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## Unmasked: COVID-19 and the Crisis of Well-Being in College Students

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## Abstract

Reports indicate that a mental health crisis of epidemic proportions continues to grow within the US college student population. More than twenty five percent of today's US college students struggle with anxiety, depression, and other mental health issues (Eisenberg & Ketchen Lipson, 2019). The COVID-19 pandemic changed life on college campuses for the entire 2020-2021 academic year. To date, little is known about the impact of COVID-19 on the average US college student's experience and well-being. The following exploratory study seeks to understand the impact of COVID-19 on US college students, identify what tools and resources are accessible to them through their colleges, and discover what additional support they would utilize if accessible. This study begins with a literature review focused on the field of positive psychology, including an overview of its principal goals and methodology. The study then moves to analysis of a self-report survey of 124 US college students using descriptive statistics and qualitative analysis. The qualitative and quantitative analyses are supported with professor and student feedback. Finally, this study takes a closer look at the state of well-being curriculum in US colleges today. Drawing on prior research in positive psychology and the results of the self-report survey of US college students, this study highlights the promising role of a positive psychology course (Russo-Netzer, & Ben-Shahar, 2011) as a potential solution to improve student well-being. A semester long course curriculum is proposed for US colleges to adopt in their pursuit toward helping students thrive.

## Keywords

college, COVID-19, positive psychology, curriculum, student, well-being, university

## Disciplines

Education | Higher Education | Social and Behavioral Sciences

**Unmasked: COVID-19 and the Crisis of Well-Being in  
College Students**

Paige DeLacey

Master of Applied Positive Psychology Program, University of Pennsylvania

MAPP 800: Capstone Project

Advisor: Virginia Millar

July 20, 2021

### Abstract

Reports indicate that a mental health crisis of epidemic proportions continues to grow within the US college student population. More than twenty five percent of today's US college students struggle with anxiety, depression, and other mental health issues (Eisenberg & Ketchen Lipson, 2019). The COVID-19 pandemic changed life on college campuses for the entire 2020-2021 academic year. To date, little is known about the impact of COVID-19 on the average US college student's experience and well-being. The following exploratory study seeks to understand the impact of COVID-19 on US college students, identify what tools and resources are accessible to them through their colleges, and discover what additional support they would utilize if accessible. This study begins with a literature review focused on the field of positive psychology, including an overview of its principal goals and methodology. The study then moves to analysis of a self-report survey of 124 US college students using descriptive statistics and qualitative analysis. The qualitative and quantitative analyses are supported with professor and student feedback. Finally, this study takes a closer look at the state of well-being curriculum in US colleges today. Drawing on prior research in positive psychology and the results of the self-report survey of US college students, this study highlights the promising role of a positive psychology course (Russo-Netzer, & Ben-Shahar, 2011) as a potential solution to improve student well-being. A semester long course curriculum is proposed for US colleges to adopt in their pursuit toward helping students thrive.

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## Introduction

Over the past year, much attention has been paid to US college students' struggles with social isolation and mental health. The decline in US college student well-being has often been attributed to the challenges of virtual learning brought on by the COVID-19 pandemic, leading many to believe that this issue will simply resolve itself once the COVID-19 pandemic is under control and life returns to normal. However, this paper sheds light on the longstanding decline of well-being in US higher education: a crisis that existed long before COVID-19 did (Eisenberg & Ketchen Lipson, 2019; Bates & Bourke, 2020)

Drawing on the field of positive psychology's methods, conceptual models of well-being, and prior research related to this topic, this paper provides support for the following claims: 1) US college students have been struggling before COVID-19 and they will continue struggling after COVID-19, 2) existing services at most higher education institutions in the US provide inadequate support for the development and maintenance of college student well-being, and 3) now more than ever, we need to be teaching US college students the skills, habits, and practices they can use to increase their well-being: specifically, we need more *positive psychology education* in the college curriculum.

Section I of this paper offers a brief introduction to the field of positive psychology: its scope, origins, methods, findings, key concepts, and practical applications for improving human well-being. Section II provides a literature review of research relevant to this paper's topic: US college student well-being. Section III details the findings of a recent online survey conducted by the author to determine a) the impact of COVID-19 on US college student well-being, b) whether US college students feel their institution provides them with adequate resources for well-being/mental health and what additional supports they are seeking, and c) whether US college

students would be interested in taking a course designed to teach them about well-being and how better to achieve it. Section IV of this paper discusses the implications of the survey results in Section III. Specifically, this section proposes that US college students need more well-being resources than their institutions are currently providing them, then proposes a potential solution to this problem: a college-level course whose curriculum is specifically designed to help US college students understand and improve their own well-being. Appendix A outlines this proposal for a higher education course on well-being in more detail. Resources include proposed scope, size, objectives, assignments, materials, grading scale, and difficulty level. A growing body of research points to the fact that well-being can be targeted through such initiatives, and institutes of higher learning are encouraged to utilize these resources to prioritize much-needed well-being within their student body. The crisis of college student well-being will still exist when the COVID-19 pandemic subsides. For years, US college students have been crying out for help: it's time we listen to them. As Winston Churchill wisely said, “never let a good crisis go to waste.”



## Section I: What is Positive Psychology?

Positive Psychology is the scientific study of the strengths and practices that enable individuals, organizations and communities to thrive (Seligman, 2002). The field is founded on the belief that people want to lead fulfilling and meaningful lives, to develop what is best within themselves, and to enhance their relationships, their work life and well-being. Put simply, by notable researcher and psychologist Chris Peterson, “positive psychology is the scientific study of what makes life most worth living” (Peterson, 2006, p. 4).

The field was founded in 1998 by Dr. Martin Seligman, then-President of the American Psychological Association (APA) when he encouraged his colleagues to explore the science behind what makes life good, and thus named the field *positive psychology*. Seligman’s early career was focused on understanding the negative, and it was during this time that he developed the theory of learned helplessness (Seligman, 2002). Learned helplessness is a phenomenon where people who do not believe they can exercise control to improve a negative situation do not act to change their circumstances, thus continuing the cycle of negativity. Seligman became interested in expanding his focus to include well-being. While the traditional field of psychology is focused on fixing what goes wrong in life, positive psychology complements and expands psychology by focusing on building upon the positive with equal scientific rigor. (Seligman & Csikszentmihalyi, 2000). Positive psychology’s research topic is human well-being, and its goal is to improve it. The term “well-being” doesn’t just mean being happy or positive; it is focused on understanding the thoughts, behaviors and emotions that enable people to build “the good life” versus a focus on fixing what is broken (Peterson, 2006; Sheldon & King, 2001). The overarching goal of positive psychology is to understand how to achieve a life of optimal well-being.

## Grounded in Science

Positive psychology differentiates itself from self-help or popular psychology because it utilizes the scientific method (Peterson, 2006; Seligman & Csikszentmihalyi, 2014). Positive psychology explores such topics as how well-being can be defined and measured; its causes and predictors; and more recently cultural understanding of well-being. In his popular book, *Flourish: A Visionary New Understanding of Happiness and Well-being*, Seligman (2011) explains five measurable components of well-being through a comprehensive framework called PERMA: positive emotions, engagement, positive relationships, meaning, and achievement. Measuring a construct such as well-being is not like measuring an objective concept like height or weight, and the earlier work of Ed Diener made significant contributions toward defining and measuring subjective well-being. Subjective well-being, or SWB, is most often characterized by three components: 1) frequent positive affect, 2) infrequent negative affect, and 3) cognitive evaluation of one's life satisfaction (Diener, 1985; Tov & Diener, 2013). Diener et al. (2010) created an 8-item flourishing scale that asked about an individual's perception across the areas of purpose and meaning, relationships, engagement, contribution to the well-being of others, competence, optimism, respect of others, and perception of being a good person, combined to provide a single well-being score. While PERMA and SWB employ slightly different terminology, there is close alignment between the two. Indeed, later factor analyses (Fallon et al, 2017) show significant correlation between the two, solidifying our understanding of what constitutes well-being.

Peterson and Seligman (2004) developed a detailed scale for understanding individual strengths that enhance well-being. Three years of global research resulted in the universal set of 24-character strengths that fall into six virtues that are relevant to people worldwide: wisdom, courage, humanity, justice, temperance, and transcendence (Peterson & Seligman, 2004). The

value in understanding one's character strengths lies in the knowledge of uncovering what is unique to each person and leveraging those strengths, which is shown to increase life satisfaction and well-being (Niemic, 2018). The VIA Survey of Character Strengths survey enables individuals to assess their own strengths and has been taken by over thirteen million people all over the world, providing a common language of people's best qualities. (viacharacter.org, 2021).

Chris Peterson's (2006) research further studied well-being in life by dividing it into three parts: 1) positive experiences, 2) positive individual traits, and 3) positive institutions. He proposed that *positive experiences* are the experiences we connect with feeling good, including emotions like happiness, joy, inspiration, and pleasure. *Positive traits* include individual character strengths, our capacity for love and work, talents, and values that impact our lives positively. Positive experiences are temporary, while positive traits are more long lasting and consistent characteristics. Peterson (2006) defines *positive institutions* as bodies that foster stronger communities that thrive and focuses on the study of strengths such as teamwork, leadership, civic responsibility, and parenting (Seligman, 2020). The comprehensive scope of positive psychology is thus quite large, ranging from temporary feelings of positive emotion in individuals to the dynamic forces that enable well-being in communities and organizations.

Although as noted objective measurement of well-being can pose a challenge, progress can be assessed with pre and post measures using many of the available validated tools such as:

- Grit Scale (Duckworth & Quinn, 2009)

Measures perseverance and passion for long-term goals.

- PERMA Questionnaire (Kern et al, 2015; Seligman, 2011)  
Measures five elements of well-being: positive emotions, engagement, relationships, meaning, and accomplishment.
- PANAS - Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988)  
Measures positive and negative affect through two 10-item mood scales.
- SPANE - Scale of Positive and Negative Experience (Diener et al., 2010)  
Similar to PANAS, it measures positive and negative feelings.

### **Practical Application Through Positive Interventions**

So how can we improve our well-being? The field of positive psychology is interested in the practical application of this knowledge. Leveraging findings from research and application, positive psychology practitioners work toward improving well-being in individuals and communities (Gable & Haidt, 2005; Peterson, 2006). Research demonstrates that the greatest improvements in preventing mental illness and suffering have come not from treating weakness, but from building competency and developing strengths which act as protection against negative outcomes - strengths such as optimism, courage, interpersonal skills, and perseverance (Seligman & Csikszentmihalyi, 2014). For research to translate more broadly into improved well-being, it is critical that we take intentional action to improve our lives and institutions. For example, adopting mindfulness practices and acceptance skills had positive well-being effects for students suffering from stress (Baime, 2019), and minority college students experienced a stronger sense of social belonging when they practiced an intervention through writing about social challenges as normal (Walton & Cohen, 2011).

A core tool of positive psychology, a positive intervention is an evidence-based action intended to increase an individual's well-being by cultivating positive emotions, behaviors, and thoughts, as well as improved relationships, and a greater sense of meaning and purpose (Pawelski, 2020; Sin & Lyubomirsky, 2009). This is notable because research suggests that while two-thirds of our happiness level may be determined by life circumstances and genetics, up to 40% can be increased by our own actions (Lyubomirsky, 2007; Bao & Lyubomirsky, 2014). Therefore, where we place our action and attention has significance in determining our overall life experience and well-being.

While a large body of evidence-based positive interventions already exist, there is great potential to develop more and better attune them to a target population. Positive psychology also conducts extensive research on how well-being interventions and skills can be used to overcome adversity; for instance, there is already substantial research focused on resilience, and depression prevention. Resilience, defined as our ability to bounce back from life's setbacks (Reivich & Shatte, 2003), is an integral skill that helps people strive toward well-being in the face of difficulty. The work of Masten et al. (2009) suggests that developing a positive pattern of coping during periods of adversity or high risk is key to building resilience. More recent research shows that the more often people practice resilience skills, the more resilient they can become (Smith et al, 2018). Additionally, positive psychotherapy (Rashid & Seligman, 2018) offers practical approaches for tapping into positive emotions, relationships and meaning toward optimal functioning.

At its core, positive psychology is the study and practice of what makes life worth living. Fostering understanding and the practical application of evidence-based techniques for improving well-being make this field particularly relevant for US college students as they begin to take ownership of the thoughts, attention and habits that will shape their well-being for years to come.

## **Section II: College Student Well-Being Crisis**

Each year, college students and their families experience the intense excitement, joy and hope for the journey that begins for their student. In Fall 2021, with vaccines widely available and the promise of campus life returning to normal, the National Center for Education Statistics (2020) predicts that nearly four million students will enter college as undergraduate students. In many ways, the college environment is the perfect place for young adults to discover who they want to be, through new relationships, the pursuit of academic interests, and developing important life skills. Arnett (2016) proposes the theory that college supports and encourages students to explore their future identity in a safe and supportive way, since most students are shielded from other responsibilities such as full-time work. Arnett (2016) goes on to say that the exploration of young adult identity and meaning can more easily develop when students are able to form relationships with peers and access support to explore their academic interests before committing to a major. Colleges make this attractive proposition to students through the admissions process by showcasing successful and happy students on their websites who thrive at their institution or offering campus tours which highlight the best parts of college life.

While colleges promise a bright future, there are challenges associated with college life that most students should expect to face. What are the normal developmental challenges college students should anticipate? For most young adults, this is their first time living away from their family, friends and the comfort of home. Additionally, most college students (who are aged 18-25 years old) are still experiencing the brain development and bodily changes associated with adolescence (Wright & Kutcher, 2016) This is an exciting and critical time for an emerging adult to use college as an opportunity to grow their decision-making skills and explore who they are and what kind of life they aspire to lead. However, most college students struggle with balancing the

demands of their daily life with less structure and guidance, coupled with the strong desire to succeed and the pressure to perform (Welle & Graf, 2011).

About half of all mental health disorders present during the mid-teen years, and an even higher number develop by the mid-twenties (Balon et al, 2015; Kessler et al, 2007). The transition to independence in college and the need to cope with a lot of new stressors can create a perfect storm when coupled with the following new situations: living with roommates, making new friends, adjusting to a heavier academic workload, effectively managing time, and deciding what major to declare or career path to follow. It is safe to say that the transition from high school to college presents new challenges for even the most prepared young adults to navigate.

### **What Does the Data Tell Us?**

So how are college students actually doing? Two large annual studies that examine mental health on college campuses shed light on what is currently happening with students (note: they do not reflect the time period inclusive of COVID-19). First, the *Healthy Minds Survey*, which is prepared annually at the University of Michigan and reports on data from over 50,000 students on 54 college campuses (Eisenberg & Lipson, 2019) revealed in its 2019 survey that close to 40% of respondents suffered from depression overall, including major and moderate, and nearly one third from anxiety. First-year students reported struggling with both academic and emotional issues; nearly 40% experienced loneliness as they tried to navigate their independence in a new environment. The survey also measures positive mental health (psychological health well-being) using the Flourishing Scale, an eight-item summary measure of the respondent's self-perceived success in important areas such as relationships, self-esteem, purpose, and optimism

(Diener et al, 2009). The average score was 38 and 48 is considered the threshold for positive mental health (Eisenberg & Lipson, 2019).

The second study, the *Your First College Year Survey* (Bates & Bourke, 2020) is also prepared annually by the Higher Education Research Institute at the University of California Los Angeles (UCLA). In 2020, 6,263 first-year students from 23 four-year colleges were surveyed across the United States. At the end of their first year of college, 60% of students reported feeling isolated from campus life: 17.1% frequently and 43.4% occasionally. Of those who frequently felt isolated, more than half (53%) frequently felt depressed. Further findings show that nearly half (49.4%) of first year students had difficulty managing time and over a third (37.9%) had difficulty adjusting to the academic demands of college (Bates & Bourke, 2020). This study confirms the challenge of social adjustment and the high rates of depression and anxiety among US college students (Bates & Bourke, 2020). However, perhaps the most concerning finding is that among students who reported mental health concerns, over half did not (or perhaps could not) seek help from their college. Of those who frequently felt anxious, 68.8% said they had never used their campus psychological services. Among those who frequently felt depressed, 59% had never used psychological services.

Outside of these surveys, other data points to an alarming 57.4% increase in suicide among teens and young adults between 2007 and 2018 (Centers for Disease Control and Prevention, 2021). This is highly significant for US college students in particular, as suicide is their second leading cause of death (Tuner, Leno & Keller, 2013). Although most US colleges have counseling and/or psychological services available, many do not seek treatment due to the perceived stigma associated with mental illness (Balon et al, 2015). This phenomenon is amplified by the fact that



the traditional model of mental health involves one-on-one treatment, which can make students feel uncomfortable or embarrassed about their mental health struggles.

This data presents a clear picture of US college students in crisis and a lack of institutional support to help them. The upshot of this is that US colleges must find better ways to support their students' collective mental health, academic adjustment, and overall well-being. Their lives depend on it.

### **Campuses Respond: Well-Being in Focus**

As concerns of mental health issues on college campuses have become more widely publicized, many colleges have responded with well-being initiatives, offices, and programs. The *positive university model* (Oades, et al, 2014) was developed in support of a more comprehensive view on the five environments of a college campus: classroom and curriculum, social and relationships, local community, faculty, and residential life. The model suggests actions be taken to support student well-being across all areas with a broader goal to strive toward a more positive experience.

In some colleges, the effort begins early in a student's experience, with many requiring orientation sessions on drug and alcohol use, sexual violence prevention, and other student health and lifestyle topics. Many colleges are beginning to proactively share mental health support information with students during orientation sessions (Brown, 2016). An article in University of California, Berkeley's *Greater Good Magazine* (Eva, 2019) summarized how several US colleges are adapting their well-being programs to be more attuned with student perspectives and student life. For instance, student feedback at Northwestern University prompted orientation organizers to change their delivery from expert speakers to student testimonials where student actors read the

stories of alumni describing their mental health challenges and how they sought help. Students reported that storytelling resonated with them as an accessible way to digest mental health information in a memorable way (Eva, 2019).

George Mason University created the Center for the Advancement of Well-Being and has undertaken a ten-year challenge to become a model university focused on helping students, faculty, and staff to build a life of vitality, purpose, resilience, and engagement (Center for Advancement of Well-Being, 2021). GMU leverages student curriculum by drawing on the research and methodology of positive psychology, creates residence life communities focused on physical and emotional well-being, and hosts an annual conference on leading practices in well-being that influence students and faculty as well as external stakeholders (Center for Advancement of Well-being, 2021).

Other US colleges are focused on leveraging their research capabilities to develop tools for well-being. Currently, as part of an interdisciplinary research project to solve global health problems, UCLA is completing online screenings to measure anxiety and depression in 100,000 students, staff, and faculty. This four-year study, called the UCLA Depression Grand Challenge ([grandchallenges.ucla.edu](http://grandchallenges.ucla.edu), 2021), leverages a 15-minute online assessment where participants learn to self-identify the signs of anxiety, depression, or suicidal thoughts. After completing their assessment, they can opt into mental health support, including counseling services, a referral to receive trained peer support, or the option to participate in an interactive online program called This Way Up ([thiswayup.org.au](http://thiswayup.org.au), 2021). According to the website, researchers plan to monitor participants throughout the four years.

US colleges are also beginning to focus on the importance of student resilience, which is generally defined as the ability to bounce back from negative experiences (Reivich & Shatte, 2003). In 2018, Florida State University launched an online resilience training tool developed through the Institute of Family Violence Studies through their College of Social Work (Antista, 2018). *Student Resilience Project* developers identified that many students coming to the university have experienced stress which can impact their learning. Florida State University now invites all incoming freshmen and transfer students to participate in the training, which features videos and short engaging informational sessions to enhance awareness of student strengths, proven to be important tools of resilience (Gilham et al, 2013), and suggest evidence-based coping strategies.

### **College Student Experience During COVID-19 Pandemic**

Since the COVID-19 pandemic impacted academic life for the entire 2020-2021 academic year, few studies have yet to assess the full impact. The Healthy Minds Network, which runs the earlier mentioned *Healthy Minds Study* (HMS), collaborated with the American College Health Association to develop a new set of survey questions related to students' experiences with the COVID-19 pandemic. The new questions focused on student "attitudes, concerns, preventive actions, and their perceived supportiveness of colleges related to COVID-19," and were sent to random samples of 18,000 college students on fourteen campuses across the US between March and May, 2020 (Healthy Minds Network, 2020). Students responded that their campuses have generally been supportive during COVID-19, especially their individual professors. Yet, sixty percent of students also indicated that the COVID-19 pandemic has made it harder to access mental health resources. This is concerning, as symptoms of mental health conditions continue to rise in US college student populations over time. From Fall 2019 to Spring 2020, the prevalence of

depression among US college students increased, and a higher percentage of students reported that their mental health negatively impacted their academic performance (Healthy Minds Network, 2020). But facing adversity during these unprecedented times may have come with a silver lining: while students reported lower levels of psychological well-being overall in Spring 2020, they also reported higher levels of resiliency. To better identify next steps for US colleges seeking to improve student well-being, a second study was conducted by Liu et al. in 2020. Liu et al. prepared a report based on their findings, urging US colleges to focus their immediate attention on the two most urgent issues in relation to student mental health and well-being: first, the development of strategies to ensure mental health services access, and second, intentional outreach to college students with special circumstances.

Of course, the data reviewed in this section is limited, in that it only represents a snapshot of a period of time during the COVID-19 pandemic. But the relatively small amount of research that has been conducted on US college student well-being during COVID-19 has consistently identified mental health struggles among our college students. When the findings from these studies are coupled with the existing data about college student well-being prior to COVID-19, it is clear that there has been a crisis of well-being and mental health in and among the US college student population for many years. Perhaps COVID-19 is simply unmasking something that was always there.

The good news is that COVID-19 has also put intense pressure on US colleges to improve student well-being. Social distancing and virtual learning have meant that many students have been home with their parents for long periods of time and are voicing their concerns aloud for the first time. As a result, US colleges are paying more attention now than ever before to these issues and

this presents an opportune time for real change to take place for our struggling college students. Now is the time for the voices of students, parents, professors, mental health professionals, and experts in human well-being to be heard by US colleges.

In Section III, we explore what happens when you pile a global pandemic on top of an already fragile college student with inadequate mental health and well-being resources. We learn how US college students adapted during this difficult time and what they wish their colleges had done differently to better support them. Above all, we dig deeper into student reflections on the entire academic year and the impact of COVID-19 on their well-being, mental health, and college experience in order to answer the most important question: *what do we do now?*

### **Section III: Exploratory Study on College Student Well-Being During COVID-19**

As mentioned in Section II, college students are struggling with mental health issues that impact their well-being. While there are numerous popular press articles in which students share the impact of COVID-19 on the past year, to date, the research, and data available that is inclusive of the entire 2020-2021 academic year during COVID-19 is very limited. Accordingly, this exploratory study aims to investigate in more detail the academic year of 2020-2021, with a focus on three core questions: First, how do college students believe COVID-19 has impacted their well-being? Second, how do they currently support their well-being? And third, what tools and strategies focused on improving personal well-being would they be interested in utilizing if offered at their college? Through quantitative and qualitative analysis of US college student responses to a self-report survey, this study seeks to explore the well-being needs of college students and further suggests that students could benefit from a more widely available positive psychology curriculum.

## **Method**

### **Participants**

This study surveyed current US college students with a mean age of 21.3 years and was distributed using a snowball sampling technique (Atkinson & Flint, 2001). Within this technique a researcher contacts several people and asks them to pass their survey on to others in the target demographic. To keep responses anonymous, no identifying information was asked of participants other than their grade level, age, and gender. The Qualtrics link to the survey in this study was also posted on the social media site Reddit. This study and its accompanying survey were approved by the Institutional Review Board of the University of Pennsylvania (protocol #848798).

### **Procedure**

The survey consisted of the following sections: informed consent, one question regarding the participant's school year at the start of the COVID-19 pandemic (Fall 2020), a writing prompt which asked participants to describe the impact of COVID-19 on their college experience, seven quantitative questions which asked participants to evaluate their emotional health and contributing factors during the COVID-19 pandemic using a Likert-type scale or selecting from options, and a writing prompt which asked participants to provide additional insight as to why they believe strategies to support their well-being selected under item six of the quantitative section above would be helpful. Finally, a few basic demographic questions about participant gender and race were asked at the end of the survey. A full review of all survey questions can be found in the appendices (Appendix B).

The survey was designed on Qualtrics and was distributed through a shareable link. Once a person clicked on the link, they were directed to the Informed Consent page. Once participants

read the Informed Consent, they had the option to click: "I consent to participate in this research study," which indicates their consent to participate, and were redirected to the next section of the survey. If they chose not to consent, they clicked "I do not consent to participate in this research study," and they were redirected to the "thank you" page at the end of the survey. The statistical package for Social Sciences (SPSS 25.0) was used to carry out the analysis of the data collected.

### **Participant Characteristics**

The sample consisted of 124 individuals with the following characteristics: mean age was 21.3 (SD=3.84). Of those selecting a gender (n=103), 63 identified as female, 39 identified as male, and one participant identified as other (Nonbinary/ftm was the written response). Of those selecting a race, 63.2% of participants identified as white, 19.3% identified as Asian, 1.8% identified as Black, 11.4% identified as Hispanic or Latino and 1.8% identified as Native Hawaiian or Pacific Islander; .9% selected "prefer not to answer." Students were asked to identify their year in school for the academic year beginning in Fall 2020 and of those who responded 40.3% were Freshman, 20.2% Sophomores, 19.4% Juniors and 20.2% Seniors.

### **Quantitative Results**

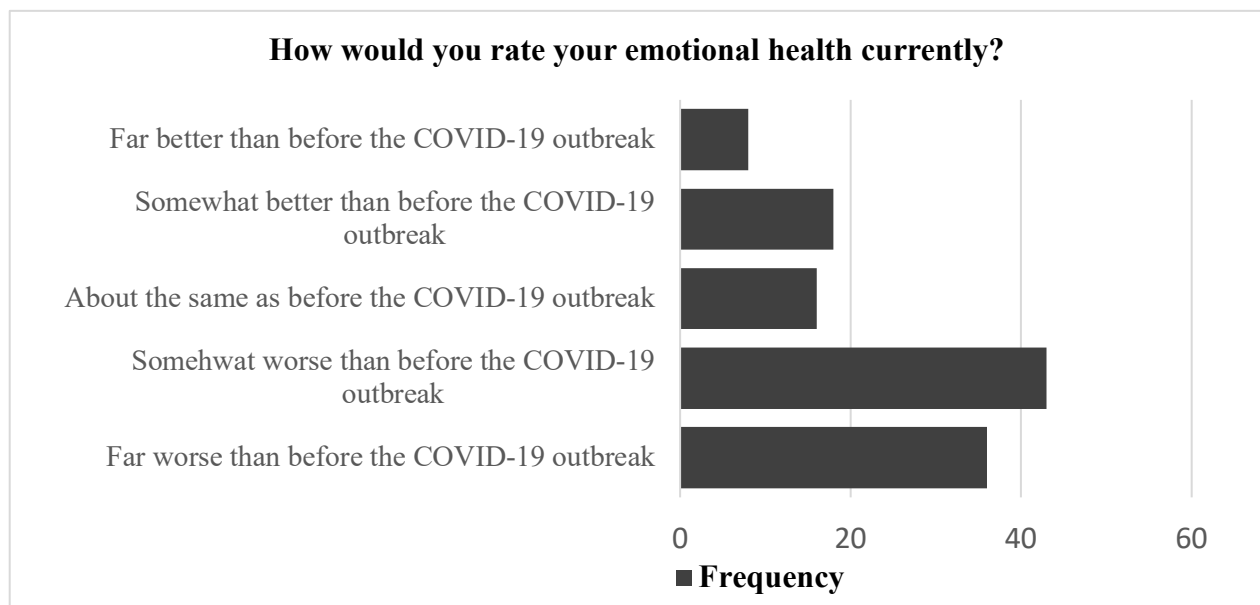
Descriptive statistical analysis of responses was conducted to identify trends and variations, understand differences in well-being factors for each question, and further analysis compared responses between year in school (freshman, sophomore, junior, and senior). Anonymous quotes from the individual write-in responses are included to further detail the students' experience. The following themes emerged from the responses:

### Theme: Most Students Experienced a Decline in Mental Health

**Q: Compared to before the COVID-19 outbreak, how would you rate your emotional health currently? (Survey Item 1)**

Overall, 74.7% of students reported that their emotional health declined since the onset of COVID-19 with 35.3% reporting “somewhat worse” and 29.4% reporting “far worse.” While the remaining 25% felt their emotional health was the same or better than before COVID-19.

**Figure 1**



*“COVID happened during my last year of undergrad, and it only exacerbated every problem. My depression and anxiety skyrocketed, and it was nearly impossible to study while knowing what was happening. This negatively impacted my grades. My concentration was and still is at an all-time low. It's harder to calm down, and easier to work myself into a panic. I find that my thoughts are always racing.”*



***Q. Reflecting on your experience over the past year, which of the following mental or emotional health challenges have you experienced as a college student? (Survey item 3)***

A total of 553 challenges were selected by the 124 respondents from eight options. The top challenges experienced by students were trouble concentrating (87.4%), anxiety (83.2%), social isolation/loneliness (81.5%) and difficulty coping with stress (74.8%). Well over half (63%) stated that they experienced depression during the school year.

*Table 1: Mental health challenges faced by students*

	<b>Responses</b>	<b>Percent reporting this challenge</b>
Anxiety	99	83.2%
Depression	75	63.0%
Social Isolation or Loneliness	97	81.5%
Trouble Concentrating	104	87.4%
Difficulty Handling my Emotions	65	54.6%
Difficulty Coping with Stress	89	74.8%
Substance Use Issues	16	13.4%
Other	8	6.7%
<b>Total</b>	<b>553</b>	

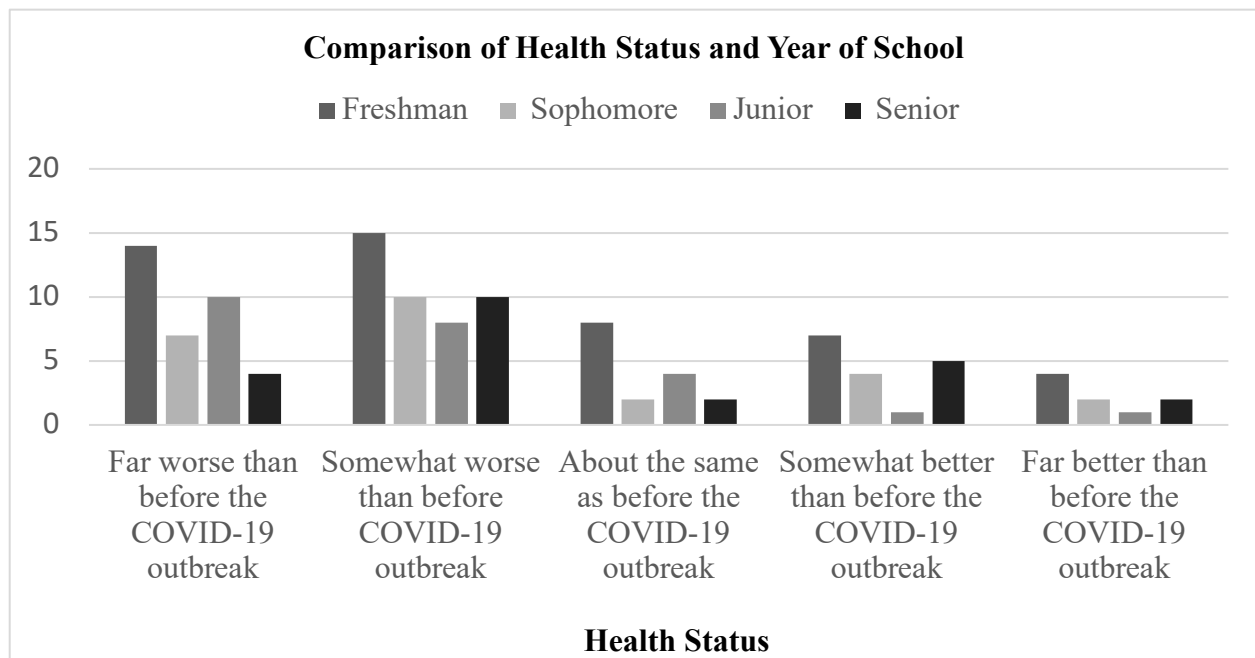
*“I didn't even have a full freshman year. I now live off campus alone and far from my campus. all my classes are online. I don't participate in clubs or classes anymore. My mental health is bad and I take more meds now. I now struggle with self-harm, basically my mental health sucks and my university barely cares lol.”*

*“My motivation dropped greatly. I didn't want to do any assignments because they didn't feel worth it. It felt like checking boxes more than an assignment meant to test my understanding or learning. Additionally, many professors were not used to teaching online. This led to difficulties in learning the content. As a result of these problems my grades dropped.”*

### **Theme: Freshmen are Struggling**

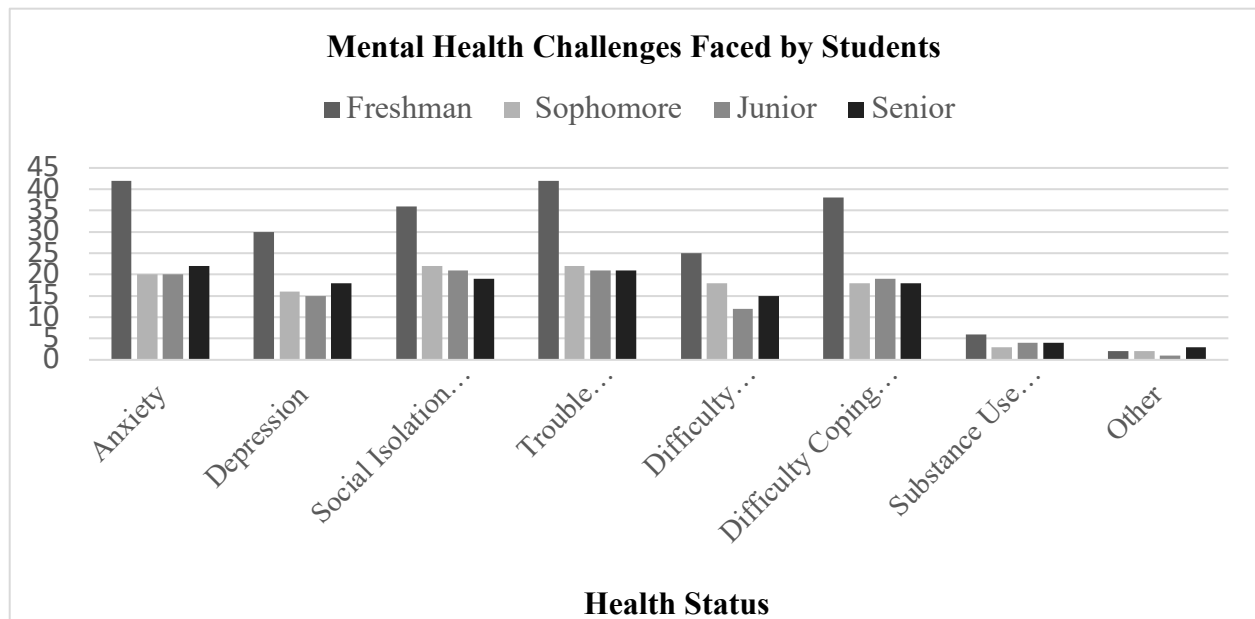
Analysis of responses by grade shows that freshmen expressed a greater decline in well-being when compared to older students. Students who claimed that their health was “far worse” or “somewhat worse” than before the COVID-19 outbreak comprise 74.9% of the freshmen, while 43.3% of sophomores, 47.2% of juniors and 34.7% of seniors reported this level of decline.

**Figure 2**



Additionally, when students reported on specific challenges experienced this year, the freshman respondents reported the highest levels in all categories as a percentage of their cohort including anxiety (41.4%), depression (38.2%), social isolation and loneliness (36.7%) and difficulty concentrating (39%).

**Figure 3**



*“As a freshman, it was really hard to come into a new school, knowing very few people during COVID. My school expected that we form a pod right away, which is hard to do when you don't know who your friends are. I got lucky with my hallmates becoming my really good friends, but I know lots of people who did not have the same experience. There was a lot of pressure to break the rules and go out because if you didn't, it was really hard to meet people.”*

*“It destroyed my college experience. I've always had a hard time studying but luckily for me I was smart enough to pass through public school without really studying... But university? I was literally drowning with all the course and then a pandemic appeared, and courses are online, and no one is here to check on you, no exercise group no nothing. I know you're supposed to be more*

*autonomous at this point but man it was hard enough without the pandemic... I have all the super hard courses and study experience without the 'I get to see people who want to do the same thing as me' one. It's really hard for me."*

**Theme: Students are Caring for Their Well-Being and Want More Resources**

***Q. Reflecting on your experience over the past year, what tools have you used to care for your mental health? (Survey Item 4)***

The 124 survey respondents selected 399 total options across the 8 choices provided to support their well-being, with over half (59.7%) choosing "Getting Outside or Connecting with Nature," 55.5% relied upon "Having a Support System of Friends" and 53% worked on "Getting Adequate Sleep." Seeking the support of a counselor (36.1%) and meditation/mindfulness practices (36.1%) were also utilized frequently.

*Table 2: Tools used to care for mental health*

	<b>Responses</b>	<b>Percent of Respondents choosing the support tool</b>
Having a Support System of Friends	66	55.5%
Getting Outside or Connecting with Nature	71	59.7%
Having a Support System of Family	56	47.1%
Getting Adequate Sleep	64	53.8%
Eating a Healthy Diet	43	36.1%
Counseling support	43	36.1%
Meditation/mindfulness practice	34	28.6%
Other	22	18.5%

**Total****399**

**Q: If you had the opportunity to learn strategies to support your well-being in college, which of the following options would you choose? (Survey item 6)**

When given choices to add strategies, the 124 student respondents selected a total of 283 strategies across 5 options that they believe would better support their college experience: 68% felt that learning to manage stress and better managing their schoolwork was a top priority, while 64% are in favor of building better habits.

*Table 3: Additional tools requested care for mental health*

	<b>Responses</b>	<b>Percent selecting this option</b>
How to create strong relationships	43	43.0%
How to build good habits	64	64.0%
How to manage stress	68	68.0%
How to better manage my schoolwork	68	68.0%
How to seek counseling or therapeutic support	40	40.0%
<b>Total</b>	<b>283</b>	

*I think all of these are really good life skills to have, and ones that are rarely taught and that we are expected to figure out on our own. College is a really big transition and adjustment, and it's really hard to learn all of these things.”*

*“I would like to learn how to create strong relationships to help solve my feeling of isolation. Building good habits would at least help me manage my life work balance and reduce my stress levels. And lastly, managing stress will definitely help me deal with my procrastination as I procrastinate when stressed and it will improve my overall mental health.”*

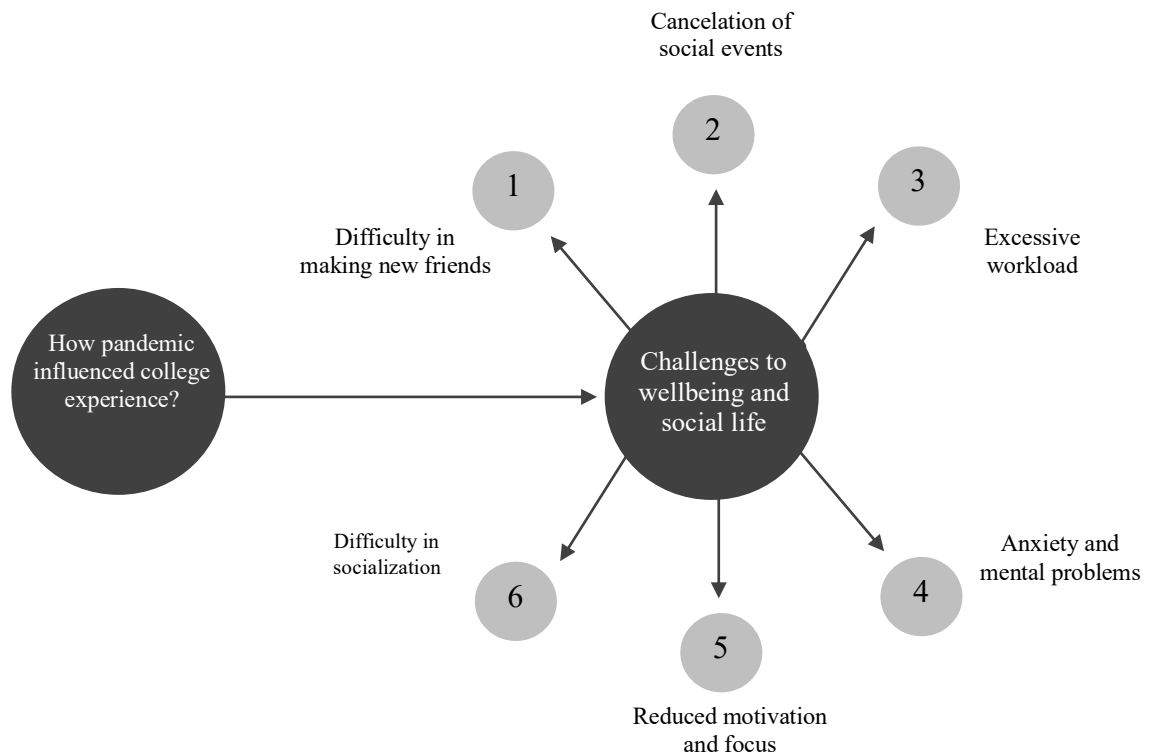
## **Qualitative Results**

The author used NVivo, a qualitative data analysis software that helps researchers to organize, analyze and identify themes in open-ended survey responses. Thematic analysis was done by using the Braun and Clarke (2006) approach in which meaningful survey responses are coded and organized around emerging themes. Each response was read carefully, and initial codes for pieces of meaningful text were identified and labeled in Nvivo12. After completing the coding of all responses, summary tables were created to reflect all codes (Appendix C). The top two themes are depicted visually in “mind maps” from the 105 respondent comments of nearly 13,000 total words for the two questions below.

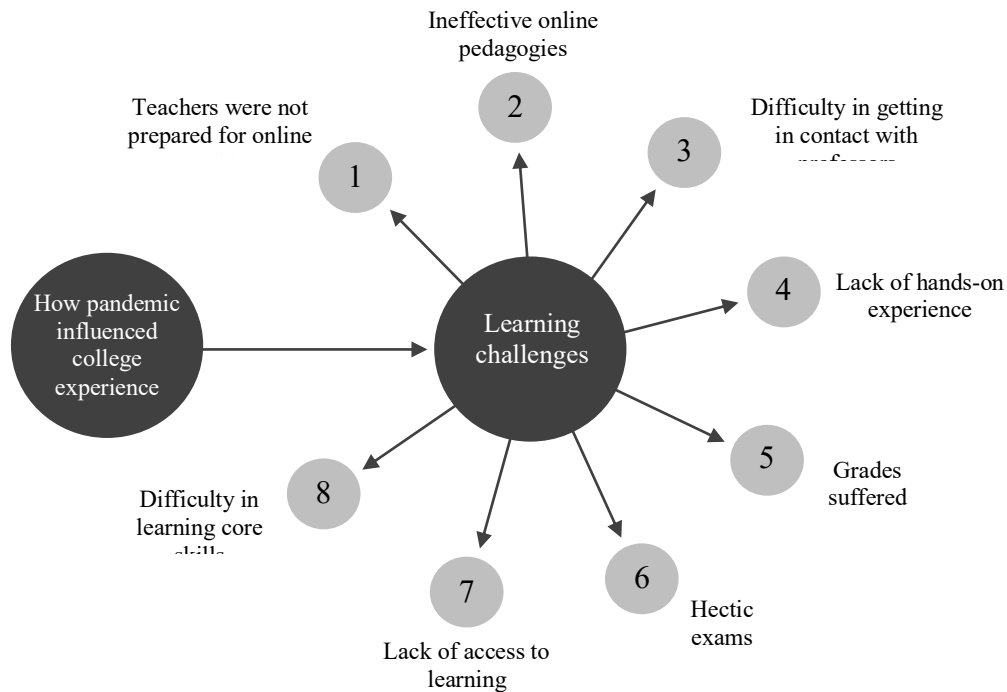
***Q. Reflecting on your past year, please describe the ways in which COVID-19 pandemic interfered with your college experience. (Qualitative Item 1)***

Consistent with earlier findings, students identified the top impact to their life as "challenges to my well-being and social life". This theme was determined by combining six initial codes for responses of 1) excessive workload, 2) anxiety and mental health problems, 3)

cancelation of social events, 4) difficulty in making new friends, 5) difficulty socializing overall, and 6) reduced motivation and focus.



The second theme "learning challenges" was reflected in responses by combining eight codes of 1) difficulty in getting in contact with professors, 2) difficulty in learning core skills, 3) grades suffering, 4) hectic exams, 5) ineffective online pedagogies, 6) lack of access to learning resources, 7) lack of hands-on experience, and 8) teachers were not prepared for online teaching.



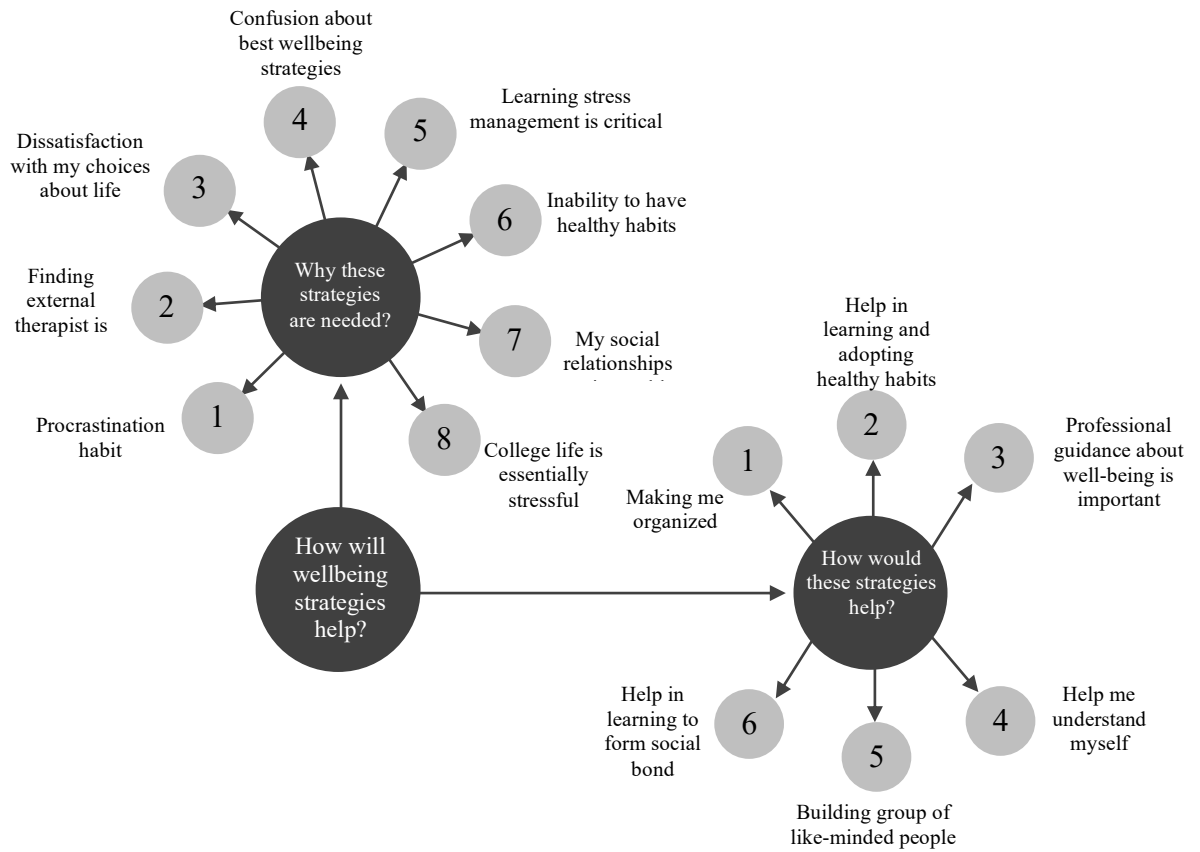
***Q. Could you elaborate on why you would like to learn these strategies (referring to options from quantitative item 6 above) and how they would support your well-being? (Qualitative Item 2)***

Analysis of this two-part question is accordingly divided into two parts: *Why* these strategies are needed; and *how* the strategies can support well-being. “Why these strategies are needed” points to a theme of common challenges experienced by students and reflected in eight codes: 1) college life is stressful, 2) confusion about what are the best well-being strategies, 3) dissatisfaction with my choices about life, 4) finding an external therapist is difficult, 5) struggling to have healthy habits, 6) learning stress management is critical, 7) my relationships are suffering, and 8) procrastination is a problem.

“How would these strategies support well-being” points to a theme of common well-being goals, reflected in six codes: 1) building groups of like-minded people, 2) help in learning and



adopting healthy habits, 3) help in learning to form better social connections, 4) help me understand myself, 5) help me get organized, and 6) guidance about well-being is important.



## Key Findings

College student responses to this self-report survey reveal several insights that are important to note for consideration about how to best support college student well-being going forward. First, the impact of COVID-19 for college student mental health are affirmed. Nearly 75% of students reported a decrease in their overall well-being during and after COVID-19. While some of these students' struggles may be temporary due to circumstances created by social distancing and virtual learning, feelings of social isolation and loneliness were reported by more than one third of students. This is too big of a number to ignore and is not going to resolve itself; it is something that must be actively addressed if it is to improve.

Perhaps one of the most important findings in this study is students' interest in their own well-being and the desire to participate in what their colleges have to offer, with more than 50% of respondents reporting that they tap into a support network of friends, they focus on getting adequate sleep and they get outside and connect with nature. These are all proven practices that can improve well-being. But students want more resources, with 68% requesting new ways to manage stress, 43% are looking for skills to create stronger relationships, and 68% want to learn how to build better habits.

As noted previously, the college transition is stressful. When you add COVID-19 on top of a significant life change, it can feel insurmountable. How can US colleges make support for their students more accessible or more effective? In this survey, 70% of respondents said they would take a college course on well-being if it was offered (Survey Item 7). This is notable because students have mental health resources available at their college, but as described in the recent national studies above, many do not utilize them or do not find them helpful. Additionally, within this current student survey, in response to the question (Quantitative Item 5) on university

services that students accessed this year, over half the participants selected none of the options. How can universities bring more well-being resources to students? The following discussion considers the specific skills that align to student requests from the survey, research-backed existing positive psychology practices and interventions, and how they intertwine to create the mold for a course whose curriculum is focused on improving US college student well-being.

### **Discussion: Meeting the identified needs with the tools of positive psychology**

The feedback from US college students reflects many of the same pre-COVID-19 themes of anxiety, stress, loneliness, and academic struggles, but with seemingly greater intensity. While these students may have access through their college to join a group, finding mental health support, or building good habits, they often struggle to utilize these resources or find them ineffective. In other words, students want what colleges are offering, but they want a more engaging, more effective, more accessible, and widespread version of it.

It is no coincidence that the resources US college students are asking for describe several of the foundational research-backed well-being concepts, and the existing tools and interventions of positive psychology to a tee. Given the challenges and needs identified by US college students in this survey and the findings of related research on college student well-being prior to the COVID-19 pandemic, the following four well-being skills are particularly relevant for college students to develop today in the aftermath of the COVID-19 pandemic. These evidence-based skills could help them make up for lost ground and restore their interrupted developmental task of learning about themselves and developing the knowledge and practices they can apply to support their well-being:

- Building positive relationships
- Developing good habits

- Strengthening resilience
- Understanding your strengths

### **Building Positive Relationships**

The “R” in the PERMA model of well-being described in Section I (Seligman, 2002) focuses on the importance of relationships. The inability to meet people and develop stronger relationships during COVID-19 is a constant theme in this survey’s student comments; and positive relationships are a key aspect of psychological well-being and greater happiness (Bowman, 2010; Seligman, 2002). But how often are young adults taught how to build skills to strengthen their relationships? College presents so many opportunities to make new friends or meet a romantic partner, and students can benefit from learning skills to strengthen how they listen and respond to each other.

Many specific techniques exist to build relationship-strengthening skills. For example, the skill of how to respond positively to someone sharing good news, called capitalization (Gable et al., 2005), is shown to increase positive emotions like belonging, joy, and feeling understood and valued. The specific technique is called “Active Constructive Responding” and a fun exercise for students involves identifying your key relationships and diagnosing your response style. Using creatively named response styles by Karen Reivich (personal communication, March 27, 2021) students can assess if they are a: joy multiplier (responding with enthusiasm and questions), conversation killer (looking at your phone and not saying much), conversation hijacker (it’s all about me) or joy thief (engaging but finding what is bad about their good news)? The risks to responding passively or destructively have been linked to relationship dissatisfaction in friendship and marriage, and Carrère and Gottman’s (1999) research accurately predicted divorce simply by

how couples responded to each other. These techniques have life-long implications, and empirically verified practices which help students build better, longer, healthier relationships and can be taught to students in support of well-being.

A second theme that emerged from the comments was feelings of loneliness, or a sense of not belonging due to social isolation. This is a struggle for students during the “normal” college experience and is certainly not attributable to COVID-19 entirely. In fact, a decade ago, Stanford researchers Walton and Cohen (2011) were studying the issue of loneliness among college students. They developed an intervention where second semester freshmen read surveys from older students that shared how they initially felt that they did not belong, but over time their sense of belonging improved. The study participants were then asked to do the same for future students reflecting on their own experience. The study results indicated that adjustment and achievement were improved throughout the rest of their years at college (Walton & Cohen, 2011). Many such validated practices exist, and taking steps to build connection, belonging and positive relationships can help students develop skills that lead to greater well-being for life.

### **Developing Good Habits**

One of the most requested support tools, mentioned by 64% of survey respondents, was learning how to develop better habits for well-being. College student feedback on the difficulty of adapting to a new environment and establishing new routines makes it a perfect time to introduce the science and practice behind habit. The importance of good habits cannot be understated: about 45% of what we do every day is based on habit rather than choice and intentional action (Neal, Wood, & Quinn, 2006), and when action becomes habit, character can change over time. Habit has a physical basis grounded in neural function in the brain, and neuroplasticity makes it possible

to create a good habit or break a bad habit through the formation of new neural pathways (Neal, Wood, & Quinn, 2006). Research across decades has consistently shown that habits are most easily formed at critical periods in life such as college and young adulthood. The motivation to abandon bad habits often comes from the negative feelings that result from engaging in the bad habit, and those feelings should be used as a springboard to drop the bad habit and begin a good one (Ouellette, & Wood, 1998). College students can benefit from learning practices to analyze their own habits and develop action plans to create healthy habits and support plans to ensure they don't slip into negative patterns.

### **Strengthening Resilience**

According to the aforementioned *Healthy Minds Study* in early 2020, one of the top impacts of COVID-19 for students was learning to adapt and manage unforeseen stress. During times of difficulty with new challenges, resilience is a skill that can help students adapt in healthy ways. As described earlier, resilience is the ability to bounce back from difficulty or simply endure hardship (Reivich & Shatte, 2003). Reivich & Shatte's 2003 book *The Resilience Factor* suggests that our capacity for resilience is not fixed and only partially hereditary; those with stronger resilience experience fewer health problems, lower stress, more positive emotions, and can more effectively respond to difficulty. More recent research shows that the more often people practice specific resilience skills, the more resilient they can become (Smith et al, 2018). Successful resilience curriculums often focus on understanding thinking traps, defined as rigid patterns or mental shortcuts that only allow individuals to see part of the picture (Reivich & Shatte, 2003, Brunwasser et al, 2009). Thinking traps are common and for college students' academic pressure, exhaustion, and ambiguity contribute to taking these unhelpful mental shortcuts. Exercises where

students practice using evidence, planning, reframing, and control to shut down negative thought patterns can protect against anxiety and depression (Southwick & Charney, 2012).

Optimism, while holding many connotations within popular press, is very specifically operationalized within positive psychology literature as a person's explanatory style (Seligman, 2006), and is another thinking pattern that can be taught. As evidenced in some of the survey comments around emotional challenges during COVID-19, college students may believe that bad things happen and that they have little choice in how they respond. But it is our thought patterns that determine our emotional and action response, according to Martin Seligman's research in his book *Learned Optimism* (2006). He suggests that changing our thought processes is something that can be learned. Optimistic people tend to think of the cause of negative events as temporary, specific and changeable; and conversely, a pessimistic explanatory style considers the cause of negative events as personal, pervasive and permanent (Seligman, 2006). For college students, who will experience ongoing new and difficult stressors, recognizing their own explanatory style and practicing exercises to shift their awareness and self-talk is an important skill to develop. One evidence-based activity that is relevant for students to foster hope and positive expectations for the future is to practice five minutes a day of imagining your best possible self where everything is going well in school, relationships, and life, focus on your potential and write down specifically what you are doing well (Sheldon & Lyubomirsky, 2006). This exercise helps to identify goals and competencies and can allow students to feel more in control of their lives. Optimism supports goal achievement and is connected to growth mindset, or the concept and belief that things can improve with practice and effort (Dweck, 2008). Understanding resilience, cultivating an optimistic explanatory style, and working toward a growth mindset are all concepts that can be taught to bolster students' ability to manage stress.

### **Understanding Your Strengths**

A significant part of the college experience is self-discovery (Arnett, 2016). Who am I and what are my unique strengths? How can I apply my strengths to create a fulfilling life with a good job and healthy relationships? These are questions many college students explore. Research supports that understanding and practicing how to utilize our strengths leads to improved well-being and flourishing, especially during transition times (Smith et al., 2020). The VIA (Values in Action) Institute for Character Strengths exists to increase knowledge of the 24-character strengths that impact how individuals think, feel, and behave. Ryan Niemiec's (2018) research on character strengths suggested that understanding our strengths creates a level of self-awareness that enables greater engagement, stronger relationships, improved happiness, and increased achievement. Student participation in the VIA survey, which takes only fifteen minutes, provides a wealth of information about their personal strength profile (VIA Institute on Character, 2021). Further insight can be developed by pairing students and having them participate in one of many existing strengths development activities such as taking turns describing their top five character strengths for five minutes, and then discussing what their life would be like if they could not access their top strength (Niemiec, 2018). Overall, college students who focus on and practice using character strengths experience a decrease in loneliness and a boost to their overall well-being (Smith et al., 2020).

### **Limitations**

While closely aligned with prior large-scale studies, the findings in this study are limited to a group of respondents who self-reported their experience as a student during COVID-19. A snowball sampling technique was used, which is inherently non-random and subject to bias, though the author attempted to begin with a set of initial informants that was diverse and represented large



and small colleges from all regions on the U.S., as well as disseminating the survey through the social media platform reddit with broad reach. The goal of this study was to uncover ways that college student well-being was specifically impacted during COVID-19 and how students wish to better support their well-being. This study suggests that the application of positive psychology education and interventions is a pathway to support college student well-being, but also recognizes that there are multiple frameworks and tools within positive psychology and beyond positive psychology that could benefit students.

### **In Summary**

Students are in a vulnerable place right now. They missed out on a “normal” college experience this year and most will resume in-person classes and campus life in the fall. While some students developed resilience and new skills, many did not, and Freshmen stand out as most likely to benefit from well-being education and practices. Colleges hold the positional power to influence student well-being through curriculum, campus life and most importantly, high quality teaching that can positively influence and encourage student exploration about how to take charge of their own well-being using positive psychology. Such practices are explored in the following section.

## **Section IV: The case for Positive Psychology in college curriculum**

### **Evidence from existing programs**

The well-being survey in this study reveals a disturbing truth about the experience of US college students: before, during, and after COVID-19. Through their highly detailed and insightful responses, these students made it clear that they are struggling, and that most US higher education institutions are not doing enough to help them succeed. The status quo for our college students is not sufficient to achieve the desired outcome – thriving young adults who can access the necessary tools and resources to contribute to their well-being. Across both quantitative and qualitative responses, two global themes are reflected in the survey responses. The first theme is the *exacerbation* – not the creation - of an existing well-being crisis among US college students due to the circumstances brought about by the COVID-19 pandemic. The second is the desire among US college students for better, more accessible tools and resources to support their own well-being. Conversely, while students indicate that they have access to supplemental resources at their universities, many choose not to engage such extracurricular services. Perhaps the most accessible and successful way to teach students positive psychology lies within the universal structure of college, the classroom.

Since the launch of the previously discussed positive psychology movement, many teachers and educators became early adopters of this new science within their classrooms and community practices, which became known as positive education (White, 2016). Research shows that to make an impact on student well-being, positive psychology can be used to blend evidence-based practices designed to improve well-being with best practices in teaching and learning for maximum impact on students (White, 2016).

When positive psychology has been taught in college classrooms over the last fifteen years it has been incredibly popular and gained press attention at schools like NYU, Yale, and Harvard (Engle, March 2021; Russo-Netzer, & Ben-Shahar, 2011). A closer look at what the research says about teaching positive psychology and professor feedback can shed light on how a positive psychology curriculum can improve college student well-being.

Examination of a relevant case study demonstrates how the development of material and the teacher's personal impact is paramount to the student course experience. A positive psychology course taught by Dr. Tal Ben-Shahar at Harvard's undergraduate college – and subsequently at the Herzliya School of Psychology, one of Israel's leading colleges – is one example of how positive education is sought among US college students and can truly make a difference in their well-being (Russo-Netzer, & Ben-Shahar, 2011). This course, listed in the Harvard course atlas at “Psych 1504: Positive Psychology,” was Harvard's most popular undergraduate psychology course ever; from 2004 to 2008, it was taken by one out of seven Harvard undergraduate students (Russo-Netzer, & Ben-Shahar, 2011). The course focus was on personal transformation through exploration of questions central to well-being, such as: how can we help ourselves and our communities become happier? How can improving well-being on an individual level affect society as a whole?

The curriculum of Harvard's positive psychology course combined action and reflection with theory and practice of evidence-based skills for improving well-being. This formula - a well-considered balance between academia and the experience of everyday life - was the key to the successful application of positive psychology in students (Russo-Netzer, & Ben-Shahar, 2011). Specifically, the use of media, including music, the intentional use of humor and telling stories was leveraged in each class and supported the “themes” for each topic. Student feedback indicates

that this combination created a fun and engaging environment for students to actively participate. Additional teaching techniques supported the goal to create positive habits and rituals in the students' lives through their own actions and choices, whether it is a habit of keeping a gratitude journal, exercising at particular times each week, or a ritual of spending time with family and friends.

Student feedback from both universities described the course as “life changing.” The combination of relevant material that truly mattered to students' well-being, taught through use of practical tools along with a supportive environment made the course a huge success even though cultural differences existed among students at the two universities (Russo-Netzer, & Ben-Shahar, 2011). The success of Harvard's undergraduate positive psychology course reveals that simply understanding lecture material or reading about well-being is not sufficient for college students to make substantive changes for their own well-being. There must be a tightening of the theory-practice gap which often exists in college curriculum. While the course material itself is surely relevant to students' theoretical understanding of well-being, it is truly the habits and positive interventions which accompany these models that will make the biggest difference in the lives of our college students. Thus, any positive psychology or well-being course must be taught in a format which is authentic for the teacher and personally relevant to the student's everyday life.

Further support for curriculum in positive psychology and its impact on college student well-being is reflected in the research study that compared 112 undergraduate students at the University of New Mexico in a positive psychology course focused on character strengths and a control group of 176 undergraduates who took other psychology courses (Smith et al, 2020). Both groups of students completed the *PERMA-Profiler* (Butler & Kern, 2016) during the first and last

week of the semester. This questionnaire assessed the five well-being elements of positive emotion, engagement, relationships, meaning, accomplishment (PERMA) plus happiness, health, loneliness, and negative emotion. The results showed that the positive psychology students had significant improvements in all of the measures, including the total PERMA score and that these improvements were significantly better compared to the students taking other psychology courses (Smith et al, 2020).

### **Professor feedback**

In addition to the research, feedback from students and professors supports the evidence that the classroom structure fosters a consistent, supportive environment for students to both learn and practice the concepts and sustainable skills of well-being. According to a recent New York Times article (Engle, March 2021), the *Yale Happiness Class*, formally known as *Psychology and the Good Life*, was only taught once in person to 1200 students and was one of its most popular courses ever. The response prompted a free 10-week version of the course that is now available on Coursera, and to date over 3.3 million people have taken the course.

Mina Simhai, adjunct professor for the science of well-being and positive psychology classes at George Washington University, echoes support for a positive psychology curriculum having the greatest impact when taught in a classroom environment (M. Simhai, personal communication, June 11, 2021). Having taught 3-credit courses in GW's Milken Institute School of Public Health, she found high student engagement and understanding with the curriculum, since students had dedicated weekly time to focus on the content and knew that they would be evaluated.

Dan Lerner, Clinical Instructor at NYU, co-teaches The Science of Happiness, to over 1000 students a year in NYU's most popular elective course. Dan Lerner and Dr. Alan Schlecter's course

popularity inspired them to write *U Thrive: How to Succeed in College and Life*, which outlines many key positive psychology concepts and application in practical strategies for college students (Lerner & Schlechter, 2017). Lerner described NYU's curriculum as focused on skills that they want students to learn and practice for life, and that students often provide feedback that "this should be a required course." (D. Lerner, personal communication, June 16, 2021).

Whether pursued anecdotally or in formal studies, the evidence is clear – well-being as an intentional curricular component is effective and sought by many US college students today. When well-being is measured in college students after they take a positive psychology course, we see their well-being improve (Butler & Kern, 2016; Smith et al, 2020). When compared to a control group, students who took the positive psychology course score higher on well-being measures than those who didn't (Russo-Netzer, & Ben-Shahar, 2011). High demand for well-being courses, as well as feedback from individual students and teachers, confirms such findings and provides a window of insight for US colleges today. We know what our students want – what they need - and we know how to give it to them. Our college students are asking us to teach them about the evidence-based skills and habits required for a human being not just to survive, but to thrive. Isn't it time we give them what they are asking for?

### **Conclusion: A Call to Action**

The surveys, the anecdotes, the research and the feedback from student and professors alike makes for a compelling case: positive psychology taught through a well-being course in the college classroom is a class students want to take and - if they are given the opportunity to take it - can improve student well-being. Prestigious schools have demonstrated that these classes are a proven accessible method, classes are well-attended, and make a positive impact (Russo-Netzer, & Ben-Shahar, 2011, Smith et al, 2020).

This paper began with a discussion around the difficulties facing today's college students. Anxiety, depression, and a desire to learn skills to manage the transition to college have been exacerbated during the COVID-19 pandemic. Importantly, students' survey responses show a strong interest in improving their well-being, a desire for more accessible resources and a willingness to take a positive psychology course at their college. Prior positive psychology curricula show that teaching these skills to college students in an elective course, open to all, does improve well-being. While positive psychology is still a growing field, colleges can adopt the curriculum into psychology or social science courses as many existing resources and proven curricula exist. To support the need for this curriculum, Appendix C provides a detailed course syllabus for a semester-long course called *You → Happier: the science of well-being*, that can be adopted by psychology departments, social science instructors or public health courses. The well-being of our college students impacts how these young adults will contribute to the world. Colleges have the power to help them develop the skills they are seeking that will support them for life.

## Appendix A

### You → Happier: The Science of Well-being

#### Course Description

We've all heard the term "live your best life" and as college students, you are, perhaps for the first time, fully in charge of how you do that for yourself. This course is based on the principles of positive psychology, the science of well-being, and will teach you a set of scientifically validated strategies and practices for living a more satisfying life and improving your well-being. Research shows that college students are more stressed, anxious and depressed than ever and feel immense pressure to succeed. This course is designed to equip you with insights about what actually works to improve well-being and provide you with a toolkit of practices you can apply to your own life. My hope is that you experience greater happiness while taking this course.

This course will begin by examining scientifically validated models of well-being so that you can develop an understanding of what really matters for our happiness. We will explore misconceptions about what you may think makes you happy, and assess our well-being using validated psychological tools. We will then dig into specific aspects of well-being that research shows matters to college students: relationships, understanding your unique strengths, communication, habits, mind/body connection to well-being and more.

#### Course Objectives

By the end of this course, you should be able to:

- Understand and articulate key concepts in the emerging field of positive psychology
- Teach a fellow student three concepts to improve their well-being using concepts and materials from this course
- Apply well-being strategies to your own life and share your experience on how it improved your well-being (or not)
- Evaluate your own well-being and develop a plan to improve it based on the research and practices in positive psychology

#### Course Requirements

**Active class participation and discussion posts.** This course is designed in support of your well-being and NOT to add immense out of classroom workload. Because of that, in order to understand the material and practice the strategies to improve your well-being you must be present and participate in all group activities which will occur during each class. You will be assigned a cohort to work with in small groups which will change three times in the semester. This will not only increase your learning but will help you build close relationships with your fellow students, a proven ingredient to happiness!



**Weekly Reading Assignments Summary.** After each reading assignment is due, you will be required to synthesize and summarize the main points conveyed for each reading into two to three sentences and submit to canvas by the due date. What is the main well-being concept taught? Or what was learned from this study? You will need to distill the insights into approximately 250 words double spaced each week.

**Teaching Session.** Within your three cohorts you will be required to teach one concept on well-being using a topic overview that you prepared ahead of time. More details will be provided on how to prepare the topic overview in week three.

**Final Project.** The research project will allow you to reflect on all you have learned during the semester and write your own well-being improvement plan. Additional details will be provided later in the semester as you get started in your weekly practice of well-being strategies.

### Course Grade

20% In-class Participation and Discussion Post

25% Weekly Reading Assignment Summary (250 words)

30% Group Teaching Sessions (3)

25% Final Project: Research Paper (8-10 pages double spaced)

**Required Reading:** College students have enough to worry about and reading materials should not add to your list- so all reading assignments will be available for free through a link on canvas, a pdf, or a video that you can access through a link. Please complete all reading before the class discussion for the week. In general, you can expect two to four articles per week, or two or three chapters of a book.

**PowerPoint Slides and Lecture Notes:** Also available for free! An outline of the main topics we will cover in class will be provided via PowerPoint slides online before each class. After each class, slides will be shared with more details including definitions and sources so that you have all course materials available.

### Course Agenda

**Week 1:** Introduction to Positive Psychology and the concept of well-being

#### Required reading:

1. Watch two short Sonja Lyubomirsky videos from the Greater Good Science Center:  
“What Determines Happiness”: [https://www.youtube.com/watch?v=\\_URP3-V1sY4](https://www.youtube.com/watch?v=_URP3-V1sY4)  
“Happiness Takes Work”: <https://www.youtube.com/watch?v=6T7QGITKZGg>
2. Peterson, C. (2006). *A primer in positive psychology*. Oxford University Press. Chapters 1 & 2.
3. Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14. <https://doi.org/10.1037/0003-066X.55.1.5>

4. Watch one short video from Dr Martin Seligman on the PERMA model of well-being <https://www.youtube.com/watch?v=jqqHUXzpfBI>

**Weekly Practice: Measure Your Happiness Levels.** By the end of this week, go online to the UPenn Authentic Happiness Website (<http://www.authentichappiness.sas.upenn.edu>) and take the “Authentic Happiness Inventory.” This short quiz is a scientifically validated measure of your levels of happiness. Write down your score. This first score will serve as a baseline throughout the semester of how your happiness levels change.

**Discussion Post:** Write approximately 300 words sharing at least two insights you had about your authentic happiness score. You are not required to share your score, but please share something that you learned about yourself through this assessment. Comment on each person in your cohort's post by Sunday at 9pm.

**Week 2:** Knowing your strengths and why it matters

**Required reading:**

1. Park, N., & Peterson, C. (2009). Character strengths: Research and practice. *Journal of college and character*, 10(4).
2. Watch The Science of Character Video <https://www.viacharacter.org/resources/videos/the-science-of-character>

**Weekly Practice: Finding Your Signature Strengths.** This week you will have an opportunity to identify and use your character strengths. The first step is to identify your character strengths. (IMPORTANT: Please do this as early in the week as possible). To identify your character strengths, take the online character strengths test which is available for free on the VIA website (<http://www.viasurvey.org/> then click to register). The test takes approximately 30 minutes. There are no right/wrong answers, but it's important to be authentic, so that you can get the most from the experience. Encourage your roommates, friends, and family to take the questionnaire too, so that you can discuss your respective scores and the idea behind the VIA with them.

After taking the test, you will get the ranking of your 24 strengths. Print it out and note your top five. We will do an in-class activity discussing our top five strengths within your cohort.

**Discussion Post:** Write about your experience and observation of using your strengths this week. What felt natural? What did you notice about when you tap into one of your top strengths? Do some strength spotting by commenting on each person in your cohort's post by Sunday at 9pm.

**Week 3:** Relationships: why they matter and skills to make them stronger

**Required reading:**

1. Fowler, J. H., & Christakis, N. A. (2008). Dynamic spread of happiness in a large social network: Longitudinal analysis over 20 years in the Framingham Heart Study. *British Medical Journal*, 337, 1-9. <https://doi.org/10.1136/bmj.a2338>

2. Gable, S. L., Gonzaga, G. C., & Strachman, A. (2006). Will you be there for me when things go right? Supportive responses to positive event disclosures. *Journal of personality and social psychology*, 91(5), 904.
3. Padilla-Walker, L. M., Memmott-Elison, M. K., & Nelson, L. J. (2017). Positive relationships as an indicator of flourishing during emerging adulthood. <https://psycnet.apa.org/record/2017-30845-018>

**Weekly practice:** Spread happiness! Fowler & Christakis (2009) have used social networking studies to suggest that positive states and behaviors seem to “spread” across populations (happiness, loneliness, quitting smoking, obesity). Let’s test this idea out. Choose one context where you interact with a group of 3+ people. Apply an intervention: publicly express gratitude for someone in the group, intentionally do acts of kindness, or intentionally ask others about something important to them that you wouldn’t normally ask in that context.

**Teaching session:** Choose one of the topics we have learned about thus far (models of well-being, character strengths or a concept we practiced on relationships) and create a two-page topic overview and teach one of your cohort members during our class activity. You will take turns teaching each other and sharing feedback about what you learned. Please submit your topic overview prior to the in-class teaching session.

**Discussion Post:** What did you learn about your natural response style? What relationships do you find it most difficult to be a joy multiplier? What gets in your way? Write a 300-word discussion post about two relationships in your life and what you observed about your response style? Comment on your cohort’s posts by 9pm Sunday.

**Week 4:** Habits part one: we are what we do

**Required reading:**

1. Read chapters 1,2 and 3 of James Clear (2018). *Atomic habits: Tiny changes, remarkable results: An easy & proven way to build good habits & break bad ones*. Avery.
2. Watch this short video on habit with James Clear.  
[https://www.youtube.com/watch?v=U\\_nzqnXWvSo](https://www.youtube.com/watch?v=U_nzqnXWvSo)

**Weekly practice:** Identify one habit you wish to change. It can be adding a good habit or breaking a bad one, we will get into those specifics next week. Determine if the change is outcome based, a process change or identity based. Bring your one-page summary of your assessment to class for an in-class activity.

**Discussion post:** Write a 300-word post about a good habit you have been practicing since you got to college. What makes this habit stick? What did you do or decide to make this habit part of your life? Comment on your cohort’s posts by Sunday 9pm.

**Week 5:** Habits part two: making them stick

**Required reading:**

1. Read chapters 5, 8, 12 & 15 of James Clear (2018). *Atomic habits: Tiny changes, remarkable results: An easy & proven way to build good habits & break bad ones.* Avery.

**Weekly practice:** Choose one habit you wish to change and identify HOW you can specifically apply the four principles of habit change: 1) make it obvious 2) make it attractive 3) make it easy 4) make it satisfying. Write a one-page reflection on your habit to class for an in-class activity. Begin to practice your new habit this week.

**Discussion post:** Write a 300-word post about how your new habit practice is going so far. How are you applying the principles of habit? What is working? What did not work? Comment on your cohort's posts by 9pm Sunday.

**Week 6: Mind/Body connection to well-being****Required reading:**

1. Baime, M. (2011). This is your brain on mindfulness. *Shambala Sun*, pp. 44-50.
2. Read chapters 1, 2, 3 & 5 of John Ratey's book (2008). *Spark: The revolutionary new science of exercise and the brain.* Little, Brown & Company.
3. Watch this short John Ratey video <https://bigthink.com/surprising-science/john-ratey-exercise?rebellitem=2#rebellitem2>

**Teaching session:** Choose one of the topics we have learned about thus far and create a two-page topic overview and teach one of your cohort members during our class activity. You will take turns teaching each other and sharing feedback about what you learned. Please submit your topic overview prior to the in-class teaching session.

**Weekly practice:** Choose a mindfulness practice or a physical activity practice and implement each day this week. You can use a meditation app if you choose meditation, or you can join a group for physical activity. You have freedom to choose what you think will most improve your well-being.

**Discussion post:** Write about your weekly practice. Describe how you structured it and what worked well or what didn't. What did you notice after a few days of practicing? How will you keep this practice going? Comment on your cohort's posts by 9pm Sunday.

**Week 7: Managing stress and building resilience****Required reading:**

1. Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist*, 47, 302-314.

2. Read chapters 1-4 in Reivich, K., & Shatté, A. (2002). *The resilience factor: 7 essential skills for overcoming life's inevitable obstacles*. Broadway books.

**Weekly practice:** After our discussion on cognitive shifts in thinking about what happens in class using the A (activating event) B (beliefs) C (consequences) D (dispute it!) and E (energy) put this into practice in your life. Observe your thoughts as a negative event happens and see if you can shift your mindset. Second activity this week: well-being check in #2 using (<http://www.authentic happiness.sas.upenn.edu>) to see if anything has changed since your first assessment.

**Discussion post:** Write about your experience using ABCDE with a specific event, how you felt about it and what happened when you tried to dispute it. What do you notice about your self-talk? What is effective when trying to dispute it? Comment on your cohort's posts by 9pm Sunday.

**Week 8:** Optimism: it's something we can learn

**Required reading:**

1. Read Reivich, K., & Gillham, J. (2003). Learned optimism: The measurement of explanatory style.
2. Genç, E., & Arslan, G. (2021). Optimism and dispositional hope to promote college students' subjective well-being in the context of the COVID-19 pandemic. *Journal of Positive School Psychology*, (FirstView articles).
3. Read chapter 2 of Seligman, M. E. (2006). *Learned optimism: How to change your mind and your life*. Vintage.

**Weekly practice:** Reframe your cognitive patterns to work towards an optimistic explanatory style. Choose a negative event in your life from the week that you would be comfortable sharing in your discussion post. First, write about the event in negative terms using what we learned about pessimistic explanatory styles, then spend the next five minutes writing about it using an optimistic style. Remember that this is a cognitive process, so you may not actually feel happy, but this is about accepting what happened and framing it in a productive way.

**Discussion post:** Write a 300-400 word post about the event you considered and what you learned by reframing it in an optimistic way. What had to change for you to do that? What did you learn about yourself? What aspect of an optimistic explanatory style is most important for you to embrace? Comment on your cohort's post by Sunday at 9pm.

**Week 9:** Achievement, goals and grit

**Required reading:**

1. Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92, 1087-1101.
2. Peterson, C. (2006). *A primer in positive psychology*. Oxford University Press. Chapters 3, 6, & 8.

**Weekly practice:** Prepare a one-page summary for an in-class activity on the following questions: How is grit defined? How does grit differ from achievement, as it has been studied? What are the implications of the Duckworth study on grit? How should they influence how we provide guidance to college students? How do you think achievement contributes to well-being? Can you have too strong of a focus on achievement?

**Teaching session:** Choose one of the topics we have learned about in the last three weeks (optimism, resilience or mind/body) and create a two-page topic overview and teach one of your cohort members during our class activity. You will take turns teaching each other and sharing feedback about what you learned. Please submit your topic overview prior to the in-class teaching session.

**Week 10:** Judgment, Decision Making, Rationality, and Wisdom

**Required reading:**

1. Read chapters 2-4 Schwartz, B. (2004/2016 Revised Edition) *The paradox of choice: Why more is less*. HarperCollins.
2. Schwartz, B. (2000). Self-determination: The tyranny of freedom. *American Psychologist*, 55, 79-88.

**Weekly practice:** Keep a daily gratitude journal. For the next week, you will spend each night writing down at least five things for which you're grateful. They can be little things or big things. You can just write a word or short phrase, but as you write these things down, be mindful of the things you're writing (e.g., imagine the person you're writing about, re-experience the experience you chose, etc.). This exercise should take at least five minutes. You can take a photo of things you're thankful for too. Do this each night for the whole week. We'll learn more about gratitude in class.

**Discussion post:** Write a 300-word post about your decision making process, defining if you are a maximizer or a satisficer. What decisions are you able to make quickly? What decisions pose greater challenges? How does having more choice impact your decisions? Please comment on your cohort's post by Sunday at 9pm.

**Week 11:** Mental health and dealing with difficulty

**Required reading:**

1. Read annual college well-being study conducted by Eisenberg, D., & Ketchen Lipson, S. (2019). *The Healthy Minds Study*
2. Arnett, J. (2016). College students as emerging adults. *Emerging Adulthood*, 4(3), 219–222. <https://doi.org/10.1177/2167696815587422>

**Weekly activity:** Do a mental health check in on yourself in the following four areas: personal well-being, close relationships, school and if applicable work, overall, in your life. How are you doing? Where do you feel like you are thriving? Where are you struggling? We will do an in-class activity using this information (but you are not required to share specific details).

**Discussion post:** Write a 300-word post about what your university can do to better support student well-being. Utilize ideas that we have discussed in class. Think realistically about what students are able to participate in balanced with what you wish for. Comment on your cohort's post by 9pm Sunday.

**Week 12:** Measuring well-being in our communities

**Required reading:**

1. Prilleltensky, I. (2012). Wellness as fairness. *American Journal of Community Psychology*, 49(1-2), 1-21.
2. Watch one video from the 2021 UN World Happiness report that interests you <https://worldhappiness.report/blog/video-series-deep-dive-into-the-2021-world-happiness-report/>
3. Read chapter 5 from the 2021 UN World Happiness Report: Mental Health and the COVID-19 pandemic (<https://worldhappiness.report>)

**Teaching session:** Choose one of the topics we have learned about in the last three weeks (achievement/grit, decision making, mental health) and create a two-page topic overview and teach one of your cohort members during our class activity. You will take turns teaching each other and sharing feedback about what you learned. Please submit your topic overview prior to the in-class teaching session.

**Discussion post:** Write a 300-word post about what you think enables a thriving community. This could be your local hometown, your residence life environment or a global community. What have you learned from positive psychology that you believe is critical for all those in a community to flourish and why? Comment on your cohort's post by Sunday at 9pm.

**Week 13:** Putting it all together: what have we learned?

We will end our semester with a class debrief on what we have learned about ourselves, each other and what tools we now have to be happier and healthier.

**Final Activity: The Gratitude Letter/Visit.** Think of one person, still living, who made a big difference in your life but whom you never properly thanked. Find a quiet spot when you have a half-hour and write a 300-word, heartfelt testimony to that person, explaining how he or she touched your life and why he or she is meaningful to you. If you are able to, schedule a time to visit this person in person and share your letter. Call the person and say you want to visit without explaining why. At the visit, read the letter aloud. Gratitude is a powerful tool for increasing happiness because it intensifies positive memories and forges social bonds. For this reason, this is likely to be one of the most impactful experiences of the course.

**How Has Your Authentic Happiness Changed?** To see if this class has helped you, re-take the "Authentic Happiness Inventory" that you took at the beginning of the semester. Have you improved your scores at all? Are you feeling more ready to take on behavior changes? Are you

experiencing more positive emotions? Are you ready to go to final exams with a bit more resilience?

**Final project due on last day of class:** 8–10-page research paper, your personal well-being improvement plan. Cite at least five concepts learned in this course, explain why they matter, and with a specific plan of how you will implement this in your life.



## Appendix B

### Survey Questions: Quantitative

Students were asked seven questions in which they had to choose a response based on a Likert-type scale or select from a chosen set of options:

1. Compared to before the COVID-19 outbreak, how would you rate your emotional health currently? (five-point scale of far better to far worse)

2. Please indicate the degree to which you agree with the following statement:

“I have a group of close friends at my college or university” (five-point scale strongly agree to strongly disagree)

3. Reflecting on your experience over the past year, which of the following mental or emotional health challenges have you experienced as a college student? Please select all that apply.

(Anxiety, Depression, Social isolation or loneliness, Trouble concentrating, Difficulty handling my emotions, Difficulty coping with stress, Substance use issues, Other)

4. Reflecting on your experience over the past year, what tools have you used to care for your mental or emotional health? (Please select all that apply).

(Having a support system of friends, Getting outside or connecting with nature, Having a support system of family, Getting adequate sleep, Eating a healthy diet, Counseling support, Meditation/mindfulness practices, Other)

5. I have access to the following well-being resources at my college/university (Please select all that apply)

(Support for my physical health, Learning how to balance my academic workload, Developing positive habits, Access to opportunities to participate in groups, Student support groups, Other)

6. If you had the opportunity to learn strategies to support your well-being in college, which of the following options would you choose? (Please select all that apply)

(How to create strong relationships, How to build good habits, How to manage stress, How to better manage my schoolwork, How to seek counseling or therapeutic support, Other)

7. If a course were offered at your college that provided information and practical ways to improve your wellbeing, how likely would you be to take it? Please use the slider to indicate your willingness to take the course from 0 (not at all willing) to 100 (completely willing)

### **Survey Questions: Qualitative**

Students were asked to complete two writing prompts to expand upon their experience during COVID-19:

1. Reflecting on your past year, please describe the ways in which COVID-19 pandemic interfered with your college experience. Feel free to write as much you'd like, but please write at least three sentences.
2. Could you elaborate on why you would like to learn these strategies and how they would support your well-being? Feel free to write as much as you like, but please write at least three sentences.

### Appendix C

#### *Coding table theme 1: challenges to well-being and social life*

Representative Statements	Initial Code	Theme
My eyes get tired during online classes and doing all the homework online and take so long to finish everything. There is too much homework.	Excessive workload	Challenges to well-being and social life
My depression and anxiety skyrocketed, and it was nearly impossible to study while knowing what was happening. My mental health is often and i take more meds now. i now struggle with self-harm. basically, my mental health sucks and my university barely cares.	Anxiety and mental health problems	
It was a different experience in that many of the campus events and activities were no longer an option.	Cancellation of social events	
It was also difficult to make new friends.	Difficulty in making new friends	
Socially, it made it a lot harder to get out and spend time with friends.	Difficulty in socialization	
The amount of class work I had to do also drained me of motivation for something meaningful out of most of my daily activities.	Reduced motivation and focus	

*Coding table theme 2: learning challenges*

Representative Statement	Initial Code	Theme
Online courses greatly impacted my understanding of the material and my ability to get in contact with professors for assistance.	Difficulty in getting in contact with professors	Learning challenges
When we are in the hospital there are quite a few vital skills I am missing. For example, the way I learned wound care and packing a wound was watching my professor at home on zoom stuffing gauze into a candle jar. While it was sunny at the time, being in the hospital I have realized I have no true knowledge of how to do wound care properly.	Difficulty in learning core skills	
my grades also suffered during the partially online semester.	Grades suffered	
Quizzes and exams in general are hellish. Having to write your solutions on paper, scanning it, uploading it and then suddenly you fail to submit it on time because of crappy internet connection. If the quiz was paperless like in Google Forms, we are given a hard time with a randomized numbering of pages and unnecessarily multi-paging of questions.	Hectic exams	
I feel as though my professors are less understanding and lenient. It seems like the amount of work has skyrocketed meanwhile the teachers have gotten lazy with their teaching.	Ineffective online pedagogies	
Lost access to services such as the testing center, library, etc.	Lack of access to learning resources	
Definitely prevented me from developing work experience since any in person work experience was not possible at the beginning of the year.	Lack of hands-on experience	
Additionally, many of professors were not used to teaching online. This led to a difficulty in learning the content.	Teachers were not prepared for online teaching	

*Coding table theme 3: technology challenges*

Representative Statements	Initial Code	Theme
My college switched to remote learning partway through the semester, and some of my profs. were very unfamiliar with the "new" tech for online classes. This meant a lot of issues with being able to access materials and difficulty with taking tests/quizzes correctly.	Difficulty in use of online tools and systems	Technology challenges
Zoom fatigue and multitasking during class became much more normal.	Tech fatigue	
Some lecturers have really poor internet so lectures cut out a lot or end up leaving the zoom class for like 5 minutes.	Poor internet connectivity	
Any question I have regarding course content isn't a simple 2-minute conversation in class or after class, it's a chain of emails that takes anywhere from 1 to 4 days to resolve.	Inefficient use of time	

*Coding table theme 4: financial challenges*

Representative Statements	Initial Code	Theme
On-campus job was terminated due to virtual learning; loss of a major source of income.	Loss of source of income	Financial challenges
I also had increased expenses that I was not accounting for because of going online, (needing a laptop, another monitor, USBs, higher speed internet, and homework codes that cost hundreds of dollars each).	Needed more financial resources for IT equipment	
while I haven't deferred any semesters in 2020/2021, paying \$50,000/year solely to access lecture recordings is a hard pill to swallow.	Online teaching is not a value for money	

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