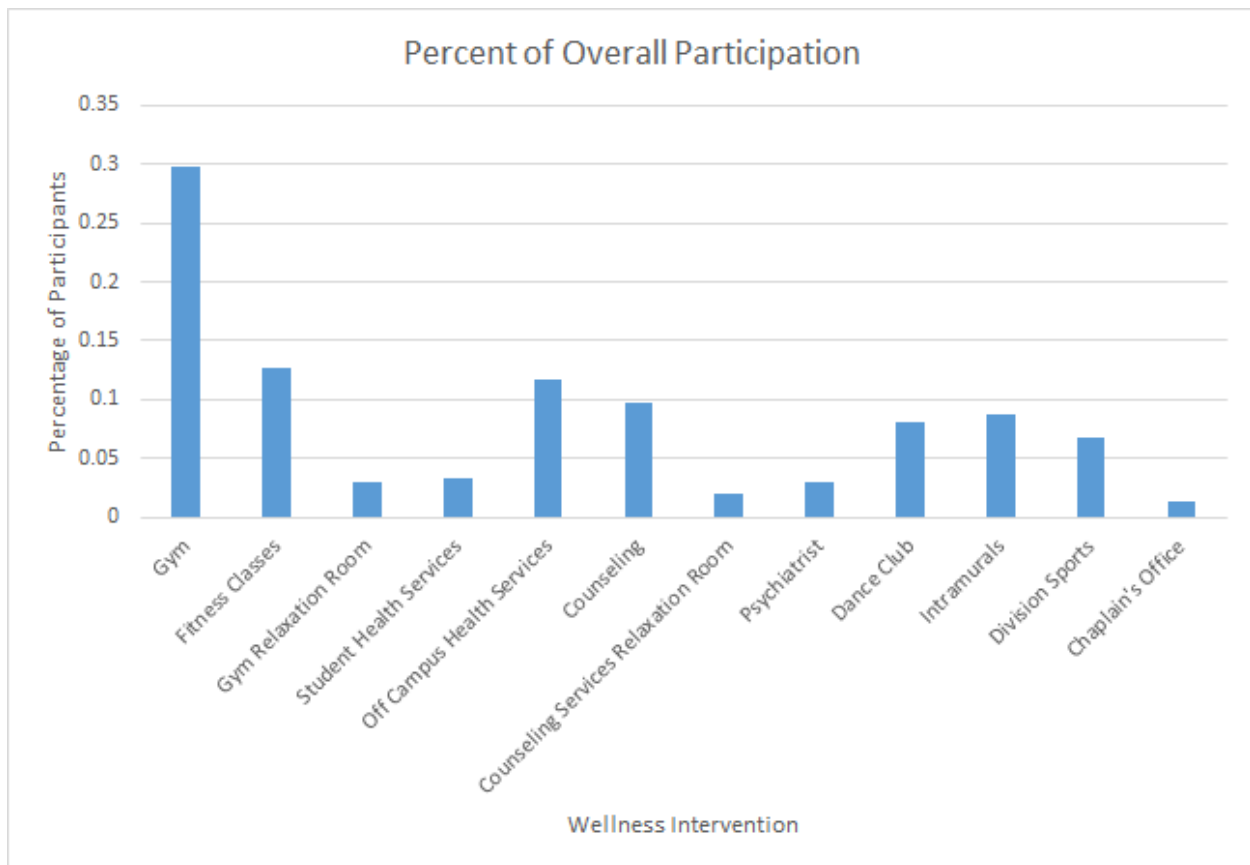


Figure 3. Percentage of Overall Participation in Wellness Interventions

Figure 3 demonstrates the percent of participation in each wellness intervention out of all responses. In total, the most used wellness intervention was the gym, with 29.76% of all participation. This was followed by fitness classes at 12.7%, off campus health services at 11.7%, and counseling at 9.7%.

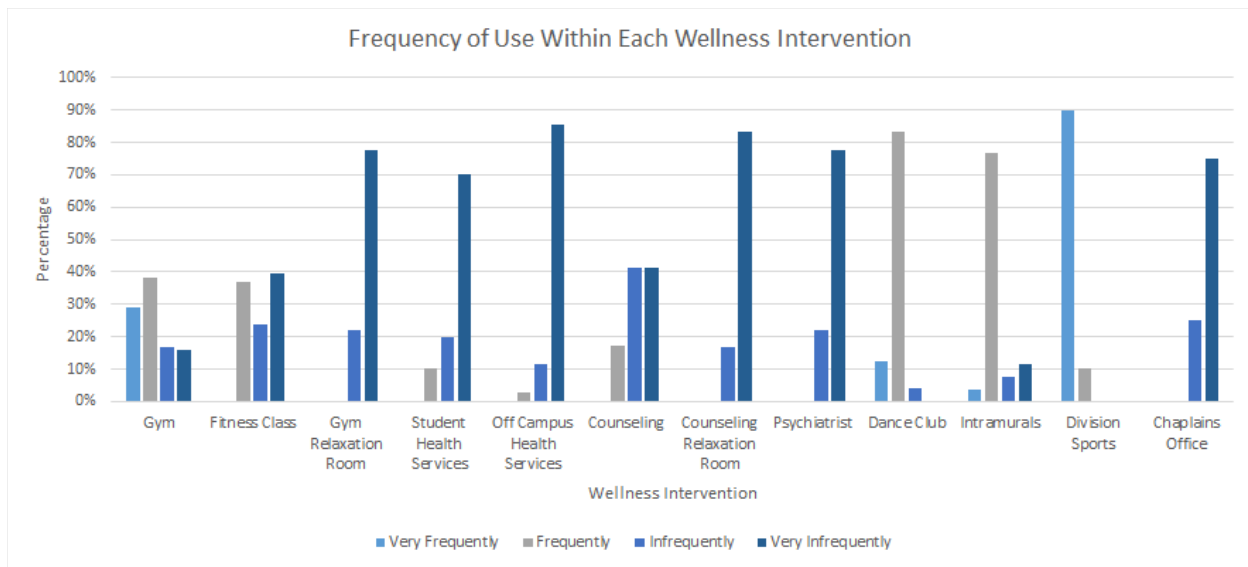


Figure 4. Frequency of Use Within Each Wellness Intervention, out of 100%.

Figure 4 demonstrates the frequency of participation of students in each wellness intervention. Very Frequently was generated by combining “daily” and “every other day”. Frequently was generated by combining “a few times a week” with “weekly”. Infrequently was generated by combining “a few times a month” and “monthly” while very infrequently was generated by combining “a few times a year” and “yearly”. It is interesting to note that the two interventions with the highest percentage of “very frequently” responses were the gym at 29% and division sports at 90%. The highest percentages of “frequently” were dance club at 83%, intramurals at 77%, the gym at 38%, and fitness classes at 37%. For “infrequently” the highest

percentages were counseling at 41% and the chaplain's office at 25%. For “very infrequently”, the highest percentages were off campus health services at 86%, counseling relaxation room at 83%, gym relaxation room and psychiatrist at 78%, chaplain’s office at 75%, student health services at 70%, counseling at 41%, and fitness classes at 39%.

The gym had an interesting spread, in total all four categories were well represented. Overall, the “frequent” categories had 67% while the “infrequent” categories had 33%. The only other wellness intervention to have all four categories was intramurals, where the “frequent” categories had 81% of responses while the “infrequent” categories had 20% of responses. The categories with most of the spread toward or entirely in the frequent categories were division sports with 100%, dance club with 96%, intramurals with 81%, and the gym with 67% . The categories with most of the spread toward or entirely in the infrequent categories were the gym relaxation room, counseling relaxation room, psychiatrist, and chaplain’s office with 100%, off campus health services with 97%, student health services with 90%, counseling with 82%, and fitness classes with 63%.

What are the Components and Dimensions of Wellness that Motivate Emerging Adults to Use Wellness Interventions?

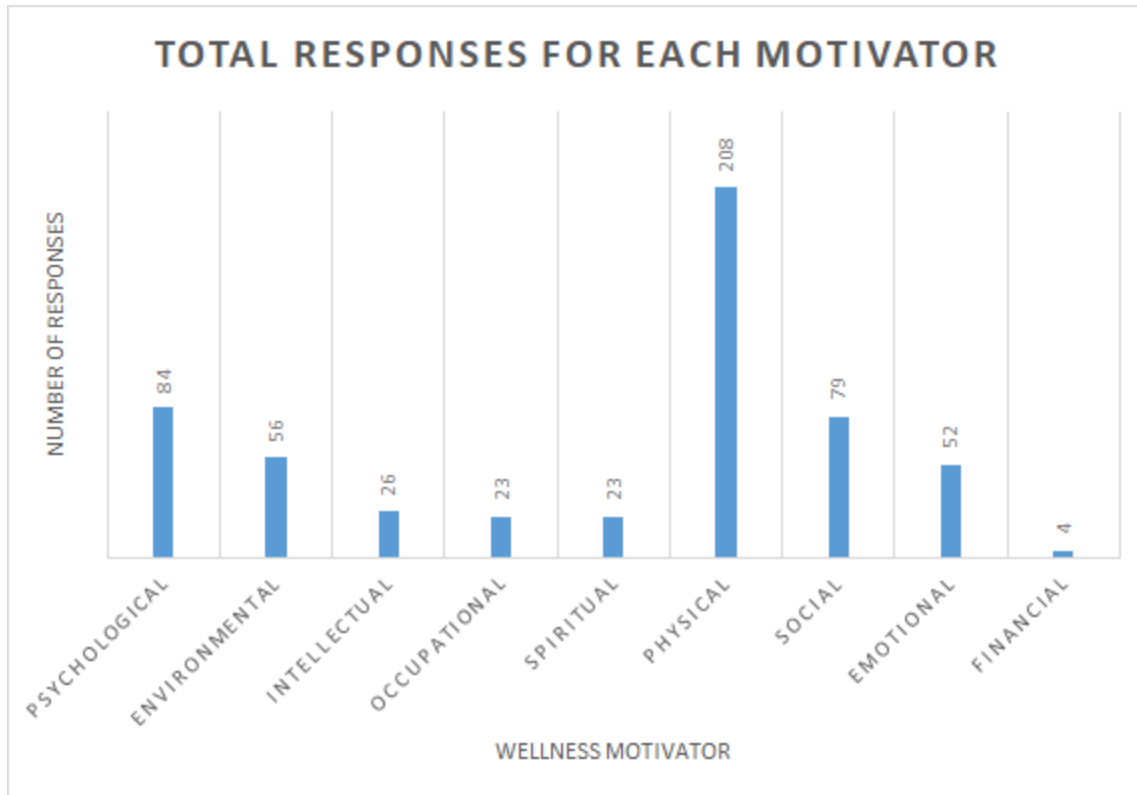


Figure 5. Total Responses for Each Wellness Motivator.

Figure 5 demonstrates the primary and secondary motivator choices in total. The 114 students participated in 299 wellness interventions, selecting 555 wellness motivators. Since the secondary motivator question was optional, some students did not select a second motivator at all for their wellness intervention. The mean for this data was 61.66, the median was 52, the mode was 23, and the range was 208 for physical wellness to 4 for financial wellness. The vast majority of students (37.4%) participated in physical wellness interventions, followed by psychological interventions (15.4%) The least noted motivators also included spiritual & occupational (23), and intellectual (26). The most cited motivators were physical (208), psychological (84), and social (79).

What is the Most Frequently Endorsed Category of Motivators that are Used by Students?

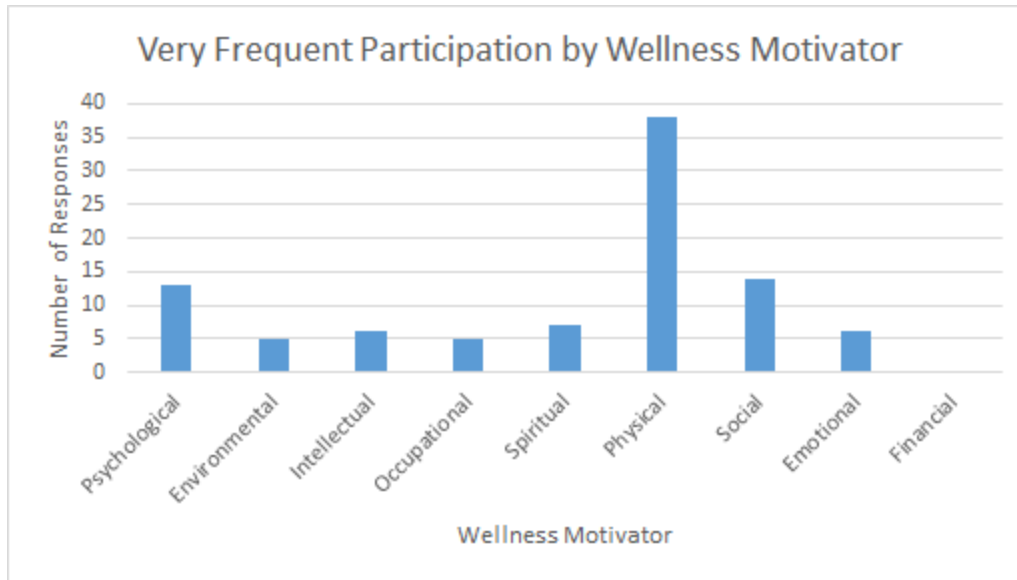


Figure 6. Very Frequent Participation by Wellness Motivator

Figure 6 demonstrates the wellness motivators selected in students who participated in a wellness intervention very frequently, which is a category created by combining results from daily and every other day. In total these 94 responses account for 16.93% of the 555 total responses. The mean for this data is 10.4, the median is 6, the mode is 5 from environmental and occupational wellness and 6 from intellectual and emotional wellness, and the range is 38 from physical wellness to 0 from financial wellness. Other than physical wellness with 38 responses accounting for 40.42% of all very frequent responses, other motivators with higher response rates include social wellness with 14 responses which accounted for 14.89% of very frequent responses and psychological wellness with 13 responses which accounted for 13.83% of very frequent responses.

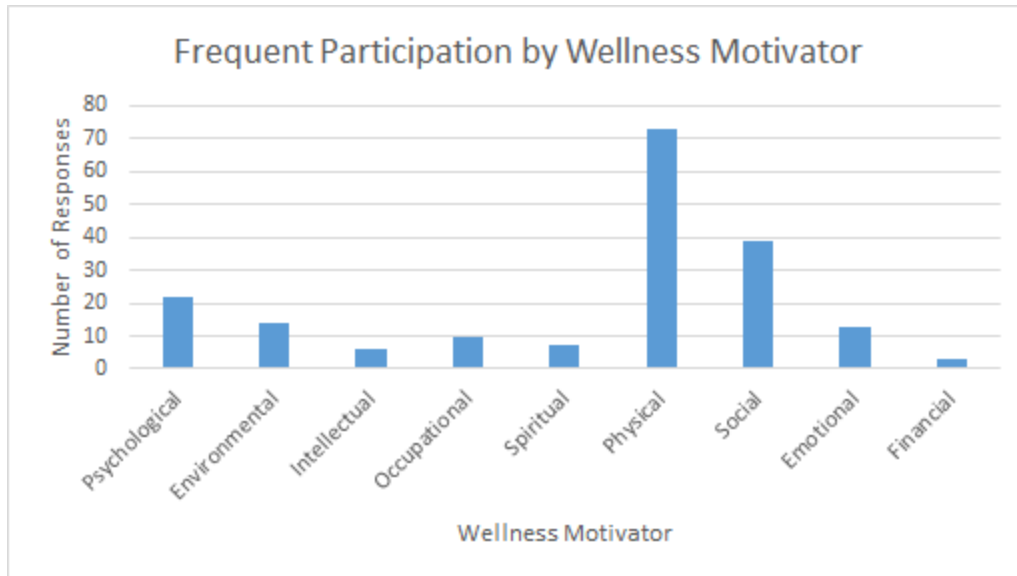


Figure 7. Frequent Participation by Wellness Motivator

Figure 7 demonstrates the wellness motivators selected in students who participated in a wellness intervention frequently, which is a category created by combining results from a few times a week and weekly. In total these 187 responses account for 33.69% of the 555 total responses. The mean for this data is 20.7, the median is 13 from emotional wellness, and the range is 73 from physical wellness to 3 from financial wellness. Other than physical wellness with 73 responses accounting for 39.04% of all frequent responses, other motivators with higher response rates include social wellness with 39 responses which accounted for 20.85% of frequent responses and psychological wellness with 22 responses which accounted for 11.76% of frequent responses.

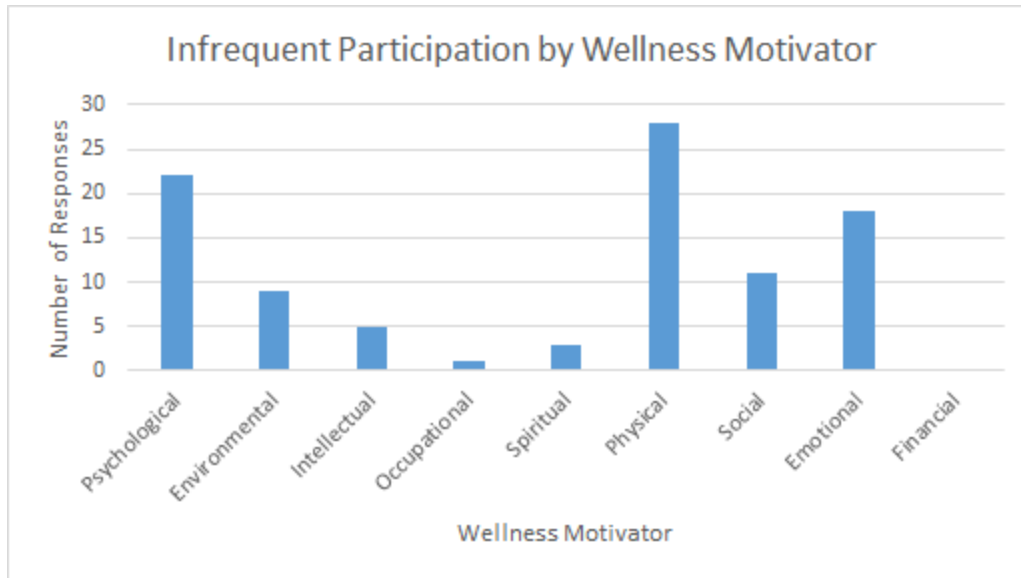


Figure 8. Infrequent Participation by Wellness Motivator

Figure 8 demonstrates the wellness motivators selected in students who participated in a wellness intervention infrequently, which is a category created by combining results from a few times a month and monthly. In total these 97 responses account for 17.47% of the 555 total responses. The mean for this data is 10.77, the median is 9 for environmental wellness, and the range is 28 from physical wellness to 0 from financial wellness. Other than physical wellness with 28 responses accounting for 28.87% of all infrequent responses, other motivators with higher response rates include psychological wellness with 22 responses which accounted for 22.68% of infrequent responses, emotional wellness with 18 responses which accounted for 18.56% of infrequent responses, and social wellness with 11 responses which accounted for 11.34% of infrequent responses.

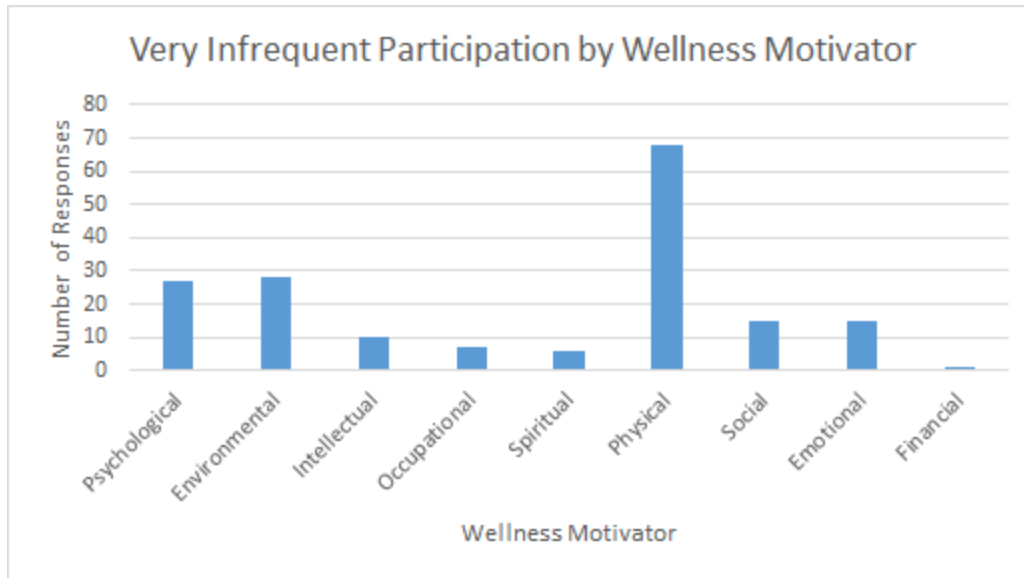


Figure 9. Very Infrequent Participation by Wellness Motivator

Figure 9 demonstrates the wellness motivators selected in students who participated in a wellness intervention very infrequently, which is a category created by combining results from a few times a year and yearly. In total these 177 responses account for 31.89% of the 555 total responses. The mean for this data is 19.66, the median is 15, the mode is 15 with social and emotional wellness, and the range is 68 from physical wellness to 1 from financial wellness. Other than physical wellness with 68 responses accounting for 38.42% of all very infrequent responses, other motivators with higher response rates include environmental wellness with 28 responses, other motivators with higher response rates include environmental wellness with 28 responses which accounted for 15.82% of very infrequent responses and psychological wellness with 27 responses which accounted for 15.25% of very infrequent responses.

Certain wellness interventions can lend themselves to varying frequencies of participation. Additionally, this means a student may participate in a certain experience either whenever it is offered, whenever it is convenient for them, or whenever it becomes available.

Clubs, Jobs, and Leadership Positions

Of the 114 participants, 86 of them were involved in other clubs and jobs, which accounted for 76% of the total responses. In total, these students participated in 266 clubs and jobs. That's 33 fewer clubs and jobs than the 299 wellness interventions that these students participated in. Of the 86 students, 69% of them held leadership positions. These students held 92 leadership positions. An assumption can be made that leadership comes with another layer of stress in an already busy day in the life of a college and university student.

Discussion

However, it is interesting to note that in all frequencies, physical wellness is always the most prominent motivator. This is not at all what I expected to see in my research. Additionally, the wide gap between the most common frequencies, a few times a year and a few times a week, are particularly interesting. It potentially suggests a few considerations. First, that the wellness interventions lend themselves to certain frequencies of participation. Second, that students only have a set amount of time for certain interventions. Or third, that these interventions are only offered a limited number of times or in a way that makes access difficult.

What is, to me, shocking about the data is how physical accounts for 37.4% of the overall response rate, followed by psychological wellness at over half of that number at 15.14%. This demonstrates that physical wellness is potentially the most motivating wellness trait. However, it could also be the wellness motivator most accessible to students due to time constraints or the most advertised method of wellness on the de-identified campus of inquiry. Most of the focus or understanding of wellness follows the notion that there are two more commonly understood categories of health, those of physical and mental/psychological. Most of my literature review on

interventions revolves around mindfulness based stress reduction (MBSR), physical interventions that increased wellness, or meditation practices (citation). In my initial search, I did not include other papers that involved the dimensions and components of health and wellness.

Additionally, this could simply indicate that for this population of emerging adults, physical management of stress is impactful and mind and body are seemingly captured. Under this way of thinking, it would make sense to see the results demonstrate that these two wellness motivators were the top two chosen by students.

Another finding, not surprising to me is that students on campus are very involved so it makes sense that they would have stress in their lives, but what is promising is that students are still taking the time to participate in their own wellness journey.

Conclusion

Some strengths of my study is the reasonable survey capture, 15% response rate, research has shown response rates can be as low as 2% for online survey sends, consistency and development on survey which was developed by literature review and empirical evidence, and finally the survey captured many health and wellness options from the research institutions campus.

Some limitations I had are while the sample for this send was reasonable, it would be beneficial to have a higher response rate to better determine what the population experiences. Next, due to time constraints I intentionally only captured two cohorts from the de-identified research campus. A capture of the entire student body would be recommended for future studies. Visual analysis & descriptive statistics only were utilized for this analysis again because of time

constraints. In the future the use of SPSS for such aspects as examination of correlations between cohorts across the sample would be interesting.

Educating students about holistic health and developing and advertising multifaceted health and wellness programming to enrich student benefits in all facets of wellness for a comprehensive approach would be recommended. Physical wellness is very well addressed, so applying the methods that make physical wellness work well to the other dimensions of wellness might be beneficial. Making each facet of wellness easily identifiable, readily accessible, and available for longer operational hours that are flexible and allow students to choose when best works for them could be greatly beneficial.

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