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“What Are We Doing About the Student Wellness Crisis?”

Conceptualizing Holistic Wellbeing, Measuring It, and Cultivating It Through a Yoga-Based
Seminar in Higher Education

A dissertation submitted in partial satisfaction of the requirements for the degree

Doctor of Philosophy in Education

by

Johnnie Yang

2026

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2026

ABSTRACT OF THE DISSERTATION

“What Are We Doing About the Student Wellness Crisis?”

Conceptualizing Holistic Wellbeing, Measuring It, and Cultivating It Through a Yoga-Based
Seminar in Higher Education

by

Johnnie Yang

Doctor of Philosophy in Education

University of California, Los Angeles, 2026

Professor Kevin Eagan, Committee Chair

Colleges and universities are confronting a growing student wellbeing crisis, marked by rising mental health concerns alongside financial stress, sedentary lifestyles, and uncertainty about the future. Although many students report experiencing these challenges, even fewer seek the support they may need. In response, institutions have expanded counseling and related services; however, these resources remain underutilized among first-generation, low-income, and students of color, signaling persistent inequities in access. This gap between student need and support points to deeper challenges in how wellbeing is defined, measured, and cultivated on college campuses. This study employs a convergent mixed-methods design to address this gap.

The quantitative strand focuses on advancing a multidimensional, student-centered measure of holistic wellbeing through the development and validation of the How Are You

(HAY) Survey, assessing 40 items across eight interrelated dimensions: physical, psychological, spiritual, intellectual, financial, occupational, sociocultural, and environmental wellbeing. Survey data from 251 undergraduate students were analyzed using exploratory and confirmatory factor analyses with ordinal indicators. Results supported a robust eight-factor structure with strong reliability, good model fit, and measurement invariance across gender, race/ethnicity, and first-generation status. Group difference analyses revealed significant disparities in wellbeing across first-generation status, household income, sexual orientation, and disability/health condition status, while regression analyses demonstrated that several dimensions of wellbeing predicted academic performance, belonging, persistence, and campus satisfaction.

The qualitative strand examines curriculum-based approaches to cultivating wellbeing through analyses of reflection journals and semi-structured interviews from a yoga-based, credit-bearing seminar, which attracted a diverse student population, particularly low-income and students of color. Students described wellbeing as dynamic, relational, and shaped by academic demands, with yoga, breathwork, meditation, and journaling providing practical, contemplative tools they applied beyond the classroom to manage stress, relationships, and uncertainty. The course also fostered awareness and personal transformation, with students engaging more intentionally with their thoughts, emotions, and broader college experiences.

Overall, this study provides empirical support for a valid, multidimensional measure of holistic wellbeing, alongside qualitative insights into how students navigate wellbeing in college. These findings underscore the urgency of addressing student wellbeing more proactively and suggest that curricular approaches hold promise as scalable and equitable strategies for narrowing the gap between student need and support.

This dissertation of Johnnie Yang is approved.

Mitchell Chang

Cindy Cruz Sangalang

Linda J. Sax

Kevin Eagan, Committee Chair

University of California, Los Angeles

2026

DEDICATION

To my father, Tom Yang, and my mother, Chia Moua Yang, whose resilience in the face of war, displacement, and the challenge of rebuilding a life in a new land made possible every opportunity I have been given.

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Which leads me to my next acknowledgement: I am especially grateful to my yoga teachers and mentors. A special thank you to the best yoga teacher in the world, Sansany, whose influence on my life extends far beyond yoga. You taught me self-love, confidence, and the

importance of believing in myself. When you first encouraged me to become a yoga teacher, I did not see that path for myself. Yet through your encouragement, patience, and persistent belief in my potential, I slowly grew into a version of myself I never imagined possible. Thank you for pushing me to grow in ways I did not know I needed.

To my partner, Daniel, thank you for being by my side throughout this journey. You have been there since the beginning of this dissertation and throughout my yoga journey and I'm so incredibly grateful for all that you've done and continue to do for me—so thank you for your love, support, and patience, and for believing in me. You are a constant sun radiating joy in my life.

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Program for providing me with a renewed sense of purpose and belonging. My time in Laos allowed me to reconnect with my family, my cultural heritage, and my spirituality, reminding me that education can be both a professional pursuit and a deeply personal journey of healing.

As I reflect on the past twelve years of adulthood, I am filled with gratitude for the opportunities, communities, mentors, friendships, and experiences that have shaped me. To those whose names do not appear here, please know that your impact has not been forgotten. Every person I have encountered, whether friend, mentor, student, colleague, critic, or challenger, has taught me something invaluable. My dissertation is ultimately about wellbeing, and along the way, I have learned that wellbeing is not something we achieve alone. Rather, it is cultivated through relationships, community, and the countless acts of care we extend to one another. My hope is that this work contributes, in some small way, to a world that is more loving, more equitable, and more attentive to the wellbeing of all people.

Namaste.

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PROLOGUE

When I arrived in Laos in 2023 as a Fulbright English teaching assistant, I stepped onto the soil my parents had fled as refugees more than thirty years earlier. On my first night in Luang Prabang, the city where I was stationed to teach, I noticed a sign for a yoga class displayed on a standing billboard outside a steakhouse while walking around town. The class was being held on the third floor above the restaurant, up a narrow set of stairs. Curiously, I froze. Back in the U.S., I had never once attended a yoga class on my own. I was too shy, too self-conscious, and too afraid of standing out in a space where I would probably not fit in. I had convinced myself that I didn't belong in expensive yoga studios that felt curated for affluent, white clientele in designer activewear. That fear always kept me out, but something shifted that evening. I stood at the base of the stairs with no personal invitation, no one beside me, and no idea what I'd find at the top. Overcoming my fear, I nervously tip-toed up those stairs.

That night, I met Sansany Keosavanh, the woman who would become my yoga teacher and mentor. Calm and steady, Sansany guided me through 60 minutes of breathwork, meditation, and movement in a way I had never experienced before. Her hands-on adjustments and words of encouragement through challenging poses helped me feel grounded, present, and alive in my own body. For the first time, I felt what it meant to feel love for my body with care in a safe and welcoming environment. From that night, I began practicing yoga with Sansany every single day.

Every morning, I biked over 10 kilometers to teach English at Souphanouvong University. The roads were rough, the heat unrelenting, and the workload tested the limits of my physical and mental wellbeing. Nevertheless, I returned to the yoga mat each evening. That hour of yoga practice with Sansany became more than an anchor; it revived my body, restored my

purpose, and gave me the strength to show up for my students each day. Through this rhythm of giving and replenishing, I began to understand something I had never been taught in school—that my capacity to learn and grow as a human being depends on my ability to be well. This personal realization soon sharpened into a broader way of seeing the classroom.

In the classroom, I saw how hard it was for students to learn if they felt tired, anxious, or disconnected. But through my own practice, I experienced how breath and movement could restore clarity, focus, and a sense of connection. This led me to wonder what education might look like if it made space for that kind of care, prioritizing both achievement and wellbeing without compromising one for the other. What if classrooms were not just places for sitting and thinking but also for feeling, moving, and healing? What if wellbeing was the foundation for learning and not the cost of it? These questions led me to explore how yoga and holistic wellbeing might shape a new vision for higher education—one that responds to the growing challenges students face in today’s fast-paced academic environment. My dissertation emerges from these questions as both a personal and scholarly exploration of what it means to consider holistic wellbeing as an educational aim of colleges and universities in the 21st century.

CHAPTER ONE

INTRODUCTION

Today, college students in the United States face a wellness crisis (Bantjes et al., 2023). According to the Healthy Minds Study (HMS), over 60% of students meet the criteria for at least one mental health condition (Lipson et al., 2022; Healthy Minds Network [HMN], 2024). At the same time, students routinely face other life challenges, including sedentary lifestyles (i.e., spending more than seven hours a day with minimal physical movement) (Castro et al., 2020), financial constraints and debt (Archuleta et al., 2013; Castleman & Meyer, 2019), and post-graduation uncertainty (Schrivver & Teske, 2020). Moreover, the National College Health Assessment (NCHA) found that over 60% of students experience overwhelming anxiety, while more than 40% experience depression severe enough to impair daily functioning (Duffy et al., 2019). Not to mention, rates of depression, anxiety, and mental illness have more than doubled over the past 10 years, signaling an ongoing “public health crisis” (Kodish et al., 2022, p. 276). Yet despite growing need, only 35% of students have received campus mental health services (American College Health Association [ACHA], 2024), underscoring the need for institutions to develop new strategies that expand access and address the full spectrum of students’ holistic wellbeing (Bantjes et al., 2023; Johnson et al., 2019; Keeling, 2014).

Many colleges and universities have responded by investing heavily in counseling centers, specialized student wellness offices, peer support programs, and prevention initiatives (Abelson et al., 2022; Aluri et al., 2025; Johnson et al., 2022). These resources have provided helpful supports, but barriers remain, including resource scarcity, stigma, and demanding academic schedules that often prevent students from accessing available services (Downs & Eisenberg, 2012; Miranda et al., 2015; Watkins et al., 2011). Moreover, equity gaps persist.

Undergraduate, queer, first-generation, low-income, international, and racially minoritized students report higher if not similar levels of wellness challenges than their peers yet are less likely to seek or receive help (Abelson et al., 2022; Backhaus et al., 2021; Dong et al., 2020; Lipson et al., 2018; Lipson et al., 2023; Sontag-Padilla et al., 2016). Thus, students from these historically underserved groups face a double burden: they are more vulnerable to distress and less likely to benefit from existing institutional responses.

A critical factor underlying these persistent gaps is the limited scope of how student wellbeing is defined and measured. National surveys such as the HMS and the NCHA focus primarily on clinical symptoms, health behaviors, and service utilization. While these data are invaluable, they emphasize physical and psychological dimensions while overlooking spiritual, intellectual, financial, occupational, cultural, and environmental dimensions (Cooke et al., 2016; Kauppi et al., 2023; Norozi, 2023; Ryff, 1989; Seligman, 2011; Steptoe et al., 2015; Swarbrick, 2006, 2012; Swarbrick et al., 2024). For students of color especially, financial pressures (Adams et al., 2016; Moore et al., 2021), spirituality (Betton, 2004; Gilbertson et al., 2022), cultural identity (Smith, 2011; Zapolski et al., 2018), and campus climate (Koo et al., 2021; Tausen et al., 2023) are also central to wellbeing, yet these factors are underemphasized in existing tools. While current research documents the scope of student wellbeing challenges, far less is known about the underlying reasons for these challenges or how students themselves define and interpret their wellbeing.

Rationale for the Study

This dissertation builds on these gaps by advancing a holistic, equity-focused understanding of student wellbeing in higher education through a mixed-methods design. While national surveys such as HMS and NCHA provide essential data, their focus on physical and

psychological health underrepresents spiritual, intellectual, financial, occupational, sociocultural, and environmental dimensions (Cooke et al., 2016; Kauppi et al., 2023; Norozi, 2023).

Examining these overlooked dimensions is necessary to gain a fuller picture of what wellbeing entails and how it is experienced across diverse student populations. Additionally, although students of color and first-generation students are included in these datasets, their persistent barriers to accessing support—such as stigma, cultural expectations, and financial strain—remain underexplored (Kodish et al., 2022; Lipson et al., 2018; Lipson et al., 2023). To address these limitations, this mixed-methods study develops and validates a multidimensional survey instrument focused on holistic wellbeing and pairs it with students’ written reflections on their own wellbeing experiences, centering underserved populations and foregrounding the subjective meanings students attach to what it means to be well.

In addition to expanding how wellbeing is measured and experienced, this dissertation examines one example of how it can be cultivated through the curriculum. Most institutional interventions remain individualized and reactive, centered on counseling services or short-term programs (Abelson et al., 2022; Johnson et al., 2022). A growing body of research, however, demonstrates the effectiveness of classroom-based approaches: credit-bearing courses in stress management, resilience, and positive psychology have been shown to enhance coping, connectedness, and overall wellness (Baik et al., 2019; Conley et al., 2013; Young et al., 2020). Extending this line of work, this study investigates a yoga-based general education seminar that integrates mindfulness, movement, and reflection. Studies ranging from randomized control trials to extensive meta-analyses all endorse yoga’s potential to reduce stress and anxiety, enhance resilience, and promote holistic growth among college students (Castellote-Caballero et al., 2024; Dai et al., 2023; Elstad et al., 2020; Gothe et al., 2019; Kanojia & Bhadane, 2018;

Kumawat & Metri, 2025; Lemay et al., 2019; Nemeroff et al., 2022). Embedding such practices within the curriculum not only normalizes self-care, reduces access barriers, and equips students with lifelong strategies for health and wellbeing (Bailey et al., 2022a, 2022b; Cardinal et al., 2012; Ladd, 2023) but also creates an intentional space for students to reflect on what wellbeing means to them and how institutions can better support it.

Taken together, this dissertation responds to conceptual, equity, and applied gaps by (1) developing and validating a multidimensional wellbeing survey, (2) contextualizing findings with student reflections to foreground lived experience, and (3) examining a curricular approach to cultivating wellbeing in higher education. In doing so, it contributes to ongoing efforts to move beyond deficit-based indicators and fragmented supports toward a proactive, student-centered model that treats wellbeing not only as an individual outcome but also as a collective academic and institutional priority in the 21st century (Datnow et al., 2022; Johnson et al., 2019; Keeling, 2014; Magolda, 2009; Mahmoudi et al., 2012).

This study design is informed by a pragmatic orientation and draws from multiple paradigms, including postpositivist and constructivist traditions. It values both empirical rigor and lived experience, with particular attention to the voices of students from historically marginalized backgrounds. In doing so, this research aims to expand existing understandings of student wellbeing and to contribute to ongoing efforts to make higher education more responsive to the full spectrum of students' needs amid a wellness crisis. To undertake this exploration, my study asks four overarching questions:

1. To what extent can college students' holistic wellbeing be reliably and validly measured as a multidimensional construct, and does this measurement model demonstrate consistency across gender, race/ethnicity, and first-generation status?

2. To what extent is holistic wellbeing associated with key student outcomes, including academic performance, persistence, belonging, and satisfaction?
3. How do diverse college students describe and make meaning of their holistic wellbeing, and how are these experiences shaped by their educational contexts?
4. How do students in a yoga-based general education seminar identify, interpret, and engage strategies for supporting their holistic wellbeing?

Background

Three major bodies of literature inform this study. First, scholarship across public health, psychology, and education has shaped how wellbeing is defined and measured. National surveys like the Healthy Minds Study (HMS) and the National College Health Assessment (NCHA) offer critical prevalence data but provide only partial insights, as they privilege physical and psychological dimensions while underrepresenting spiritual, intellectual, cultural, and environmental aspects (ACHA, 2024; Cooke et al., 2016; Dodge et al., 2012; HMN, 2024; Kauppi et al., 2023; Linton et al., 2016; Norozi, 2023; VanderWeele et al., 2020). These gaps highlight the need for multidimensional tools for wellbeing that reflect the lived realities of diverse students.

Second, applied research highlights concrete strategies for cultivating wellbeing in higher education, including yoga and mindfulness programs, contemplative pedagogy, and wellness or physical activity requirements (Bailey et al., 2022a, 2022b; Cardinal et al., 2012; Ladd, 2023; Johannes et al., 2024; Milroy et al., 2012; Pearman et al., 1997; Polacek et al., 2013; Waters et al., 2015; Zajonc, 2013). These curricular and policy interventions show that wellbeing can be embedded proactively within the academic environment, positioning classrooms and degree

requirements as powerful levers for advancing student health and resilience (Baik et al., 2019; Conley et al., 2013; Young et al., 2020).

Finally, conceptual frameworks provide scaffolding for theorization. Swarbrick's (2006, 2012) eight dimensions of wellness and Norozi's (2023) holistic wellbeing model establish the multidimensional scope of wellbeing, while Maslow's (1943) hierarchy of needs and Deci and Ryan's (2000) self-determination theory help explain how these dimensions intersect with basic psychological needs for autonomy, competence, and relatedness. Complementing these perspectives, foundational student development theories situate wellbeing as a dynamic process shaped through students' interactions with institutional environments, relationships, and educational experiences (e.g., Astin, 1984; Tinto, 1993). Together, these bodies of literature inform the development of Yang's Relational Model of Holistic Wellbeing, which is examined and refined through the design of this study.

Overview of Research Design

Chapter Three outlines the methodological approach used in this study, which employed a convergent mixed-methods design (Creswell, 2009; Fetters et al., 2013) to investigate college student wellbeing across multiple dimensions. Quantitative and qualitative data were collected in separate strands, analyzed independently, and then merged for interpretation. The quantitative strand evaluated the validity, reliability, and dimensional structure of the How Are You (HAY) Survey (formerly Yang's Holistic Wellbeing Survey), while the qualitative strand examined how students enrolled in a yoga-based seminar described and interpreted their holistic wellbeing through written journal reflections and semi-structured interviews. Integration focused on areas of confirmation, expansion, and discordance to assess whether student narratives affirmed, extended, or challenged the survey's portrayal of interconnected wellbeing dimensions. This

design supported the study's dual aim of producing a psychometrically robust, culturally responsive instrument and a nuanced, student-centered account of wellbeing in higher education.

Site, Participants, and Recruitment

The study focused on full-time undergraduate students at a large public research university in the western region of United States. Undergraduate students were invited to complete an online survey, yielding a sample that exceeded the minimum threshold recommended for stable factor solutions. A purposive sampling approach guided recruitment, with intentional outreach to students of color, first-generation students, and low-income students, given their centrality to the study's equity focus. Recruitment occurred through multichannel strategies, including collaborations with campus units and student-serving spaces (e.g., multicultural centers and ethnic studies and education departments), as well as limited digital distribution through researcher networks at other institutions. Although the survey was accessible beyond the focal institution, only a small number of undergraduate responses ($n = 9$) from different institutions were received and subsequently excluded to maintain a single-institution analytic sample. Accordingly, all analyses were conducted exclusively on full-time undergraduate students aged 18-24 at a single institution.

The qualitative portion of the study included 18 participants who were students enrolled in a yoga-based general education seminar during the Spring 2025 quarter. The seminar integrated mindfulness, movement, and reflective practices into the curriculum and fulfilled multiple degree requirements. Enrollment was self-selected and the demographic composition of the course could not be predetermined. Together, these sites provided both a broad survey sample and a classroom-based context for examining how students experience and interpret wellbeing.

Data Sources

The quantitative strand consists of the HAY Survey, a newly designed instrument measuring eight dimensions of wellbeing (i.e., physical, psychological, spiritual, intellectual, financial, occupational, sociocultural, and environmental) using Likert-scale items on a five-point scale. The survey was developed with multiple pilot phases and input from students, educators, and clinicians to enhance relevance and accessibility.

The qualitative strand took place within the yoga-based seminar, where students engaged in ongoing reflection on their wellbeing. Students submitted weekly written journal entries documenting their experiences with yoga practice, course discussions, and their broader sense of holistic wellbeing across academic, personal, and social contexts. These journals were complemented by semi-structured interviews that provided deeper insight into individual trajectories. Collectively, these data sources offered a rich perspective on how students conceptualized and experienced wellbeing when it was intentionally integrated into the college curriculum.

Data Analysis

Quantitative analyses proceeded in several stages to examine the structure, validity, and implications of the HAY Survey. First, exploratory factor analysis (EFA) was conducted to assess the underlying dimensional structure of the instrument and Cronbach's alpha was used to assess reliability. This was followed by confirmatory factor analysis (CFA) using ordinal indicators to evaluate model fit and test a multidimensional measurement model of holistic wellbeing. Higher-order modeling was also conducted to examine whether the eight domains reflect a broader holistic wellbeing construct. Measurement invariance was assessed through sequential tests of configural, threshold, and threshold-plus-loading invariance across key

subgroups (e.g., gender, race/ethnicity, first-generation status). Finally, composite scores derived from the CFA were used in regression to examine associations between holistic wellbeing and key student outcomes, including academic performance, persistence, and belonging.

Qualitative data from student journals and interviews were analyzed using reflexive thematic analysis guided by an abductive analytic approach, involving iterative movement between inductive (data-driven) and deductive (theory-informed) coding (Braun & Clarke, 2022; Finlay, 2002). To support this process, I used AILYZE, an AI-assisted qualitative analysis tool, to facilitate initial coding and theme generation based on structured analytic prompts. These prompts directed the software to attend to both emergent patterns in participants' language and sensitizing concepts drawn from the eight dimensions of holistic wellbeing and contemplative education frameworks (Norozi, 2023; Swarbrick, 2006). Integration occurred at the interpretive stage through narrative weaving, finding areas of confirmation, expansion, and discordance between qualitative and quantitative findings to provide a richer account of students' holistic wellbeing (Fetters et al., 2013).

Limitations

While this dissertation offers meaningful contributions to the study of holistic wellbeing in higher education, several limitations should be acknowledged. First, although the holistic wellbeing survey was grounded in theory and informed by student and educator input, it remains in the early stages of validation. Psychometric analyses were conducted within a single institutional context, which limits generalizability to other higher education settings or student populations. Future research should examine the instrument's reliability and construct validity across more diverse campuses and over longer timeframes.

Second, the quantitative data were cross-sectional, limiting the ability to make causal inferences about relationships among wellbeing dimensions or changes in wellbeing over time. Third, the qualitative strand drew on a relatively small, self-selected sample of students enrolled in a yoga-based seminar. While their reflections provided rich insight into lived experiences of wellbeing, they may overrepresent students who are already inclined to value or cultivate wellbeing. Finally, although the study intentionally centered students of color and adopted a multidimensional framework, it may not fully capture the intersecting effects of race, class, gender, disability, and structural conditions. Integration of the quantitative and qualitative strands, while guided by a convergent design, remains interpretive and shaped by the researcher's positionality.

Positionality Statement

As a first-generation, Hmong, gay, spiritual, and low-income student from a refugee background, my lived experience has deeply shaped my understanding of wellbeing and informed the questions I bring to this research. I have experienced the toll that financial strain, mental and physical health challenges, and limited access to support systems can take on a student's ability to thrive in college. These challenges revealed to me that succeeding academically does not always equate to personal flourishing. It was through yoga that I began to reconnect with my health and sense of balance. Yoga taught me how stress lives in the body, how breath can calm the mind, and how embodiment can create space for healing and clarity (Gothe et al., 2019; Kanojia & Bhadane, 2018; Waters et al., 2015; Zajonc, 2013).

This personal journey now informs my academic and pedagogical commitments. As both a researcher and yoga teacher, I envision pathways to expand self-care through yoga and education. Often times, we think that self-care is a luxury for those with time and money, but as

an educator, I believe it is a necessary and human practice. Yoga, in its most fundamental form, begins with breath: a resource available to all of us. This belief foregrounds my commitment to making wellbeing more equitable and offered in ways that are culturally resonant, academically grounded, and personally empowering. My aim is to provide frameworks and tools that support students in exploring and nurturing their wellbeing at their own pace. My dissertation is grounded in the ethos voiced by civil rights scholar and activist Angela Davis, who reminds us that “Anyone who’s interested in making change in the world also has to learn how to take care of herself, himself, their selves.” This vision is not only personal but also political because students come to college to prepare themselves to contribute to a better world. Yet the capacity to create change is deeply tied to one's ability to stay well. Higher education must therefore recognize, legitimize, and promote the everyday practices that develop students’ capacity for wellbeing. This dissertation reflects that belief: an effort to explore and uplift the ways students strive to do well in the world while also learning how to be well within themselves.

Significance of the Work

This dissertation is designed to contribute to ongoing efforts to reimagine how wellbeing is conceptualized, measured, and cultivated in higher education. By developing a multidimensional survey informed by student and educator input and pairing it with a qualitative case study of a yoga-based seminar, the study offers a more inclusive and context-sensitive approach to capturing student wellbeing. It addresses gaps in existing literature by drawing attention to underexplored dimensions such as spiritual, intellectual, and environmental wellbeing and by centering the perspectives of students from historically marginalized backgrounds. While the survey is in the early stages of validation, psychometric analyses provide initial evidence of its utility across diverse student populations. In doing so, the study advances

theoretical, methodological, and practical conversations about how to strengthen wellbeing measurement and praxis in higher education.

The significance of this work also extends beyond scholarly debates to the broader social and institutional moment in which it is situated. Colleges and universities are grappling with rising student distress, widening equity gaps, and increased scrutiny of institutional responses to student needs (Abelson et al., 2022; Johnson et al., 2022; Lipson et al., 2022). Within this context, research that foregrounds holistic and multidimensional approaches to wellbeing is urgently needed. By integrating measurement development with insights from curricular innovation, this dissertation positions wellbeing as a shared academic and institutional priority rather than an ancillary service (Datnow et al., 2022; Johnson et al., 2019; Keeling, 2014; Magolda, 2009; Mahmoudi et al., 2012). This study aims to inform policy, practice, and pedagogy by offering a framework through which colleges can cultivate learning environments where students thrive academically, personally, socially, and collectively.

CHAPTER TWO

LITERATURE REVIEW

Research on college student wellbeing has expanded significantly over the past several decades, documenting both the challenges students face and the efforts institutions have made to support them (Bantjes et al., 2023; Duffy et al., 2019; Lipson et al., 2022). Yet despite this growing body of work, a persistent gap remains between what students need and how institutions respond (Abelson et al., 2022). Colleges and universities have largely relied on counseling centers, wellness offices, and other student services to address wellbeing (Aluri et al., 2025; Johnson et al., 2022), often treating it as the responsibility of campus resources rather than as a shared academic or curricular priority (Johnson et al., 2019; Keeling, 2014). In practice, curricular and classroom-based approaches remain underutilized, even though they represent one of the most impactful and equitable points of contact between students and institutions (Baik et al., 2019; Conley et al., 2013; Young et al., 2020). Part of this underutilization stems from the lack of a shared understanding of what wellbeing entails, as definitions and priorities vary widely across higher education contexts.

This literature review responds to these conceptual and practical limitations by tracing the conceptual evolution of wellbeing across disciplines and examining how it has been defined, measured, and applied in higher education. It begins by discussing three philosophical paradigms (i.e. hedonic, eudaimonic, and evaluative) that underpin much of the wellbeing literature. It then synthesizes insights from large-scale measurement instruments, including the Healthy Minds Study and the National College Health Assessment, highlighting both their contributions and limitations in capturing the health and wellbeing of diverse students. Building on this foundation, the chapter reviews curricular and policy interventions (e.g., yoga, mindfulness, physical

education requirements) as proactive strategies for cultivating student wellbeing. The chapter concludes with a discussion of various holistic, psychological, and student development frameworks that ground this study's approach to wellbeing in higher education. Together, these sections establish a foundation for understanding wellbeing's philosophical traditions, measurement challenges, applied practices, and theoretical models.

Mapping the Conceptual Terrain of Wellbeing

Etymologically, *well-being* merges the words *well* and *being*, appearing in English texts as early as the 16th century and referring to “a state of being healthy, happy, or prosperous” (Oxford University Press, n.d.). The hyphenated form remains common in U.S. contexts as preferred by the American Psychological Association (APA), which defines well-being as “a state of happiness and contentment, with low levels of distress, overall good physical and mental health and outlook, or good quality of life” (APA, 2018). While both *well-being* and *wellbeing* are used across the literature, a growing number of scholars and journals advocate for the unhyphenated form. Norozi (2023) suggests “using ‘wellbeing’ without the hyphen to avoid confusion with the opposite of ‘ill-being’” (p. 1), while the International Journal of Wellbeing (n.d.) describes their editorial choice as “intentionally forward looking,” reflecting a shift toward understanding wellbeing as a unified, holistic construct rather than a compound of discrete terms. While the hyphenated form reflects conventional usage, particularly in American contexts, the unhyphenated form signals an evolving conceptualization of wellbeing as an integrated single-unit concept. In this dissertation, I adopt the unhyphenated *wellbeing* to reflect the inseparability and ongoing nature of living and being well.

Beyond debates over terminology, the concept of wellbeing itself has gained substantial traction in both academic and public discourse over the past several decades. A key turning point

came with the World Health Organization's [WHO] (1946) proposed definition of health as "a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity" (p. 1). This landmark definition ignited a paradigm shift, embedding wellbeing within notions of health and foregrounding physical, mental, and social wellness as a constitution of health rather than the mere absence of illness. In the decades that followed, scholars across disciplines responded with a proliferation of theoretical models, measurement tools, and disciplinary interpretations of wellbeing (Cooke et al., 2016; Linton et al., 2016; Ruggeri et al., 2020). While this growth reflects increasing scholarly interest, it has also led to significant conceptual fragmentation, underscoring the ongoing challenge of defining, measuring, and integrating wellbeing across academic and applied domains.

Another issue related to this conceptual evolution is the frequent conflation of the terms *health*, *wellness*, and *wellbeing*. Though often used interchangeably in the literature (Pincus, 2023), each term carries distinct connotations. *Health* typically refers to a person's physical or mental condition and not just the absence of illness, often framed through biomedical or clinical indicators. *Wellbeing*, by contrast, is a more subjective and evolving sense of balance shaped by context, culture, and individual interpretation (Diener, 1984; Dodge et al., 2012). The WHO (2021) defines well-being as a "a positive state experienced by individuals and societies. Similar to health, it is a resource for daily life and is determined by social, economic and environmental conditions" (p. 10). *Wellness*, on the other hand, emphasizes the practices or actions that promote functioning across all life domains (Roscoe, 2009; Swarbrick, 2006). The Global Wellness Institute (n.d.) defines wellness as "the active pursuit of activities, choices, and lifestyles that lead to a state of holistic health." Generally, wellness is not only shaped by self-responsibility, choices, behaviors, and lifestyles, but by one's physical, social, and cultural contexts. In other

words, *health* is what we have, *wellbeing* is how we feel about it, and *wellness* is what we do to maintain or improve it. Because wellbeing is fundamentally tied to perception and experience, it is commonly measured through indicators of satisfaction with various life domains (e.g., relationships, work, health) which capture how individuals evaluate their overall quality of life (Diener et al., 2018). This dissertation is primarily concerned with *wellbeing*—how it is defined, measured, and experienced within a higher education context.

Despite the formal definitions offered above, *wellbeing* remains an elusive and contested concept; its meaning often shifts depending on cultural, disciplinary, and personal contexts. Scholars across fields continue to debate how wellbeing is best understood. To ground this discussion, the next section turns to three major philosophical approaches: hedonic, eudaimonic, and evaluative. Each offers a distinct lens for understanding what it means to live and be well.

Hedonic Wellbeing

Hedonism, derived from the Greek word *hedone* meaning pleasure, is one of the earliest philosophical frameworks for understanding wellbeing. It characterizes the “good life” by the presence of pleasure, happiness, and the absence of pain. This perspective originates from the Greek philosopher Epicurus (341-270 BCE), who viewed the pursuit of modest pleasures, mental tranquility, and freedom from physical pain as the highest goal of human life (Ryff et al., 2021). These foundational ideas laid the groundwork for hedonic approaches to wellbeing, which dominated early psychological theories by equating wellbeing with happiness. According to this view, individuals who frequently experienced positive emotions and infrequently experienced negative ones were presumed to be well.

In the early stages of wellbeing research, happiness was often treated as a relatively fixed condition, strongly tied to demographic and personality traits. For example, Wilson (1967)

famously described the “happy person” as someone who was “young, healthy, well-educated, well-paid, extroverted, optimistic, worry-free, religious, married, with high self-esteem, high job morale, modest aspirations, of either sex and of a wide range of intelligence” (p. 294). This seemingly outdated definition reflected the dominant assumption that happiness (i.e., wellbeing) could be explained by stable life circumstances or traits. However, this view left little room for variation across individual contexts, cultures, experiences, or values.

Dr. Edward Diener was instrumental in challenging and reorienting this perspective. His work marked a significant departure from earlier models of his time, which had defined wellbeing in terms of the absence of illness and the presence of social and material success. Instead, Diener argued that wellbeing is fundamentally subjective, grounded in individuals’ own perceptions of their lives. In his seminal article *Subjective Well-Being* (Diener, 1984), he introduced a new paradigm based on three key components: (1) *subjectivity*, meaning that wellbeing is defined by the individual’s perspective; (2) *positive valence*, which captures the presence of positive emotions and life satisfaction, rather than simply the absence of distress; and (3) *global life assessment*, which refers to a person’s overall evaluation of their life as a whole. Diener’s reconceptualization helped shift the field toward a more inclusive, flexible, and psychologically grounded understanding of wellbeing.

Not only did Diener lay the theoretical groundwork, but he also pioneered empirical tools that allowed researchers to systematically study wellbeing. For instance, the satisfaction with life scale (Diener et al., 1985) and the positive and negative affect schedule (Watson et al., 1988) became widely used instruments for measuring life satisfaction and emotional experience. These tools were central to the emergence of positive psychology, a field that gained momentum in the late 1990s and focused on human strengths, flourishing, and optimal functioning rather than

mental illness or pathology (Keyes, 2002; Seligman & Csikszentmihalyi, 2000). Within this movement, subjective wellbeing (SWB) became a foundational construct, offering researchers a robust framework to quantify happiness as a means towards human flourishing.

Over time, Diener's influence extended far beyond psychology. His research demonstrated strong associations between high SWB and a range of other outcomes, including better physical health, lower rates of chronic illness, reduced stress, and greater longevity (Diener & Chan, 2011; Diener et al., 2017; Visram et al., 2018). These findings helped to elevate wellbeing as a multi-sector concern, informing initiatives in public health, education, economics, and social policy.

Despite its empirical utility, the hedonic approach has also faced notable criticism. Scholars have pointed out that its emphasis on emotional experience may obscure other vital dimensions of wellbeing, such as meaning, purpose, identity, and social context (Deci & Ryan, 2008; Ryan & Deci, 2001; Ryff, 1989). Additionally, momentary happiness does not always align with an individual's broader sense of fulfillment or life satisfaction. These limitations have led to increasing interest in complementary frameworks, including eudaimonic and evaluative approaches, which offer more nuanced accounts of what it means to be well. The following sections examine these models in greater depth.

Eudaimonic Wellbeing

While early psychological models of wellbeing focused on hedonic approaches, scholars soon began to question whether such measures could fully capture the richness and complexity of wellbeing. Critics noted that positive affect alone could not account for the deeper dimensions of life, such as personal growth, meaning, and moral purpose (Ryan & Deci, 2001; Ryff, 1989). In response, a growing body of research turned toward eudaimonia. Derived from the Greek

philosopher Aristotle and the words *eu* (good) and *daimon* (spirit or true self), eudaimonia refers to the realization of one's potential through virtuous living and alignment with one's deeper purpose and values (Ryff et al., 2021). Unlike hedonism, which emphasizes “what one feels,” eudaimonia centers on “how one lives.”

Eudaimonic approaches to wellbeing emphasize growth, self-realization, and the fulfillment of enduring human capacities rather than fleeting positive affect. Ryff's (1989) six-dimensional model and Deci and Ryan's (1985, 2000) self-determination theory converge in framing wellbeing as the realization of autonomy, competence, relatedness, purpose, and self-acceptance, highlighting that flourishing depends on enduring qualities rather than momentary happiness. These frameworks position wellbeing as a developmental process grounded in agency and connection, offering an important alternative to hedonic definitions focused on short-term pleasure.

Seligman's (2011) PERMA model helped popularize eudaimonic thinking by proposing a framework across five pillars of wellbeing: positive emotion, engagement, relationships, meaning, and accomplishment. While PERMA broadened institutional conversations about wellbeing, critiques highlight that its elements overlap conceptually and empirically (Al-Hendawi et al., 2024; Ryan et al., 2019; Seligman, 2018), and that the model neglects dimensions such as physical health, environmental sustainability, and socioeconomic stability, especially in marginalized populations (Donaldson et al., 2022). More fundamentally, PERMA reflects liberal individualist assumptions by framing “meaning” as an individual pursuit, overlooking cultural and structural contexts that shape human flourishing (Christopher & Hickinbottom, 2008; Krys et al., 2019; Sollis et al., 2024). These limitations underscore the need for culturally responsive approaches that move beyond Western ideals of self-actualization.

Despite these critiques, the eudaimonic tradition remains a vital complement to hedonic perspectives, broadening the scope of wellbeing to include purpose, growth, and self-realization. Scholars increasingly acknowledge that hedonic and eudaimonic approaches are interdependent; that is, feeling good and doing good often reinforce one another (Huta & Waterman, 2014; Ryan & Deci, 2001). Yet, debates remain about universality. What counts as pleasure or virtue? Who gets to decide? Do they vary across cultures, communities, and personal histories? These unresolved tensions highlight the importance of reflexive approaches that center how people define and evaluate their own wellbeing.

Evaluative Wellbeing

Emerging from the advancements of hedonic and eudaimonic approaches, evaluative approaches introduced a more complementary understanding of wellbeing. The term “evaluative” refers to the cognitive process by which individuals assess the overall quality and coherence of their lives considering personal and contextual judgments. Rather than defining wellbeing by prescribing which feelings one *ought* to have (i.e., hedonism) or which virtues one *ought* to pursue (i.e., eudaimonia), evaluative approaches focus on how individuals assess the quality and meaning of their own lives. The underlying question shifts from "Are you happy?" (hedonism) or "Are you virtuous?" (eudaimonia) to "Are you satisfied?" (evaluative). The evaluative approach asks individuals to reflect on whether their life is going well according to what they personally deem important and attainable. In this way, satisfaction refers to a reflective appraisal of one's life circumstances, goals, and values, making wellbeing a dynamic and deeply personal interpretation rather than a universal standard.

Although Diener's (1984) concept of subjective wellbeing incorporated evaluative elements such as life satisfaction, early wellbeing research often blurred the line between

emotional happiness and cognitive judgment. The distinction between hedonic wellbeing (e.g., happiness, joy, stress) and evaluative wellbeing (i.e., judgments about one's life overall) was not always clearly drawn. For instance, a person might report low levels of daily happiness due to stress or hardship but still feel deeply fulfilled because their life aligns with their values and long-term goals. Conversely, someone may experience frequent positive emotions and outward success yet feel dissatisfied due to a perceived lack of meaning or unmet aspirations. These examples illustrate how emotional states and life judgments can diverge. Evaluative wellbeing accounts for this complexity, emphasizing that people interpret and assess their lives in ways that extend beyond how they feel in the moment (Diener et al., 2018; Kahneman & Deaton, 2010). Over time, this distinction has become more defined, leading to more nuanced and holistic understandings of what it means to experience wellbeing.

Building on this logic, evaluative approaches highlight the role of personal judgment and social context in shaping wellbeing. Multiple discrepancy theory examines wellbeing in terms of the gaps between what people have and what they want, expect, need, or believe they deserve (Michalos, 1985), while research on the “status effect” demonstrates that comparison to peers often predict wellbeing more strongly than by objective resources (Pincus, 2023). These insights underscore that wellbeing is not reducible to absolute conditions but emerges from subjective reflection shaped by context. At its core, evaluative wellbeing affirms that life satisfaction depends on whether individuals feel their lives reflect who they are and what they care about.

Evaluative approaches build upon and reframe both hedonic and eudaimonic traditions, emphasizing wellbeing as a dynamic and culturally contextual process of self-assessment (VanderWeele et al., 2020). However, this paradigm remains limited by its focus on individual perception. Satisfaction measures often overlook how structural inequities, material access, and

systemic barriers constrain the very choices through which people define and evaluate their wellbeing. As such, while evaluative approaches provide a critical complement to hedonic and eudaimonic models, it also reinforces the need for approaches that integrate subjective reflection with attention to broader social conditions.

Objective vs Subjective Wellbeing

To complement subjectively grounded models, many researchers and policymakers have turned to what is often termed *objective wellbeing*, an approach that emphasizes the external conditions necessary for people to thrive (Das et al., 2020; Voukelatou et al., 2021). Although labeled “objective,” this framing is not without critique; the selection and weighting of indicators such as income, education, employment, housing, healthcare access, and environmental safety inevitably reflect cultural values and political priorities about what constitutes a good life. Still, these observable indicators have become influential tools for policy analysis and cross-national comparison. For example, the Organisation for Economic Co-operation and Development (OECD) developed the *Better Life Index* to track wellbeing across countries, positioning wellbeing as a policy-relevant priority and shifting the focus of progress beyond traditional economic metrics like gross domestic product (GDP) (OECD, n.d.). By operationalizing wellbeing through standardized, population-level data, “objective wellbeing” frameworks have enabled governments to identify systemic disparities and enact large-scale interventions to improve wellbeing at the macro level.

Despite their broad utility, objective models have limitations. Their reliance on material resources and access often conflates external conditions with wellbeing itself. Indicators such as income, education, or healthcare access are invaluable for tracking quality of life, but they do not capture whether individuals feel satisfied, fulfilled, or able to live in alignment with their values

(Diener, 1984; VanderWeele et al., 2020). Labeling these structural indicators as “wellbeing” risks masking how the same resources may be experienced differently across cultural and social contexts. For instance, two students with similar financial means may report vastly different levels of wellbeing depending on family expectations, community support, or cultural norms (Sollis et al., 2024; Kashdan & Nezlek, 2012; Voukelatou et al., 2021). For this reason, objective indicators may be more appropriately understood as measures of quality of life (i.e., the conditions under which life unfolds) rather than wellbeing itself. Quality of life broadly refers to the availability of resources and opportunities, while wellbeing reflects the lived experience of navigating those conditions. Because wellbeing is inherently shaped by self-perception, meaning, and values (Diener, 1984), it cannot be fully captured by “objective” indicators alone.

In response, some scholars advocate for integrated models that combine subjective experiences with objective indicators to better reflect the complexity of human flourishing. For example, VanderWeele (2017) and Weziak-Bialowolska et al. (2021) validated a six-domain framework (i.e., emotional health, physical health, meaning and purpose, character strengths, social connectedness, and financial security) that merges structural and experiential components. While such models broaden the scope of wellbeing, they also raise important cultural concerns. The category of “character strengths” may appear universally desirable, but what counts as a “strength” is deeply shaped by cultural norms and values. Traits such as assertiveness, independence, or ambition may be celebrated in Western contexts, while in other cultures, humility, deference, or self-restraint may hold greater value (Christopher & Hickinbottom, 2008). By presenting certain characteristics as inherently positive, such models risk promoting a narrow, culturally specific vision of flourishing. More broadly, these frameworks often draw from Western, individualistic worldviews that may not adequately reflect collectivist or non-

Western understandings of wellbeing (Christopher & Hickinbottom, 2008; Kryś et al., 2019). As Christopher and Hickinbottom (2008) argue, such ideologies “set limits on what human flourishing is taken to be” (p. 565). While autonomy is central to many liberal democracies, this framing may obscure other ways of conceiving wellbeing that emphasize communal harmony, spiritual fulfillment, or reciprocal obligation.

Likewise, it is important to acknowledge that all surveys, including my own, embed assumptions about what constitutes wellbeing. Decisions about which domains to include, which words to use, and which outcomes to emphasize inevitably reflect particular values and perspectives. The issue, then, is not whether bias exists, but whether frameworks are explicit about their assumptions and target population(s). Building on critiques of Western-centric models (Christopher & Hickinbottom, 2008; Kryś et al., 2019), my approach aims to expand the scope of wellbeing research by foregrounding multidimensionality and centering the perspectives of students of color in data collection and outreach, while also recognizing the inherent conceptual limitations of any survey instrument.

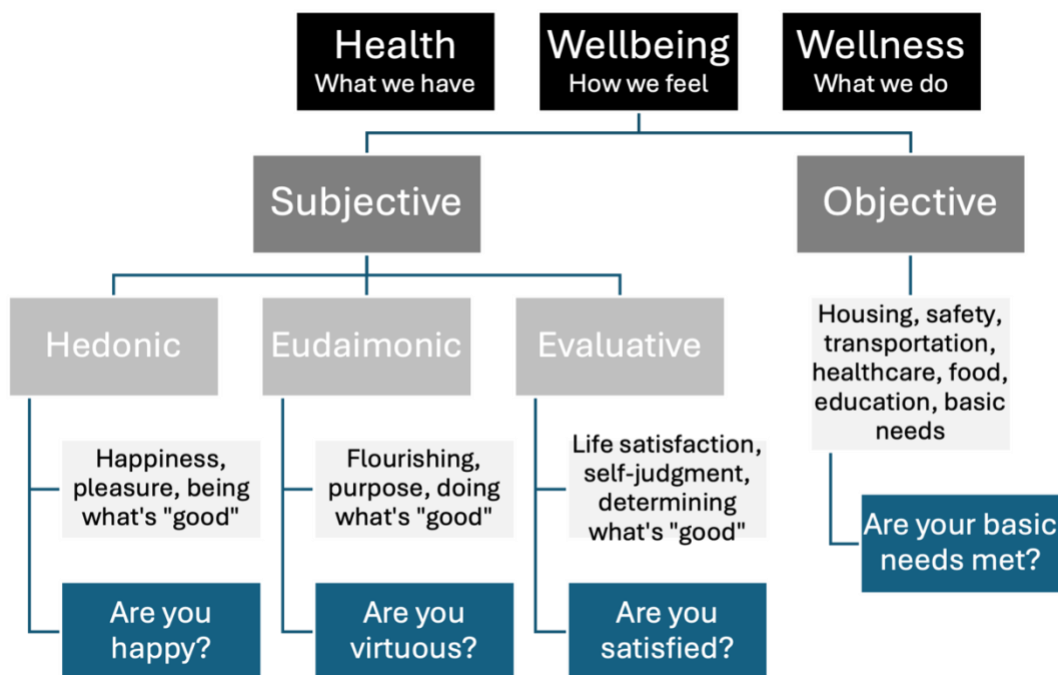
Conceptual Synthesis of Wellbeing

To synthesize the conceptual terrain explored thus far, Figure 2.1 maps out the distinction between *health*, *wellbeing*, and *wellness*, as well as subjective and objective approaches to wellbeing. In this framing, *health* refers to the physiological and psychological states or conditions of the body and mind that we have; *wellbeing* refers to how we feel about or experience our health and wellness (i.e., our perceptions of our state of being); and *wellness* refers to what we do, our habits, or the actions we take to reach or maintain a particular state or goal. Altogether, the figure underscores a three-part framework: *health* as state, *wellbeing* as experience, and *wellness* as action.

While wellbeing is generally viewed as the subjective counterpart to health and health conditions, objective wellbeing emphasizes structural and material conditions such as housing, food access, education, and environmental safety as the foundation for quality of life (Voukelatou et al., 2021). Having a high sense of objective wellbeing could be indicated by having one's basic needs met. Within the subjective domain, hedonic, eudaimonic, and evaluative frameworks offer different philosophical paradigms on what it means to be well (hedonic), do well (eudaimonic), and feel well (evaluative). While each paradigm offers valuable insight, their conceptual boundaries often overlap, leading to inconsistencies in how wellbeing is defined and measured across the literature.

Figure 2.1

Mapping the Conceptual Terrain of Wellbeing



Ryan and Deci (2001) explain that hedonic wellbeing is most commonly aligned with the construct of subjective wellbeing (Diener, 1984), whereas eudaimonic wellbeing tends to be associated with psychological wellbeing. Yet in practice, it is not clear whether subjective

wellbeing is different from psychological wellbeing or whether psychological wellbeing, too, is a subjective construct, as few studies draw clear distinctions among them (Diener et al., 2017). In light of this conceptual overlap, this dissertation adopts the stance that wellbeing is best understood as both a subjective and psychological phenomenon, encompassing hedonic, eudaimonic, and evaluative components under the broader umbrella of subjective wellbeing. Within this framing, psychological wellbeing is treated not as a synonym for wellbeing writ large (Ryff, 1989) but rather as one distinct dimension of it, a point that will be elaborated in subsequent sections.

Hedonic, eudaimonic, and evaluative traditions are three separate paradigms shaping how wellbeing is conceptualized in the literature. To reiterate, *hedonic* approaches capture affective states such as happiness, pleasure, stress, and anxiety, often aligning wellbeing with emotional balance and the absence of distress. *Eudaimonic* approaches emphasize purpose, growth, and virtue, framing wellbeing as the pursuit of meaningful goals and the development of enduring capacities. *Evaluative* approaches, by contrast, center individuals' reflective judgments about whether their lives meet their standards, support their aspirations, and align with their values. Each paradigm has received varying levels of scholarly attention, with hedonic indicators often prioritized in large-scale surveys, while eudaimonic and evaluative dimensions remain less consistently measured. The next section reviews recent syntheses of wellbeing measurement tools to assess how the construct has been defined, operationalized, and applied across different populations.

Review of Measures of Wellbeing

A synthesis of recent reviews on wellbeing measurement (Charlemagne-Badal et al., 2015; Cooke et al., 2016; Dodd et al., 2021; Kauppi et al., 2023; Lindert et al., 2015; Linton et

al., 2016; Zhang et al., 2024) reveals both progress and persistent gaps in the field. Collectively, these reviews affirm that wellbeing is inherently multidimensional, with common domains such as psychological health, physical functioning, social connection, and meaning consistently appearing across measures. Meanwhile, they highlight fragmentation in definitions, inconsistent inclusion of dimensions like spirituality, financial security, and environment, and limited theoretical grounding across measurement tools. Importantly, most reviews focus on general adult populations or clinical groups, with students representing only a small fraction of samples (Cooke et al., 2016; Zhang et al., 2024) and students of color rarely considered explicitly. The few reviews that did focus on higher education (e.g., Dodd et al., 2021) noted the frequent conflation of mental health with general wellbeing, underscoring the need for conceptual clarity.

In summary, this body of scholarship demonstrates where wellbeing measurement has succeeded—in affirming its multidimensionality and expanding the range of available tools—and where it has fallen short—in under-sampling student populations and conflating different concepts. These limitations provide the rationale for developing and testing a student-centered, equity-focused instrument that better captures the holistic wellbeing experiences of diverse college populations. The next section examines two of the largest national surveys on college student health and wellbeing to better understand the philosophical assumptions that underlie how student wellbeing has been studied.

National Surveys on Student Health and Wellbeing

Two of the most widely used national surveys on college student health and wellbeing are the Healthy Minds Study (HMS) and the National College Health Assessment (NCHA). Both are large-scale, long-running instruments that have shaped how institutions and policymakers conceptualize student wellbeing, particularly through their emphasis on mental health, service

utilization, and health-related behaviors (ACHA, 2024; HMN, 2024). Their strengths lie in their breadth, comparability across institutions, and practical utility for informing campus programs and policy. HMS is notable for its integration of validated mental health measures and optional modules that allow campuses to tailor analyses to local concerns, while NCHA provides one of the broadest overviews of health behaviors, academic impacts, and lifestyle factors available for U.S. students. Overall, these surveys have provided a rich evidence base for understanding student health at scale and for guiding institutional responses to the mental health crisis.

Despite their scale and influence, both HMS and NCHA reveal some limitations in how we understand and measure student wellbeing in higher education. After reviewing the sample characteristics from the 2024 national reports of both surveys, more than half of respondents are White students and continuing-generation students, showing less representation among students of color and first-generation students. While this diversity might be representative of the general U.S. population, it reinforces the need for research tools and approaches that center the voices of historically marginalized populations in higher education. For example, for students navigating structural inequities, wellbeing may be especially shaped by factors such as financial pressures (Adams et al., 2016; Moore et al., 2021), spirituality (Betton, 2004; Gilbertson et al., 2022), cultural belonging (Smith, 2011; Zapolski et al., 2018), family responsibility, or institutional climate (Koo et al., 2021; Tausen et al., 2023). These aspects may not only influence levels of wellbeing but also how students interpret and respond to survey items that assume stability, autonomy, or access to resources. Therefore, widely used instruments may inadvertently privilege normative experiences while obscuring forms of wellbeing and distress that are more salient for marginalized populations, underscoring the need for student-centered measures that are theoretically and culturally responsive.

Beyond looking at the samples, I also conducted an item-level analysis of both surveys, revealing conceptual gaps in how wellbeing is operationalized. I reviewed 67 items from the HMS mental health status module and 113 items from the NCHA core module, classifying them according to hedonic, eudaimonic, and evaluative paradigms. My analysis revealed that 79.1% of HMS items and 69.0% of NCHA items adopt a hedonic orientation, primarily emphasizing symptoms of distress, emotional states, or behavioral health risks. By contrast, eudaimonic items (16.4% in HMS, 23.0% in NCHA) and evaluative items (16.4% in HMS, 21.2% in NCHA) were comparatively scarce, highlighting that while both surveys capture students' health-related states extensively, they give far less attention to how students interpret or find meaning in those states (Yang, 2026). This orientation is somewhat expected for HMS, which explicitly markets itself as a mental health survey. However, it is more concerning for NCHA, which is positioned as a comprehensive assessment of student health and wellbeing yet offers little insight into how students themselves evaluate their health-related experiences. Thus, both surveys may largely reflect a diagnostic and perhaps deficit-based model of student health rather than a holistic framework of wellbeing.

Coverage across wellbeing dimensions is similarly uneven. My analysis also categorized each item according to their topical representation. Both surveys had the most representation of items related to physical, psychological, and social aspects, whereas less attention was devoted to spiritual, intellectual, financial, occupational, or environmental dimensions. At least one item within each survey touches on each of these areas, but overall, this finding shows that there are major aspects to student wellbeing that remains underexplored. This limited scope creates a need for more multidimensional tools given that aspects of wellbeing are interdependent across life domains (Swarbrick, 2006; Norozi, 2023).

In summary, the limitations of leading wellbeing instruments like HMS and NCHA highlight the need for a new measurement tool that does three things: (1) centers the voices of students of color and first-generation students who remain less represented in existing surveys, (2) prioritizes evaluative paradigms to better capture students' subjective experiences about their wellbeing, and (3) expands coverage from physical, psychological, and social aspects to include additional critical dimensions such as spiritual, intellectual, financial, occupational, and environmental wellbeing. Such a tool would provide a more holistic and equity-focused understanding of how students experience wellbeing in higher education. While clarifying how wellbeing has been measured is essential, it is equally important to examine how campuses have actively cultivated wellbeing through yoga, mindfulness, and other contemplative practices that seek to embed wellness into the academic environment.

Yoga, Mindfulness, and Contemplative Practices in Higher Education

Over the past two decades, higher education institutions have faced increasing concern about student mental health and wellbeing, marked by rising rates of stress, anxiety, burnout, and disengagement (Duffy et al., 2019; Lipson et al., 2022). In response, scholars and practitioners have urged institutions to promote health and wellbeing more centrally in the academic mission (Datnow et al., 2022; Magolda, 2009; Mahmoudi et al., 2012; Norozi, 2023). Yoga, mindfulness, meditation, and other contemplative practices have emerged as popular and effective remedies (Barbezat & Bush, 2014; Shapiro et al., 2011). Yet, much of this work remains in extracurricular, counseling, or wellness-program contexts (Abelson et al., 2022). Less attention has been paid to embedding such practices into credit-bearing curricular courses that reach a broader student population and are structured to foster holistic wellbeing, including physical, psychological, spiritual, social, cultural, and intellectual dimensions (Norozi, 2023). To address this gap, the

following review explores three areas of the literature: (1) demonstrated benefits of yoga and mindfulness in higher education contexts; (2) the foundations of contemplative education and pedagogy; and (3) models of curricular integration, covering issues of equity, access, and critique and highlighting the persisting gaps that motivate the present study's examination of a yoga-based seminar within the general education curriculum.

Benefits of Yoga and Mindfulness in Higher Education

Yoga is an ancient tradition with roots in Vedic civilization, historically developed as a spiritual discipline to unify body, mind, and spirit (Saraswati, 2008; Satchidananda, 2012). Over centuries, it has evolved into diverse schools and practices, and in contemporary times yoga has become a global phenomenon often adapted for secular contexts and promoted for its benefits to holistic health and wellbeing (Newcombe, 2009). In the literature, yoga is commonly described as a set of practices that may include physical postures (asana), breathing techniques (pranayama), meditation, or some combination of these. Mindfulness, by contrast, is typically framed as a secular form of meditation that emphasizes nonjudgmental awareness of present-moment experience (Kabat-Zinn, 2003). In practice, however, the terms are frequently overlapping in the literature, as interventions often blend elements of yoga, mindfulness, and meditation. For the purposes of this study, yoga will be understood primarily as asana, or physical postures designed to energize the body, optimize physiological function, and support mental clarity, while mindfulness and meditation will be acknowledged as complementary practices that frequently intersect with yoga in higher education research.

Strong evidence indicates that yoga is an effective intervention for reducing stress and anxiety among university students (Kanojia & Bhadane, 2018). For example, Elstad et al. (2020) conducted a randomized controlled trial (RCT) with more than 200 students and found that a 12-

week yoga program significantly reduced psychological distress and improved sleep quality, with effects lasting through a 12-week follow-up. A handful of other randomized trials have reported similar results (e.g., Castellote-Caballero et al., 2024; Nemeroff et al., 2022), consistently demonstrating that yoga lowers perceived stress and anxiety while enhancing emotional wellbeing. Smaller-scale interventions and qualitative analyses (e.g., Dai et al., 2023; Lemay et al., 2019) further corroborate these findings by showing reductions in stress, worry, and rumination and increases in mindfulness, coping, and self-acceptance. In summary, this body of research underscores yoga's potential as a scalable, low-cost, and widely acceptable strategy to support student wellbeing in higher education.

Beyond mental health, yoga and mindfulness practices have also been linked to improvements in concentration, cognitive performance, and academic achievement among college students. Kumawat and Metri (2025) conducted an RCT with nearly 100 female undergraduates experiencing elevated stress and found that an eight-week yoga intervention improved selective attention, working memory, and processing speed, alongside reductions in stress. Similarly, Tripathi et al. (2025) observed positive effects on psychophysiological regulation and executive functioning in first-year students participating in a structured yoga program. Earlier work by Kauts and Sharma (2009) demonstrated that adolescents assigned to a daily yoga module outperformed peers in academic achievement tests, with the largest gains among those reporting high stress, suggesting that yoga may buffer the negative impact of stress on learning. Extending beyond behavioral data, Gothe et al. (2019) synthesized evidence from neuroimaging studies, showing that regular yoga practice is associated with structural changes in brain regions central to memory and executive function, such as the hippocampus and prefrontal cortex. All in all, these findings provide converging evidence that yoga can support not only

student wellbeing but also the cognitive capacities and academic engagement essential for success in higher education (Quinn & Maddox, 2022; Villate, 2015).

Mindfulness-based programs have also gained traction on college campuses as evidence-based strategies to reduce stress and enhance wellbeing. Rooted in Kabat-Zinn's (2003) mindfulness-based stress reduction (MBSR) framework, these interventions typically combine meditation, breathing exercises, and awareness practices to cultivate nonjudgmental attention to the present moment. Research with college populations has shown that even brief mindfulness training can lower perceived stress, anxiety, and rumination while improving emotion regulation and self-compassion (Shapiro et al., 2011). A narrative synthesis of 57 studies found that the majority reported significant decreases in stress and anxiety, as well as increases in mindfulness, although results for physiological stress outcomes were mixed, highlighting the need for further research (Bamber & Schneider, 2016). Building on this, a meta-analysis of 25 studies with nearly 1,500 college students reported a moderate overall effect size of 0.56 ($p < .001$) for mindfulness meditation in reducing anxiety, with results moderated by factors such as number of sessions and outside practice (Bamber & Morpeth, 2019). Furthermore, a large, preregistered network meta-analysis of 183 randomized controlled trials on adult wellbeing interventions similarly found moderate, consistent effects across mindfulness, yoga, exercise, and positive psychology programs, suggesting that multiple contemplative and embodied approaches can comparably support wellbeing (Wilkie et al., 2026). Put together, these findings confirm that mindfulness interventions hold promise for improving student mental health and are increasingly recognized as accessible and non-stigmatizing alternatives to traditional counseling services.

The evidence is clear that yoga and mindfulness consistently reduce stress, anxiety, and distress while promoting cognitive performance and wellbeing among college students. Yet

despite their demonstrated effectiveness, institutions continue to struggle with how to deliver these tools equitably and at scale. This tension underscores a larger challenge about the need to rethink not only what resources we offer students but also how curriculum might serve as a pathway towards wellbeing. It is within this context that contemplative approaches to education emerge, offering new ways of perceiving and structuring learning.

Contemplative Education, Pedagogy, and Practice

Contemplative education is a pedagogical framework that integrates presence, reflection, and inner awareness into the learning process, expanding higher education's purpose beyond intellectual mastery to include the holistic development of the self—cognitive, emotional, and embodied (Barbezat & Bush, 2014; Zajonc, 2013). Although often presented today in secular terms, it is deeply rooted in religious and spiritual traditions, including Buddhist meditation, Hindu yoga and Vedantic philosophy, and contemplative strands of Christianity and Judaism (Barbezat & Bush, 2014; Morgan, 2015). In the U.S., its integration into higher education accelerated in the late 20th century as faculty and organizations such as the Association for Contemplative Mind in Higher Education sought to adapt these practices for academic settings, balancing respect for their origins with the creation of inclusive, secular frameworks (Zajonc, 2013). Rooted in ancient traditions yet reshaped for modern needs, contemplative education positions itself as both a timely and transformative response to contemporary challenges in higher education.

Within this broad framework, four categories of practice have proven especially relevant to college classrooms: relational practices (dialogue, storytelling, deep listening), stillness practices (silence, meditation, mindfulness, concentration, open awareness), movement practices (yoga, tai chi, qigong), and creative process practices (journaling, art, singing, chanting) (Zajonc,

2013). These approaches help students connect intellectual inquiry with embodied awareness and personal reflection, generating more engaged and durable forms of learning. For instance, Krusberg and Ward (2018) introduced sensory meditation and contemplative videography into an undergraduate physics course, where students reported recognizing connections between abstract theories and lived experience that had previously gone unnoticed. Similarly, Barbezat and Bush (2014) describe how reflective writing and compassion-based exercises can deepen discussion in the humanities and social sciences, cultivating empathy and critical self-reflection. These brief examples illustrate how contemplative pedagogy may reorient higher education courses. By integrating subjective and experiential dimensions of learning with academic inquiry, contemplative education responds to pressing concerns about student disengagement, rising mental health needs, and the narrowing of education to utilitarian outcomes. In doing so, it reframes the classroom as a site where academic rigor and personal development reinforce one another, offering a more holistic and human-centered vision of what it means to educate students in the 21st century (Barbezat & Bush, 2014; Morgan, 2015; Zajonc, 2013). If contemplative education provides the philosophical and pedagogical rationale for integrating holistic learning and wellbeing into the heart of academic life, then general education wellness and physical activity requirements represent one of the most tangible and evidence-based policy mechanisms through which institutions can begin to operationalize that vision.

General Education Requirements, Curricular Integration

Across U.S. higher education, curriculum levers like general education wellness courses and physical education/activity requirements (PE/PAR) have plummeted even as student health needs have skyrocketed (Watkins et al., 2011). Historically, having PE requirements were near-universal but declined from 97% of institutions in the 1920s-30s to about 39% by 2010 (Cardinal

et al., 2012). More recent studies indicate that only about 16% of ACHA-NCHA-participating institutions now have such requirements in place, with higher prevalence among private and two-year colleges, and with wide variation in format (e.g., activity-based, conceptual, or combined approaches) (Bailey et al., 2022a). Similarly, a statewide scan of Texas community colleges found that nearly all offer health/wellness or activity courses as electives but only some of them require them as part of granting associate degrees (Ladd, 2023). Thus, while institutional mandates have diminished, the accumulated research underscores that such requirements remain among the most effective policy levers for promoting student wellbeing at scale (Woodall et al., 2025).

The decline of PE requirements reflects the broader professionalization and academic stratification of physical education, also known as kinesiology. Originally conceived as a service-oriented discipline dedicated to promoting physical activity among the general student population, kinesiology gradually evolved into a specialized, research-intensive academic enterprise (Cardinal et al., 2015). As faculty roles shifted toward producing theory-driven scholarship and preparing credentialed professionals, service-based activity courses—once central to institutional missions—were increasingly viewed as peripheral or lower-status within the academic hierarchy (Corbin & Cardinal, 2008; Henry, 1964; Park, 2011). This evolution mirrored a broader institutional valorization of theory over praxis, contributing to the erosion of universal PE requirements even as evidence of their effectiveness in promoting health and wellbeing persisted (Cardinal, 2014; Wanjau et al., 2023; Woodall et al., 2025).

Physical activity functions as a kind of multi-system catalyst, simultaneously shaping cognitive performance, emotional regulation, and underlying biological processes. A growing body of evidence demonstrates that regular movement is associated with improved attention,

memory, and executive functioning, alongside broader gains in subjective wellbeing and life satisfaction (Mandolesi et al., 2018). These benefits are not merely psychological but are rooted in neurobiological mechanisms, including increased cerebral blood flow, enhanced neurogenesis, and the regulation of neurotransmitters linked to mood and cognition. Complementing this, large-scale syntheses of evidence indicate that physical activity is inversely associated with depression and anxiety, with findings suggesting a probable causal relationship between physical inactivity and the onset of these conditions (Wanjau et al., 2023). Yet, despite these well-documented benefits, university students remain strikingly sedentary, with many failing to meet recommended levels of physical activity, thereby placing themselves at risk for diminished cognitive functioning and poorer mental health outcomes (Castro et al., 2020). Put together, these findings position physical activity not as a peripheral lifestyle choice, but as a foundational component of holistic wellbeing, with implications that extend from neural functioning to academic performance and overall quality of life.

Empirical evidence generally supports the effectiveness of educational requirements to promote health and wellbeing, though findings vary by design and implementation. Population-level analyses link institutional mandates to higher odds of meeting the WHO's physical-activity guidelines across sex and weight groups (Bailey et al., 2022b), while longitudinal studies show that alumni from colleges with health or PE requirements maintain greater aerobic activity, smoke less, and retain stronger health knowledge years after graduation (Pearman et al., 1997). Similarly, conceptual wellness courses—those emphasizing behavior change and self-regulation rather than skill acquisition—have been shown to improve students' physical activity and fitness knowledge within a single semester, with sustained benefits well beyond college (Maldari et al., 2021; Polacek et al., 2013). Yet effectiveness depends not only on content but also on

institutional commitment: programs implemented as electives or isolated course offerings often lack the reach or continuity to influence campus-wide culture (Long et al., 2021; Milroy et al., 2012). Emerging innovations, including technology-assisted and multi-modal approaches such as apps, social media, and exergames, may enhance engagement when intentionally integrated into curricular and co-curricular contexts (Johannes et al., 2024). Overall, this evidence suggests that well-designed, required wellness curricula can shift health norms, knowledge, and behaviors, but their impact is strongest when institutions treat them as structural—not optional—components of the educational experience.

Growing evidence also shows that course design can play a direct role in supporting student mental health (Long et al., 2021). In professional education, for example, Saint Louis University’s medical school redesigned its preclinical curriculum by reducing contact hours, shifting grading, and embedding required mindfulness and resilience training. The result was striking: students reported lower rates of depression, anxiety, and stress, along with stronger peer cohesion compared to earlier cohorts (Slavin et al., 2014). Such curricular approaches are rarely seen in undergraduate settings, even as national data show high rates of depression and anxiety across student populations (Abelson et al., 2022; Lipson et al., 2022; Long et al., 2021). These patterns highlight an urgent need for scalable, curriculum-based responses. Studies suggest that required courses integrating movement, mindfulness, and health literacy can provide universal access to evidence-based wellbeing practices (Bailey et al., 2022a, 2022b; Milroy et al., 2012).

Moreover, mindfulness and holistic wellbeing curricular interventions are promising approaches for addressing the mental health crisis among college students. Across systematic reviews, meta-analyses, and higher education reports, researchers have consistently found that mindfulness-based interventions are associated with reductions in stress, anxiety, depression, and

emotional distress, while also supporting broader psychological wellbeing and resilience among university students (González-Martín et al., 2023; Zuo et al., 2023). At the same time, scholars increasingly argue that student wellbeing should not be approached solely as an individual clinical issue but rather as a broader institutional and educational responsibility embedded within campus culture, pedagogy, and student support systems (Zhao et al., 2025).

Importantly, emerging evidence also suggests that the structure and delivery of these interventions matter substantially. A recent report from the Healthy Minds Network found that while self-guided mindfulness applications, campus workshops, student-led organizations, and campus-sponsored programming may provide short-term or accessible benefits, structured mindfulness courses embedded within academic settings demonstrated the strongest and most sustained outcomes for student mental health and wellbeing, including improvements that persisted over time (Johnston et al., 2026). These findings reinforce broader calls within the literature for higher education institutions to more intentionally integrate contemplative and wellbeing-oriented practices into coursework and the educational experience itself, rather than relying exclusively on optional or peripheral wellness programming (Zhao et al., 2025). Building on this work, the present study examines a credit-bearing yoga seminar as one model for integrating holistic wellbeing into the undergraduate curriculum, treating wellness as a core component of the general education learning experience.

THEORETICAL FRAMEWORKS

To frame the multidimensional nature of wellbeing in this study, I draw from two complementary frameworks that conceptualize wellbeing as an interconnected and evolving process: Swarbrick's (2006, 2012) eight dimensions of wellness and Norozi's (2023) holistic wellbeing model for school education. Although developed in different contexts, both

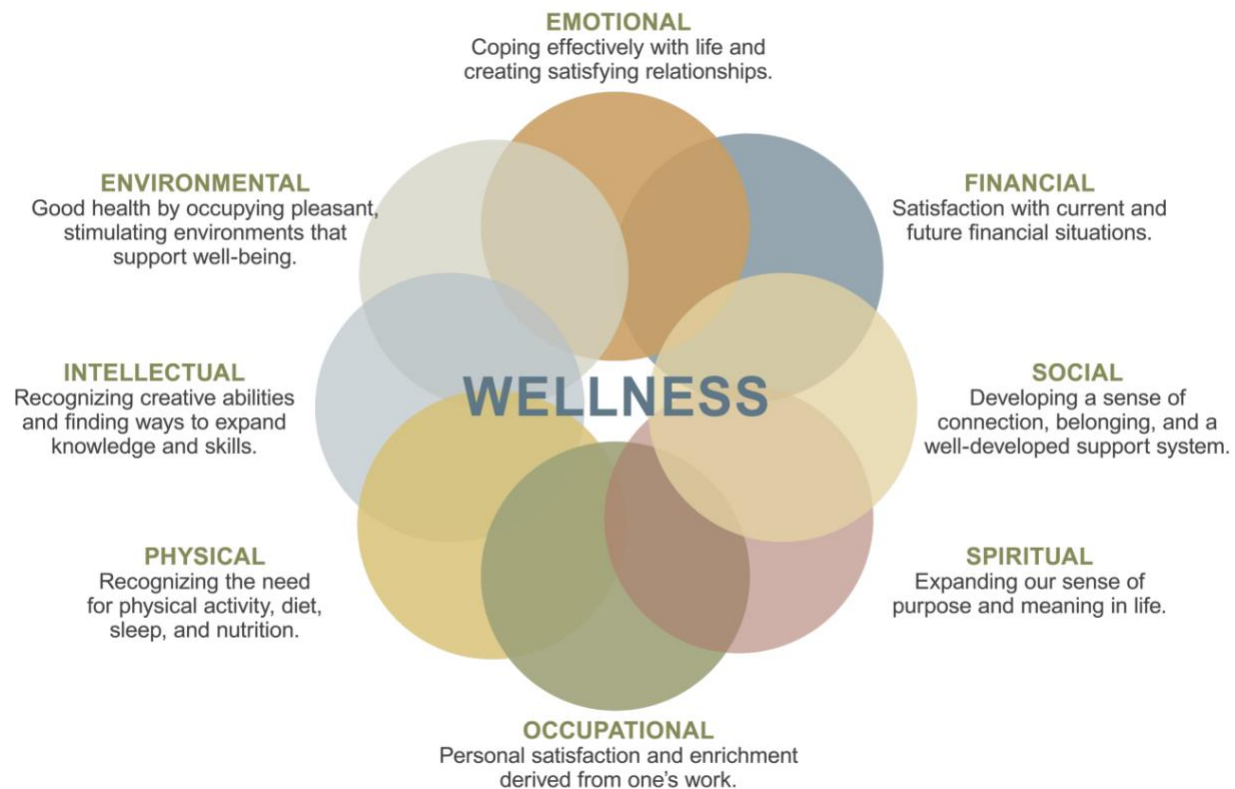
frameworks suggest that wellness and wellbeing are shaped by overlapping aspects of human life and offer visual tools for thinking about how these aspects interact.

Swarbrick's Wellness in Eight Dimensions

Swarbrick's model (Figure 2.2) was originally introduced in psychiatric and rehabilitation settings to support adults navigating mental health conditions, substance use, and trauma-related challenges. The model emphasizes intentionality and agency, defining wellness as “a conscious, deliberate process that requires being aware of and making choices for a more satisfying lifestyle” (Swarbrick & Yudof, 2015, p. 22). The figure offers clear operational definitions for each of the eight dimensions, providing a foundation for understanding how they function individually and in relation to one another. As Swarbrick (2006, 2012) explains, these dimensions are deeply interconnected: financial stress, for example, can trigger emotional strain, compromise physical health, impair occupational performance, reduce social engagement, or lead to spiritual distress. This framing positions wellness as an ongoing practice of balance and self-awareness. Since its introduction, the model has been widely adopted across education, healthcare, and policy settings for its practical relevance.

Figure 2.2

Swarbrick's Wellness in Eight Dimensions Model



Note. Reproduced with permission from Swarbrick, M., & Yudof, J. (2015). *Wellness in 8 dimensions*. Collaborative Support Programs of New Jersey.

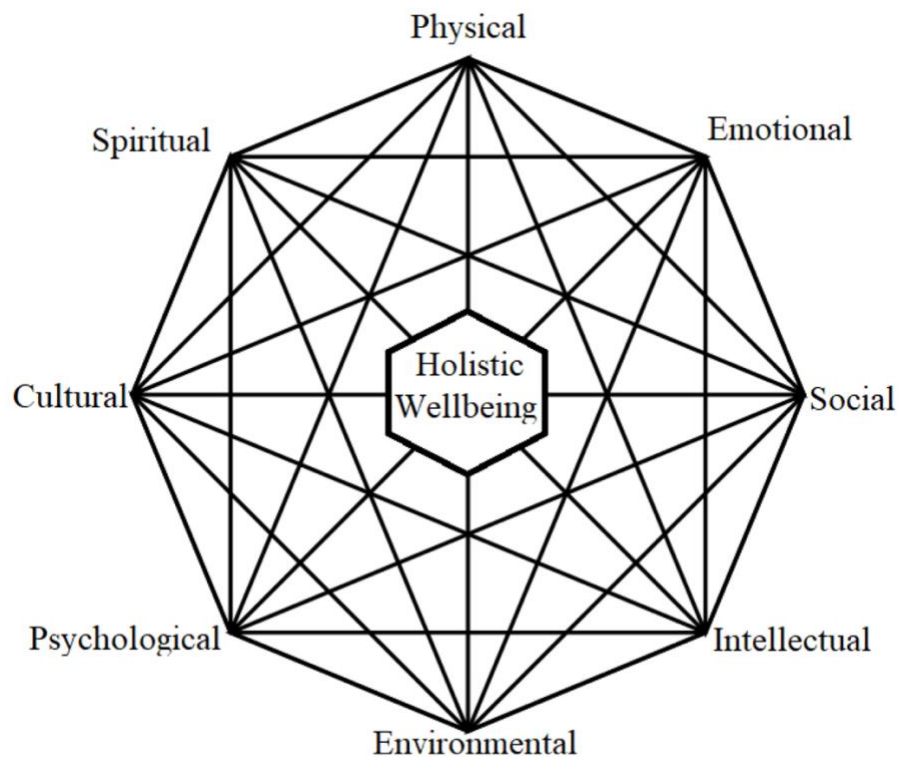
Norozi's Holistic Wellbeing Model for School Education

On the other hand, Norozi's (2023) model (Figure 2.3) emerges from an educational perspective and centers on the developmental, cultural, and systemic influences that shape student wellbeing. She defines holistic wellbeing as "a process of developing and adapting patterns of behavior that lead to improved health in various dimensions of wellbeing, as well as heightened life satisfaction and happiness" (p. 6). Her framework outlines eight interconnected dimensions that together shape how students experience wellbeing throughout their development: physical, social, cultural, psychological, environmental, intellectual, spiritual, and

emotional. Rather than viewing these dimensions as isolated, Norozi stresses their dynamic interdependence. Her approach positions schools as vital ecosystems that must attend not only to academic achievement but to the broader wellbeing of students and teachers alike (Hascher & Waber, 2021; Keeling, 2014). Importantly, she underscores that educators who experience wellbeing themselves are more likely to nurture it in their students, reinforcing a systemic and relational understanding of wellbeing through education. Although developed with school-aged children in mind, Norozi's model provides a compelling call for educational institutions at all levels to embed wellbeing into their structures, cultures, and daily practices (Keeling, 2014).

Figure 2.3

Norozi's Holistic Wellbeing Model for School Education



Note. Reproduced from Norozi (2023), The Nexus of Holistic Wellbeing and School Education: A Literature-Informed Theoretical Framework, *Societies*, 13(5), 113. Licensed under CC BY 4.0.

Using either Swarbrick's or Norozi's framework alone would not fully capture the goals of my research on college student wellbeing. While Swarbrick's (2006, 2012) model offers valuable insight into mental health recovery and lifestyle balance, it lacks an educational lens necessary to understanding the role of learning environments and educational institutions. Conversely, Norozi's (2023) education-centered model emphasizes the role of systemic factors that shape student wellbeing but does not sufficiently address emerging adulthood populations, nor does it mention two dimensions from Swarbrick's model. For example, financial and occupational wellness, key concerns for all adults, can directly affect college students' overall wellbeing, especially as they navigate their transition into adulthood. By integrating both models, this study bridges those gaps, offering a more comprehensive approach that accounts for both institutional context and individual needs. This approach is especially relevant considering that over 60% of college students meet the criteria for a mental health condition (Lipson et al., 2022), underscoring the need for frameworks that can support both academic development and holistic wellbeing.

While both frameworks present eight overlapping dimensions to support living and being well, additional key differences remain. Swarbrick does not explicitly address cultural and psychological dimensions, which Norozi emphasizes. To reconcile these distinctions and enhance analytic clarity, this study combines overlapping areas into two umbrella categories: sociocultural and psychological wellbeing. These umbrella terms allow for a more holistic operationalization of key wellbeing dimensions, while also acknowledging that I may refer to them interchangeably at times with their component terms (e.g., using sociocultural wellbeing to indicate social and cultural aspects, and psychological wellbeing to encompass emotional and mental aspects). This terminological decision is intentional; it reflects the goal of capturing the

essence of wellbeing as it is experienced by students, particularly those navigating diverse social, cultural, and emotional realities. By synthesizing and clarifying these dimensions, I take an approach that is not only theoretically grounded but also adaptable to the lived experiences of college students in varied educational and sociocultural contexts. Additional information about the definitions and rationale for these terms are explained in the following sections, where I offer clearer operationalization of each wellbeing dimension.

The Eight Dimensions of Holistic Wellbeing

Physical Wellbeing

Physical wellbeing is one of the most widely recognized dimensions of holistic health because the body provides the foundation and serves as a vehicle for all other aspects of life. Scholars define it in terms of bodily functioning, energy, and physical capacities (Kauppi et al., 2023; Linton et al., 2016). Classic wellness models emphasize fitness, strength, and health-conscious behaviors such as exercise and nutrition (Hettler et al., 1980; Renger et al., 2000), while others stress perception and attitude, noting that individuals may feel physically well even with chronic conditions if they interpret their health positively (Adams et al., 1997). These definitions highlight an important tension between behavior- and perception-based approaches. A behavior-only model risks equating wellness with rigid fitness or diet standards, whereas a perception-only model risks downplaying the value of healthy practices. A balanced view suggests that physical wellbeing involves caring for the body through movement, rest, sleep, nutrition, hygiene, and safety, while also considering how individuals experience those practices in light of culture and personal circumstance. Thus, physical wellbeing can be understood as the quality of one's relationship with their physical health and body.

Psychological Wellbeing

Psychological wellbeing has long been a contested concept, in part because it was originally synonymous with wellbeing itself. Early scholarship, rooted in psychology, emphasized internal states such as happiness, purpose, and self-actualization (Diener, 1984; Ryff, 1989). In this context, the term “psychological” simply indicated that wellbeing was being studied through a psychological lens rather than distinguishing it from other domains (Ryff, 1989). However, as interdisciplinary models expanded to distinguish physical, social, and spiritual wellbeing, psychological wellbeing came to represent one specific facet of a broader whole. Later work added attention to constructs such as emotional awareness, self-esteem, optimism, stress management, and relational capacity (Adams et al., 1997; Swarbrick & Yudof, 2015). Scholars today often distinguish psychological wellbeing from subjective wellbeing, with the former centering internal states and the latter emphasizing evaluative judgments across life domains (VanderWeele et al., 2020). Still, the two inevitably overlap because people’s inner states are shaped by how they interpret and evaluate their mental and emotional experiences. Importantly, psychological wellbeing does not imply a constant state of happiness but rather the ability to navigate emotions, stress, and uncertainty in ways that sustain resilience and functioning (Zhang et al., 2024). In this sense, psychological wellbeing is best understood as the quality of one’s relationship with their own mind, encompassing both mental and emotional health.

Spiritual Wellbeing

Spiritual wellbeing is often described as the search for meaning, purpose, and transcendence. Early models equated it with religious belief and faith practices, but contemporary frameworks emphasize its broader relevance for those who may or may not

identify as religious (Ellison, 1983; Tisdell, 2003). Scholars describe it as appreciation for life's depth and expanse, orientation toward values, and experiences of peace and harmony (Adams et al., 1997; Hettler et al., 1980; Swarbrick & Yudof, 2015). Other accounts highlight the ability to give and receive love, to live ethically, and to experience connection beyond the self (Linton et al., 2016; Renger et al., 2000). Importantly, spirituality is deeply shaped by culture and community, where ancestral traditions and collective practices often guide meaning-making (Tisdell, 2003).

Within higher education, spirituality has been framed as a pluralistic and developmental process through which students grapple with questions of identity, values, belonging, and purpose across religious and nonreligious worldviews, shaped by campus contexts and relationships (Rockenbach & Mayhew, 2013). Similarly, Astin et al. (2011) emphasize students' engagement with meaning and purpose as central to learning and holistic development during the college years. Taken together, this literature suggests that spiritual wellbeing is less about adherence to a fixed belief system and more about an evolving orientation toward significance in life. Accordingly, spiritual wellbeing can be defined as the quality of one's relationship with meaning and purpose, whether expressed through spirit, conscience, or cultural tradition.

Intellectual Wellbeing

Intellectual wellbeing is commonly described as engaging the mind in stimulating activities, developing creativity, and pursuing new knowledge (Adams et al., 1997; Hettler et al., 1980). Traditional models often highlight formal education and skill acquisition, but these approaches risk framing wellbeing solely in terms of outcomes such as academic performance or career preparation (Renger et al., 2000). More nuanced perspectives emphasize discernment, curiosity, and critical inquiry as processes that sustain intellectual growth (Dammann, 2019;

Swarbrick & Yudof, 2015). Contemporary critiques of the “growth mindset” caution against reducing learning to perseverance alone, as this can obscure structural barriers and foster self-blame (Alexander & Perche, 2024; Dweck, 2006). Instead, intellectual wellbeing may be better understood as remaining open to complexity, engaging in dialogue across differences, and being willing to question assumptions. This framing values cultural knowledge, lived experience, and informal learning alongside formal education. In this way, intellectual wellbeing highlights the relational and ethical dimensions of how people pursue and apply knowledge. Thus, intellectual wellbeing is best defined as the quality of one’s relationship with data, information, and knowledge, including how it is sought, interpreted, and applied.

Financial Wellbeing

Although not represented in some holistic models (Norozi, 2023), financial wellbeing is increasingly recognized as critical to overall health and life satisfaction. Public health and policy definitions describe it as meeting current obligations, feeling secure about the future, and making choices that enable enjoyment of life (Consumer Financial Protection Bureau, 2017). Scholars distinguish between objective indicators such as income, debt, or savings and subjective indicators such as stress, confidence, or satisfaction with one’s financial situation (Bai, 2023; Netemeyer et al., 2018). Research suggests that financial distress may influence psychological distress and physical health challenges, particularly among emerging adult populations and students (Aubrey et al., 2022; Ryu & Fan, 2023). Yet, most student surveys focus narrowly on financial stress rather than broader perceptions of capability or financial literacy. Viewing finances as part of wellbeing requires integrating both material resources and personal meaning. A balanced approach treats money not only as an external resource but also as something individuals relate to emotionally and cognitively. Therefore, I define financial wellbeing as the

quality of one's relationship with money and finances, encompassing control, financial literacy, and decision-making.

Occupational Wellbeing

Occupational wellbeing is often framed in terms of job satisfaction, worker wellbeing, or vocational wellbeing (Adams et al., 2019; Bautista et al., 2023; Stoewen, 2017), yet such definitions exclude those not engaged in formal employment. Hettler et al. (1980) extended this concept to include student life, emphasizing meaningful engagement in academic and extracurricular roles. Broader models describe it as deriving enrichment from paid and unpaid activities, balancing roles, and aligning work with personal values (Roscoe, 2009; Swarbrick & Yudof, 2015). For students, this dimension may include coursework, caregiving, leadership, or creative projects, which all require time and energy. Conceptualizing occupation as “time use” better captures this diversity by recognizing that all individuals, regardless of job status, structure their days around commitments (Bowman et al., 2025). What matters is whether these commitments contribute to purpose, satisfaction, and broader wellbeing. This reframing also shifts the emphasis away from productivity toward meaningful alignment with values and priorities. Thus, occupational wellbeing can be defined as the quality of one's relationship with time and the extent to which daily activities support purpose and fulfillment.

Sociocultural Wellbeing

Social wellbeing is traditionally described in terms of relationships, community participation, and interdependence (Adams et al., 1997; Hettler et al., 1980). Public health models emphasize interpersonal interactions and reciprocity (Renger et al., 2000), while psychiatric frameworks foreground belonging and support systems (Swarbrick & Yudof, 2015). However, these approaches often treat relationships as context-neutral, overlooking how they are

shaped by culture. Drawing on Vygotsky's (1978) sociocultural theory, human development is mediated through social interaction and culturally situated practices. From this perspective, relationships are not only sources of support, but also spaces where individuals learn how to understand and experience wellbeing. Research further shows that cultural identity, traditions, and collective practices shape how belonging is expressed and experienced (Adedeji et al., 2023; Walls et al., 2022). For example, intergenerational households or communal rituals may be central sources of wellness in some communities, while friendships or campus organizations may serve that role in others. These differences suggest that interpersonal measures alone are insufficient, as social experiences are always embedded within broader cultural contexts. While this dimension is often referred to as social wellbeing, I use the term sociocultural wellbeing to reflect this broader perspective. Accordingly, sociocultural wellbeing refers to the quality of one's relationships with others as shaped by the cultural and social contexts in which they occur.

Environmental Wellbeing

Environmental wellbeing has received less attention in education and psychology, though it appears in public health and psychiatric frameworks as the quality of one's surroundings and one's engagement with them (Renger et al., 2000; Swarbrick & Yudof, 2015). Classic definitions emphasize safety, clean environments, and sustainability efforts, but recent scholarship highlights deeper relational dimensions such as connectedness to nature, identity, and stewardship (Mayer & Frantz, 2004; Nisbet et al., 2009). Research shows that exposure to green spaces can enhance mental health, cognitive function, reduce stress, and support social connection (Bratman et al., 2012; Ibes & Forestell, 2020; Liu et al., 2022). Environmental wellbeing also involves recognizing interdependence between human health and food systems, climate, and ecological sustainability (Fanzo et al., 2021). Thus, the environment should not be

treated as an external backdrop but as an integral context shaping every other dimension of wellbeing. A relational definition emphasizes both physical surroundings and the meanings people assign to them. Therefore, environmental wellbeing is best defined as the quality of one's relationship with nature and environmental surroundings, across built and natural spaces, expressed through connection, meaning, and care.

Foundational Theories of Wellbeing and Student Development

Maslow's Hierarchy of Needs

Maslow's hierarchy of needs (1943) and self-determination theory (SDT) (Deci & Ryan, 1985, 2000), though not the primary frameworks of my dissertation, provide useful interpretive lenses for organizing the eight dimensions of wellbeing defined earlier. Maslow (1943) emphasized that human needs are hierarchical: when basic physiological and psychological needs go unmet, higher-order pursuits such as creativity, belonging, or purpose become harder to achieve. In this sense, wellbeing can be understood as hierarchical, too: when we feel well, we can manage many life challenges, but when we feel unwell, that single challenge can become the center of our attention. Yet Maslow's model alone does not explain why individuals prioritize certain needs or how they sustain them.

Self-Determination Theory

SDT adds this motivational lens, identifying *autonomy*, *competence*, and *relatedness* as universal psychological needs that motivate human growth, behavior, and wellbeing. When these needs are met, people feel energized and engaged; when they are thwarted, they become unmotivated, distressed, and disconnected. *Autonomy* refers to the ability to act in ways aligned with one's values and is grounded in physical, psychological, and spiritual wellbeing. Without health, clarity, or meaning, autonomy falters. *Competence* reflects the capacity to navigate the

material world, which is shaped by intellectual, financial, and occupational wellbeing. When students can use knowledge, resources, and time effectively, they move through life with confidence; when these domains are compromised, feelings of incompetence and inadequacy emerge. *Relatedness* encompasses social, cultural, and environmental wellbeing, centering on how individuals connect with others, their communities, and the natural world. These connections foster belonging and purpose and are necessary for human motivation and wellbeing. Taken together, Maslow's hierarchy of needs and SDT provide the scaffolding for my proposed Model of Holistic Wellbeing.

College Student Development Theories

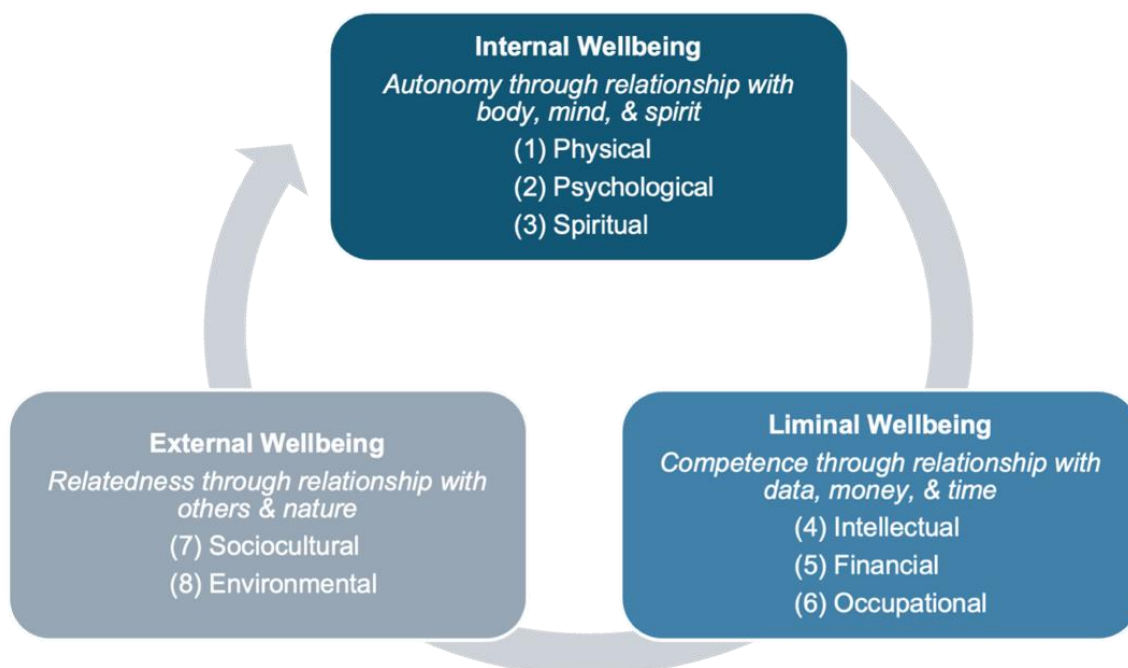
Equally important, this proposed model is grounded in the tradition of college student development scholarship, which conceptualizes growth as an ongoing, contextually shaped process rather than a fixed personal trait. Foundational theorists have long emphasized that students develop through their interactions with institutional environments, peers, faculty, and curricular experiences, including through involvement and engagement (Astin, 1984), social and academic integration (Tinto, 1993), sense of belonging (Strayhorn, 2018), and identity development (Chickering & Reisser, 1993). These perspectives suggest that wellbeing, like learning and identity, is not solely inherited, privately managed, or individually possessed, but cultivated over time through structured opportunities, relationships, and educational practices. Building on this tradition, my proposed Relational Model of Holistic Wellbeing positions wellbeing as a developmental capacity that can be supported, strengthened, and sustained through intentional curricular, co-curricular, and pedagogical design. In doing so, the framework explicitly centers higher education as a site not only for knowledge production, but for holistic wellbeing development among college students.

Yang's Relational Model of Holistic Wellbeing

While traditional approaches have defined wellbeing as a state to be measured or achieved (Lindert et al., 2015), my proposed model insists that wellbeing is dynamic (Norozi, 2023; Swarbrick, 2006, 2012), hierarchical (Maslow, 1943), and self-determined (Deci & Ryan, 2000). Each of the eight wellbeing dimensions corresponds to a core SDT domain (i.e., autonomy, competence, and relatedness), which are hierarchically positioned to reflect the dynamic nature of wellbeing in human experience. Figure 2.4 offers a visual representation of these domains and how they come together to form an expansive, integrative model of holistic wellbeing development in higher education. A deeper discussion of each domain follows. While conceptual at this stage, the framework serves as both an interpretive tool and a guide for future research and practice in higher education.

Figure 2.4

Yang's Relational Model of Holistic Wellbeing



Internal Wellbeing

Internal wellbeing refers to the relationship we cultivate with our body, mind, and spirit, characterized by our physical, psychological, and spiritual wellbeing. This domain is where autonomy takes root, since aspects of internal wellbeing are only experienced through the self. Physical wellbeing sustains autonomy by allowing us to move, act, and care for our bodies; psychological wellbeing enables us to reflect, feel, and interpret our thoughts; and spiritual wellbeing provides the guiding principles through which we frame our sense of meaning and purpose. When physical needs go unmet, emotions are ignored or suppressed, or values are abandoned, our internal wellbeing falters and our capacity for autonomy diminishes. Internal wellbeing forms the foundation for higher-order pursuits; that is, without a functioning body, mental clarity, or purposeful grounding, our capacity for creativity, managing resources, and connection is significantly limited.

Liminal Wellbeing

Liminal wellbeing encompasses the intellectual, financial, and occupational spheres where competence is exercised through a relationship with knowledge, resources, and time. This domain reflects our ability to navigate the material world with confidence and discernment, whether by managing money, pursuing education, or engaging in meaningful work. Competence here does not imply perfection or status, but the capacity to move through life with clarity and direction. When liminal wellbeing is overemphasized (e.g., when grades, careers, or financial security are prioritized above all else) it can result in burnout or disconnection. Conversely, when it is underdeveloped, self-esteem, opportunities, and access to social networks may be limited. Balanced cultivation of this domain enables individuals to participate in society more skillfully and to sustain broader wellbeing.

External Wellbeing

External wellbeing reflects our social, cultural, and environmental connections, encompassing the relationships that bind us to people, communities, and the natural world. Rooted in our need for relatedness, this domain emphasizes how we experience reciprocity, belonging, and interdependence, rather than objective indicators such as housing or food access. Our sense of self is continually nourished, challenged, and defined through these connections, which shape how we find meaning and purpose. When neglected, external wellbeing can give way to isolation, disconnection, or a sense of alienation from community and environment. Cultivating external wellbeing therefore requires attending to the quality of our relationships with others and with the natural world, positioning ourselves within the larger ecosystem of life with awareness and care.

Overall, this proposed framework encourages self-reflection, prompting students to assess their current sense of wellbeing across these interconnected domains. At its core, holistic wellbeing is not about meeting universal benchmarks, but rather about navigating the expectations we place on ourselves and those we inherit from others, while also learning to manage them with awareness. The expectations we hold tend to shape the ongoing, self-determined process of our own wellbeing. In this way, Yang's Relational Model of Holistic Wellbeing remains a deeply self-determined and developmental process, shaped by context, culture, and personal values, but always anchored in the individual's own relationship to their body, mind, purpose, community, and broader understanding of the world.

Conclusion

Chapter Two traced the conceptual evolution of wellbeing across disciplines and examined how it has been defined, measured, and applied in higher education. It began with a

review of hedonic, eudaimonic, and evaluative paradigms, showing that each offers valuable but partial insights (Diener, 1984; Ryff, 1989; VanderWeele et al., 2020). National surveys such as the Healthy Minds Study and the National College Health Assessment have provided critical data on student health and wellbeing (ACHA, 2024; HMN, 2024; Lipson et al., 2022; Lipson et al., 2023), but they remain largely rooted in hedonic framings, with limited attention to evaluative perspectives that capture students' subjective experiences. Their samples are also predominantly White and continuing-generation students, underscoring the need for wellbeing research that better centers more students of color and first-generation populations, including those from lower-income backgrounds (Bowman et al., 2025; Kodish et al., 2022). Moreover, while these surveys emphasize physical, psychological, and social wellbeing, they give far less attention to spiritual, intellectual, financial, occupational, and environmental dimensions that also shape wellbeing (Norozi, 2023; Swarbrick, 2006).

The chapter then turned to evidence-based practices and policies, including yoga, mindfulness, contemplative education, and physical education requirements. This literature highlights both the promise and the paradox of wellbeing in higher education: although research shows that curricular integration can enhance student health, learning, and resilience (Barbezat & Bush, 2014; Long et al., 2021; Pearman et al., 1997; Polacek et al., 2013; Slavin et al., 2014; Woodall et al., 2025), institutions have steadily dropped such general education requirements over time (Bailey et al., 2022a; Cardinal et al., 2012; Ladd, 2023). Altogether, the literature review points to the importance of adopting evaluative approaches that foreground students' subjective sense of wellbeing while also embedding proactive, curricular strategies that meet the needs of diverse student populations.

After reviewing conceptual and applied practices, the chapter turned to holistic theoretical frameworks, beginning with Swarbrick’s (2006, 2012) and Norozi’s (2023) models to identify eight common dimensions of wellbeing. Each dimension was then defined in detail, drawing on existing instruments and literature. From there, two additional theories—Maslow’s (1943) hierarchy of needs and self-determination theory (Deci & Ryan, 1985, 2000)—, along with various college student development theories (Astin, 1984; Chickering & Reisser, 1993; Strayhorn, 2018; Tinto, 1993), were introduced to justify how these dimensions can be organized into a new framework for student wellbeing development in higher education. This integration led to the proposed Relational Model of Holistic Wellbeing, which conceptualizes wellbeing as a dynamic, hierarchical, and self-determined process for student development in higher education.

A final insight from the wellbeing literature clarifies the core orientation of this framework. As Diener (1984) observed, “Notably absent from definitions of [subjective wellbeing] are necessary objective conditions such as health, comfort, virtue, or wealth... Although such conditions are seen as potential influences on SWB, they are not seen as an inherent and necessary part of it” (p. 543). This distinction is central to Yang’s Relational Model of Holistic Wellbeing, which foregrounds students’ lived experiences and subjective evaluations of their wellbeing. At the same time, the model recognizes that students’ evaluations of wellbeing are produced in relation to academic, social, cultural, and economic contexts. The key takeaway of this literature review is that wellbeing development in higher education must be understood as both multidimensional and meaning-based—something students actively interpret, reflect on, and make sense of within their environments. This perspective explains not only why existing measures remain insufficient but also why new approaches must center students’ own evaluative judgments across multiple domains of life. The following chapter builds directly on

this conceptual foundation by detailing the methodological decisions used to operationalize holistic wellbeing and to examine how students experience and evaluate it in higher education contexts.

CHAPTER THREE

METHODS

This chapter describes the methods used to develop and validate the How Are You (HAY) Survey and to examine how undergraduate students in a yoga-based seminar describe and experience holistic wellbeing. I begin by introducing the research questions, followed by an overview of the convergent mixed-methods design and the approach to integrating quantitative and qualitative data. I then outline the quantitative strand, including the survey's initial development and refinement, pilot data collection, and subsequent procedures for participant recruitment, sampling, and psychometric analyses used to evaluate the HAY Survey. Limitations and ethical considerations specific to the quantitative strand are also addressed. Next, I describe the qualitative strand, including data collection and analytic procedures for reflection journals and interviews from students enrolled in a yoga-based seminar, as well as an overview of limitations and ethical considerations. Together, this chapter provides a comprehensive account of the methodological approaches used in this study.

Research Questions

The research questions guiding this study address the need for a culturally responsive, student-centered understanding of holistic wellbeing in higher education. This study examines two core areas: first, how college student wellbeing can be measured quantitatively across multiple dimensions using the HAY Survey; and second, how students describe and make meaning of their wellbeing in their own words. These aims fit into a convergent mixed-methods approach in which survey results and qualitative reflections are collected, analyzed, and interpreted to provide a richer understanding of college student wellbeing. This dissertation is guided by the following research questions:

1. To what extent can college students' holistic wellbeing be reliably and validly measured as a multidimensional construct, and does this measurement model demonstrate consistency across gender, race/ethnicity, and first-generation status?
2. To what extent is holistic wellbeing associated with key student outcomes, including academic performance, persistence, belonging, and satisfaction?
3. How do diverse college students describe and make meaning of their holistic wellbeing, and how are these experiences shaped by their educational contexts?
4. How do students in a yoga-based general education seminar identify, interpret, and engage strategies for supporting their holistic wellbeing?

Research Design

This study uses a convergent mixed-methods design (Creswell, 2009; Fetters et al., 2013) to investigate college student wellbeing across multiple dimensions. Quantitative and qualitative data were collected during 2025-2026, analyzed separately, and then merged for interpretation. Collecting both strands within similar institutional and cultural contexts allows student narratives to be examined alongside survey responses while maintaining the independence of each strand. The quantitative strand evaluates the validity, reliability, and dimensional structure of the HAY Survey following its refinement. The qualitative strand draws on reflection journals and interviews from students enrolled in a yoga-based seminar. Following separate analyses, the quantitative and qualitative strands were integrated through a process of narrative weaving or integration, which involves bringing the two sets of findings together in a written, interpretive discussion to examine how they relate to one another (Fetters et al., 2013). In this approach, attention is given to the “fit” between the findings, or how well the results from each strand align. This fit can take several forms, including confirmation, when both sets of findings support

the same conclusions; expansion, when they offer different but complementary insights into the same issue; and discordance, when the findings do not align, revealing tensions or areas that may require further interpretation or investigation (Fetters et al., 2013).

A convergent design is selected over purely quantitative, qualitative, or sequential approaches for three reasons. First, survey data alone cannot capture the cultural meanings and lived experiences underlying wellbeing scores; integrating qualitative data provides essential context and interpretive depth. Second, qualitative data alone would not allow for systematic measurement, validation, or the identification of broader patterns across a diverse student sample. Third, this study is well-suited for convergence: survey responses reveal patterns across multiple dimensions of wellbeing, while journals and interviews offer insights that extend and complicate those patterns. This integrated analysis, presented at the end of the chapter, produces findings that are both empirically rigorous and grounded in students' lived experiences, aligning with the study's aim to better understand diverse students' holistic wellbeing in higher education.

Quantitative Strand

Survey Instrument Development and Pilot Testing

The design and structure of the HAY Survey were grounded in established multidimensional frameworks of wellbeing, drawing on Swarbrick's (2006, 2012, 2024) eight dimensions of wellness and Norozi's (2023) holistic wellbeing model. These frameworks informed the identification of eight core dimensions—physical, psychological, spiritual, intellectual, financial, occupational, sociocultural, and environmental wellbeing—and were selected for their emphasis on both intrapersonal and contextual aspects of wellbeing in education. Because no existing instrument integrates these eight dimensions while emphasizing evaluative and reflective wellbeing assessment for college students, I developed the survey using

a de novo item development approach (Clark & Watson, 2019; Tsui et al., 2024). An initial pool of approximately 80 items (10 per dimension) was generated, following Clark and Watson's (2019) recommendation to start with more items to work with in the early stages of survey development. Item development was intentionally guided by equity considerations, including the use of non-clinical, non-deficit language, an emphasis on relational and contextual wellbeing, and purposive recruitment in spaces serving historically underrepresented students so that early feedback from these populations could inform refinement.

Item content was further informed by a comprehensive review of existing measures (Bautista et al., 2023; Charlemagne-Badal et al., 2015; Cooke et al., 2016; Kauppi et al., 2023; Lindert et al., 2015; Linton et al., 2016; Swarbrick et al., 2024; Weziak-Bialowolska et al., 2021), contemplative practice during my study of yoga and meditation in India (Saraswati, 2008; Satchidananda, 2012), and my lived experience as a yoga teacher. Between Summer 2024 and Winter 2025, the instrument was refined iteratively based on feedback from students, faculty, staff, health professionals, and community collaborators. This process prioritized conceptual clarity, reduction of survey fatigue, and alignment with subjective and evaluative understandings of wellbeing, resulting in a final structure of five items per dimension (40 items), plus one global wellbeing item (41 items total). A detailed demographics section was included to capture key identity and contextual variables (e.g., race/ethnicity, gender, income, first-generation status, enrollment status, GPA, and field of study), enabling subgroup analyses and tests of measurement invariance to examine whether the survey functioned equivalently across diverse student populations. In addition, the survey included items assessing students' sense of belonging (Strayhorn, 2018), consideration of leaving college (Tinto, 1993), satisfaction with the campus

experience, perceived access to academic and wellness resources, and access to basic needs, providing contextual indicators of student experience alongside wellbeing indicators.

The 40 wellbeing items were anchored with the stem, “Considering this past month, to what extent would you agree or disagree with each of the following statements,” a strategy shown to reduce recall bias and improve response validity (Clarke et al., 2008). Survey items followed this consistent agree/disagree format to minimize method bias by maintaining uniform item structure across constructs (Podsakoff et al., 2012). In the pilot study, respondents rated items using a six-point forced-choice Likert scale (1=strongly disagree, 6=strongly agree) to discourage midpoint responding and promote more non-neutral judgment (Krosnick et al., 2002). Each dimension concluded with a global satisfaction item, reflecting an evaluative approach to wellbeing measurement that captures respondents’ overall judgments and is widely used in wellbeing research (Diener et al., 1985; Diener et al., 2018).

Pilot testing was conducted between February and August 2025 to assess content validity, item clarity, survey functionality, and preliminary psychometric properties of the HAY Survey. Across three iterative pilot phases, a total of $N = 344$ responses were collected from students (84.3%), staff (4.4%), faculty (1.5%), alumni (6.4%), and those from another role (3.5%). The first pilot phase (February 2025) involved 143 participants, primarily self-identified as Asian (35.7%) or Hispanic/Latinx (30.8%), as women (68.5%), and 50.8% first-generation. Pilot feedback analyses were conducted with the first $n = 128$ student respondents to evaluate clarity, flow, and overall usability. These students were primarily recruited through a campus multicultural center and an upper-division education course. This racially and socioeconomically diverse sample was instrumental in understanding the survey experience. Approximately 63% ($n = 80$) completed a follow-up survey with multiple-choice and open-ended questions about their

experience. More than 80% indicated that the survey length felt “just right,” while over 50% rated their survey experience as “good” and over 30% as “very good.” Informal feedback also suggested that the survey encouraged self-reflection, which was one of the design goals. Although the estimated completion time was initially advertised for 20-30 minutes, pilot data showed an average of 10.79 minutes (range: 4-41 minutes, median: 9 minutes, $SD=6.24$ after accounting for outliers). Based on these findings, promotional materials were updated to reflect a revised estimated completion time of 10-20 minutes, and the number of 41 survey items plus the demographics section was retained.

The second pilot phase (early Spring 2025) added 88 participants recruited through a multi-channel strategy, including campus organizations, wellness initiatives, and peer networks. Phase 2 participants identified primarily as Asian (47.7%), women (63.3%), and continuing-generation students (67.1%) This phase emphasized testing revised item wording and comparing the performance of new items with earlier versions. The third pilot phase (late Spring to Summer 2025) included 114 participants, which identified primarily as Asian (56.4%), women (71.7%), and continuing-generation students (70.2%). Most participants completed the survey only once. Although participants from earlier rounds were invited to complete subsequent versions through follow-up emails, only a small number completed multiple survey iterations during the development process.

Across all phases, the pilot process was iterative: items were continually revised, tested, and re-evaluated to ensure conceptual clarity and alignment with student experiences. One major refinement occurred prior to Phase 3, when all reverse-coded items were replaced with positively worded alternatives. Earlier versions of the survey included at least one reverse-coded item per dimension to encourage more attentive responding and to reduce pattern uniform response

patterns (Weijters et al., 2013). However, emerging evidence suggests that reverse-coded items contribute little to construct validity and may even compromise data quality (Suárez-Álvarez et al., 2018; van Sonderen et al., 2013; Zeng et al., 2024). Accordingly, beginning with the Phase 3 administration on April 25, 2025, all items were presented in positive form. Although reverse-coded items were removed at this stage, future iterations of the instrument may reintroduce them selectively once the factor structure is fully stabilized. A detailed change log documenting each modification was maintained and reported to the university's Institutional Review Board (IRB). Refer to Appendix A (Table A1) for the full list of items across all pilot phases.

Using items and respondents in the final pilot phase ($n = 57$), I conducted an EFA in SPSS (principal axis factoring, oblique rotation) to examine item performance in this exploration stage. A nine-factor solution emerged, somewhat consistent with the theorized eight dimensions. I used simple, provisional cutoffs (salient primary loadings $\geq .40$ and cross-loading gaps $\geq .20$) to flag items for refinement. Given the small sample, results were interpreted cautiously and used to identify items with clear loadings versus potential cross-loaders. Despite the small, underpowered sample, some solutions converged cleanly and showed promising patterns: most items displayed salient primary loadings on their theorized dimensions with some cross-loadings. These findings were preliminary and used for item screening rather than validation; items with weak or diffuse loadings were flagged for refinement, while conceptually coherent items with strong primary loadings were retained for the field study.

Notably, the instrument was piloted primarily with undergraduate students recruited through a multicultural student center and Asian American Studies and Education courses, yielding substantial representation of first-generation students of color and low-income students, with over half of respondents reporting household incomes below \$80,000. Across three pilot

phases, participant feedback informed iterative revisions to item wording, response options, and overall survey length, with particular attention to clarity, cultural resonance, and accessibility for students from historically underrepresented backgrounds. Documentation of major pilot revisions across phases is provided in Appendix A. Additional exploratory analyses from the pilot study, including preliminary analyses of evaluative wellbeing items across pilot phases, were published separately in the *Journal of American College Health* (Yang, 2026) and informed continued survey refinement and implementation.

In addition to student pilot feedback, dissertation committee members also provided direct and substantive input on the survey content. The final instrument reflects iterative revisions made in response to both sources of feedback, resulting in several key design refinements. These included revising the item stem from “Considering this past month...” to “Reflecting on the past month...” to better cue evaluative reflection; transitioning from a six-point forced-choice response scale to a five-point scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, 5=strongly agree) to allow for neutral responding; and, as mentioned, replacing reverse-coded items with positively worded alternatives to improve clarity and data quality. In addition, a single open-ended question was added at the end of the survey to allow respondents to describe their wellbeing experiences in their own words, supporting integration with the qualitative strand. A complete list of the pilot instrument (i.e., Yang’s Holistic Wellbeing Survey) can be found in Appendix A and the resulting final instrument (i.e., How Are You Survey) can be found in Appendix B.

Site, Participants, and Recruitment

The primary site for quantitative data collection was a large public research university in the western United States, where the analytic sample was drawn exclusively from full-time

undergraduate students. Recruitment at this institution occurred through campus-based academic programs, wellness workshops, and student organizations. Although the survey was initially distributed more broadly through professional and institutional networks across the United States, only a small number of responses were received from students outside the focal institution. To maintain analytic consistency and a clearly defined institutional context, these cases were excluded, and all analyses were restricted to full-time undergraduate students enrolled at the focal university.

A purposive sampling approach guided recruitment, with intentional outreach to students of color, first-generation students, and low-income students, given their centrality to the study's equity focus. Recruitment followed a multi-channel strategy, including email distributions, rigorous in-person flyer distributions, social media outreach, and direct engagement through classes and campus events. Classroom visits and wellness-related workshops yielded the highest response rates in the pilot study and were therefore prioritized during the primary recruitment period. To incentivize participation, respondents who opted into a voluntary raffle were entered into a drawing in which approximately one-in-four participants were offered a \$10 coffee gift card distributed via Tangocard.com. Of the 53 participants selected, 43 redeemed their incentives. This strategy replaced an earlier pilot incentive model that offered \$20 Target gift cards to a smaller number of participants (one-in-five), which resulted in lower uptake (27 incentives accepted out of 50 offered). The revised approach expanded the number of incentives while maintaining budget feasibility through discretionary research funds. Data collection occurred over five weeks between January and February 2026. All procedures were reviewed and approved by the university's IRB prior to implementation.

Given the use of online recruitment channels and a small incentive, the survey was also subject to bot activity. Qualtrics' built-in bot detection feature flagged a substantial number of suspicious entries, which were reviewed alongside metadata indicators such as response duration and completion patterns. These cases were manually removed prior to data cleaning and analysis. In response to this activity, the survey distribution strategy was modified mid-collection: a new survey link was created and distributed primarily through verified campus-based networks, and a password-protected raffle link was implemented to prevent automated responses. Of the survey links, 41 valid responses were collected from the original link that experienced bot infiltration, while 225 were collected through the updated, more controlled distribution. Only verified, responses were retained in the final dataset.

Data Sample

The online survey yielded a raw sample of 266 respondents. Data cleaning was conducted in multiple stages to ensure data quality and alignment with the study's analytic criteria. Duplicate responses were identified using Qualtrics' duplicate flag and IP address metadata, resulting in the removal of one case ($n = 1$) after careful review. To maintain a single-institution sample, cases from respondents indicating enrollment at another institution and with missing institutional information were excluded ($n = 10$). Additional restrictions were applied to focus on full-time undergraduate students between the ages of 18-24, resulting in the removal of part-time students and those outside of the target age range ($n = 2$). Response quality was assessed using survey duration and response variability (i.e., standard deviation of summed scores). Cases with both short completion time (less than half the median of 419 seconds) and evidence of straight lining ($SD < .15$) were flagged and removed ($n = 2$), resulting in a final analytic sample of 251 respondents.

Following data cleaning, variables were reviewed and prepared for analysis. All variable labels, value labels, and response option codes were verified for accuracy and consistency. Several demographic variables were recoded to support meaningful subgroup analyses. Open-ended responses for major, race/ethnicity, religious/spiritual background, and disability status were reviewed and carefully recoded into existing categories. After data cleaning and the application of analytic inclusion criteria, the final analytic sample consisted of $N = 251$ full-time undergraduate students aged 18-24 at a single institution.

As shown in Table 3.1, the sample was primarily composed of traditional college-aged students, with the majority between ages 18 and 19. The sample was predominantly women (72.5%), with smaller proportions of men and nonbinary/trans participants. Due to small subgroup sizes for nonbinary, trans man, trans woman, trans nonbinary, and another gender identity, these options were combined into a non-binary/trans category. Racial/ethnic composition reflected substantial representation of East Asian, Hispanic or Latino/a/x/e, and White students, with additional diversity across other racial/ethnic groups. For subgroup analyses, race/ethnicity responses were recoded into a mutually exclusive categorical race group variable. East Asian, Southeast Asian, and South Asian respondents were combined into a single Asian category, while participants reporting more than one racial/ethnic identity were classified as multiracial. Due to small subgroup sizes, monoracial Black and Middle Eastern or North African respondents were combined into an Other category. These recoding decisions were made to support meaningful statistical comparisons while preserving as much demographic variation as possible. Although the demographic characteristics of the sample broadly reflected those of the larger population at the focal institution, random sampling was not employed. Therefore, the sample cannot be considered statistically representative of all students at the institution.

Table 3.1*Demographic Characteristics of the Sample (N=251)*

Category	<i>n</i>	%
<u>Age</u>		
18	71	28.3
19	87	34.7
20	43	17.1
21	34	13.5
22-24 ^a	16	6.4
<u>Gender</u>		
Woman	182	72.5
Man	61	24.3
Non-binary/Trans ^a	8	3.2
<u>Race/Ethnicity (select all that apply)</u>		
East Asian	86	34.3
Hispanic or Latino/a/x/e	72	28.7
White	65	25.9
Southeast Asian	36	14.3
South Asian	18	7.2
Black	11	4.4
Another race/ethnicity ^b	19	7.6
<u>Race Group (categorical variable)</u>		
Asian	109	43.3
Hispanic or Latino/a/x/e	55	21.9
White	32	12.7
Multiracial	44	17.5
Other ^c	11	4.4
<u>Sexual Orientation</u>		
Heterosexual/Straight	182	72.5
Bisexual	34	13.5
Gay/Lesbian	14	5.6
Queer/Pansexual/Asexual/Questioning ^a	19	7.6
Missing	2	0.8
<u>Citizenship Status</u>		
U.S. citizen	231	92.0
International student (e.g., F-1, J-1, M-1 visa)	14	5.6
Another citizenship status (e.g., permanent resident)	6	2.4

Note.^a Response options were combined due to small cell sizes ($n < 5$).^b Includes American Indian or Alaska Native, Middle Eastern or North African, Native Hawaiian or Pacific Islander due to small cell sizes ($n < 5$).^c Includes Black and Middle Eastern or North African respondents. All American Indian or Alaska Native and Native Hawaiian or Pacific Islander respondents fell into the Multiracial category.

Table 3.2 indicates that the sample was largely composed of first- and second-year students, with a wide distribution of academic majors, most notably in the social & behavioral sciences and biological & life sciences. Just under half (46.6%) of the sample identified as STEM majors. In terms of socioeconomic background, about two-in-five (43.0%) participants were first-generation college students, defined as neither parent having completed a 4-year or bachelor's degree (Tibbetts et al., 2018). Household income levels varied widely, with a majority (57.0%) reporting incomes of \$100,000 or higher. To facilitate interpretation, income was dichotomized at \$100,000 to distinguish between lower- and higher-income groups. This cutoff aligns with regional cost-of-living benchmarks in Los Angeles County, where low-income thresholds for small households (e.g., two to three persons) are approximately \$96,950 to \$109,050, according to the California Department of Housing and Community Development (2025). While students may come from diverse geographic and financial backgrounds, this threshold provides a contextually relevant benchmark for interpreting income in a high cost-of-living region in the West.

Table 3.2*Academic and Socioeconomic Characteristics of the Sample (N=251)*

Category	<i>n</i>	%
<u>Year in college</u>		
First-year undergraduate	108	43.0
Second-year undergraduate	60	23.9
Third-year undergraduate	42	16.7
Fourth-year or more undergraduate ^a	41	16.3
<u>GPA</u>		
Below 2.0	2	0.8
2.0 to 2.2	0	0.0
2.3 to 2.5	4	1.6
2.6 to 2.8	6	2.4
2.9 to 3.1	12	4.8
3.2 to 3.4	29	11.6
3.5 to 3.7	49	19.5
3.8 to 4.0 or above	149	59.4
<u>Major (select all that apply)</u>		
Social & Behavioral Sciences	91	36.3
Biological & Life Sciences	78	31.1
Arts and Humanities	31	12.4
Education	26	10.4
Health Sciences & Public Health	22	8.8
Mathematics, Statistics, & Data Sciences	19	7.6
Business, Finance, & Management	14	5.6
Physical Sciences	13	5.2
Engineering	11	4.4
Computer & Technology Sciences	5	2.0
Design, Media, and Architecture	5	2.0
Undecided/Undeclared	2	0.8
<u>STEM Major (binary variable)</u>		
No (only non-STEM major selected)	132	52.6
Yes (at least one STEM major selected)	117	46.6
Missing	2	0.8
<u>Highest level of education completed by any parent</u>		
Did not complete high school	24	9.6
High school diploma or GED	48	19.1
Some college, no degree	21	8.4
Associate's degree	15	6.0
Bachelor's degree	64	25.5
Graduate or professional degree	79	31.5
<u>First-Generation Status (parent education < bachelor's degree)</u>		
No	143	57.0
Yes	108	43.0

Table 3.2 (continued)

Category	<i>n</i>	%
<u>Estimated Household Income</u>		
Less than \$20,000	23	9.2
\$20,000–\$39,999	22	8.8
\$40,000–\$59,999	21	8.4
\$60,000–\$79,999	21	8.4
\$80,000–\$99,999	9	3.6
\$100,000–\$119,999	19	7.6
\$120,000–\$139,999	14	5.6
\$140,000–\$159,999	12	4.8
\$160,000–\$179,999	8	3.2
\$180,000–\$199,999	15	6.0
\$200,000–\$219,999	15	6.0
\$220,000–\$239,999	8	3.2
\$240,000 or more	52	20.7
Missing	12	4.8
<u>Income (binary variable)</u>		
Lower income (<\$100,000)	96	38.2
Higher income (≥\$100,000)	143	57.0
Missing	12	4.8

Note.

^a Includes Fifth-year undergraduate or more due to small cell size ($n < 5$).

As shown in Table 3.3, a substantial proportion of students reported experiencing health and wellness challenges, particularly persistent stress or burnout (72.9%), mental health conditions (42.2%), and sleep-related challenges (41.0%). Only a small proportion (15.9%) reported no health or wellness conditions. In terms of religious and spiritual identification, the sample reflected a diverse range of orientations, with roughly comparable proportions identifying as religious/spiritual and secular. Some participants endorsed both secular (e.g., atheist, agnostic) and religious identities, often reflecting a religious upbringing without current practice, according to some open-ended responses. Therefore, to capture participants' most current orientation, individuals who endorsed any secular identity were classified as secular in the binary variable, even if they also selected a religious category. Those who selected only

religious/spiritual identities (and no secular identity) were categorized as religious/spiritual. This coding approach prioritizes present identification over past or cultural affiliation in operationalizing religious and spiritual orientation in this study.

Table 3.3

Health/Wellness Conditions and Religious/Spiritual Characteristics of the Sample (N=251)

Category	<i>n</i>	%
<u>Health/Wellness Condition (select all that apply)</u>		
Persistent stress or burnout (e.g., feeling exhausted, overwhelmed)	183	72.9
Mental health condition (e.g., anxiety, depression, bipolar disorder)	106	42.2
Sleep-related challenge (e.g., insomnia, sleep apnea)	103	41.0
Eating-related challenge (e.g., disordered eating, binge eating)	79	31.5
Cognitive or developmental disability (e.g., ADHD, dyslexia, autism)	28	11.2
Chronic pain or musculoskeletal condition (e.g., back pain, knee injury)	26	10.4
Chronic health condition (e.g., asthma, diabetes, cancer)	24	9.6
Substance use-related challenge (e.g., alcohol, marijuana, nicotine)	17	6.8
Sensory or physical disability (e.g., hearing or visual impairments)	11	4.4
Long-term effects of past illness (e.g., long COVID)	5	2.0
None	40	15.9
<u>Health/Wellness Condition (binary variable)</u>		
No (Selected None)	40	15.9
Yes (Selected at least one health/wellness condition)	211	84.1
<u>Religious/Spiritual Background (select all that apply)</u>		
Catholic (Roman Catholic)	60	23.9
Agnostic	58	23.1
Christian	51	20.3
Atheist	50	19.9
Buddhist	19	7.6
Spiritual (general)	14	5.6
Hindu	9	3.6
Muslim	5	2.0
Another religious/spiritual background	10	4.0
None	19	7.6
<u>Religious/Spiritual Identity (binary variable)</u>		
No (Secular: Selected at least Atheist, Agnostic, or None)	120	47.8
Yes (Religious/Spiritual: Selected at least one religious/spiritual identity & did not select Atheist, Agnostic, or None)	131	52.2

Data Analysis

Quantitative data analysis proceeded in multiple stages, including data preparation, exploratory and confirmatory factor analyses (EFA/CFA), measurement invariance testing, and subsequent group comparison, and regression analyses. The overarching goal was to evaluate the dimensional structure, reliability, validity, and equity of the HAY Survey. First, an EFA was conducted on the 40 wellbeing items. Analyses were performed in SPSS Version 30.0 (IBM Corp., 2024) using principal axis factoring with Promax oblique rotation (Fabrigar et al., 1999), given the expectation that wellbeing dimensions would be correlated (Norozi, 2023; Swarbrick, 2006, 2012). Factorability was assessed using the Kaiser–Meyer–Olkin (KMO) measure ($\geq .80$) and Bartlett’s test of sphericity ($p < .001$). Item retention criteria included primary loadings of $\geq .50$ and a minimum difference of .20 between primary and cross-loadings (Fabrigar et al., 1999). Interpretations were based on the rotated pattern matrix. Internal consistency reliability was assessed using Cronbach’s alpha, with values $\geq .70$ considered acceptable (Taber, 2018; Tavakol & Dennick, 2011).

Following EFA, confirmatory factor analyses (CFA) were conducted in Mplus Version 8.9 (Muthén & Muthén, 1998-2023) to evaluate a series of theoretically driven models of holistic wellbeing. First, a unidimensional model was estimated as a baseline comparison to assess whether wellbeing could be represented as a single construct across all included items. Next, an eight-factor correlated model was tested, reflecting the theorized multidimensional structure of wellbeing across physical, psychological, spiritual, intellectual, financial, occupational, sociocultural, and environmental dimensions (Norozi, 2023; Swarbrick, 2006, 2012). To further examine the structure of holistic wellbeing, alternative and hierarchical models were evaluated. A bifactor model was tested to assess the extent to which a general holistic wellbeing factor

accounted for item variance alongside dimension-specific factors, providing insight into the relative contributions of global versus dimension-level variance. Hierarchical models were then examined, including a second-order model in which the eight dimensions loaded onto a single higher-order holistic wellbeing factor. In addition, an alternative second-order three-domain model was specified, grouping dimensions into internal, liminal, and external domains according to Yang's Relational Model of Holistic Wellbeing (Deci & Ryan, 2000; Maslow, 1943). Finally, a third-order model was explored to assess whether these three domains could themselves be represented as indicators of an overarching holistic wellbeing construct, thereby evaluating the plausibility of a fully hierarchical structure.

Given the ordinal nature of the data and violations of normality assumptions, all models were estimated using the weighted least squares mean and variance (WLSMV) estimator with theta parameterization (Muthén & Muthén, 1998–2023) and missing values coded as -9. WLSMV uses a diagonal weight matrix to produce accurate, asymptotically efficient estimates and mean- and variance-adjusted chi-square statistics. In contrast, maximum likelihood estimation assumes continuous, normally distributed variables, which may lead to biased parameter estimates when applied to ordinal data. Although Likert-type items with five or more response categories are sometimes treated as continuous in structural equation modeling (Rhemtulla et al., 2012), this approach can violate underlying assumptions and bias parameter estimates when distributions are non-normal (Svetina et al., 2020; Wu & Estabrook, 2016). Accordingly, items were treated as categorical, with response categories modeled as thresholds rather than continuous values, consistent with best practices for ordinal measurement.

Model evaluation was guided by conventional fit indices, including the Comparative Fit Index (CFI) and Tucker–Lewis Index (TLI), with values of $\geq .90$ indicating acceptable to good

fit; the Root Mean Square Error of Approximation (RMSEA), with values of $\leq .08$ considered acceptable; and the Standardized Root Mean Square Residual (SRMR), with values of $\leq .08$ indicating adequate fit (Hu & Bentler, 1999). Modification indices were examined to identify areas of localized model misfit and were used to guide iterative model refinement.

Following CFA, measurement invariance was examined using multi-group CFA to assess whether the eight-factor structure operated equivalently across gender, race/ethnicity, and first-generation status. Establishing measurement invariance is critical to ensure that observed differences reflect substantive variation in wellbeing rather than differences in how groups interpreted or responded to the survey items (Meredith, 1993; Putnick & Bornstein, 2016; Svetina et al., 2020; Wu & Estabrook, 2016). In addition to evaluating the full measurement model, factor-level invariance analyses were conducted for each of the eight dimensions. Due to uneven group representation across gender and race/ethnicity categories, factor-level analyses focused on first-generation status (first-generation vs. continuing-generation students), which provided more balanced group sizes (approximately 108 and 143, respectively). As shown in Table 3.4, cross-tabulations indicated that first-generation status captured meaningful variation across both race/ethnicity and income, with a higher proportion of lower-income students and students of color identifying as first-generation, supporting its use as the primary grouping variable for factor-level invariance testing.

Table 3.4*Distribution of Income and Race/Ethnicity by First-Generation Status*

Category	First-Generation %	Continuing-Generation %
<u>Income (n=239)</u>		
Lower income (<\$100,000)	64.1	22.1
Higher income (≥\$100,000)	35.9	77.9
Missing (n=12)		
<u>Race/Ethnicity (N=251)</u>		
Asian	30.6	53.1
Hispanic or Latino/a/x/e	42.6	6.3
White	9.3	15.4
Multiracial	13.9	20.3
Other	3.7	4.9

Note. Values represent column percentages within first-generation status. Income percentages are based on non-missing cases ($n = 239$).

Again, because the survey items were treated as ordinal, measurement invariance testing followed procedures appropriate for categorical indicators using the WLSMV estimator. Although Likert-type items with multiple response categories are sometimes treated as continuous (Rhemtulla et al., 2012), this approach assumes approximately normal distributions; however, the present data exhibited skewed response patterns. Accordingly, items were modeled as ordinal with thresholds to obtain more accurate parameter estimates. Rather than traditional configural, metric, and scalar invariance (Putnick & Bornstein, 2016), models were evaluated sequentially using (1) configural, (2) threshold, and (3) threshold-plus-loading invariance, consistent with methodological recommendations for ordinal data (Svetina et al., 2020; Wu & Estabrook, 2016).

Configural invariance assesses whether the same factor structure is present across groups without imposing equality constraints. Threshold invariance evaluates whether item thresholds are equivalent across groups, indicating that response categories or “thresholds” (e.g., “agree”)

correspond to similar levels of the underlying construct. Threshold-plus-loading invariance further constrains factor loadings to be equal across groups, testing whether items relate to their respective latent factors in a comparable manner and enabling meaningful comparisons across groups. Due to sparse response categories (e.g., no observations in extreme categories for some items), selected response options were collapsed to ensure sufficient cell counts and stable estimation of thresholds across groups (e.g., strongly disagree and disagree categories combined into one threshold). Model comparisons were evaluated using changes in CFI ($\Delta\text{CFI} \leq .01$) as well as RMSEA ($\leq .08$), CFI/TLI ($\geq .90$), and SRMR ($\leq .08$) (Hu & Bentler, 1999; Meredith, 1993). Modification indices were examined to identify parameters contributing to model misfit and to guide freeing of thresholds and factor loadings in cases of partial or non-invariance.

Following measurement invariance testing, composite mean scores were computed for each wellbeing dimension in SPSS. Descriptive statistics (means and standard deviations) were calculated, and independent samples *t*-tests were conducted to examine significant group differences across key social identities, including gender, first-generation status, income level, STEM major, sexual orientation, religious/spiritual identity, and health/wellness condition. One-way ANOVAS were also conducted to examine significant differences across racial/ethnic groups and year in college by wellbeing dimension and bivariate correlations were conducted to examine significant associations between wellbeing, age, and GPA. Regression analyses were also conducted to examine the extent to which wellbeing dimensions predicted key college student outcomes, including academic performance (i.e., GPA), persistence, belonging, and satisfaction with the college experience, all of which were measured using single-item indicators included on the HAY Survey. Collectively, these analyses examined whether wellbeing scores were associated with theoretically relevant academic and institutional outcomes.

Limitations

Several limitations should be considered when interpreting the quantitative findings of this study. First, the HAY Survey was designed primarily by the researcher, introducing the possibility that theoretical commitments, professional experiences, and interpretive frameworks shaped the conceptualization of holistic wellbeing and the selection of item content. Although this limitation was mitigated through iterative pilot testing, student feedback, and substantive input from dissertation committee members, the instrument reflects a particular theoretical orientation and may not capture all possible dimensions or expressions of wellbeing relevant across institutional or cultural contexts.

Second, while the instrument development process incorporated multiple rounds of revision informed by student responses and expert feedback, formal content validation procedures were not implemented. Specifically, the study did not employ a structured expert panel or a content validity index to systematically evaluate item relevance and representativeness. As a result, evidence of content validity is based on qualitative feedback and iterative alignment rather than quantified expert agreement. Future research could strengthen the instrument by incorporating formal content validation protocols.

Third, the study did not assess criterion-related validity through direct comparison with existing validated wellbeing scales. Although multiple established measures of wellbeing are available, incorporating such comparisons was beyond the scope of the present study, which prioritized the development and preliminary evaluation of a student-centered, multidimensional measure tailored to higher education. Instead, analyses focused on reliability, internal structure, and associations with theoretically relevant outcomes, providing initial evidence of validity without direct scale-to-scale comparison.

Fourth, the sample was drawn from a single large public research university, which may limit the generalizability of findings to other institutional contexts, including community colleges, private institutions, or institutions serving different student populations. Additionally, the sample size ($N = 251$), while sufficient for the analyses conducted, remains modest for psychometric validation and may limit the stability of parameter estimates and subgroup comparisons. Although the demographic composition of the sample generally resembled that of the broader undergraduate population at the institution, participants were not randomly selected. Therefore, the sample should not be considered statistically representative of the institution.

Fifth, the quantitative analyses were based on cross-sectional data collected at a single point in time. Although associations between wellbeing scores and theoretically relevant contextual and demographic variables were examined, the design does not permit causal inference, temporal ordering, or strict predictive validity. Longitudinal data would be necessary to assess the stability of wellbeing over time, sensitivity to change, and the instrument's ability to predict future academic or wellbeing-related outcomes.

Finally, the scope of psychometric evaluation in this study was necessarily limited. While evidence was provided regarding factor structure, internal consistency, and measurement invariance across selected subgroups, other important aspects of validity and reliability, including test-retest reliability, responsiveness to intervention, and longitudinal invariance, were not examined. These dimensions represent important directions for future research and are essential for establishing the HAY Survey as a fully validated measure suitable for broad institutional use.

Qualitative Strand

Site, Participants, and Recruitment

The qualitative strand employed a case study situated within a curricular campus initiative in which first-year students enrolled in a three-course, interdisciplinary sequence across the Fall, Winter, and Spring quarters to fulfill four general education requirements, in addition to the university's Writing II requirement. Each cluster of courses is organized around a shared thematic focus and is taught by faculty and lecturers from multiple academic departments, intentionally emphasizing interdisciplinary inquiry in the first-year curriculum. This study was situated within the cluster titled *All in Your Head? Brain, Bodymind, and Society*, which integrates perspectives from neuroscience, psychology, philosophy, disability studies, and the humanities to examine how the brain, body, and social context interact to shape experiences of mental health, subjectivity, and wellbeing. Students begin the cluster in a large lecture format enrolling over 250 students across the Fall and Winter quarters, during which they are introduced to shared themes, concepts, and interdisciplinary frameworks. In the Spring quarter, the cluster transitions into small, writing-intensive seminar sections of approximately 20-25 students each. Students select from a range of seminar options aligned with the cluster's overarching theme, each designed and facilitated by an instructor and centered on a distinct topical focus. This qualitative case study examined one such seminar, *Yoga and Holistic Wellbeing*, which I designed and facilitated across a 10-week period, plus one finals week.

As the culminating course in the cluster sequence, *Yoga and Holistic Wellbeing* was intentionally designed to integrate theory and practice by pairing interdisciplinary scholarship on wellbeing with embodied contemplative engagement. Drawing on my separate training as a 500-hour Registered Yoga Teacher (RYT-500) with Yoga Alliance, I carefully introduced students to

a range of yoga, breathwork, and meditation practices alongside contemplative modalities such as journaling, chanting, and guided inquiry. Students also engaged with foundational yogic texts, including the *Yoga Sutras of Patanjali*, a classical text outlining the philosophical foundations of yoga (Satchidananda, 2012), and *Asana Pranayama Mudra Bandha*, a contemporary instructional text detailing yogic practices and techniques (Saraswati, 2008). These readings situated contemplative practices within broader philosophical and historical traditions while providing practical guidance for experiential learning (Zajonc, 2013). Each three-hour seminar was split between an experiential practice component and lecture, discussion, and reflective activities, supporting sustained reflection and analytic meaning-making and generating a rich corpus of student writing and reflections for qualitative analysis.

Participants in the qualitative study drew from a cohort of 20 undergraduate students enrolled in the seminar. In this context, research participation consisted of providing consent for observations, coursework, and course-related materials produced during the seminar to be used for research purposes, specifically to examine how students described and experienced yoga and holistic wellbeing within the course context. Participation was entirely voluntary. Eligibility criteria required that students be officially enrolled in the course during the Spring 2025 quarter and be at least 18 years of age to provide consent. No restrictions were placed on participation based on gender, race, ethnicity, or language spoken.

Given my dual role as course instructor and principal investigator, multiple safeguards were implemented to mitigate potential coercion and protect student autonomy. A graduate student colleague with no instructional or evaluative role in the course served as the recruitment point person and visited the class during the first and final sessions to explain the purpose of the study and consent process. During this process, I removed myself from the classroom to mitigate

undue pressure for students to participate in the study. Students were informed that official consent for research participation would occur only after the course concluded and final grades were submitted, that I as the instructor would not know who consented prior to that time, and that they could revise or withdraw their consent within seven days of the final class session. Students were also informed that participation was completely voluntary, confidential, and would have no impact on their academic standing. All study procedures, including recruitment, informed consent processes, and data collection plans, were reviewed and approved by the university's IRB prior to the start of the Spring 2025 quarter. After the course concluded and final grades were submitted, 18 of 20 students consented to participate in the research; only materials associated with consenting students were included in the analyses.

Data Sources

Qualitative data for this study primarily consisted of course-generated materials produced as part of the *Yoga and Holistic Wellbeing* seminar and used for research purposes only with student consent. These coursework materials were designed to support reflection, integration of theory and practice, and meaning-making over time, and collectively captured students' experiences of holistic wellbeing within the course context. Seminar data sources included reflective journals and individual semi-structured interviews. The reflection prompts and the interview protocol are included in Appendix C.

1. **Weekly journal reflections.** Students completed nine weekly journal reflections (up to three pages each) in response to two to six prompts per week. Prompts invited students to document their experiences with yoga and contemplative practices, engage with course readings, and reflect on personal insights related to holistic wellbeing. Students were encouraged to connect course concepts to their lived experiences, reflect on in-class

discussions and activities, and incorporate direct quotations from course texts. As part of their reflections, students were invited, but not required, to complete the pilot version of Yang's Holistic Wellbeing (YHW) Survey. Students who chose not to complete the survey were encouraged to review the survey items to guide their reflections. These reflections constituted 25% of the course grade (2.5% per reflection with one week excused) and were graded for completion.

2. **Semi-structured interviews.** Individual semi-structured interviews (30-60 minutes each) were conducted during Week 9 via Zoom in lieu of a reflection journal entry and regular class session due to the Memorial Day holiday. These interviews provided students an opportunity to reflect on their course experiences, offer feedback about the course design, and discuss their developing ideas for their final essay assignment. Attendance constituted 40% of students' final course grade, with each week of attendance worth 4%. Participation in an interview served as the attendance requirement for that week and was therefore equivalent to 4% of the student's final course grade.

Data Sample

The qualitative sample included $n = 18$ first-year students at least 18 years old who consented to participate in the study; of these, $n = 17$ completed the YHW Survey and provided demographic information, which was later merged with the pilot dataset. This sample was largely composed of students of color ($n = 15$), women ($n = 13$), and students reporting household incomes below \$100,000 ($n = 9$). Only two participants identified as first-generation. These characteristics provide important context for understanding the diverse lived experiences that shaped students' engagement with holistic wellbeing throughout the course. Table 3.5 presents more demographic characteristics of study participants.

Table 3.5*Demographic Characteristics of Study Participants*

Pseudonym	Major	Gender	Race/ethnicity	Spirituality/Religion	Disability/Condition
Kiki	Social Sciences	W	Multiracial, Black, Asian (Chinese)	Agnostic	N
Tingting	Health Sciences	W	Asian (Chinese)	None	N
Alicia	Arts & Humanities, Health Sciences	W	White	Agnostic	Y
Emma	Natural Sciences	W	Multiracial, Black, White	Protestant	Y
Lily	Health Sciences	W	Hispanic (Mexican American)	Atheist	Y
Gigi	Natural Sciences	W	Asian (Chinese)	Agnostic, Christian	Y
Ollie	Natural Sciences	M	White	Atheist	N
Cici	Social Sciences	W	Asian (Chinese)	Buddhist	N
Kyle	Social Sciences	M	White	Roman Catholic	N
Peach	Arts & Humanities, Social Sciences	W	Hispanic (South American)	None	Y
Xena	Social Sciences	W	Asian (Chinese)	None	Y
Jenny	Natural Sciences	W	Hispanic (Mexican American, Central American)	Christian	N
Mala	Natural Sciences	W	Asian (Indian)	Hindu	N
Jimmy*	-	M	Asian (Chinese)	Buddhist	-
Mimi	Arts & Humanities	W	Multiracial, White, Hispanic (South American)	Roman Catholic	N
April	Health Sciences	W	Black	Spiritual (general)	Y
Shang	Business & Management, Natural Sciences	M	Asian (Chinese)	Spiritual (general)	N
Nathan	Natural Sciences	M	Asian (Chinese)	None	N

Note. * Available demographic information was extracted from written journal reflections.

Data Analysis

Prior to analysis, all data were systematically organized and prepared through several steps. First, a master document was created containing welcome survey questions and all journal reflection prompts administered throughout the 10-week course. Welcome survey questions asked students to describe their prior yoga experience, if any, their reason for enrolling in the course, and any personal goals for the course. This master document served as a reference for contextualizing student reflection journals during analysis. Next, one document was created for each participant. Welcome survey responses and all journal submissions were compiled into a single file per student. Each compiled document contained approximately 10 to 25 pages of single-spaced text. Relevant demographic and background information from students ($n = 17$)—including gender, race/ethnicity, income, first-generation status, religious/spiritual identification, major, GPA, sexuality, and disability status—were included at the top of each document to support analyses. Each participant was assigned a unique participant ID and pseudonym to ensure confidentiality.

In addition to journal data, audio-recorded semi-structured interviews were transcribed using the AI-assisted platform Otter.ai. All transcripts were manually reviewed and corrected for accuracy prior to analysis. Transcripts were de-identified and labeled with participant pseudonyms, and any potentially identifying information was removed or generalized. A separate document containing the interview protocol was included alongside the qualitative materials for analysis.

I used AILYZE, an AI-assisted qualitative analysis platform, to support the coding process by organizing large volumes of text data, identifying preliminary patterns, and generating initial thematic structures (AILYZE, Inc., 2026). I conducted three separate analyses:

one for student journals, one for interview transcripts, and one combining both data sources with overarching themes. I uploaded each dataset into the platform and analyzed them independently to preserve the context of each source. For each analysis, I provided structured prompts aligned with my research questions to guide the coding process. I also entered a set of predetermined codes based on the eight dimensions of holistic wellbeing (physical, psychological, spiritual, intellectual, financial, occupational, sociocultural, and environmental) (Norozi, 2023; Swarbrick, 2006, 2012) and key contemplative and transformative learning constructs emphasized in the course, such as self-awareness, emotional regulation, real-life application, and perspective shifts (Barbezat & Bush, 2014; Zajonc, 2013). At the same time, I instructed the platform to remain open to new codes that emerged directly from participants' language and experiences. Based on these inputs, AILYZE generated initial codes and suggested themes for each dataset, which I then reviewed, refined, and interpreted in relation to my research questions.

In Analysis 1, which included only the journal reflections, the deductive coding structure performed as intended. AILYZE successfully organized participant responses according to the eight predetermined dimensions of holistic wellbeing, generating codes and excerpts associated with each dimension. In Analysis 2, which focused exclusively on interview transcripts, the initial analysis generated four themes: (a) personal transformation and self-awareness, (b) redefinition of yoga, (c) practical integration into daily life, and (d) holistic wellbeing integration. To further explore the thematic structure of the interview data, I conducted a second analysis using revised prompts, which yielded five themes: (a) embodied awareness and regulation, (b) meaning-making and values integration, (c) relationality and classroom community, (d) contemplative practices and engagement, and (e) institutional and contextual factors. Finally, in Analysis 3, I combined the journal reflections and interview transcripts into a

single dataset. This analysis generated three overarching themes: (a) embodied and practical applications, (b) developing awareness, and (c) personal transformation. Through this iterative process, I compared, refined, and synthesized AI-generated codes and themes across analyses, ultimately selecting the thematic structure that best represented participants' experiences and addressed the study's research questions. Prompts were refined throughout the process to support deeper synthesis and grouping of related concepts across datasets.

Because I served as the course instructor, I had already engaged extensively with the journal data throughout the quarter through reading, grading, and responding to weekly reflections. I also reviewed all interview transcripts in full during transcription review and analysis. This familiarity with the dataset allowed me to critically assess AI-generated codes and themes against the original participant narratives, including areas of nuance, divergence, and counterexamples that may not have been emphasized by the platform. Consistent with emerging practices in AI-assisted qualitative research, the platform supported the coding process as a “thought partner” rather than an independent analytic agenda (Farrand & Jung, 2025; Knippen et al., 2025; Saldaña, 2013). All final analytic decisions and interpretations were made by me using a reflexive thematic analysis approach guided by abductive coding logic (Braun & Clarke, 2022; Finlay, 2002) and grounded in attention to lived experience and meaning-making (Moustakas, 1994; van Manen, 2016).

Mixed-methods integration occurred following completion of both analytic strands through the use of narrative integration that examined relationships between quantitative and qualitative findings (Fetters et al., 2013). This approach allowed qualitative findings to contextualize, elaborate, and extend the survey results, illuminating not only whether holistic

wellbeing can be measured but how it is experienced and supported in practice within higher education.

Limitations

The qualitative strand was bounded to a single first-year seminar at one institution. Data were drawn primarily from graded course materials, which may have introduced social desirability or course-norm effects, where students align their writing with perceived course values or instructor expectations. Although safeguards were implemented to mitigate instructor-researcher dynamics, including post-grading consent and recruitment by a non-evaluating colleague, the instructional context may still have shaped what students chose to write or share in interviews. Another limitation is that the seminar was offered as the third course in a three-part neuroscience-related cluster. As a result, participants had already completed two related courses and may have entered the seminar with a greater interest in wellbeing, mindfulness, neuroscience, or self-development than the broader student population. While the cluster is open to all students in the fall, enrollment in the spring seminar was limited to students who had completed the earlier courses in the sequence. Findings reflect students' experiences within a single seminar context and may differ from how wellbeing is understood or cultivated in other curricular, co-curricular, or institutional settings.

In addition, the qualitative data were collected during the survey pilot in Spring 2025, whereas the quantitative survey data were collected in 2026; changes in institutional conditions, student circumstances, or broader sociopolitical contexts across these periods may have influenced how wellbeing was experienced or articulated, which should be considered when interpreting integrated findings. This research design positions the qualitative strand to capture not only how holistic wellbeing can be measured, but how it is experienced, interpreted, and

enacted by students within a structured educational setting. Because many of the journal reflections were connected to students' engagement with the pilot version of the HAY Survey itself, participants may have been more attuned to the language and dimensions represented within the survey during their reflections. While this alignment strengthened opportunities for mixed-methods integration, it may also have shaped how students framed and articulated their experiences of wellbeing within the qualitative data.

CHAPTER FOUR

FINDINGS

This chapter presents the findings of this mixed-methods study examining both the measurement and lived experience of holistic wellbeing among college students. The chapter is organized into five parts: Part I presents the quantitative validation of the How Are You (HAY) Survey, including exploratory and confirmatory factor analyses, reliability analyses, and measurement invariance testing procedures used to evaluate the psychometric structure of holistic wellbeing. Part II presents integrated findings across the eight dimensions of wellbeing represented in the HAY Survey. Organized by dimension, this section interprets quantitative findings related to factor structure, composite scores, and descriptive patterns alongside qualitative reflections drawn from student journals to examine how students described, experienced, and made meaning of these wellbeing dimensions in their educational lives. Part III examines associations between wellbeing and key student outcomes, including group differences, academic outcomes, persistence, belonging, and college satisfaction, while selectively integrating qualitative reflections that contextualize and expand upon these statistical relationships. Part IV presents qualitative findings related to yoga and contemplative practice in higher education, drawing from student journals and semi-structured interviews to explore themes of embodied application, developing awareness, and personal transformation. Part V provides an overarching mixed-methods synthesis through narrative integration, examining broader areas of confirmation, expansion, and discordance across the quantitative and qualitative strands to develop a more comprehensive understanding of holistic wellbeing in higher education.

Part I: Psychometric Evaluation of the HAY Survey

Exploratory Factor Analysis

To address the first research question, an EFA was conducted on the HAY Survey items. The purpose of this analysis was to identify the underlying factor structure of the instrument and provide evidence of construct validity. The initial analysis included all 40 items and was conducted using principal axis factoring with Promax rotation to identify patterns of shared variance and determine the number and composition of latent factors (Fabrigar et al., 1999). For interpretive clarity and stronger factor-item correspondence, the final reporting and interpretation of factor structures emphasized loadings of .50 and above. However, items with loadings in the .40-.49 range were also examined for conceptual coherence and potential cross-loading patterns during exploratory analyses.

Results from the initial EFA indicated that two items—PSY3 (“I seek support for my mental health when I need it [e.g., talking with friends/family, peer support, counseling.]”) and OCC2 (“I have enough time in my day to take care of my personal needs.”)—demonstrated factor loadings below .40 and were removed from subsequent analyses. In addition, ENV3 (“I appreciate spending time outdoors.”) demonstrated a comparatively weaker loading in the .40 range and loaded substantially lower than the other environmental wellbeing items, which each exceeded .70; ENV3 was therefore removed from the final solution. One financial wellbeing satisfaction item also demonstrated a loading in the .40 range, but it cross-loaded more strongly (.54) onto a theoretically meaningful financial wellbeing factor and was therefore retained for further examination in the revised model. Following these refinements, a second EFA was conducted on the remaining 37 items.

The revised analysis produced nine distinct factors with clear and interpretable structures, and Table 4.1 provides the factor loadings for these items and factors. Correlations among factors were present, as expected given the conceptual relatedness of wellbeing dimensions. Notably, one item originally theorized within the spiritual domain (SPI4: “I can return to a sense of peace when life feels challenging”) loaded onto the psychological wellbeing factor. This loading was retained, as the concept of “returning to a sense of peace” may reflect elements of psychological regulation or peace of mind, indicating meaningful theoretical overlap between spiritual and psychological wellbeing. Aside from this exception, items clustered in ways that were largely consistent with the hypothesized dimensions of holistic wellbeing. Overall, these results provide initial support for the multidimensional structure of the HAY Survey.

In addition, the financial wellbeing items initially split across two factors in the EFA solution, suggesting a potential distinction between different aspects of financial wellbeing. To further examine this pattern, a separate exploratory factor analysis was conducted using only the five financial wellbeing items. Results from this analysis indicated that both a two-factor and a one-factor solution were viable. The two-factor solution appeared to differentiate between students’ perceived financial situation (e.g., financial stability and comfort) and their financial behaviors (e.g., budgeting and decision-making). However, a unidimensional solution also demonstrated strong factor loadings, with all items exceeding the .50 threshold. Reliability analysis further supported the internal consistency of the full set of financial wellbeing items. Given the strong empirical support for a unidimensional structure, as well as the conceptual coherence of financial wellbeing as an integrated dimension within the broader model, all five items were retained within a single financial wellbeing factor for subsequent analyses.

Table 4.1*Rotated Pattern Matrix of EFA Factor Loadings for the HAY Survey (Loadings $\geq .50$)*

Item	Factor								
	1	2	3	4	5	6	7	8	9
OCC5: Overall, I am satisfied with my daily use of time.	.859								
OCC4: I make good use of my time to pursue what's important to me.	.759								
OCC1: What I do each day feels worthwhile.	.681								
OCC3: I feel motivated to carry out my daily responsibilities.	.610								
SOC5: Overall, I am satisfied with my social relationships.		.815							
SOC1: I feel a sense of belonging in the communities that matter to me.		.765							
SOC3: I make meaningful contributions to my community.		.617							
SOC4: I feel supported by the people in my life.		.571							
SOC2: I can adapt comfortably to different social and cultural settings.		.567							
PHY2: I maintain a healthy diet (e.g., eating a variety of nourishing foods, limiting ultra-processed products).			.724						
PHY3: I engage in regular physical activity.			.688						
PHY1: I take good care of my body (e.g., hydration, hygiene, posture).			.631						
PHY4: I usually get enough restful sleep.			.613						
PHY5: Overall, I am satisfied with my physical health.			.599						
INT3: I push myself to think critically about what I am learning.				.864					
INT2: I thoughtfully engage with feedback to improve my learning.				.694					
INT1: I remain open to ideas that challenge my thinking.				.691					
INT4: I take initiative to learn new things on my own.				.664					
INT5: Overall, I am satisfied with my thinking and learning habits.				.545					

Table 4.1 (continued)

Item	Factor								
	1	2	3	4	5	6	7	8	9
PSY4: I can regulate my own emotions (e.g., anger, sadness, anxiety).					.793				
PSY2: I carry a sense of happiness with me.					.724				
PSY5: Overall, I am satisfied with my psychological wellbeing (e.g., mental and emotional health).					.690				
SPI4: I can return to a sense of peace when life feels challenging.					.665				
PSY1: I am managing my stress well.					.569				
ENV4: I take actions that support environmental sustainability.						.765			
ENV2: I feel connected to the local natural environment.						.759			
ENV5: Overall, I am satisfied with my relationship with nature.						.733			
ENV1: I am mindful of how my behaviors impact the environment.						.681			
SPI1: I feel connected to something greater than myself (e.g., a cause, a higher power, nature).							.759		
SPI3: I remain aware of what gives my life meaning.							.672		
SPI2: I engage in practices that help me feel grounded (e.g., journaling, prayer, community service).							.661		
SPI5: Overall, I am satisfied with my sense of meaning and purpose.							.590		
FIN2: I can comfortably cover my living expenses.								.907	
FIN1: I feel at ease with my financial situation.								.867	
FIN4: I manage my own money effectively (e.g., saving, budgeting, spending).									.825
FIN3: I make responsible decisions around money.									.796
FIN5: Overall, I am satisfied with my financial habits.									.505

Note. Loadings < .50 are suppressed. Extraction method: Principal Axis Factoring. Rotation: Promax with Kaiser normalization. Items PSY3, OCC2, and ENV3 were removed prior to analysis due to loadings < .50 across all factors from initial EFA.

Internal Consistency

Following the establishment of the factor structure through exploratory factor analysis, internal consistency reliability was assessed for each of the identified wellbeing dimensions (Taber, 2018; Tavakol & Dennick, 2011). Cronbach's alpha coefficients were calculated to evaluate the extent to which items within each subscale consistently measured the same underlying construct. As shown in Table 4.2, all subscales demonstrated acceptable to strong levels of internal consistency, with alpha values exceeding the recommended threshold of .70. These results provide further support for the reliability of the HAY Survey and the coherence of each wellbeing dimension.

Table 4.2

Internal Consistency Reliability of HAY Survey Subscales

Wellbeing Factor	Items	# of Items	Cronbach's α
Physical	PHY1-PHY5	5	.813
Psychological	PSY1, PSY2, PSY4, PSY5, SPI4	5	.864
Spiritual	SPI1-SPI3, SPI5	4	.825
Intellectual	INT-1-INT5	5	.822
Financial	FIN1-FIN5	5	.840
Occupational	OCC1, OCC3-OCC5	4	.883
Sociocultural	SOC1-SOC5	5	.844
Environmental	ENV1, ENV2, ENV4, ENV5	4	.826

Note. An alternative 3-item financial wellbeing factor (FIN3, FIN4, FIN5) demonstrated Cronbach's $\alpha = .848$.

Confirmatory Factor Analysis

To further evaluate the structure of the HAY Survey and address the first research question, a series of confirmatory factor analyses (CFA) were conducted to compare alternative representations of holistic wellbeing. All models were estimated using the WLSMV estimator with categorical indicators and THETA parameterization. Model fit was evaluated using χ^2 ,

RMSEA, CFI, TLI, and SRMR (Hu & Bentler, 1999). Each model reflected a different assumption about how the 37 retained items and wellbeing dimensions were organized.

The unidimensional model specified that all 37 items loaded onto a single latent holistic wellbeing factor, testing whether wellbeing could be represented as a single undifferentiated construct (Swarbrick et al., 2024). In contrast, the eight-factor model specified that items loaded onto their respective wellbeing dimension (physical, psychological, spiritual, intellectual, financial, occupational, sociocultural, and environmental), with factors allowed to correlate, reflecting a multidimensional but interrelated structure (Norozi, 2023; Swarbrick, 2006). The bifactor model specified that each item loaded simultaneously onto a general holistic wellbeing factor and its corresponding dimension-specific factor. In this model, the general and dimension-specific factors were constrained to be orthogonal, allowing for the examination of whether a single overarching factor accounted for most of the shared variance while retaining dimension-level specificity (Norozi, 2023; Swarbrick et al., 2024).

The second-order model specified that the eight first-order wellbeing factors loaded onto a single higher-order holistic wellbeing factor. This model assumes that items reflect their respective dimensions, and that these dimensions, in turn, reflect a broader underlying construct of holistic wellbeing (Norozi, 2023). To further examine the theoretical structure proposed in this study, a second-order three-domain model was tested, in which the eight wellbeing dimensions were grouped into three broader domains: internal (physical, psychological, and spiritual), liminal (intellectual, financial, and occupational), and external (sociocultural and environmental) (Deci & Ryan, 2000; Maslow, 1943). These groupings were developed to reflect qualitatively different forms of wellbeing experience and interaction. The internal domain represented intrapersonal and embodied aspects of wellbeing rooted within the self, whereas the external

domain reflected wellbeing shaped through social relationships and interaction with broader environmental contexts. The liminal domain represented intermediary dimensions that bridge internal wellbeing capacities with external institutional, academic, and economic systems. In this model, the eight first-order factors loaded onto these three second-order domains.

Finally, a third-order model was estimated, extending this structure by specifying that the three second-order domains (internal, liminal, and external) loaded onto a single third-order holistic wellbeing factor. This model most closely reflected the relational framework proposed this study by testing whether holistic wellbeing could be understood simultaneously as a multidimensional construct with distinct domains and as an integrated higher-order experience of wellbeing. In other words, the model examined whether the eight dimensions of wellbeing functioned not only as separate dimensions, but also as interconnected components of a broader holistic wellbeing construct (Deci & Ryan, 2000; Maslow, 1943; Norozi, 2023; Swarbrick, 2006, 2012; Swarbrick et al., 2024).

As shown in Table 4.3, the unidimensional model demonstrated poor fit to the data ($RMSEA = .145$, $CFI = .633$, $TLI = .623$, $SRMR = .119$), indicating that holistic wellbeing is not adequately represented as a single latent construct by the data. The eight-factor model demonstrated substantially improved fit ($RMSEA = .067$, $CFI = .928$, $TLI = .920$, $SRMR = .063$), supporting the multidimensional structure identified in the EFA. The bifactor model yielded a modest improvement in model fit ($RMSEA = .064$, $CFI = .936$, $TLI = .928$, $SRMR = .065$), suggesting the presence of a general wellbeing factor alongside dimension-specific factors. The second-order, second-order three-domain, and third-order models all demonstrated acceptable and comparable fit (see Table 4.3), indicating that the eight dimensions of wellbeing may be meaningfully organized within a hierarchical structure.

Table 4.3*Model Fit Indices for Alternative Factor Structures of Holistic Wellbeing*

Model	χ^2	df	RMSEA (CI)	CFI	TLI	SRMR
Unidimensional	3953.41	629	.145 (.141, .149)	.644	.623	.119
Eight-Factor	1278.72	601	.067 (.062, .072)	.928	.920	.063
Bifactor	1194.38	592	.064 (.058, .069)	.936	.928	.065
2nd-Order	1321.42	621	.067 (.062, .072)	.925	.920	.071
2nd-Order (Three-Domain)	1323.40	618	.067 (.062, .072)	.925	.919	.070
3rd-Order	1323.40	618	.067 (.062, .072)	.925	.919	.070

Note. χ^2 = chi-square; df = degrees of freedom; RMSEA = root mean square error of approximation; CI = confidence interval; CFI = comparative fit index; TLI = Tucker–Lewis index; SRMR = standardized root mean square residual. Model estimated using WLSMV with categorical indicators.

These findings provide strong support for the multidimensional and interrelated nature of holistic wellbeing. Although the bifactor model demonstrated the strongest statistical fit, the eight-factor model was retained as the primary measurement model because it more clearly preserved the interpretability and practical utility of the eight wellbeing dimensions. While the bifactor model supported the presence of a general holistic wellbeing factor underlying the survey items, it also emphasized a dominant general factor that risked obscuring meaningful variation across specific wellbeing dimensions. In contrast, the eight-factor model aligned more closely with the theoretical framework guiding this study, which conceptualized holistic wellbeing as multidimensional, relational, and composed of interconnected yet distinguishable dimensions of wellbeing. Retaining the eight-factor structure also better supported subsequent analyses, including measurement invariance testing, examination of dimension-specific relationships with educational outcomes, and mixed-methods integration across distinct areas of student experience. Accordingly, the bifactor model was interpreted as evidence for an

overarching holistic wellbeing construct, whereas the eight-factor model was retained as the primary operational model for analytic and interpretive purposes.

To further illustrate the structure of the retained measurement model, Figure 4.1 presents the eight-factor measurement model of holistic wellbeing, including standardized factor loadings. In this model, each of the 37 items loaded onto its respective wellbeing dimension, reflecting the multidimensional nature of holistic wellbeing. The eight latent factors were specified as distinct but freely correlated constructs, consistent with the theoretical assumption that dimensions of holistic wellbeing are interconnected yet distinguishable. Correlations among all factors are depicted in the figure with coefficients reported separately in the following table.

Figure 4.1

Eight-Factor CFA Measurement Model of Holistic Wellbeing

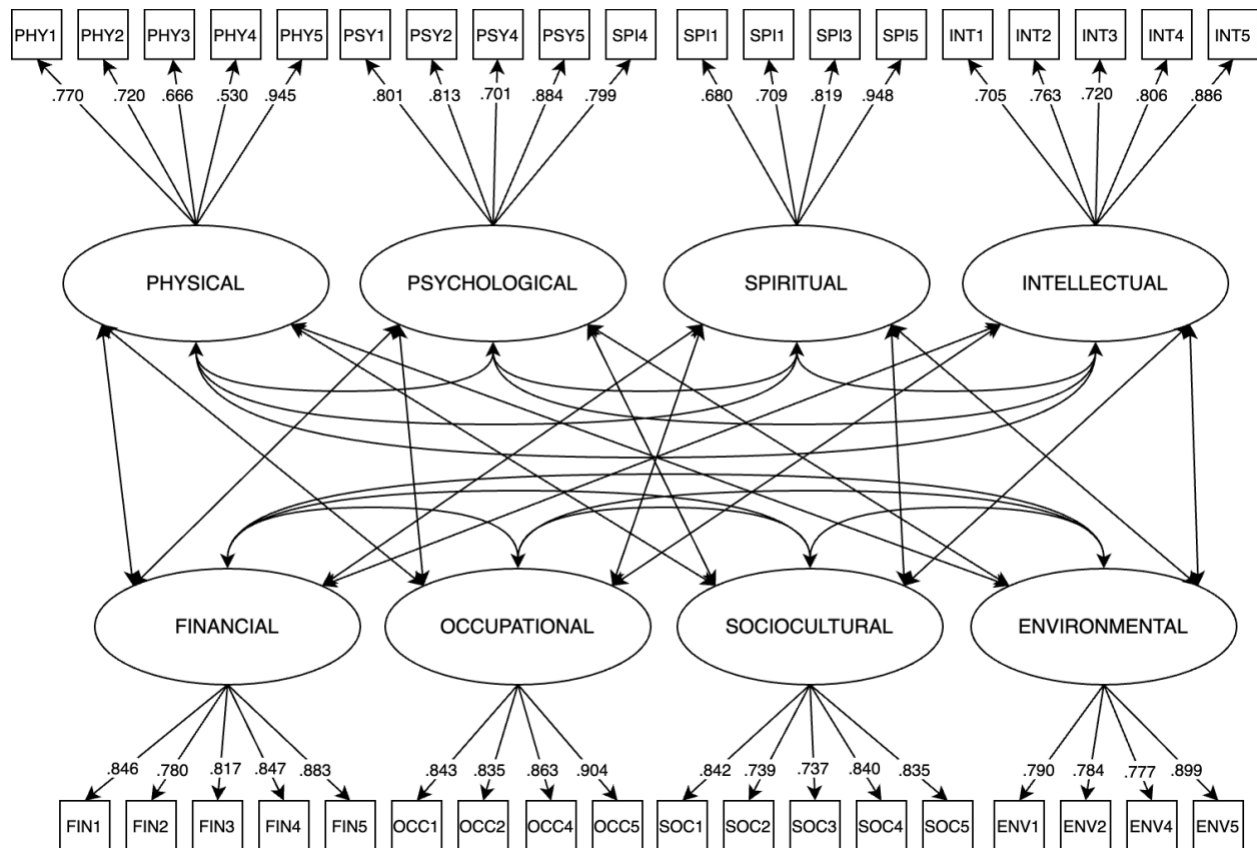


Table 4.4 presents the latent factor correlation matrix for the eight-factor model. Correlations among factors were moderate to high and statistically significant at the $p < .001$ level, indicating that the wellbeing dimensions are meaningfully related while remaining empirically distinguishable. Given that all items were drawn from the same holistic wellbeing instrument and assessed using similar response formats, some degree of overlap among dimensions was expected. Nonetheless, variability in the magnitude of correlations suggests that certain dimensions share stronger conceptual relationships than others. For example, psychological wellbeing (PSY) demonstrated relatively strong associations with spiritual (SPI, $r = .767$), occupational (OCC, $r = .718$), and sociocultural (SOC, $r = .677$) wellbeing, whereas financial and environmental wellbeing demonstrated comparatively lower correlations ($r \leq .504$) with all other dimensions, suggesting greater distinctiveness within the broader model. Overall, this pattern supports the conceptualization of holistic wellbeing as a multidimensional construct composed of interconnected yet distinguishable dimensions.

Table 4.4

Latent Factor Correlation Matrix for the Eight-Factor Model of Holistic Wellbeing

Factor	PHY	PSY	SPI	INT	FIN	OCC	SOC	ENV
PHY	1.00							
PSY	.677	1.00						
SPI	.472	.767	1.00					
INT	.412	.532	.501	1.00				
FIN	.455	.485	.249	.413	1.00			
OCC	.534	.718	.670	.534	.454	1.00		
SOC	.476	.677	.659	.479	.302	.623	1.00	
ENV	.504	.449	.481	.434	.228	.400	.480	1.00

Note. All correlations are significant at $p < .001$.

PHY = physical wellbeing; PSY = psychological wellbeing; SPI = spiritual wellbeing; INT = intellectual wellbeing; FIN = financial wellbeing; OCC = occupational wellbeing; SOC = sociocultural wellbeing; ENV = environmental wellbeing.

The results of the CFA provide strong support for the multidimensional structure of holistic wellbeing as measured by the HAY Survey. Across model comparisons, the eight-factor model demonstrated good fit and conceptual clarity, while alternative models further suggested that these dimensions are meaningfully interrelated and may be organized within broader hierarchical structures. Accordingly, the eight-factor model was used as the primary measurement model for subsequent invariance testing.

Measurement Invariance Testing

Following the establishment of the eight-factor measurement model, measurement invariance testing was conducted to evaluate whether the HAY Survey measured holistic wellbeing equivalently across key student groups, particularly across gender, race/ethnicity, and first-generation status. Establishing invariance is essential for ensuring that comparisons of wellbeing across groups are meaningful and not confounded by differences in how participants interpret survey items or use response categories (Meredith, 1993; Putnick & Bornstein, 2016; Svetina et al., 2020; Wu & Estabrook, 2016). In the context of scale development, evidence of invariance strengthens confidence that observed group differences reflect meaningful differences in wellbeing rather than measurement artifacts.

Because the HAY Survey consisted of ordinal indicators, such as Likert-style response options ranging from “strongly disagree” to “strongly agree,” measurement invariance testing followed procedures recommended for categorical confirmatory factor analysis models (Svetina et al., 2020; Wu & Estabrook, 2016). Unlike continuous variables, ordinal indicators represent ordered response categories in which the distance between responses is not assumed to be equal. As a result, invariance testing for ordinal data requires additional consideration of how participants interpret and use response categories across groups. Invariance testing therefore

proceeded sequentially through configural invariance, threshold invariance, and threshold-plus-loading invariance.

First, configural invariance tested whether the survey demonstrated the same overall factor structure across groups before any equality constraints were imposed. In practical terms, this step examined whether the same survey items related to the same wellbeing dimensions across groups. For example, items related to sleep, diet, hygiene, exercise, and satisfaction with physical health were expected to function as indicators of physical wellbeing for all groups. During this initial step, the model intentionally allowed groups to differ in how strongly items related to wellbeing dimensions and how participants used response categories. This provided a flexible baseline model to determine whether the general structure of the survey appeared similar across groups before introducing stricter equality constraints in later analyses. Support for configural invariance suggests that the same underlying wellbeing dimensions were being measured similarly across groups. Conversely, failure to achieve configural invariance suggests that certain items may relate to different underlying constructs across groups, making subsequent forms of invariance testing more difficult to interpret.

Second, threshold invariance introduced equality constraints on item thresholds across groups. For ordinal survey items, thresholds represent the points at which participants transition from one response category to the next, such as moving from “strongly disagree” to “disagree.” In practical terms, threshold invariance tests whether participants across groups interpret and use the response scale similarly. For example, if two students from different groups both select “agree” on a physical wellbeing item, threshold invariance examines whether that response reflects a comparable level of underlying physical wellbeing for both students. Support for threshold invariance suggests that response categories carry similar meaning across groups,

allowing group differences in scores to be interpreted more confidently as meaningful differences in wellbeing. Conversely, failure to achieve threshold invariance suggests that some groups may use response categories differently. For instance, one group may endorse “agree” at lower levels of wellbeing than another group. In such cases, observed group differences may partly reflect differences in interpretation or response tendencies rather than true differences in wellbeing itself.

Third, threshold-plus-loading invariance added equality constraints on factor loadings while retaining the threshold constraints established in the previous step. Maintaining the threshold constraints is important because it ensures that groups are already using the response categories in comparable ways before testing whether the survey items relate to the underlying construct similarly across groups. Factor loadings represent the strength of the relationship between each survey item and its corresponding wellbeing dimension. In practical terms, loadings indicate how strongly each item contributes to the overall construct being measured. For example, within physical wellbeing, items related to sleep, exercise, diet, hygiene, and physical satisfaction should contribute to the physical wellbeing factor in relatively similar ways across groups. By constraining loadings to equality, this analysis tested whether the underlying construct functioned similarly across groups once comparable use of the response scale had already been established. Support for loading invariance therefore suggests that the wellbeing dimension is organized similarly across groups and that survey items contribute comparably to the construct being measured. On the other hand, failure to achieve loading invariance suggests that certain items may be more central to the construct for some groups than others. For instance, exercise may relate more strongly to physical wellbeing for one group, while sleep or diet may relate more strongly for another group. Such differences complicate interpretation because

observed group differences may partly reflect differences in how the construct itself is organized across groups rather than true differences in wellbeing alone.

Full Survey Measurement Invariance. Measurement invariance was first evaluated across gender, race/ethnicity, and first-generation status at the full-survey level to assess whether the overall eight-factor structure of the HAY Survey demonstrated comparable measurement properties across groups. This analysis evaluated whether the survey maintained consistent factor structure, response thresholds, and item-factor relationships across demographic categories. As shown in Table 4.5, configural, threshold, and threshold-plus-loading models demonstrated acceptable fit across all three grouping variables. Importantly, changes in CFI remained below the recommended threshold of .010 in all cases, indicating that the addition of increasingly restrictive invariance constraints did not meaningfully reduce model fit.

Table 4.5

Invariance Testing of Eight-Factor Model Across Gender, Race/Ethnicity, and First-Generation Status

Model	χ^2 (df)	RMSEA	CFI	TLI	SRMR	Δ CFI
<u>Gender</u>						
Configural	1918.90 (1202)	.070	.921	.913	.084	—
Threshold	1965.25 (1262)	.068	.923	.919	.084	+.002
Threshold + loadings	1978.83 (1291)	.066	.925	.922	.085	+.002
<u>Race/Ethnicity</u>						
Configural	3189.08 (2413)	.073	.916	.907	.109	—
Threshold	3472.19 (2743)	.067	.921	.923	.111	+.005
Threshold + loadings	3643.55 (2854)	.068	.914	.920	.125	-.007
<u>First-Generation Status</u>						
Configural	1983.31 (1202)	.072	.919	.911	.081	—
Threshold	2047.96 (1265)	.070	.919	.915	.081	+.000
Threshold + loadings	2069.03 (1294)	.069	.920	.918	.082	+.001

Note. χ^2 = chi-square; df = degrees of freedom; RMSEA = root mean square error of approximation; CFI = comparative fit index; TLI = Tucker–Lewis index; SRMR = standardized root mean square residual. Model estimated using WLSMV with categorical indicators.

Across gender, model fit remained stable as additional equality constraints were introduced across the invariance testing sequence ($\Delta\text{CFI} = +.002$), suggesting that participants across gender groups interpreted response categories similarly and demonstrated comparable relationships between items and their respective wellbeing dimensions. For race/ethnicity, the threshold-plus-loading model demonstrated a slight decrease in model fit ($\Delta\text{CFI} = -.007$); however, this remained within recommended guidelines for invariance, suggesting that the survey continued to function similarly across racial/ethnic groups despite the addition of threshold and loading constraints. Similarly, invariance across first-generation status was supported, with minimal changes in model fit as progressively stricter assumptions were tested ($\Delta\text{CFI} \leq .001$), indicating that first- and continuing-generation students demonstrated highly similar response patterns across the full survey.

Overall, these findings provide evidence that the eight-factor measurement model operated similarly across gender, race/ethnicity, and first-generation status, supporting meaningful group comparisons using the HAY Survey. However, full-survey invariance analyses reflect aggregate measurement behavior across all eight wellbeing dimensions and may obscure localized sources of non-invariance within specific factors or items. In other words, acceptable fit at the full-survey level does not necessarily indicate that every factor functioned identically across groups. To further examine this possibility, additional factor-level invariance analyses were conducted.

Factor-Level Invariance by First-Generation Status. Factor-level invariance analyses were subsequently conducted to examine whether specific wellbeing dimensions operated similarly across groups. In multidimensional models, localized areas of non-invariance can be masked by acceptable overall model fit. By testing each wellbeing dimension separately, these

analyses provided a more focused examination of potential item- or factor-level variation. To facilitate a more interpretable analysis, these tests were conducted using first-generation status. As described in Chapter Three, first-generation students in this sample were more evenly represented than some other demographic groups and tended to be from lower-income and racially/ethnically minoritized backgrounds, making first-generation status a meaningful grouping variable for examining potential differences in how wellbeing dimensions functioned across student experiences.

Before conducting the factor-level invariance analyses, cross-tabulations were examined across all survey items and grouping variables to identify sparse or zero-frequency response categories. This step was necessary because the invariance models used ordinal response categories (e.g., strongly disagree to strongly agree), and threshold estimation in categorical CFA requires non-zero observations within each response category across groups. For example, on the item SOC5 (“Overall, I am satisfied with my social relationships”), no Asian students selected “strongly disagree,” and no White students selected “neither agree nor disagree.” These empty response categories created estimation problems in Mplus. To address this issue, adjacent lower-end response categories (e.g., “strongly disagree,” “disagree,” and “neither agree nor disagree”) were combined for SOC5 in SPSS prior to transferring the data into Mplus, resulting in a revised three-category ordinal structure while preserving the overall ordering of the response scale. Similar recoding procedures were applied across multiple wellbeing items to support stable estimation during the factor-level invariance analyses.

In psychometric research, achieving perfect measurement invariance across diverse populations is often difficult, particularly when using ordinal response categories and smaller subgroup samples. Accordingly, invariance testing focuses on whether model fit meaningfully

worsens after equality constraints are imposed across groups. When only a small number of thresholds or factor loadings contribute substantially to declines in model fit, researchers commonly use partial invariance procedures by freeing those specific parameters while retaining equality constraints for the remaining items (Byrne et al., 1989; Chen, 2007). In practical terms, this means that if most items within a wellbeing dimension function similarly across groups, a limited number of non-invariant items do not necessarily invalidate the broader construct. When acceptable model fit and minimal changes in fit are achieved after these adjustments, partial invariance can still support meaningful comparisons of latent constructs and group differences across populations.

Table 4.6 presents the factor-level measurement invariance analyses by first-generation status. Psychological, spiritual, occupational, and sociocultural wellbeing demonstrated full threshold and loading invariance, as the addition of equality constraints did not meaningfully reduce model fit and overall fit indices remained strong. These findings suggest that first- and continuing-generation students generally interpreted response categories similarly and that the survey items related to their respective wellbeing dimensions in comparable ways across groups. Establishing measurement invariance is an important component of scale development because it supports more valid group comparisons and provides evidence that the instrument measures the same underlying constructs across populations. However, the remaining wellbeing dimensions demonstrated more nuanced patterns of invariance, with several factors requiring partial threshold or loading adjustments to achieve acceptable model fit, suggesting that some survey items functioned somewhat differently across groups.

Table 4.6*Invariance Testing of Each Wellbeing Factor by First-Generation Status*

Model	χ^2 (df)	RMSEA	CFI	TLI	SRMR	Δ CFI
<u>Physical</u>						
Configural	8.01(10)	.000	1.000	1.000	.015	—
Threshold	68.39 (30)	.101	.968	.979	.042	-.032
Partial threshold ^a	55.99 (29)	.084	.979	.987	.035	+.011
Partial threshold ^a + loadings	71.67 (34)	.094	.969	.982	.052	-.010
<u>Psychological</u>						
Configural	33.54 (10)	.137	.988	.976	.027	—
Threshold	38.49 (29)	.051	.995	.997	.041	+.007
Threshold + loadings	43.30 (34)	.047	.995	.997	.045	+.000
<u>Spiritual</u>						
Configural	9.42 (4)	.104	.996	.989	.015	—
Threshold	16.82 (20)	.000	1.000	1.000	.026	+.004
Threshold + loadings	23.14 (24)	.000	1.000	1.000	.034	+.000
<u>Intellectual</u>						
Configural	28.58 (10)	.122	.989	.977	.026	—
Threshold	29.05 (25)	.036	.998	.998	.032	+.009
Threshold + loadings	72.27 (30)	.106	.974	.983	.073	-.024
Threshold + partial loadings ^b	39.43 (28)	.057	.993	.995	.040	+.019
<u>Financial</u>						
Configural	220.44 (10)	.410	.919	.839	.125	—
Configural (3-item) ^c	0.00 (0)	.000	1.000	1.000	0.000	—
Threshold	27.70 (11)	.110	.989	.994	.045	-.011
Threshold + loadings	34.78 (14)	.109	.987	.994	.050	-.002
<u>Occupational</u>						
Configural	4.24 (4)	.022	1.000	1.000	.009	—
Threshold	16.58 (20)	.000	1.000	1.000	.027	+.000
Threshold + loadings	22.49 (24)	.000	1.000	1.000	.031	+.000
<u>Sociocultural</u>						
Configural	40.98 (10)	.157	.985	.970	.033	—
Threshold	38.24 (27)	.058	.995	.996	.039	+.010
Threshold + loadings	44.29 (32)	.055	.994	.996	.044	-.001
<u>Environmental</u>						
Configural	28.02 (4)	.219	.986	.957	.027	—
Threshold	39.25 (19)	.092	.988	.992	.040	+.002
Partial threshold ^d	26.38 (17)	.066	.994	.996	.032	+.006
Partial threshold ^d + loadings	26.99 (21)	.048	.996	.998	.034	+.002

Note. χ^2 = chi-square; df = degrees of freedom; RMSEA = root mean square error of approximation; CFI = comparative fit index; TLI = Tucker–Lewis index; SRMR = standardized root mean square residual. Model estimated using WLSMV with categorical indicators. ^a PHY2\$3 threshold freed. ^b INT1 and INT4 loadings freed. ^c A 3-item factor was tested due to poor configural fit in the 5-item model. ^d ENV1\$3 and ENV4\$3 thresholds freed.

Across the wellbeing dimensions, several factors demonstrated acceptable configural invariance, suggesting that the overall factor structures were generally comparable across first-generation and continuing-generation students. However, some factors demonstrated declines in model fit after threshold or loading constraints were imposed. When evaluating invariance models, interpretation was based on the overall pattern of fit indices and changes in comparative fit index (ΔCFI), rather than any single fit statistic in isolation. Although RMSEA values above .08 are traditionally interpreted as reflecting weaker model fit, prior research has noted that RMSEA may become inflated in models with smaller sample sizes or low degrees of freedom (Kenny et al., 2015). Accordingly, model fit was evaluated collectively, with values approaching or exceeding .90 for CFI/TLI, values below or near .08 for RMSEA and SRMR, and ΔCFI values less than or equal to .010 interpreted as indicating acceptable model fit and invariance retention (Svetina et al., 2020). For models in which full invariance was not initially supported, modification indices from the Mplus output were examined to identify specific thresholds or factor loadings contributing most strongly to model misfit. These indices provided information about which survey items functioned somewhat differently across groups and guided theoretically informed partial invariance adjustments.

As shown in Table 4.6, the physical wellbeing factor demonstrated acceptable configural invariance, indicating that the same items generally clustered together as indicators of physical wellbeing across generation status. However, full threshold invariance was not initially supported. Examination of the modification indices indicated that the PHY2\$3 threshold contributed substantially to model misfit. Partial threshold invariance was therefore established after freeing the PHY2\$3 threshold for the item “I maintain a healthy diet (e.g., eating a variety of nourishing foods, limiting ultra-processed products),” corresponding to the threshold for

endorsing “agree” within the recoded response structure. Subsequent loading invariance was then supported, suggesting that although first-generation and continuing-generation students differed somewhat in how they endorsed agreement for this item, the overall relationships between the physical wellbeing items and the latent construct remained comparable across groups.

The intellectual wellbeing factor also demonstrated acceptable configural and threshold invariance, suggesting that first-generation and continuing-generation students generally interpreted the response categories similarly. However, constraining factor loadings resulted in a meaningful decline in model fit. Examination of the modification indices indicated that the INT1 (“I remain open to ideas that challenge my thinking”) and INT4 (“I take initiative to learn new things on my own”) loadings contributed most strongly to model misfit. Partial loading invariance was subsequently established by freeing these loadings simultaneously, resulting in acceptable model fit. These findings suggest that while students across groups interpreted the response categories similarly, these particular items contributed somewhat differently to the underlying construct of intellectual wellbeing depending on first-generation status.

The financial wellbeing factor demonstrated poor configural fit in the original five-item model, indicating that the underlying factor structure was not comparable across first-generation and continuing-generation students. This result may be partially explained by patterns observed in the earlier exploratory factor analysis, in which the financial wellbeing items appeared to separate into two distinct groupings: items reflecting financial circumstances (e.g., “I can comfortably cover my living expenses” and “I feel at ease with my financial situation”) and items reflecting financial behaviors (e.g., “I manage my own money effectively,” “I make responsible decisions around money,” and “Overall, I am satisfied with my financial habits”). Because the three financial behavior items demonstrated stronger and more coherent loadings in

the EFA, a separate three-item financial behavior factor was subsequently tested for invariance. Although the three-item configural model was just-identified, meaning the model had zero degrees of freedom and global fit indices could not be meaningfully interpreted at that stage, the subsequent threshold and loading invariance models demonstrated acceptable fit and minimal changes in CFI. These findings suggest that financial behaviors functioned more consistently across first-generation and continuing-generation students than the broader five-item financial wellbeing factor, which appeared to capture more heterogeneous aspects of financial experience.

Lastly, the environmental wellbeing factor demonstrated acceptable configural invariance, but full threshold invariance was not initially supported. Examination of the modification indices indicated that the ENV1\$3 (“I am mindful of how my behaviors impact the environment”) and ENV4\$3 (“I take actions that support environmental sustainability”) thresholds contributed most strongly to model misfit. Partial threshold invariance was therefore established by freeing these thresholds simultaneously, both corresponding to the transition into the “neither agree nor disagree” response category. Subsequent loading invariance was then supported, indicating that although first-generation and continuing-generation students differed somewhat in how they used the response scale for these items, the overall environmental wellbeing factor functioned similarly across groups.

Overall, these findings suggest that half of the HAY Survey dimensions demonstrated full invariance across first-generation and continuing-generation students, while the other half required partial threshold or loading adjustments to achieve acceptable model fit. Importantly, even when partial invariance procedures were necessary, the broader factor structures generally remained stable across groups, supporting the interpretability of the wellbeing dimensions and the validity of subsequent group comparisons. Because physical, intellectual, financial, and

environmental wellbeing demonstrated more nuanced patterns of invariance, these factors were subsequently examined across racial/ethnic groups to further evaluate whether specific survey items functioned differently.

Factor-Level Invariance by Race/Ethnicity. Using the same procedures described previously, configural, threshold, and threshold-plus-loading invariance models were evaluated across racial/ethnic groups to further examine whether specific survey items or factor loadings functioned differently across student populations. Table 4.7 presents the race/ethnicity invariance analyses for the four wellbeing dimensions that demonstrated more nuanced patterns of invariance in the first-generation analyses.

The physical wellbeing factor demonstrated acceptable configural invariance, indicating that the overall structure of the physical wellbeing construct was generally comparable across racial/ethnic groups. However, full threshold invariance was not initially supported, as the addition of threshold constraints resulted in a meaningful decline in model fit ($\Delta CFI = -.025$). Examination of the modification indices indicated that the PHY2\$3 threshold for the item “I maintain a healthy diet (e.g., eating a variety of nourishing foods, limiting ultra-processed products)” and the PHY5\$3 threshold for the item “Overall, I am satisfied with my physical health” contributed most strongly to model misfit for Hispanic students. These thresholds corresponded to the transition into the “neither agree nor disagree” response category. Partial threshold invariance was therefore established after freeing these thresholds. These findings suggest that Hispanic students may have used the midpoint response category for these items somewhat differently than other racial/ethnic groups, indicating that neutrality or uncertainty regarding physical health and dietary behaviors may not have reflected the same underlying level of physical wellbeing across groups.

Table 4.7*Invariance Testing of Each Wellbeing Factor by Race/Ethnicity*

Model	χ^2 (df)	RMSEA	CFI	TLI	SRMR	Δ CFI
<u>Physical</u>						
Configural	16.99 (20)	.000	1.000	1.000	.026	—
Threshold	110.99 (71)	.097	.975	.986	.058	-.025
Partial threshold ^a	93.35 (69)	.077	.985	.991	.055	+.010
Partial threshold ^a + loadings	189.29 (84)	.145	.934	.969	.111	-.051
Partial threshold ^a + partial loadings ^b	109.22 (79)	.080	.981	.990	.069	+.047
<u>Intellectual</u>						
Configural	35.49 (20)	.114	.991	.981	.041	—
Threshold	86.76 (56)	.096	.981	.987	.078	-.010
Partial threshold ^c	53.73 (55)	.000	1.000	1.000	.049	+.019
Partial threshold ^c + loadings	113.78 (70)	.102	.974	.985	.096	-.026
Partial threshold ^c + partial loadings ^d	92.94 (68)	.078	.985	.991	.079	+.011
<u>Financial</u>						
Configural	237.13 (20)	.426	.924	.847	.126	—
Configural (3-item) ^e	0.00 (0)	.000	1.000	1.000	.000	—
Threshold	50.50 (27)	.121	.984	.993	.064	-.016
Threshold + loadings	64.32 (36)	.115	.980	.993	.074	-.004
<u>Environmental</u>						
Configural	53.07 (17)	.118	.980	.972	.059	—
Threshold	85.70 (47)	.117	.978	.989	.067	-.002
Threshold + loadings ^f	123.47 (59)	.135	.964	.985	.095	-.014

Note. χ^2 = chi-square; df = degrees of freedom; RMSEA = root mean square error of approximation; CFI = comparative fit index; TLI = Tucker–Lewis index; SRMR = standardized root mean square residual. Model estimated using WLSMV with categorical indicators. ^a PHY2\$3 and PHY5\$3 thresholds freed for Hispanic students. ^b PHY1 and PHY5 loadings for Asian group, PHY2 and PHY5 loadings for White group, PHY2 loading for Multiracial group freed. ^c INT5\$2 threshold for Multiracial group freed. ^d INT3 and INT5 loadings for Multiracial group freed. ^e A 3-item factor was tested due to poor configural fit in the 5-item model. ^f Threshold + loadings invariance was not supported.

Although partial threshold invariance improved model fit, subsequent loading invariance was not initially supported (Δ CFI = -.051). Examination of the modification indices further indicated that several factor loadings contributed substantially to model misfit, including the PHY1 loading for Asian students (“I take good care of my body [e.g., hydration, hygiene,

posture].”), the PHY5 loading for Asian students (“Overall, I am satisfied with my physical health”), the PHY2 loading for White students (“I maintain a healthy diet”), the PHY5 loading for White students, and the PHY2 loading for Multiracial students. After freeing these loadings, acceptable partial loading invariance was achieved. Collectively, these findings suggest that although the broader physical wellbeing construct remained relatively stable across racial/ethnic groups, certain aspects of physical wellbeing may contribute somewhat differently to the construct depending on students’ racial/ethnic backgrounds.

The intellectual wellbeing factor demonstrated acceptable configural invariance, although the initial configural model demonstrated somewhat elevated RMSEA values. Threshold invariance initially approached acceptable fit ($\Delta\text{CFI} = -.010$), but examination of the modification indices indicated that the INT5\$2 threshold for the item “Overall, I am satisfied with my thinking and learning habits” contributed substantially to model misfit for Multiracial students. This threshold corresponded to the transition into the “neither agree nor disagree” response category within the recoded response structure. After freeing this threshold, partial threshold invariance was supported. However, subsequent loading invariance was not initially supported ($\Delta\text{CFI} = -.026$). Modification indices further indicated that the INT3 loading (“I push myself to think critically about what I am learning.”) and the INT5 loading contributed most strongly to model misfit for Multiracial students. Partial loading invariance was subsequently established after freeing these loadings, resulting in improved model fit. These findings suggest that although intellectual wellbeing generally functioned similarly across racial/ethnic groups, certain aspects of critical thinking and learning habits may relate somewhat differently to the broader intellectual wellbeing construct for Multiracial students relative to other groups.

The financial wellbeing factor again demonstrated poor configural fit in the original five-item model, consistent with the earlier first-generation analyses. This finding may reflect the heterogeneous nature of the broader financial wellbeing construct, which appeared to capture both financial circumstances and financial behaviors. Thus, a separate three-item financial behavior factor was tested across racial/ethnic groups. Although the three-item configural model was just-identified, meaning the model had zero degrees of freedom and global fit indices could not be meaningfully interpreted at that stage, the subsequent threshold and loading invariance models demonstrated acceptable fit and relatively small changes in CFI. These findings suggest that financial behaviors functioned more consistently across racial/ethnic groups than the broader five-item financial wellbeing factor, further supporting the distinction between financial behaviors and financial circumstances observed in the earlier EFA results.

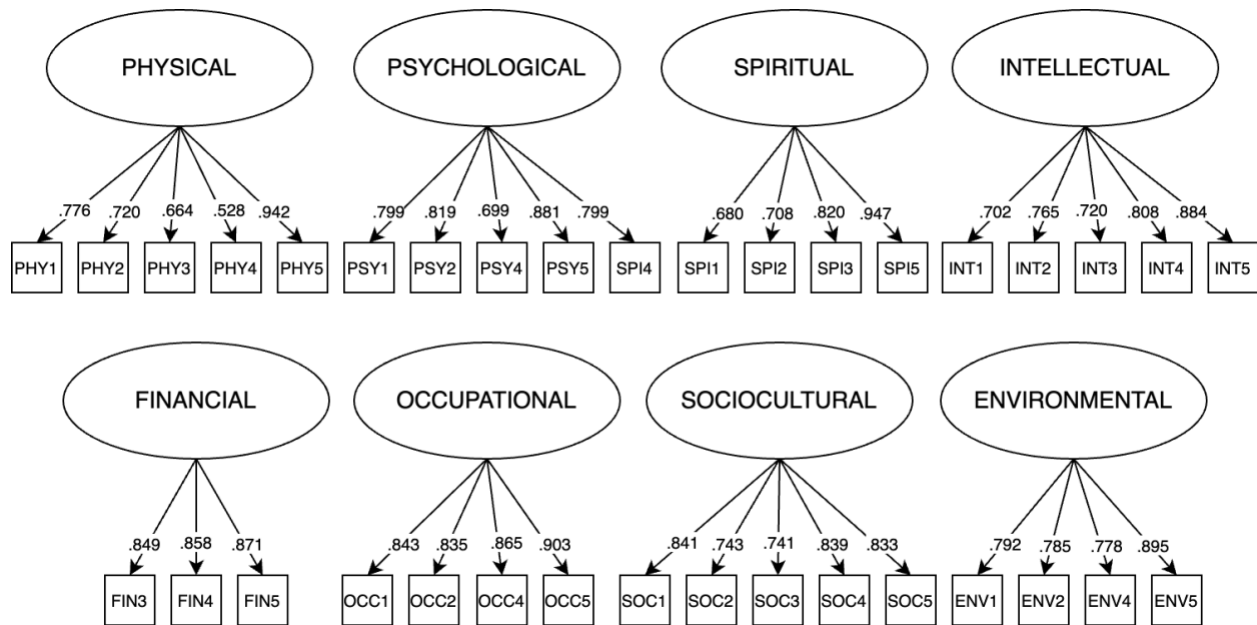
Lastly, the environmental wellbeing factor demonstrated acceptable configural and threshold invariance across racial/ethnic groups. However, threshold-plus-loading invariance was not supported ($\Delta\text{CFI} = -.014$, $\text{SRMR} = .095$), indicating that the relationships between environmental wellbeing items and the broader latent construct differed somewhat across groups. Examination of the modification indices suggested that the remaining model misfit reflected broader residual misfit rather than a small number of isolated loading parameters. As a result, theoretically interpretable partial loading adjustments were not established for the environmental wellbeing factor. These findings suggest that environmental wellbeing may be conceptualized or experienced somewhat differently across racial/ethnic groups, particularly regarding the extent to which specific environmental attitudes or sustainability-related behaviors contribute to the broader construct of environmental wellbeing.

Collectively, the invariance analyses provided evidence that the HAY Survey generally functioned comparably across first-generation and racial/ethnic groups, although several wellbeing dimensions required partial invariance adjustments at the item level. Psychological, spiritual, occupational, and sociocultural wellbeing demonstrated the strongest evidence of invariance, while physical, intellectual, financial, and environmental wellbeing revealed more nuanced patterns of group variation. In particular, the findings suggested that financial wellbeing may represent a more heterogeneous construct across student populations, especially when distinguishing between financial circumstances and financial behaviors. Overall, these results support the broader structural validity of the HAY Survey while also identifying specific areas in which the meaning or salience of wellbeing items may vary across groups.

Following the invariance analyses, a refined 35-item measurement model was retained for subsequent descriptive, correlational, regression, and integrated mixed-methods analyses. This revised model preserved the overall eight-factor structure of the HAY Survey while refining the financial wellbeing dimension to a three-item factor consisting of FIN3, FIN4, and FIN5. The refinement was informed by invariance findings indicating that the three-item specification demonstrated stronger and more stable functioning across demographic groups than the initial five-item configuration. The retained financial wellbeing items emphasized students' perceived financial responsibility, management, and habits, whereas the removed items appeared to reflect broader financial circumstances and stability that may have functioned differently across student populations. The revised model demonstrated improved overall fit, $\chi^2(532) = 1024.81$, RMSEA = .061, CFI = .943, TLI = .936, and SRMR = .055. Figure 4.2 presents the refined retained measurement model and associated standardized factor loadings used throughout the remainder of the study.

Figure 4.2

Revised 35-Item Eight-Factor CFA Measurement Model of Holistic Wellbeing



In summary, the EFA, CFA, and invariance analyses provided support for the multidimensional structure and cross-group functioning of the HAY Survey. The revised 35-item measurement model established a psychometrically supported framework for examining holistic wellbeing across dimensions while also identifying areas in which wellbeing may be experienced differently across student populations. Building upon this validated structure, Part II now turns to the descriptive and integrated findings associated with each wellbeing dimension.

Part II: Holistic Wellbeing Dimensions: Descriptive and Integrated Findings

This section examines how students described, interpreted, and experienced holistic wellbeing across the dimensions represented in the HAY Survey. Organized dimension by dimension, each subsection integrates quantitative findings related to composite score patterns and factor structure alongside qualitative reflections drawn primarily from weekly student journals. Many of these reflections emerged through structured journal activities connected to

students' engagement with the pilot version of the HAY Survey, in which students were invited to reflect on specific survey items and broader dimensions of wellbeing in relation to their own lives and educational experiences. As discussed in Chapter Three, AILYZE was used to assist with the organization and preliminary synthesis of journal data; however, I independently reviewed all journal entries multiple times to ensure that emergent themes, nuanced interpretations, and dissenting or contradictory evidence were not overlooked. As instructor of record, I had also previously engaged with the journals throughout the quarter for instructional and grading purposes prior to formal qualitative analysis.

Within each subsection, quantitative findings help describe the average trends of each wellbeing dimension, while qualitative reflections provide insight into how students understood, negotiated, and made meaning of these experiences within the social, emotional, and institutional contexts of college life. In addition to highlighting areas of alignment across data sources, this section also examines tensions, contradictions, and diverging perspectives within students' reflections, revealing holistic wellbeing as a dynamic and continually negotiated process within higher education.

To provide an initial overview of wellbeing patterns across dimensions, composite mean scores were calculated by averaging responses across the retained items within each validated factor. Table 4.8 presents descriptive statistics for these composite scores across the sample. Overall, students reported moderate to moderately high levels of wellbeing across dimensions, with mean scores ranging from 3.44 for physical wellbeing to 3.97 for intellectual wellbeing on a five-point scale. Intellectual, sociocultural, and environmental wellbeing demonstrated the highest average scores, suggesting that many students experienced relatively strong engagement in learning, reflection, social connection, and broader awareness of their surroundings and

communities. In contrast, physical and psychological wellbeing demonstrated the lowest average scores, potentially reflecting ongoing challenges related to stress, rest, emotional regulation, and embodied wellbeing within the context of college life. Although these differences were not extreme, the overall pattern suggests that students may experience certain forms of wellbeing more consistently than others, particularly within educational environments that often reinforce intellectual engagement while simultaneously placing strain on physical and psychological wellbeing. Standard deviations were moderate across dimensions, indicating meaningful variability in students' experiences, while intellectual wellbeing demonstrated the least variation across participants.

Table 4.8

Descriptive Statistics for Mean Composite Scores of Validated Wellbeing Dimensions (N=251)

Wellbeing Dimension	Items	Mean	SD
Physical	PHY1-PHY5	3.44	0.76
Psychological	PSY1, PSY2, PSY4, PSY5, SPI4	3.45	0.73
Spiritual	SPI1-SPI3, SPI5	3.58	0.84
Intellectual	INT-1-INT5	3.97	0.55
Financial	FIN3-FIN5	3.61	0.80
Occupational	OCC1, OCC3-OCC5	3.50	0.81
Sociocultural	SOC1-SOC5	3.85	0.64
Environmental	ENV1, ENV2, ENV4, ENV5	3.75	0.71

Note. Intellectual and financial wellbeing were based on $n = 250$ due to one missing observation.

Following this overview, the findings now turn to each wellbeing dimension individually to examine how students described, interpreted, and negotiated these aspects within college life. Each subsection briefly contextualizes the quantitative patterns associated with the dimension before integrating qualitative reflections that illustrate how students made sense of these experiences in practice.

Physical Wellbeing: Negotiating Self-Care Under Academic Pressure

Physical wellbeing demonstrated the lowest composite mean score among the validated wellbeing dimensions ($M = 3.44$, $SD = 0.76$), suggesting that students experienced greater difficulty sustaining physical wellbeing relative to other areas of wellbeing. The retained items within this factor reflected students' ability to maintain sleep, nourishment, movement, bodily care, and overall satisfaction with their physical health. Standardized factor loadings further suggested that PHY5 ("Overall, I am satisfied with my physical health.") ($\lambda = .94$) functioned especially strongly within the construct, whereas PHY4 ("I usually get enough restful sleep.") ($\lambda = .53$) appeared somewhat more variable across participants. This distinction became particularly visible in students' reflections, where exhaustion and inconsistent self-care emerged as recurring themes throughout their college experiences.

Students consistently described physical wellbeing as something they valued yet struggled to maintain within the pace and pressure of academic life. While a few students described stable wellness routines, these accounts were less common. For example, Mala shared, "I exercise regularly and stay active everyday through swimming, jogging, and occasionally hiking." More frequently, students described physical wellbeing as something continually negotiated against coursework, deadlines, and competing responsibilities. Kiki explained, "I have not been getting enough sleep, or eating the way I want to. I am so busy that I lack the time to focus enough on my physical needs." Similarly, Jenny reflected, "I have had trouble trying to juggle my academics and my physical activity...to prioritize one over the other." Rather than framing these struggles as isolated personal shortcomings, many students described them as embedded within the structure and rhythm of college life itself, where physical needs were often deferred in order to meet academic expectations.

These tensions appeared especially visible in students' discussions of sleep and eating habits, which were often described as inconsistent, reactive, or shaped by convenience. Jenny noted, "I often find myself eating quick-service meals, which consist of sandwiches, burritos, and pizza quite often," while Gigi reflected, "One area I lacked in was feeling tired and struggling with sleep," though she also described becoming "more mindful with [her] caffeine and melatonin intake." The comparatively lower physical wellbeing scores therefore appeared to reflect more than isolated unhealthy habits. Instead, the findings suggest that many students experienced physical wellbeing as difficult to sustain consistently within institutional environments that often reward productivity, busyness, and endurance. At the same time, several students demonstrated active efforts toward bodily awareness and self-regulation, suggesting that physical wellbeing was not absent from students' lives, but existed in ongoing tension with the demands of college life.

Psychological Wellbeing: Navigating Anxiety, Overthinking, and Happiness

The next lowest composite mean score fell into the psychological wellbeing category ($M = 3.45$, $SD = 0.73$), suggesting that many students experienced ongoing challenges related to stress, emotional regulation, and mental health throughout college life. The retained items within this factor reflected students' perceived capacity to manage stress, regulate emotions, maintain happiness, return to a sense of peace during difficulty, and feel satisfied with their overall mental and emotional health. Standardized factor loadings indicated that PSY5 ("Overall, I am satisfied with my psychological wellbeing [e.g., mental and emotional health].") ($\lambda = .88$) and PSY2 ("I carry a sense of happiness with me.") ($\lambda = .82$) functioned especially strongly within the construct, whereas PSY4 ("I can regulate my own emotions [e.g., anger, sadness, anxiety].") ($\lambda = .70$) appeared somewhat more variable across participants. Students' reflections similarly

suggested that psychological wellbeing was often experienced as fluid and difficult to sustain consistently amid academic pressure, uncertainty, and social demands.

Many students described their mental and emotional wellbeing as deeply intertwined with the broader pressures of college life rather than as isolated internal struggles. Xena, a social sciences major, reflected, “I have always been an anxious person and always been stressful about lots of things...like studying, relationships, and the future plans.” Her reflection illustrates how anxiety was often experienced as persistent and multidimensional, extending beyond academics alone and shaping her relationships, self-perception, and outlook toward the future. Jenny similarly described how “this mixture of anxiety, loneliness, and self-doubt, severely impacted [her] performance in classes,” illustrating how mental health was closely intertwined with students’ academic functioning, concentration, and sense of stability within college life.

Students also described recurring patterns of overthinking, mental exhaustion, and internal tension that often felt difficult to interrupt. April shared, “I get in my head a lot and overthink everything I do,” while Cici described her mind as “like a stormy ocean with never-ending waves, continually disturbing me.” Rather than describing stress as occasional or temporary, many students framed these experiences as ongoing conditions that shaped their daily functioning and emotional energy. Additionally, several students described developing greater awareness of these patterns through yoga and contemplative practices. Tingting explained that “yoga helps us notice these thought patterns and allows us to subdue them without having to seek immediate relief,” suggesting that students began recognizing tendencies to react impulsively, avoid discomfort, or seek quick distraction from emotional distress. Instead, yoga and mindfulness practices appeared to create moments of pause, reflection, and emotional awareness that allowed some students to relate differently to stress and anxiety. Even so, students’

reflections suggested that sustaining these practices consistently remained difficult within institutional environments often characterized by pressure, busyness, and constant performance demands.

Spiritual Wellbeing: Searching for Meaning, Purpose, and Authenticity

Spiritual wellbeing demonstrated moderate composite scores across the sample ($M = 3.58$, $SD = 0.84$), reflecting students' ongoing efforts to make sense of meaning, purpose, and authenticity within the broader context of college life. The retained items within this factor focused on students' sense of connection to something greater than themselves, engagement in grounding practices, awareness of what gives life meaning, and overall satisfaction with their sense of purpose. Standardized factor loadings suggested that SPI5 ("Overall, I am satisfied with my sense of meaning and purpose.") ($\lambda = .95$) and SPI3 ("I remain aware of what gives my life meaning.") ($\lambda = .82$) were especially central to the construct. On the other hand, SPI1 ("I feel connected to something greater than myself [e.g., a cause, a higher power, nature].") ($\lambda = .68$) and SPI2 ("I engage in practices that help me feel grounded [e.g., journaling, prayer, community service]") ($\lambda = .71$) showed somewhat greater variability across participants, reflecting the many ways students understood spirituality and searched for meaning in their lives.

For some students, spirituality was closely tied to formal religious traditions that provided structure, guidance, and emotional grounding. Mala, an Indian student who identified as Hindu, reflected that "My faith lies in Hinduism; karmic beliefs and the notion of reincarnation are deeply rooted within this religion," describing spirituality as a framework that shaped how she understood both herself and the world around her. Similarly, April, a Black student who identified as generally spiritual, shared that she had "got into bible study and [had]

been trying to build a tighter bond with my spiritual self and the lord,” suggesting that spiritual practice offered a sense of stability and reflection amid the pressures of college life.

At the same time, many students described spirituality in ways that were less connected to organized religion and more rooted in individualized systems of belief and personal meaning-making. Jimmy, a Chinese student who identified with Buddhism, explained that he followed Buddhism for “the ideals of a mortal instead of worship,” emphasizing philosophical guidance and ethical reflection rather than devotion or religious obligation. Likewise, Xena, another Chinese student who did not identify with a formal religion, noted that she still believed “in karma and past lives.” These reflections suggest that spirituality also functioned as an evolving framework students used to interpret uncertainty, relationships, morality, and personal growth.

Across these perspectives, students consistently returned to questions of authenticity, fulfillment, and internally defined purpose when reflecting on the purpose of life. Mala described realizing that “my existence already holds meaning, and I do not need to attribute external meaning to it through accomplishments,” reflecting a shift away from achievement-based self-worth toward a more intrinsic understanding of value and existence. Ollie, a White student who identified as atheist, similarly shared that he was “focused on exploring whatever interests me...which is enough for me,” suggesting that spiritual wellbeing could also emerge through curiosity, personal freedom, and self-directed exploration rather than religious belief alone. At the same time, students described how difficult it could be to sustain this sense of alignment within academic and social environments shaped by comparison, performance, and external expectations. Kyle, a White student who identified as Roman Catholic, admitted, “I think I don’t always allow myself to live authentically because I’m too afraid of others’ opinions,” illustrating how students’ sense of meaning and authenticity could become constrained by social judgment

and pressure to conform. These reflections suggest that students often understood spiritual wellbeing as an ongoing effort to live in alignment with their values, identity, and sense of purpose within institutional environments that frequently prioritized productivity and achievement over reflection and self-understanding.

Intellectual Wellbeing: Learning Beyond the Classroom

Intellectual wellbeing emerged as one of the strongest dimensions across the sample ($M = 3.97$, $SD = 0.55$), suggesting that many students felt relatively confident in their thinking and learning habits despite challenges in other areas of wellbeing. The retained items within this factor reflected openness to new ideas, critical thinking, engagement with feedback, self-directed learning, and overall satisfaction with one's intellectual habits. Standardized factor loadings suggested that INT5 ("Overall, I am satisfied with my thinking and learning habits.") ($\lambda = .88$) and INT4 ("I take initiative to learn new things on my own.") ($\lambda = .81$) functioned especially strongly within the construct. Students' reflections further illustrated how intellectual wellbeing extended beyond academic performance alone and often involved curiosity, reflection, perspective-taking, and personal growth.

Many students described learning as a meaningful and fulfilling part of everyday life rather than simply a requirement tied to grades or coursework. Xena, a Chinese student majoring in the social sciences, shared that "I gain knowledge everyday, learning new things and solidifying my past knowledge, I feel fulfilled," suggesting that intellectual engagement provided a sense of personal satisfaction and momentum beyond formal academic achievement. Similarly, Mala described valuing "engaging in powerful, diverse conversations that make me rethink my beliefs," illustrating how intellectual wellbeing often involved encountering ideas that disrupted assumptions and encouraged deeper reflection. For several students, this curiosity extended well

beyond the classroom itself. Shang explained that he tried “to always keep learning from everybody,” reflecting a view of learning as relational and ongoing rather than confined to professors or textbooks. Nathan similarly described intentionally cultivating his thinking through “reading and watching videos about philosophy,” suggesting that intellectual wellbeing was frequently sustained through self-directed exploration and independent curiosity.

Students also emphasized the importance, and difficulty, of remaining open to perspectives that challenged their existing beliefs. Cici, a social sciences major, reflected on “sometimes not willing to learn from viewpoints or perspectives that are different from mine,” acknowledging the discomfort that can accompany intellectual growth and self-examination. In contrast, Kyle explained that he actively tried to “learn from different perspectives...[he] may not agree with,” suggesting that intellectual wellbeing sometimes required intentionally engaging disagreement, uncertainty, and ideological difference. These experiences appeared in both classroom and interpersonal contexts, where students described navigating unfamiliar ideas, conversations, and ways of thinking. At the same time, students recognized that sustaining critical reflection could become emotionally and mentally exhausting. Lily described struggling with “inconsistency regarding practicing my critical thinking skills,” suggesting that intellectual engagement often fluctuated depending on stress, motivation, and academic demands. Shang similarly admitted that constantly questioning his assumptions and decisions occasionally left him “feeling lost,” revealing how deep reflection could create uncertainty alongside growth. These findings suggest that intellectual wellbeing involved more than knowledge acquisition alone. Students often described it as an ongoing process of curiosity, reflection, openness, and learning to navigate the ambiguity that accompanies deeper forms of thinking and self-examination.

Financial Wellbeing: “Not Having More Money, but Using Money Wisely”

Financial wellbeing demonstrated moderate composite scores across the sample ($M = 3.61$, $SD = 0.80$). The refined three-item factor focused on students' financial responsibility, money management, and satisfaction with their financial habits. Standardized factor loadings were consistently strong across the retained items, ranging from $\lambda = .85$ to $.87$, with FIN5 (“Overall, I am satisfied with my financial habits.”) ($\lambda = .87$) functioning most strongly within the construct. While the refined factor primarily captured students' financial habits and perceived self-management, students' reflections also revealed how these behaviors were deeply shaped by broader financial realities, including family resources, stress, emotional coping, and uncertainty about the future.

Many students described financial wellbeing through the lens of discipline, intentionality, and control over spending habits. Tingting, a lower-income Chinese student in the health sciences, explained that she tried to remain “careful and intentional” with spending, while Mimi, a higher-income multiracial student, described feeling “in control of my money.” Similarly, Xena, a higher-income Chinese international student, defined financial wellbeing “not for having more money but for using money wisely,” suggesting that students often framed financial wellbeing less around wealth itself and more around maintaining habits associated with responsibility and stability. These reflections closely mirrored the retained financial wellbeing items, which emphasized financial decision-making and behavioral self-regulation.

Furthermore, students' reflections also revealed how emotionally fragile that sense of control could become, particularly during periods of stress or uncertainty. April, a first-generation low-income Black student, admitted, “I can also be impulsive with money, especially when I feel stressed or overwhelmed,” illustrating how emotional strain could directly shape

financial behaviors and self-perceptions around responsibility. Cici, an upper-middle-income Chinese international student, similarly shared that she sometimes spent money on “snacks and video games to cope with emotions,” highlighting how spending occasionally functioned as emotional relief rather than purely practical decision-making. Other students described financial wellbeing through worries about long-term security and independence. Shang, a low-income Chinese student, reflected, “When I think about how my financial wellbeing is, I just think about how much I worry about the future,” while Peach, a upper-middle-income Hispanic student, described feeling “increasingly stressed about finding a job and saving money.” These reflections suggest that students experienced financial wellbeing through an ongoing negotiation among responsibility, emotional coping, stress, and uncertainty about future stability, even when their current financial situations differed substantially.

Occupational Wellbeing: The Importance of Spending Time in Fulfilling Ways

Occupational wellbeing reflected how students experienced the use of their time, energy, and daily responsibilities within college life ($M = 3.50$, $SD = 0.81$). The retained items within this factor focused on students’ sense of motivation, purpose, meaningful time use, and overall satisfaction with how they spent their days. Standardized factor loadings showed that OCC5 (“Overall, I am satisfied with my daily use of time.”) ($\lambda = .90$) and OCC4 (“I make good use of my time to pursue what’s important to me.”) ($\lambda = .87$) functioned especially strongly within the construct, indicating that occupational wellbeing was closely tied to students’ perceptions of whether their time aligned with what they personally valued.

When reflecting on occupational wellbeing, students discussed the challenge of balancing academic responsibilities, work, personal life, and rest within the fast pace of college life. Several students described periods where this balance felt manageable and fulfilling. Mala, an

Indian student studying natural sciences, reflected, “My occupational wellbeing is great. I think I have gotten the hang of balancing work, academics, and other responsibilities,” while Kiki similarly shared, “I think I found the balance between academics and a life outside of that.” These reflections suggested that occupational wellbeing was often associated with feeling capable of managing competing demands while still maintaining space for life beyond academic productivity.

In contrast, many students described how difficult this balance could be to sustain consistently. April, a first-generation Black student from a lower-income background, explained, “I find myself struggling with managing time effectively, especially as I juggle work, school, and personal responsibilities.” Gigi, a higher-income Chinese student, similarly reflected that she “never feel[s] like [she] had enough time to even complete tasks [she] needed to, let alone activities [she] wanted to do.” These reflections suggest that occupational wellbeing was shaped less by how busy students were and more by whether their responsibilities felt manageable, meaningful, and sustainable over time. Students often described wanting enough space within their schedules to engage in activities that felt personally fulfilling rather than feeling consumed entirely by obligation and productivity.

Several students also connected occupational wellbeing to broader questions about meaning and intentionality in how they spent their time. Shang, a lower-income Chinese student studying business and natural sciences, described occupational wellbeing as “something that governs all other aspects of wellbeing, because spending time well is the most fundamental and important way to live life.” He later explained that he was learning to “allocate more time into meaningful things and a balanced lifestyle,” framing occupational wellbeing as an ongoing process of intentionally aligning time with personal values and priorities. Jimmy similarly shared

that he felt “proud as a student at UCLA and [enjoyed] what [he studied],” while Mimi described fulfillment through “working towards my degree and finding my career path.” Across these reflections, occupational wellbeing appeared closely tied to whether students felt their use of time contributed to a sense of purpose, direction, and a life that felt meaningful beyond simply remaining productive.

Sociocultural Wellbeing: Belonging to a Meaningful Community and Culture

Sociocultural wellbeing, which was one of students’ strongest aspects of wellbeing ($M = 3.85$, $SD = 0.64$), reflected experiences of belonging, support, connection, and navigating different social and cultural environments within college life. The retained items within this factor focused on students’ sense of belonging within meaningful communities, perceived social support, contributions to community, adaptability across social and cultural settings, and overall satisfaction with their relationships. Standardized factor loadings showed that SOC1 (“I feel a sense of belonging in the communities that matter to me.”) ($\lambda = .84$), SOC4 (“I feel supported by the people in my life.”) ($\lambda = .84$), and SOC5 (“Overall, I am satisfied with my social relationships.”) ($\lambda = .83$) functioned especially strongly within the construct, suggesting that sociocultural wellbeing was closely tied to students’ feelings of connection, acceptance, and relational support. Students’ reflections further illustrated that sociocultural wellbeing extended beyond simply being surrounded by others and often involved finding spaces where they felt understood, valued, and able to navigate different cultural and interpersonal contexts authentically.

Many students described close relationships as an important source of grounding and emotional support within college life. Tingting, a Chinese student studying health sciences, shared that the presence of loved ones gave her “a deep sense of connection and belonging,”

while Mala reflected that her “friends, family, and social network all listen to my emotions and accept me for who I am.” Students frequently described belonging as something actively cultivated through participation, shared experiences, and emotionally supportive communities rather than something automatically provided by the university environment itself. Kiki, a multiracial Black and Chinese student, attributed much of her growth to “joining a new organization this quarter, full of people I love who make me feel seen,” while Cici described how, within group settings, “the circle brings us closer, and our hearts are connected.” These reflections suggest that sociocultural wellbeing was often strengthened through spaces where students experienced recognition, emotional safety, and mutual care

On the other hand, students also described how connection could remain fragile, partial, or difficult to sustain. Gigi explained that she preferred “few very good, close friends rather than a large group,” emphasizing depth over quantity within relationships. Others described feeling isolated even while surrounded by people. Ollie reflected that it could feel “quite isolating” when he was unable to be fully open with friends, while Nathan shared that he sometimes felt “misunderstood by others.” Several students also discussed the challenges of navigating large institutional and cultural environments that did not always foster a strong sense of belonging. Tingting described UCLA as feeling “disconnected from the broader student body,” illustrating how students could simultaneously participate within campus life while still feeling socially distant from it. These reflections suggest that sociocultural wellbeing involved ongoing efforts to locate or create communities where students felt emotionally understood and socially connected rather than simply socially present.

Students also described how cultural background and social expectations shaped their experiences of sociocultural wellbeing and belonging within college life. Kiki, a multiracial

Black and Chinese student, reflected, “I make it a point to stay connected to my cultural background,” suggesting that maintaining cultural ties provided a sense of grounding, identity, and continuity within the university environment. Xena, a Chinese international student, similarly described experiencing “stiff” academic competition within her cultural context, suggesting that navigating college as an international student could heighten feelings of pressure and comparison between herself and her peers. These reflections illustrate how sociocultural wellbeing extended beyond interpersonal relationships alone and also involved navigating cultural identity, expectations, and pressures while trying to find spaces where students felt understood and accepted.

Environmental Wellbeing: Nature as Both Refuge and Responsibility

Environmental wellbeing emerged as a relatively strong dimension across the sample ($M = 3.75$, $SD = 0.71$), reflecting students’ relationships with nature, environmental responsibility, and the role of natural spaces in supporting balance and wellbeing within college life. Standardized factor loadings showed that ENV5 (“Overall, I am satisfied with my relationship with nature.”) ($\lambda = .90$) functioned especially strongly within the construct, followed by ENV1 (“I am mindful of how my behaviors impact the environment.”) ($\lambda = .79$), ENV2 (“I feel connected to the local natural environment.”) ($\lambda = .79$), and ENV4 (“I take actions that support environmental sustainability.”) ($\lambda = .78$). Students’ reflections further illustrated that environmental wellbeing extended beyond simply spending time outdoors and often involved restoration, emotional regulation, intentional environmental practices, and a broader sense of connection to the world around them.

Many students described nature as an important source of calm, relief, and emotional restoration within the pressures of academic life. Xena, a Chinese international student, shared,

“I like to lie in the grass under the sun and feel the breeze, it is so enjoyable to me,” while Jenny explained that hikes, beaches, and gardens were “good places for me to feel more calm and relaxed.” For some students, these experiences carried a deeper sense of emotional grounding and release from the intensity of college life. April, a first-generation Black student from a lower-income background, reflected that when she is able to “get outside and enjoy nature,” she feels “more at peace and balanced,” suggesting that time outdoors helped restore a sense of internal stability that was often difficult to maintain within fast-paced academic environments. Lily similarly described that “the beach makes me feel free,” illustrating how natural spaces could create feelings of openness, emotional release, and distance from the pressures and structure of daily responsibilities.

Students also described environmental wellbeing as something that often required intentional effort to maintain. Mimi explained, “When I study, I try to be outdoors as much as possible because it gives me a sense of relief and relaxation,” while Ollie shared that mountain biking and other outdoor activities helped him stay grounded over time. At the same time, several students described barriers that complicated their relationship with nature. Gigi reflected, “I still feel a disconnect from nature because I spend so much of my time indoors at a desk and on a computer,” highlighting how academic life itself could limit students’ opportunities to engage with outdoor environments. Cici similarly shared that she did “not feel safe when spending time outdoors, especially going off-campus alone,” illustrating how environmental wellbeing could also be shaped by concerns around safety, comfort, and access to outdoor spaces. These reflections complicated idealized assumptions that connection to nature is equally accessible or restorative for all students.

For some students, environmental wellbeing also extended into broader questions of sustainability and coexistence. Alicia explained, “I think that sustainability and environmental action are very important, and I do my best to contribute in small ways,” while Xena reflected that “we should coexist with everything on earth.” These reflections suggest that environmental wellbeing involved more than personal relaxation or enjoyment of nature alone. Students also described feeling ethically connected to the environments they inhabited and mindful of how their behaviors affected the broader world around them.

Part III: Associations with Key Student Characteristics and Outcomes

Using the composite mean scores calculated for each wellbeing factor, this section examines patterns of holistic wellbeing across student identities, academic characteristics, and student experience outcomes. These analyses help clarify how different dimensions of wellbeing may both shape and be shaped by students’ broader experiences, identities, and contexts within higher education. First, independent samples *t*-tests and one-way ANOVAs were conducted to assess group differences across demographic and academic-related variables. Next, bivariate correlations examined associations between wellbeing dimensions, age, and self-reported GPA categories. Finally, multiple regression analyses were conducted to evaluate the extent to which specific dimensions of wellbeing predicted academic-related outcomes, including GPA, persistence, sense of belonging, and satisfaction with college. Where relevant, quantitative findings are contextualized alongside qualitative reflections to further illustrate how students experienced and made sense of these patterns within their everyday lives.

Group Differences Across Student Identities

To examine differences in wellbeing across student identities, independent samples *t*-tests were conducted for each wellbeing dimension. Table 4.9 presents statistically significant group

differences ($p < .05$), reported as Cohen's d effect sizes, which are presented such that negative values indicate lower wellbeing for the focal identity group relative to its comparison group. Several broader patterns emerged when examining group differences across student identities and demographic characteristics. Because the nonbinary/trans group was small ($n = 8$), gender comparisons were limited to men and women to ensure stable statistical estimates. Notably, no statistically significant differences were observed between men ($n = 61$) and women ($n = 182$) across any wellbeing dimension, suggesting relatively comparable wellbeing profiles across gender within this sample.

Table 4.9

Group Differences in Wellbeing Dimensions by Identity (Cohen's d)

Wellbeing Dimension	Man ($n=61$)	First-Gen ($n=108$)	Household Income ($\geq \$100k$) ($n=143$)	STEM Major ($n=117$)	LGBQ + ($n=67$)	Religious /Spiritual Identity ($n=131$)	Health/Wellness Condition ($n=211$)
Physical	—	-.39	.69	—	-.35	—	-1.05
Psychological	—	—	.45	—	-.51	—	-1.03
Spiritual	—	—	—	—	-.49	.81	-.53
Intellectual	—	—	.41	—	—	—	-.40
Financial	—	-.31	.59	.26	-.47	—	-.77
Occupational	—	—	.43	—	-.50	—	-.74
Sociocultural	—	—	.33	—	—	—	-.42
Environmental	—	—	—	—	-.34	—	—

Note. Only statistically significant group differences ($p < .05$) are displayed. Cohen's d values are signed such that negative values indicate lower wellbeing for the identity group listed in each column relative to its comparison group.

In contrast, socioeconomic factors demonstrated some of the most consistent disparities across wellbeing dimensions. First-generation students ($n = 108$) reported lower physical ($d = -.39$) and financial ($d = -.31$) wellbeing relative to continuing-generation students ($n = 143$). Students from households making \$100,000 or more ($n = 143$) demonstrated higher wellbeing

than lower-income students ($n = 96$) across multiple dimensions, including physical ($d = .69$), financial ($d = .59$), psychological ($d = .45$), and occupational wellbeing ($d = .43$). These findings suggest that socioeconomic advantage may shape students' wellbeing in ways that extend beyond financial security alone and influence students' broader capacity to maintain physical health, manage stress, sustain balance, and engage meaningfully with academic and daily responsibilities. Moreover, the comparatively lower wellbeing reported by first-generation and lower-income students may reflect the cumulative pressures associated with financial strain, limited institutional support, competing responsibilities, and unequal access to resources that support wellbeing within higher education environments. However, findings related to first-generation differences should be interpreted with some caution given earlier evidence of partial measurement invariance for the physical wellbeing factor.

Identity-based differences also emerged across several wellbeing dimensions. LGBTQ+ students ($n = 67$) reported lower wellbeing than straight/heterosexual students ($n = 182$) across physical ($d = -.35$), psychological ($d = -.51$), spiritual ($d = -.49$), financial ($d = -.47$), occupational ($d = -.50$), and environmental ($d = -.34$) wellbeing, with most effect sizes falling within the small-to-moderate range. These disparities may reflect the cumulative effects of identity-based stress and stigma, and the challenges of navigating social and institutional environments that may not consistently affirm LGBTQ+ students' identities and experiences.

In contrast, students identifying with a religious or spiritual identity ($n = 131$) reported substantially higher spiritual wellbeing ($d = .81$) than secular or non-religious identities ($n = 120$), representing one of the largest observed group differences in the study. Given that the spiritual wellbeing factor centered on meaning, grounding practices, connection, and purpose, this pattern may also provide additional support for the construct validity of the dimension itself.

Importantly, the survey captured a broad range of religious and spiritual traditions and orientations, suggesting that the spiritual wellbeing dimension could assess meaning-making and spiritual experience across diverse belief systems rather than privileging a single religious framework.

Students reporting a health or wellness condition ($n = 211$) demonstrated the most pronounced and consistent disparities across the survey compared to those without any reported condition or health-related challenge ($n = 40$), particularly in physical ($d = -1.05$) and psychological wellbeing ($d = -1.03$), alongside large negative differences in financial ($d = -.77$) and occupational wellbeing ($d = -.74$). The magnitude and consistency of these differences suggest that health and wellness conditions may shape students' experiences across multiple interconnected dimensions of wellbeing rather than within isolated dimensions alone. Overall, these findings suggest meaningful variation in holistic wellbeing across student identities, with the most substantial disparities emerging among students from lower-income backgrounds and those reporting a health or wellness condition. However, because several wellbeing dimensions demonstrated partial measurement invariance across groups, some observed differences may also reflect variation in how certain constructs or survey items functioned across populations rather than solely differences in underlying wellbeing levels.

Next, to examine differences in wellbeing across racial/ethnic groups and year-in-college classifications, one-way analyses of variance (ANOVAs) were conducted for each wellbeing dimension, followed by Tukey post hoc tests where appropriate to identify specific group differences (see Table 4.10). No statistically significant differences emerged across year-in-college classifications, suggesting that students' wellbeing levels remained relatively comparable as they progressed through college. In contrast, racial/ethnic differences emerged primarily

within physical, financial, and environmental wellbeing. Hispanic or Latino/a/x/e students reported lower physical wellbeing than both Asian and White students, while Asian students reported higher financial wellbeing than Hispanic or Latino/a/x/e students. White students also reported slightly higher environmental wellbeing than Asian students.

Table 4.10

Significant One-Way ANOVA Results Across Racial/Ethnic Groups

Wellbeing Dimension	<i>F</i> (df)	<i>p</i>	Significant Post Hoc Differences	Group Means
Physical	4.21(4,246)	.003	Hispanic/Latinx < Asian, White	Hispanic/Latinx = 3.13; Asian = 3.52; White = 3.76
Financial	3.61(4,245)	.007	Asian > Hispanic/Latinx	Asian = 3.65; Hispanic/Latinx = 3.36
Environmental	2.41(4,246)	.050	White > Asian	White = 4.08; Asian = 3.67

Note. Only statistically significant overall ANOVA results are displayed. Tukey post hoc tests were conducted for significant tests.

These ANOVA results suggest that racial/ethnic variation within the sample was concentrated in dimensions tied more directly to students' material, embodied, and environmental experiences, whereas psychological, spiritual, intellectual, occupational, and sociocultural wellbeing appeared relatively comparable across groups. One possible explanation for this pattern is that physical, financial, and environmental wellbeing may be more immediately shaped by broader structural and contextual inequalities related to access, financial stability, living conditions, and health-related behaviors. At the same time, several of these same dimensions were also identified in the earlier invariance analyses as demonstrating localized forms of measurement non-invariance across racial/ethnic groups. More specifically, modification indices had indicated that certain physical, financial, and environmental wellbeing items functioned somewhat differently across groups, suggesting that some observed mean differences may reflect both underlying differences in wellbeing and variation in how particular

items or constructs were understood, experienced, or interpreted across racial/ethnic populations. These findings further highlight the importance of examining holistic wellbeing as both a psychological and culturally situated construct rather than assuming identical experiences or meanings across student groups.

Bivariate Associations Among Study Variables

To examine relationships between wellbeing and selected student characteristics, Pearson bivariate correlations were conducted using composite scores for each wellbeing dimension alongside age and cumulative GPA. Table 4.11 shows that several wellbeing dimensions demonstrated significant positive associations with GPA, including physical ($r = .29, p < .001$), financial ($r = .21, p < .001$), occupational ($r = .16, p < .05$), and psychological wellbeing ($r = .15, p < .05$). Notably, the strongest relationships with GPA emerged in dimensions tied to students' physical health, psychological functioning, financial behaviors, and ability to manage occupational responsibilities. These findings suggest that academic performance may be shaped not only by traditional academic skills or achievement indicators, but also by students' broader capacity to sustain wellbeing while navigating the demands of college life.

Table 4.11

Bivariate Correlations Between Wellbeing Dimensions and Student Characteristics

Wellbeing Dimension	GPA	Age
Physical	.29***	-.14*
Psychological	.15*	—
Spiritual	—	—
Intellectual	—	—
Financial	.21***	—
Occupational	.16*	—
Sociocultural	—	—
Environmental	—	—

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Only statistically significant correlations are displayed.

Students' qualitative reflections further helped contextualize these associations. In relation to physical wellbeing, several students described how academic demands frequently disrupted movement, sleep, and bodily care. Cici reflected, "I rarely do physical exercises, while sitting for a long time everyday to study," while Nathan shared, "I often overindulge in screen time, like scrolling on my phone late at night instead of sleeping, which leaves me tired for classes." Similarly, Jenny, a student reporting a GPA between 2.9 and 3.1, described struggling "to juggle my academics and my physical activity," while Kiki, who reported a GPA between 3.8 and 4.0, explained that despite her strong academic performance, she was "not getting enough sleep, or eating the way I want to" because she was "so busy." These reflections suggest that students frequently experienced academic performance and physical self-care as deeply interconnected rather than separate aspects of college life.

Psychological wellbeing also demonstrated a significant positive relationship with GPA. Students frequently described how stress, anxiety, and emotional strain influenced their academic functioning and ability to engage with coursework effectively. Jenny reflected, "I still need to strengthen all of my study habits and stress management, as I tend to be pretty hard on myself when it comes to it," later adding, "I often stress out about the homework assignments and quizzes and get upset if I do not understand them right away." Elsewhere, she described how "this mixture of anxiety, loneliness, and self-doubt severely impacted [her] performance in classes." These reflections suggest that psychological wellbeing may shape academic experiences through students' ability to regulate stress, maintain confidence, and persist through academic challenges.

Financial wellbeing similarly demonstrated a positive relationship with GPA, suggesting that financial stress and financial management behaviors may shape students' broader academic

experiences. Jimmy described himself as “the broke college student just like most other kids,” while Lily, a first-generation student from a lower-income background, reflected on “the anxiety one can obtain when constantly worrying about having enough [money] for both college and personal expenses.” In contrast, Alicia, a White student from a lower-income background, described feeling financially stable despite ongoing worries about budgeting because scholarships covered her college expenses. As she explained, “I do get very worried about finances and budgeting, but I know logically that I don’t really need to be...I have a significant amount of money in scholarships,” later noting that this support also gave her “the opportunity to earn more money than I currently am if I needed to by getting a job.” These reflections suggest that financial wellbeing was not solely determined by how much money students had, but also by whether students felt a sense of stability, balance, and perceived control over their financial circumstances. In this way, financial wellbeing may influence academic functioning not only through access to financial resources themselves, but also through the emotional burden, uncertainty, and cognitive strain associated with managing financial stress during college.

Occupational wellbeing also demonstrated a significant positive association with GPA, highlighting how students’ academic performance was often intertwined with their relationship to time, structure, and daily responsibilities. Tingting explained that “keeping a clear and organized calendar has been a helpful tool for managing my time and staying on top of deadlines,” illustrating how organization and planning helped her manage academic demands more effectively. In contrast, Emma reflected that excessive phone use had caused her to “sacrifice sleep, let people down, and worsen [her] mood,” suggesting that misusing time could negatively affect multiple areas of students’ wellbeing at once. Students also connected occupational wellbeing to future aspirations and pressure surrounding academic success. Jenny

explained, “I need to do all this work in college in order to get the job that will give me the biggest salary,” revealing how academic responsibilities were often tied to concerns about long-term stability and future career outcomes. These reflections suggest that occupational wellbeing may support academic performance through students’ ability to maintain routines, manage responsibilities, and sustain a sense of direction and purpose within college life.

Beyond GPA, small negative correlations were also observed between age and physical wellbeing ($r = -.14, p < .05$), indicating slightly lower physical wellbeing scores among older students within the sample. Interestingly, this pattern was not observed in the earlier ANOVA analyses across year-in-college classifications, suggesting that chronological age may capture broader life circumstances, competing responsibilities, or stressors associated with wellbeing more effectively than academic standing alone. This finding may be particularly relevant for non-traditional or older students who began college later and may be navigating additional responsibilities outside of school, such as employment, caregiving, financial obligations, or other life demands that shape their capacity to maintain physical wellbeing alongside academic responsibilities.

Predictors of Student Outcomes

To provide context for subsequent regression analyses, descriptive statistics were calculated for key outcome variables collected as part of the HAY Survey. These included cumulative GPA, persistence (i.e., students’ self-reported consideration of leaving or taking a break from college), sense of belonging, and satisfaction with college. In this study, “considered leaving” serves as an inverse indicator of persistence, such that higher scores reflect lower levels of persistence. Descriptive statistics for these variables are presented in Table 4.12. Overall,

students reported relatively high GPA alongside moderate levels of belonging and satisfaction, providing a baseline for interpreting relationships between wellbeing and student outcomes.

Table 4.12

Descriptive Statistics of Dependent Variables

Variable	Scale	Mean	SD
GPA: What is your most recent cumulative GPA?	1=2.0 or below to 8=3.8 to 4.0 or above	7.20	1.27
Considered Leaving: I have seriously considered leaving or taking a break from college	1=strongly disagree to 5=strongly agree	2.18	1.19
Belonging: I feel like I belong at this college	1=strongly disagree to 5=strongly agree	3.74	.91
Satisfaction: Overall, I am satisfied with my college experience	1=strongly disagree to 5=strongly agree	3.85	.85

To examine the extent to which holistic wellbeing predicts key student outcomes, a series of hierarchical multiple regression analyses using sequential predictor blocks were conducted. Separate models were estimated for each outcome variable, including cumulative GPA, persistence (i.e., consideration of leaving or taking a break from college), sense of belonging, and satisfaction with college. In each model, demographic characteristics (gender, age, race/ethnicity, first-generation status, household income, LGBQ+ identity, religious/spiritual identity, STEM major, and disability/health condition) were entered in the first step as control variables. Women and Asian students served as the reference groups for gender and race/ethnicity, respectively, due to their larger sample sizes. The nonbinary/trans ($n = 8$) and other racial/ethnic ($n = 11$) categories were excluded from regression analyses because of small subgroup sizes. Missing data were handled using listwise deletion, resulting in slight variation in sample size across models. In the second step, exploratory forward-selection procedures were used to identify the wellbeing dimensions that demonstrated the strongest incremental

associations with each outcome after accounting for demographic characteristics. Given the moderate intercorrelations among wellbeing dimensions, this approach helped identify the most salient predictors while minimizing issues related to overlapping variance.

Prior to analysis, assumptions of linear regression were examined. Visual inspection of standardized residual plots indicated that assumptions of linearity and homoscedasticity were met. Histograms and normal probability plots suggested that residuals were approximately normally distributed. Multicollinearity was assessed using variance inflation factors (VIF), with no major concerns identified, although some overlap was observed among theoretically related predictors. Standardized beta coefficients from the final regression models are presented in Table 4.13 to facilitate comparison of the relative strength of predictors across outcomes. Wellbeing dimension predictors not retained in the final forward-selection models are indicated with dashes.

Table 4.13*Standardized Beta Coefficients from Regression Models Predicting Student Outcomes*

	<u>Dependent Variables</u>			
	GPA (<i>n</i> = 228)	Considered Leaving (<i>n</i> = 229)	Belonging (<i>n</i> = 229)	Satisfaction (<i>n</i> = 229)
<u>Independent Variables</u>				
<u>Block 1: Input Controls</u>				
Gender: Man	-.00	.07	.02	-.06
Age	-.13	.39***	-.04	-.16
Year in college	.13	-.23*	.06	.13
Race: Hispanic or Latino/a/e/x	-.21**	-.14	-.23**	.02
Race: White	.05	.02	-.07	.01
Race: Multiracial	-.04	-.07	.06	.05
First-Generation	-.04	.01	.06	.00
Household Income (≥\$100k)	.14	-.21**	.15*	.14*
LGBQ+ Identity	.03	.13*	-.03	.06
Religious/Spiritual Identity	-.19*	.10	-.09	-.13*
STEM Major	-.16*	-.09	-.10	-.06
Disability/Health Condition	.06	-.03	.04	-.05
<u>Block 2: Wellbeing Dimensions</u>				
Physical	.15*	—	—	—
Psychological	—	-.34***	.21**	.20**
Spiritual	—	—	—	—
Intellectual	—	—	—	—
Financial	.15*	—	—	—
Occupational	—	—	—	—
Sociocultural	—	—	.33***	.40***
Environmental	—	.14*	—	—
<u>Final Model Adjusted R²</u>	.24	.20	.31	.32

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. Standardized coefficients (β) from final models are reported. Asian students served as the reference racial/ethnic group and Woman as the reference gender group for regression analyses.

Predictors of Cumulative GPA. Distinct patterns emerged across each student outcome, suggesting that different dimensions of holistic wellbeing may relate to different aspects of students' academic and college experiences. For cumulative GPA, Hispanic or Latino/a/x/e

identity (ref group: Asian), religious/spiritual identity, and STEM major status were associated with lower GPA scores within the final model. After accounting for these demographic characteristics, physical wellbeing ($\beta = .15, p < .05$) and financial wellbeing ($\beta = .15, p < .05$) emerged as significant positive predictors of GPA. Students reporting stronger physical wellbeing, including healthier sleep, movement, nutrition, and bodily care habits, also tended to report stronger academic performance. Similarly, students reporting stronger financial wellbeing, particularly around financial management behaviors such as budgeting, responsible spending, and satisfaction with their financial habits, also demonstrated higher GPAs. These findings suggest that academic performance may be associated with students' physical health behaviors, including diet, physical activity, sleep, and self-care, as well as their ability to effectively manage their personal finances. The final model explained 24% of the variance in GPA.

Predictors of Persistence. For persistence, operationalized as having seriously considered leaving or taking a break from college, older students and LGBTQ+ students demonstrated higher consideration of leaving college within the final model, whereas students from higher-income households ($\geq \$100k$) and those further along in college demonstrated lower consideration of leaving. Interestingly, age and year in college demonstrated opposite associations within the model, suggesting that older students may experience distinct challenges not fully captured by traditional year-in-college classifications alone. These findings may reflect the experiences of nontraditional or older students whose life circumstances, responsibilities, or educational pathways differ from those of traditionally aged students.

After accounting for these demographic characteristics, psychological wellbeing emerged as the strongest wellbeing predictor within the model ($\beta = -.34, p < .001$). Higher psychological wellbeing scores, including emotional regulation, stress management, happiness, and satisfaction

with one's mental and emotional wellbeing, were associated with lower consideration of leaving college, suggesting that perceived mental and emotional health may play an important role in persistence-related experiences. Environmental wellbeing also emerged as a small positive predictor ($\beta = .14, p < .05$). Because this dimension included items related to environmental awareness, sustainability behaviors, mindfulness of one's environmental impact, and connection to nature, this finding may reflect a broader form of social or institutional sensitivity rather than environmental wellbeing functioning as a direct risk factor itself. However, given the modest effect size and exploratory nature of the model, this relationship should be interpreted cautiously and may warrant further investigation in future research with larger samples. Together, these findings suggest that persistence may be associated not only with academic preparedness, but also with students' emotional capacity to navigate the broader pressures and instability associated with college life. The final model accounted for approximately 20% of the variance in considering leaving college.

Predictors of Sense of Belonging. Sense of belonging appeared to be shaped by both students' identity-based experiences and their broader relational and emotional wellbeing within college life. Hispanic or Latino/a/x/e identity was associated with lower belonging scores relative to Asian students, while students from higher-income households demonstrated slightly higher belonging scores within the final model. After accounting for these demographic characteristics, sociocultural wellbeing emerged as the strongest predictor of belonging ($\beta = .33, p < .001$), followed by psychological wellbeing ($\beta = .21, p < .01$). Students who reported stronger sociocultural wellbeing, including greater social support, meaningful contribution to their communities, comfort navigating different social and cultural settings, and satisfaction with their relationships, also reported stronger belonging on campus. Likewise, students reporting stronger

psychological wellbeing, particularly in areas related to emotional regulation, stress management, and overall mental and emotional wellbeing, demonstrated stronger belonging scores. These findings suggest that students' sense of belonging may be closely tied to both their identity-based experiences and their broader relational and emotional wellbeing, as students who felt more socially supported, emotionally well, and connected to their communities also reported stronger belonging on campus. The final model accounted for approximately 31% of the variance in students' sense of belonging.

Predictors of Overall Campus Satisfaction. Both identity-based characteristics and multiple wellbeing dimensions emerged as significant predictors of overall campus satisfaction within the final model. Religious/spiritual identity was associated with slightly lower satisfaction scores, while students from higher-income households were associated with slightly higher satisfaction scores. After accounting for these demographic characteristics, sociocultural wellbeing again emerged as the strongest predictor ($\beta = .40, p < .001$), followed by psychological wellbeing ($\beta = .20, p < .01$). Findings suggest that students' satisfaction with college may be shaped by the extent to which students feel socially connected, emotionally supported, and meaningfully engaged within the broader campus environment. The final model accounted for approximately 32% of the variance in satisfaction with college, representing the strongest explanatory model in the study.

Overall, the regression results suggest that different dimensions of holistic wellbeing operate through distinct but interconnected pathways rather than as a single generalized condition. Dimensions tied more directly to material and embodied experience, such as physical and financial wellbeing, were more closely associated with academic performance, whereas psychological and sociocultural wellbeing aligned more strongly with persistence, belonging,

and satisfaction. This pattern highlights that student success is not reducible to a single form of wellbeing and suggests that efforts to support student wellbeing may require acknowledging the interconnected nature of students' lives.

The qualitative strand of this study draws on student journals and semi-structured interviews from a yoga and holistic wellbeing first-year seminar. This analysis examines how students describe, interpret, and make meaning of holistic wellbeing within the context of their everyday lives and educational experiences. These data offer insight into how students navigate stress, identity, and daily responsibilities while developing awareness and practices that shape their sense of wellbeing. In alignment with the study's conceptual framework, analysis considers students' reflections across the eight dimensions of the HAY Survey and key contemplative education themes. Student voice is centered throughout the findings through the use of direct quotations, presented with pseudonyms and source identifiers (i.e., journal or interview).

Part IV: Yoga and Contemplative Practice in Higher Education

Building on students' conceptualizations of holistic wellbeing, this theme examines how yoga and contemplative practices were experienced as lived, embodied processes within the seminar. Drawing from both journal entries and interviews, the analysis centers on how students engaged with specific practices such as breathwork, movement, meditation, and reflective writing and how these experiences translated into strategies for navigating everyday student life. To capture this process-oriented dimension, findings are organized into three interrelated sub-themes. The first, *Embodied and Practical Applications*, highlights how students integrated yoga-based techniques into their daily routines to manage stress, regulate emotions, and support physical and mental health. The second, *Developing Awareness*, explores how yoga and contemplative practices fostered greater introspection, presence, and recognition of internal

patterns. The third, *Personal Transformation*, examines various student narratives around before-and-after impacts from engaging with yoga and contemplative practices in higher education.

These three sub-themes illustrate how yoga and contemplative practices functioned as generative tools through which students developed sustainable approaches to wellbeing within and beyond the classroom.

Embodied and Practical Applications: Carrying Wellbeing Into Everyday Life

Breathwork, in particular, was seen as one of the most accessible and frequently utilized practices. Several students described intentionally incorporating breathing techniques into their daily lives as a means of calming the mind and body. For example, Jimmy explained,

I've tried to incorporate deep inhalation breathing into my routine and it has significantly improved my relaxation. Consciously filling my lungs to their capacity and then slowly exhaling is really calming and I think it'll be really useful when I'm stressed. (Journal).

Similarly, Alicia connected these practices to her own bodily experiences, noting:

I have had a history of breathing issues and of not feeling like I can ever get a full breath, but the yogic breathing really helped with that. In the text it says that yogic breathing 'is especially useful in situations of high stress or anger for calming the nerves' (Saraswati, 2008, p. 383). I actually tried using yogic breathing a couple of other times throughout the week when I was feeling stressed or tired, and I noticed that it helped me to relax (Journal).

These reflections suggest that techniques like yogic breathing (Saraswati, 2008, p. 383) functioned not only as a momentary classroom exercise but also as an accessible technique that students could deploy in real time, particularly during periods of academic pressure or emotional strain—like for Nathan who said that “doing some deep breathing can reduce my mental stress, especially in the midterms week or final weeks” (Interview). These narratives show that students were developing a form of embodied self-regulation that could be mobilized in moments of stress, positioning breath as an immediate and accessible point of intervention.

In addition to breathwork, students also described meditation as a useful tool for managing stress and regaining focus during moments of overwhelm, helping students take an intentional pause in the midst of competing demands. Xena, for example, explained:

When I have a lot of thoughts and anxiety and it's hard to focus...I'm really overwhelmed or have too many things to do, I'll drop everything and sit and meditate for like 10-20 minutes and just focus on my breath, and it has really helped me. And when I'm dealing with negative emotions, I also think it's important to have someone in your life who knows how you're feeling—whether it's a friend, family member, or therapist. (Interview).

Xena's reflection illustrates how meditation was used not only as a technique for calming the mind, but as an intentional interruption to moments of overload, allowing her to step back, regulate her emotions, and re-center her attention. At the same time, her account highlights an important recognition that self-regulation does not occur in isolation, emphasizing the role of social support networks—such as friends, family members, or therapists—in navigating emotional challenges.

In addition to breathwork and meditation, students also described incorporating movement-based practices into their routines. Yoga sequences such as the surya namaskar (sun salutation) (Saraswati, 2008, p. 162), as well as individual poses, were carried beyond the classroom and adapted to students' daily lives. For some, these sequences became part of ongoing routines tied to both physical development and course engagement. April, for instance, reflected on how practicing sun salutations supported both her strength-building and preparation for one of the seminar's final assignments, which required students to memorize and lead the sun salutation for the class or a friend outside of the course:

I always enjoy the sun salutations because they wake me up and keep me moving. I really want to start trying to do them every day, I feel like over time they would help build my strength, especially in the Chaturanga pose. I'm already starting to remember how to do the sun salutations, and I feel like I'm preparing myself for the final. Plus, I know they're doing good things for my body. (Journal).

While April's reflection highlights structured and goal-oriented engagement with movement, other students described using individual poses in response to stress. Kiki, for example, described turning to restorative poses in her dorm as a way to regulate overwhelming emotions:

When I'm really stressed, I just start doing yoga in my dorm. I really like Child's Pose because it's not too hard, and I feel very calm when I'm in it—it's almost like a comfort pose for me. If I'm overwhelmed, I'll go into Child's Pose or try to meditate and sit in quiet, which are some of the main takeaways I've carried from class. (Interview).

These examples illustrate how movement-based practices were adapted in both structured and situational ways, functioning as tools for long-term development as well as immediate emotional regulation and relief.

Students also described the structure of the course, including weekly yoga practice and reflection journals, as meaningful interventions in the pace of their daily lives. Amid demanding schedules and competing responsibilities, these components created a consistent space for pause and restoration. Tingting, for example, explained, "I'm quite busy with my other extracurriculars, but every week when we're able to practice yoga, it definitely gives me some time just for myself and just to relax" (Interview). Her reflection suggests that students often experienced the course as a rare opportunity to pause from the pace and pressure of college life, creating intentional space for rest, self-awareness, and personal care within otherwise demanding schedules.

In addition to movement-based practices, students identified reflective writing as a key component of their engagement with yoga. Journaling functioned as a structured opportunity to pause, contemplate, and make sense of their experiences. As Lily shared:

I think every week when I do journals and reflect on how I felt during class or the readings, it becomes a moment where I can really sit with my thoughts. I love doing my journals by myself with no one else in the room because I can recall how I felt. I feel like a lot of people in this society don't really reflect—they just move on—but being able to reflect is very important. (Interview).

Lily's reflection highlights how writing operated as a contemplative practice, allowing students to slow down and revisit their experiences with greater intention. Journaling complemented physical practices by offering a parallel tool for processing emotions, reinforcing learning, and cultivating self-awareness through deliberate reflection.

Within the context of a credit-bearing course, practices like breathwork, movement, meditation, and reflective journaling collectively created a structured environment that enabled students to step out of the constant busyness of academic and extracurricular life and attend to their wellbeing. Rather than remaining confined to the classroom, students described adapting these practices into their daily routines as tools for managing stress, restoring energy, and creating moments of pause. These findings suggest that the embodied and practical applications of yoga were not only enacted through individual techniques but were also supported by the structure of the course, which provided the time and space necessary for students to engage in rest, balance, and self-care within the broader demands of college life.

Developing Awareness: Learning to Notice the Self More Deeply

A central pattern across student reflections was the gradual development of awareness, beginning with a recognition of disconnection from the body and extending into emotional and cognitive self-understanding. For many students, this awareness emerged through direct, embodied experience during practice. Lily's reflection captures this initial moment of realization, where awareness begins as a confrontation with previously unnoticed tension and fatigue:

Our first yoga session allowed me to feel where my body felt tense and care for it. It allowed me to feel energized and exhausted all at once... Even though I felt overwhelmed at first, I wasn't focused on it but rather focused on my breath or heartbeat... I noticed how flexible I am and that I can actually go beyond what I thought was my limit. I noticed myself more calm, my muscle tension that I've been experiencing had suddenly left my body, I felt alert and at ease, I wasn't so anxious anymore. I did feel hungry and thirsty, but

I felt fulfilled. I noticed that I was more patient after practice, I didn't feel the need to be on constant “go.” I was at peace. (Journal).

Lily’s account illustrates how awareness first emerged as noticing—of bodily tension, fatigue, and internal states—before evolving into an ability to respond differently. Rather than remaining overwhelmed, she describes a shift toward directing attention to the breath, suggesting an early form of self-regulation rooted in embodied awareness. For other students, this awareness was catalyzed more specifically through attention to breath and physical sensation. Xena, for example, described a striking discovery in something as simple as inhalation:

I have never noticed that lifting my chest and shoulder can help me inhale more air. When I practice this breathing method, I feel like my body opens up a new channel that connects me to another world. I just practiced this breathing method again when I was writing the last sentence, and I still find it unbelievable. (Journal).

Here, awareness takes on a sense of novelty and even wonder, as previously automatic bodily processes become objects of conscious attention. The language of “opening” and “connection” suggests that breathwork served as an accessible technique and a gateway to a deeper awareness of the self and awe.

Similarly, Jenny’s reflection highlights how this growing awareness of breath extended beyond the yoga classroom into other areas of her life:

I always struggle with breathing...like, in the gym, you're supposed to breathe in when you're doing one motion and breathing out the other one. And I always forget that—that's the one thing I struggle with the most...and I feel yoga really helped me, like, actually focus on my breath and learn how to control my breathing. (Interview).

Jenny’s account demonstrates how awareness becomes transferable; what begins as attention to breath during yoga evolves into a broader capacity to regulate physical effort and tension in other contexts. Awareness, in this sense, is transferred to other activities like working out at the gym.

As students became more attuned to their bodies, this awareness extended into their emotional lives, too. Mala reflected on recognizing the presence of difficult emotions without immediately acting on them:

There are instances, though not frequent, where I feel contempt towards others. I refrain myself from acting on these emotions but they do exist. While I feel like some of these negative emotions are a part of human nature, I should try to follow a more serene, positive outlook and avoid violent tendencies. (Journal).

Mala's reflection suggests a shift from unexamined emotional reactions to a more deliberate acknowledgment of internal states through yoga and contemplative practice. In this example, awareness may not eliminate all negative emotions, but it may create space between feeling and action. Lily similarly described how this growing awareness supported a more intentional engagement with her emotions:

With my emotions, I sometimes feel them very strongly, and they can be overwhelming, but through practices we've learned in yoga—like breathing techniques or paying attention to what my body is feeling—I've been able to self-regulate and think more intentionally rather than not thinking at all. (Interview).

These reflections indicate that awareness operates as a bridge between embodied sensation and emotional regulation, allowing students to move from reactivity toward intentionality.

For students, this process sometimes deepened further into metacognitive awareness, characterized by the ability to pause and reflect in moments of emotional activation. Jimmy described this shift succinctly:

When I catch myself reacting from ego, I try to pause and ask: 'What part of me feels threatened, and why?' That small moment of reflection can shift everything. Letting go of ego, even for a moment, makes space for real connection with myself. (Journal).

In this account, awareness becomes an active intervention—a moment of interruption that disrupts automatic responses and opens the possibility for self-inquiry. The “small moment of

reflection” Jimmy describes reflects a more advanced form of awareness, one that not only observes internal states but interrogates their origins.

Finally, for some students, this developing awareness was catalyzed during specific yoga postures, culminating in deeply embodied emotional experiences that blurred the boundaries between physical sensation and affective release. Nathan’s reflection illustrates this integration:

Supported Fish Pose was my favorite [pose]. I lifted my chest toward the sky with a block under my upper back. The pose made my heart feel open in a way that made me feel both vulnerable and free. I could feel my shoulders moving away from my ears. The stress I feel from working at a desk all day was melting into the mat. Tears came out of nowhere, not because I was sad, but because I felt so grateful and free...It was like my body was thanking me for the care. (Journal).

Nathan’s experience reflects a culmination of the awareness process, where attention to the body facilitated a profound physical and emotional release. His description of simultaneous vulnerability and freedom suggests that awareness, when fully embodied, can give rise to moments of emotional clarity and realization.

These accounts illustrate that developing deeper awareness was an ongoing and layered process through which students became more attentive to their physical sensations, emotional patterns, and everyday responses to stress and challenge. Many students described moving from recognizing tension or discomfort toward reflecting more intentionally on their habits, thoughts, and emotional reactions, with some also experiencing moments of emotional release, clarity, or personal realization. Across these reflections, awareness emerged as both a foundation and a pathway for change, helping students relate to their bodies, emotions, and inner experiences with greater intentionality, compassion, and care.

Personal Transformation: Capturing Moments of Change and Growth

Beyond the development of awareness, students described meaningful changes and growth in how they engaged with their daily lives, emotions, and sense of self. For many, these

transformations began early in the quarter, as practices introduced in the course started to reshape patterns of attention and presence. Shang, for example, described an initial shift toward greater intentionality and grounding, which emerged within the first few weeks of the seminar:

For me, I've learned to take more care of myself and listen to what my body wants. When I haven't had the chance to meditate and I'm doing a lot of things back to back, it doesn't feel like I'm fully present or fully aware—sometimes I finish something and I'm like, 'did that really just happen? Was I really there?' But I feel like after starting meditation and yoga and being more present, things have shifted. Since week one or two, I stopped bringing my laptop to class, and I feel like that made me more present to the slides because it was the only thing I could focus on. I think I'm starting to learn how to ground myself and do things that I really want to do. (Interview).

For Shang, transformation appeared through a growing alignment between awareness and action, as he described removing distractions and cultivating greater presence in his daily life. These shifts suggest that increased self-awareness was beginning to reshape how he intentionally directed his attention and how he showed up in class.

For others, transformation took the form of developing tools to navigate emotional distress. Xena described a clear shift in her ability to regulate her emotions:

I would say I can't control my emotions very well before taking this course, but after taking this course, it's given me some practices that can help me take control, like breathing and just get some stretching in or something. It calms me down and makes me think more instead of just feeling nervous and depressed, you know? It's a great improvement. (Interview).

Xena's story highlights a movement from emotional reactivity toward intentional regulation, suggesting that the practices introduced in the course provided students with tangible strategies for managing previously overwhelming experiences.

In other cases, these transformations extended beyond the classroom and into students' lived experiences, where they were tested and enacted in real time. April's journal entry offers a particularly vivid example:

I found out that my brother had stolen money from my mom, and I was overwhelmed with anger. I called my sister afterward, and she laughed, so I spoke to her in a way I couldn't even believe—my words were overly disrespectful. I lost all respect for her and for myself. I went to my dorm feeling consumed by anger and spiraling into negative thoughts. But then I remembered the yoga class. I took a moment to meditate, and I felt centered again, like everything was going to be okay. I was able to recenter myself, apologize to my sister, and feel at peace. It was like all my worries had been lifted. I truly believe that the yoga class gave me the tools to handle that situation and to control my emotions, especially in overwhelming moments. Looking back, I can already tell that yoga is going to be an integral part of my journey moving forward. (Journal).

April's journal reflection shows transformation as a dynamic process enacted under pressure, where she recognized her emotional state and actively altered the course of the interaction. The shift from anger and relational rupture to reflection, accountability, and repair demonstrates how course practices translated into meaningful changes in behavior and relationships. Her reflection also suggests that transformation was often experienced through small but emotionally significant moments in everyday life, where increased awareness created space for students to respond more intentionally rather than react automatically in situations of stress or conflict.

Several students described personal transformation through gradual changes in how they approached their daily routines, emotional habits, and relationship with themselves. Mala, for instance, reflected on a shift in how she balanced productivity and self-care:

Now, I can take breaks from being productive or studying to simply engage in things that bring me happiness. I no longer feel that guilt because I started acknowledging all the hard work that I have already done. I also started journaling more frequently, writing about my emotions and how my day has been. By doing so, I feel more in tune with my mental state, and it brings upon a sense of calmness and inner peace that I can hardly find in other parts of my busy routine. (Journal).

Similarly, Mimi reflected on the importance of slowing down and creating space for introspection:

I realized that I'm always like "go, go, go," and I don't take the time to just sit with my own thoughts...And so just having that time in class to do that made me realize, oh, this is important. It's important to just take a moment and breathe and just listen to your breath and recognize the thoughts that are coming in and out all the time. The importance of

incorporating sitting with yourself, listening to your breath, and calming your thoughts every day can help you get to a different mental state entirely. (Interview).

Mimi's and Mala's accounts suggest a shift from externally driven productivity toward more balanced, intentional ways of living, where reflection, rest, and emotional processing are actively prioritized as essential elements of personal transformation.

Finally, some students described deeper transformations in how they understood themselves and their relationship to the world. Kiki, for example, reflected on a shift in how she approached attachment:

One of the things that really stuck with me was our discussion on attachment...how you can care about something deeply without being so attached to it. Because I feel I over-attach myself to a lot of things in my life, and that just brings me pain later on. And so discussing that, and saying "it's okay to let go, you can still care without having to be so attached to something" really stuck with me. Once you take a step back, it's better for you and your own wellbeing. And I feel like that's the main thing that really stuck with me. (Interview).

This reflection points to a more philosophical transformation, where students began to reinterpret their emotional experiences through new ways of understanding the self and the world. Rather than eliminating attachment, Kiki describes a reconfiguration of how she relates to it—one that allows for care without suffering.

In summary, these student narratives illustrate that personal transformation unfolded across multiple dimensions, including behavior, emotional regulation, daily habits, and underlying belief systems. For some, transformation appeared as immediate and observable change; for others, it emerged more gradually through shifts in perspective and practice. Across these variations, however, a common thread remained: students described becoming more intentional in how they engaged with themselves, their emotions, their relationships, and their lives, suggesting that the course fostered not only awareness, but meaningful and sustained personal change.

Part V: Overall Mixed-Methods Synthesis

This section integrates the quantitative and qualitative findings to examine how the two strands collectively deepen understanding of holistic wellbeing among college students.

Although integration occurred throughout the preceding findings sections, this final synthesis highlights several broader insights that emerged through the combination of methods. Following Fetters et al. (2013), the integration process involved discussing areas of confirmation, expansion, and discordance across the quantitative and qualitative strands. Across the findings, holistic wellbeing emerged as multidimensional, deeply interconnected, and continually shaped through the realities of college life.

Interconnectedness of Wellbeing Dimensions

Across both strands, holistic wellbeing consistently emerged as multidimensional, interconnected, and relational. Quantitatively, the HAY Survey demonstrated strong support for an eight-factor structure, suggesting that physical, psychological, spiritual, intellectual, financial, occupational, sociocultural, and environmental wellbeing function as empirically distinct yet related dimensions of student experience. At the same time, the qualitative findings illustrated how these dimensions frequently interacted and overlapped within students' everyday lives. Even when reflecting on a single area of wellbeing, students often connected their experiences to several other dimensions within the same narrative. Physical exhaustion shaped emotional wellbeing and motivation, financial strain influenced stress and uncertainty, and sociocultural belonging informed students' sense of identity, community, and meaning. These reflections reinforced the idea that holistic wellbeing operates through interconnected processes that students experience simultaneously across multiple dimensions.

Institutional and Structural Conditions Shaping Wellbeing

Another major finding across both strands concerns the role of institutional and structural conditions in shaping students' capacity to sustain wellbeing. Quantitatively, multiple wellbeing dimensions demonstrated meaningful associations with outcomes such as GPA, persistence, belonging, and satisfaction. The qualitative findings contextualized these relationships by illustrating the lived conditions surrounding them. Students repeatedly described negotiating wellbeing within systems of academic pressure, financial strain, social expectations, time scarcity, and demanding institutional routines. Many described sacrificing sleep, nourishment, movement, rest, and social connection in order to keep pace academically. Others reflected on feeling disconnected despite being surrounded by peers or struggling to access restorative environments because of safety concerns, limited time, or heavy workloads. Rather than framing wellbeing primarily as an individual responsibility, students frequently situated their struggles within the broader structure of college life itself. In this sense, higher education emerged not simply as a backdrop to wellbeing, but as an active environment shaping how wellbeing is experienced, maintained, and negotiated.

Tensions and Contradictions Across Findings

Several important tensions also surfaced across the integrated findings. Quantitatively, significant group differences emerged across race/ethnicity, first-generation status, sexual orientation, income, and health condition status. Within the qualitative narratives, however, students did not always explicitly attribute their experiences of stress, exhaustion, isolation, or uncertainty to their demographic backgrounds or identities. This suggests that structural inequities may shape students' wellbeing even when those experiences are not consciously framed or narrated through demographic categories themselves.

The qualitative findings also revealed that students' wellbeing was often experienced as unstable and highly responsive to the changing pressures of college life. While the quantitative findings captured overall patterns and associations at a single point in time, students' reflections illustrated how wellbeing could fluctuate across days, responsibilities, and academic demands. This was especially evident in discussions of physical wellbeing. Although students understood sleep, nourishment, movement, and rest as important to their wellness, many described struggling to maintain these practices during stressful academic periods. Kiki reflected, "I have not been getting enough sleep, or eating the way I want to. I am so busy that I lack the time to focus enough on my physical needs," while Jenny described "trying to juggle my academics and my physical activity...to prioritize one over the other." In both examples, physical wellbeing was not experienced as a fixed or stable condition, but as something that shifted alongside students' workloads, stressors, environments, and personal expectations. These reflections suggest that students' understandings of wellbeing were often highly contextual and subjective. Although wellbeing could be measured or described at a particular moment in time, students' experiences also revealed how quickly it could change in response to the immediate realities of college life.

Students also complicated more idealized understandings of intellectual and sociocultural wellbeing by illustrating how experiences commonly associated with growth, connection, or engagement could simultaneously produce discomfort, uncertainty, or isolation. Although intellectual wellbeing is often framed positively through curiosity, critical thinking, and self-reflection, several students described these processes as emotionally demanding and at times destabilizing. Shang admitted that questioning too much sometimes left him "feeling lost," suggesting that intellectual openness and continual self-reflection could also generate uncertainty alongside personal growth. Similarly, the qualitative findings revealed that sociocultural

wellbeing involved more than simply being socially active or surrounded by peers and community. Ollie described feeling “quite isolating” when he was unable to be fully open with friends, while Tingting reflected that even while attending a large university, she could feel “disconnected from the broader student body.” These accounts suggest that intellectual and sociocultural wellbeing cannot be reduced to surface indicators such as academic engagement or social participation alone. Rather, students’ reflections revealed how both dimensions were shaped by deeper experiences of emotional safety, authenticity, self-understanding, and meaningful connection within the broader college environment.

Environmental wellbeing also revealed an important gap between valuing restorative environments and actually being able to access them within everyday college life. Although students often described outdoor spaces as calming or grounding, the qualitative findings showed how safety concerns, academic pressure, limited time, and institutional routines shaped students’ ability to engage with these environments. For instance, Cici explained that she did “not feel safe when spending time outdoors, especially going off-campus alone,” while Gigi reflected, “I still feel a disconnect from nature because I spend so much of my time indoors at a desk and on a computer.” While the survey findings characterized environmental wellbeing through students’ reported connection to nature and restorative environments, the qualitative findings revealed how difficult it could be for students to meaningfully access those experiences within the realities of college life.

Financial wellbeing presented another important area of complexity. Although the quantitative analyses identified meaningful differences across income groups, students’ reflections suggested that financial wellbeing was shaped by far more than household income alone. Students frequently described financial wellbeing through feelings of stability, security,

support, stress, and uncertainty surrounding their everyday circumstances. For example, Alicia, a lower-income student, described feeling relatively secure because scholarships covered much of her educational expenses, illustrating how institutional resources could alleviate financial strain despite limited economic background. In contrast, Jenny explained that although her father helped pay tuition, she still “often [feels] guilty about it,” while April admitted that stress sometimes led her to become “impulsive with money.” Across these accounts, students from differing income backgrounds described similar concerns surrounding control, dependence, pressure, and future stability. While the survey findings demonstrated clear associations between financial wellbeing and socioeconomic status, the qualitative findings revealed how students’ financial experiences were also shaped by institutional support systems, emotional coping, family dynamics, and perceptions of security within uncertain conditions.

In summary, the integrated findings demonstrate that a comprehensive understanding of holistic wellbeing required both quantitative and qualitative approaches. The quantitative findings provided strong evidence that wellbeing could be measured as a multidimensional construct with meaningful associations with student outcomes, revealing broader patterns and group differences across the sample. The qualitative findings added depth to these patterns by illustrating how students experienced, interpreted, and navigated wellbeing within the realities of everyday college life, including shifting academic pressures, relationships, institutional constraints, and personal circumstances. Through the integration of both strands, holistic wellbeing emerged as a dynamic and relational phenomenon in which distinct dimensions could be measured quantitatively while also being continuously shaped through embodied experiences, emotional coping, social context, and institutional conditions. The qualitative findings further highlighted how yoga and contemplative practices offered students practical ways to regulate

stress, reconnect with themselves, cultivate reflection, and navigate challenges across multiple dimensions of wellbeing. The mixed-methods design therefore provided a more comprehensive understanding of holistic wellbeing in higher education while also highlighting the potential value of contemplative and wellness-oriented approaches for supporting student wellbeing within college environments.

CHAPTER FIVE

DISCUSSION AND IMPLICATIONS

This chapter discusses the major findings of this mixed-methods study and situates them within broader conversations around student wellbeing, measurement, contemplative education, and curricular wellness integration in higher education. The purpose of this study was to examine holistic wellbeing among college students through two connected strands of inquiry: the development and validation of the How Are You (HAY) Survey and the qualitative analysis of students' experiences in a yoga-based general education seminar. These components provided both measurement-based and experiential insight into how students conceptualize, navigate, and cultivate wellbeing within higher education.

This chapter is organized around three major tasks. First, it provides a concise summary of the study's central findings across the quantitative, qualitative, and mixed-methods strands. Second, it places these findings in conversation with scholarship on wellbeing measurement, student wellbeing, contemplative education, yoga and mindfulness, and curricular wellness interventions. And third, it discusses implications for institutional policy, pedagogy, research, measurement, and theory. Overall, the findings position holistic wellbeing as a central educational concern shaped by the structures, cultures, and learning environments of higher education.

Summary of Findings

Psychometric Analyses of the HAY Survey

The psychometric findings provided strong support for conceptualizing holistic wellbeing as a multidimensional construct composed of eight interconnected yet distinguishable dimensions: physical, psychological, spiritual, intellectual, financial, occupational, sociocultural,

and environmental wellbeing. Beginning with an initial 40-item instrument, the exploratory and confirmatory factor analyses refined the HAY Survey into a 35-item model demonstrating strong reliability, structural validity, and overall cross-group functioning. Across the confirmatory analyses, the unidimensional model demonstrated poor fit, while the eight-factor model demonstrated substantially stronger fit, supporting the argument that student wellbeing cannot be adequately represented through a single generalized construct. Additional bifactor and hierarchical models further suggested the presence of an overarching holistic wellbeing construct connecting the dimensions while still preserving meaningful variation across specific areas of wellbeing.

The invariance analyses also demonstrated that the full survey functioned comparably across gender, race/ethnicity, and first-generation status, with psychological, spiritual, occupational, and sociocultural wellbeing demonstrating especially strong evidence of invariance and physical, intellectual, financial, and environmental wellbeing demonstrating partial invariance. These findings suggest that while the overall construct of holistic wellbeing appears broadly comparable across groups, certain dimensions may be interpreted or experienced differently depending on students' social identities and backgrounds. Future research should continue examining these areas of partial invariance and explore whether additional or revised items are needed to more fully capture the diverse ways wellbeing is understood across student populations. Overall, these findings supported the broader structural validity of the HAY Survey while also reinforcing the idea that wellbeing is shaped through social, cultural, and institutional context.

Beyond the psychometric findings, the quantitative analyses also revealed meaningful patterns across wellbeing dimensions and student outcomes. Physical, psychological,

occupational, financial, and sociocultural wellbeing demonstrated some of the strongest associations with GPA, belonging, persistence, and satisfaction, reinforcing the interconnected relationship between wellbeing and student success. Composite mean scores further suggested that students experienced comparatively lower levels of physical, psychological, and occupational wellbeing. Group difference analyses revealed disparities in wellbeing across first-generation students, LGBTQ+ students, and students with health conditions, reporting lower wellbeing across several dimensions. Although some racial and ethnic differences also emerged, these patterns varied across dimensions and warrant further exploration in larger and more diverse samples. These findings suggest that wellbeing operates as both a multidimensional and socially patterned phenomenon closely tied to students' broader educational experiences.

Journal Reflections and Interviews

At the same time, the qualitative findings demonstrated that students richly described wellbeing through broader experiences related to meaning, identity, fulfillment, embodiment, spirituality, intellectual growth, and environmental connection. Although spiritual, intellectual, occupational, and environmental wellbeing demonstrated fewer direct relationships with the selected institutional outcomes in the quantitative analyses, students still described these dimensions as meaningful aspects of how they understood and evaluated their lives. These findings suggest that narrower wellbeing frameworks may capture dimensions most predictive of institutional outcomes while still overlooking important aspects of students' broader lived experiences.

Additional qualitative findings from the yoga-based seminar suggested that contemplative and embodied educational experiences may support forms of learning and self-awareness that are often pushed to the periphery of higher education or left for students to

navigate on their own outside the academic mission. The seminar also attracted students from a wide range of racial, cultural, academic, and personal backgrounds, many of whom entered the course with little or no prior experience with yoga or contemplative practice. Across journals and interviews, students described carrying practices from the course into their daily lives through changes in stress management, reflection, rest, and self-care. Many also reported becoming more aware of their habits, emotional responses, bodily sensations, and relationships to productivity, often describing a greater ability to pause and respond to challenges more intentionally. Others reflected on broader moments of personal transformation, including shifts in perspective, increased self-compassion, and reevaluations of what wellbeing meant within the context of college life.

Importantly, the seminar functioned as a contemplative educational space that connected academic learning with embodied and practical applications, fostering greater self-awareness, intentional reflection, and personal transformation. Across the findings, students frequently described becoming more aware of their habits, stress patterns, relationships, emotions, and relationship to productivity while also learning practical strategies for regulating their wellbeing within everyday college life. Many students expressed a desire for structured opportunities to slow down, reflect, and reconnect with themselves, yet also described how the pace and pressures of higher education often made these practices difficult to sustain independently. By embedding yoga, mindfulness, reflection, and contemplative practice directly into a credit-bearing course, the seminar appeared to make these experiences more accessible, consistent, and integrated within students' routines. In doing so, the course blurred the boundary between academic learning and wellbeing development, positioning contemplative practice as part of the educational experience itself rather than something existing outside of it.

Connecting Findings to Prior Literature

The Measurement Landscape of Student Health, Wellness, and Wellbeing

The findings of this study expanded how student wellbeing can be understood and measured within higher education. Earlier chapters argued that major surveys such as the Healthy Minds Study (HMS) and National College Health Assessment (NCHA) primarily reflect a hedonic orientation toward wellbeing by emphasizing emotional distress, mental health symptoms, behavioral risk factors, and help-seeking patterns (Diener, 1984; Ryan & Deci, 2001; Ryff, 1989). My earlier item-level analysis further suggested that these surveys devote comparatively less attention to eudaimonic and evaluative dimensions of wellbeing, including meaning, purpose, reflection, embodiment, spirituality, and broader judgments about whether students feel fulfilled or aligned with their values (Deci & Ryan, 2008; Huta & Waterman, 2014; VanderWeele et al., 2020). In response to these gaps, the HAY Survey was designed to capture not only symptoms or distress, but also students' perceptions, evaluations, habits, and lived experiences across multiple dimensions of wellbeing. This broader framing was reinforced in the qualitative findings, as students frequently described wellbeing through self-awareness, relationships, identity, balance, embodiment, and personal growth within the context of college life. Collectively, these findings support scholarship that conceptualizes wellbeing as relational, developmental, and contextually shaped rather than solely defined by emotional states or symptom reduction (Christopher & Hickinbottom, 2008; Ryan & Deci, 2001; Ryff et al., 2021).

Next, the quantitative findings suggested that while the HAY Survey expanded the philosophical scope of wellbeing measurement, it still reinforced the importance of several dimensions already emphasized within national surveys such as HMS and NCHA. Across the regression analyses, physical, psychological, financial, and sociocultural wellbeing were the

dimensions most consistently associated with GPA, belonging, satisfaction, and persistence. Notably, HMS and NCHA already devote substantial attention to physical health, psychological distress, social connection, and financial challenges (ACHA, 2024; HMN, 2024). In this sense, although earlier critiques in this dissertation highlighted the narrower hedonic and symptom-oriented framing of these surveys, the present findings also reinforced that they are capturing several dimensions of wellbeing that appear especially relevant to conventional indicators of student functioning and success within higher education. The contribution of the HAY Survey, therefore, was not simply to reject existing approaches, but to broaden the conceptual scope of wellbeing measurement while still recognizing the importance of the dimensions most strongly tied to institutional outcomes. Additionally, physical, psychological, financial, and sociocultural dimensions were significantly associated with spiritual, intellectual, occupational, and environmental wellbeing, suggesting that the dimensions most predictive of student success do not operate in isolation but are embedded within a broader, interconnected system of wellbeing.

The psychometric findings of this study also contributed to a crowded measurement landscape in which health, wellness, flourishing, quality of life, and wellbeing are often measured through overlapping constructs. Prior reviews have noted persistent fragmentation in wellbeing measurement, including inconsistent definitions, uneven dimensional coverage, and limited attention to student populations (Cooke et al., 2016; Dodd et al., 2021; Kauppi et al., 2023; Zhang et al., 2024). More recently, Swarbrick et al.'s (2024) Wellness Inventory represented an important contribution because it drew from an eight-dimensional wellness framework and demonstrated evidence of internal consistency, test-retest reliability, convergent validity, and discriminant validity. However, despite being theoretically organized around eight dimensions, the final psychometric solution supported a single 54-item wellness factor, meaning

the items ultimately functioned as indicators of one broad wellness construct as opposed to separating into distinct dimensions. This raises an important measurement tension: if wellness is theorized across multiple areas of life but ultimately functions as one general factor, the measure may be useful for capturing overall wellness while offering less clarity about how specific dimensions differ, interact, or relate to student experiences and outcomes.

A similar pattern can be observed in the Perceived Wellness Survey (PWS), one of the most widely cited wellness measures in the literature (Adams et al., 1997). Although the PWS was theoretically organized around six dimensions of wellness, including physical, spiritual, intellectual, psychological, social, and emotional wellness, the authors ultimately concluded that the instrument functioned as a largely unidimensional measure of perceived wellness and did not examine measurement invariance across demographic groups. Likewise, Swarbrick et al.'s (2024) Wellness Inventory was developed from an eight-dimensional wellness framework but ultimately supported a single 54-item wellness factor. In contrast, the HAY Survey supported an eight-factor model of holistic wellbeing, demonstrated poor fit for a unidimensional structure, and showed measurement invariance across gender, race/ethnicity, and first-generation status. Furthermore, the survey was developed and tested within a racially and socioeconomically diverse college student sample that included a high proportion of students of color, lower-income students, and first-generation students, groups that often receive less attention within wellbeing measurement research (Cooke et al., 2016; Dodd et al., 2021; HMS, 2024; NCHA, 2024).

These findings provide support for a multidimensional understanding of holistic wellbeing. Although the dimensions were significantly related, they remained empirically distinguishable and demonstrated different relationships with student outcomes. This distinction is important because it allows researchers and practitioners to identify specific areas of strength

and challenge while still recognizing wellbeing as a holistic and interconnected phenomenon. In this sense, the HAY Survey contributes a more multidimensional, equity-attentive, and student-centered approach to understanding how wellbeing is experienced and measured within higher education.

Student Wellbeing, Institutional Pressures, and Educational Outcomes

The findings of this study reinforced broader national concerns regarding college student wellbeing while also providing a more multidimensional understanding of how these challenges are experienced within higher education. Across the composite wellbeing scores, students generally reported lower levels of physical, psychological, and occupational wellbeing, reflecting broader concerns about stress, burnout, exhaustion, and uncertainty surrounding academic and future-oriented pressures documented throughout the literature (ACHA, 2024; HMN, 2024; Kodish et al., 2022; Lipson et al., 2022). These findings align with scholarship describing college students as navigating overlapping pressures related to mental health, sedentary lifestyles, financial strain, and uncertainty about life after graduation (Archuleta et al., 2013; Castleman & Meyer, 2019; Castro et al., 2020; Schriver & Teske, 2020). Meanwhile, sociocultural wellbeing scores were comparatively stronger, suggesting that many students still experienced meaningful forms of connection, support, and belonging despite broader institutional and personal stressors. This finding may reflect the sustained attention higher education scholars and practitioners have devoted to belonging, engagement, and student integration as critical predictors of persistence and student success (Astin, 1984; Strayhorn, 2018; Tinto, 1993). Overall, these findings suggest that while colleges and universities have made important progress in cultivating community and connection, many students continue to experience strain across several core dimensions of holistic wellbeing.

The regression analyses further clarified which dimensions of wellbeing were most closely associated with institutional outcomes. Physical, psychological, financial, and sociocultural wellbeing emerged as the dimensions most consistently associated with GPA, belonging, persistence, and satisfaction. Physical wellbeing was more closely tied to academic functioning and performance, reinforcing literature connecting sleep, stress management, movement, and health behaviors to student achievement and cognitive functioning (Castro et al., 2020; Gothe et al., 2019). Financial wellbeing was also associated with several institutional outcomes, aligning with research showing that financial stress, debt, and economic instability can negatively shape persistence, academic engagement, and overall student wellbeing (Archuleta et al., 2013; Castleman & Meyer, 2019; Moore et al., 2021). On the other hand, sociocultural wellbeing demonstrated particularly strong relationships with belonging and satisfaction, reinforcing longstanding scholarship emphasizing the importance of social integration, support networks, and campus belonging for student persistence and success (Astin, 1984; Strayhorn, 2018; Tinto, 1993). These findings reinforce that many of the dimensions emphasized within national surveys such as HMS and NCHA capture aspects of wellbeing that are meaningfully connected to educational outcomes and student success within higher education.

The subgroup analyses similarly reflected patterns documented throughout the broader student wellbeing literature. First-generation students, LGBQ+ students, and students with disabilities generally reported heightened challenges across multiple wellbeing dimensions, aligning with prior studies documenting persistent inequities in student mental health, stress, and access to support services (Abelson et al., 2022; Backhaus et al., 2021; Dong et al., 2020; Lipson et al., 2018; Lipson et al., 2023). Some racial and ethnic differences also emerged, particularly

among Hispanic students across select wellbeing dimensions, although these patterns were less pronounced than those reported in larger national datasets. These findings may reflect sample size limitations as well as the complexity of wellbeing experiences across different student populations.

Given the demographic composition of the sample, which was composed primarily of Asian and Hispanic/Latino/a/x/e students, and the relatively small subgroup sizes for several other racial/ethnic populations, these findings should be interpreted cautiously and should not be assumed to reflect the experiences of all student groups. Nevertheless, the results continue to support broader scholarship showing that structural inequities, financial strain, campus climate, and unequal access to support systems remain important contextual factors shaping student wellbeing (Koo et al., 2021; Tausen et al., 2023). Rather than drawing definitive conclusions about all demographic groups, the present findings are best understood as identifying patterns that are consistent with prior research and warrant further investigation across more diverse institutional contexts and student populations. Together, these findings reinforce the importance of developing wellbeing frameworks and institutional supports that are responsive to the lived realities of historically underserved students.

Contemplative Education, Yoga, and Curricular Wellness Integration

The qualitative findings from the yoga-based seminar also reinforced a growing body of research demonstrating the benefits of yoga, mindfulness, and contemplative practices for college student wellbeing. Students frequently described reductions in stress, greater emotional awareness, improved self-regulation, and a growing ability to pause and respond to challenges more intentionally, aligning with prior studies showing that yoga and mindfulness practices can reduce anxiety, distress, rumination, and psychological strain among college students (Bamber &

Morpeth, 2019; Bamber & Schneider, 2016; Castellote-Caballero et al., 2024; Dai et al., 2023; Elstad et al., 2020; Kanojia & Bhadane, 2018; Nemeroff et al., 2022). Many students also described becoming more aware of their habits, internal dialogue, breathing, bodily sensations, and relationship to productivity, reinforcing literature suggesting that contemplative and embodied practices can strengthen mindfulness, coping, self-awareness, and emotional regulation (Kabat-Zinn, 2003; Lemay et al., 2019; Shapiro et al., 2011). Beyond psychological wellbeing, students often described feeling more focused, grounded, and mentally present in their academic lives, which parallels emerging research linking yoga and mindfulness practices to cognitive functioning, attention, executive functioning, and academic engagement (Gothe et al., 2019; Kumawat & Metri, 2025; Tripathi et al., 2025). Put together findings support broader evidence that yoga and mindfulness represent accessible, scalable, and non-stigmatizing approaches for supporting holistic student wellbeing within higher education contexts.

Importantly, the seminar functioned less as a clinical or treatment-oriented intervention and more as a preventative and developmental space in which students could cultivate habits related to resilience, reflection, embodiment, and self-regulation before reaching points of crisis. This distinction mirrors broader arguments within contemplative and higher education scholarship that wellbeing should be approached proactively through educational environments rather than exclusively through reactive mental health treatment models (Johnson et al., 2019; Keeling, 2014; Zhao et al., 2025). Students frequently described using breathing exercises, movement practices, journaling, mindfulness, and reflection strategies outside of class to manage stress, regulate emotions, navigate interpersonal tensions, and create healthier routines within their daily lives. These findings align with prior research suggesting that contemplative and yoga-based practices can provide students with transferable lifelong skills for coping, resilience,

and self-awareness (Bailey et al., 2022a; Barbezat & Bush, 2014; Zajonc, 2013). At the same time, because this study focused on students' experiences during a single academic quarter, additional longitudinal research is needed to better understand whether these perceived benefits remain sustained beyond course completion and whether such practices shape students' long-term wellbeing trajectories over time.

The findings also carry broader implications for curricular wellness integration within higher education. Unlike many campus wellness initiatives that operate as optional workshops, extracurricular programs, or short-term interventions, this seminar fulfilled general education requirements while consistently engaging students in movement, mindfulness, reflection, and discussion throughout the academic quarter. This distinction is important because prior research suggests that institutional and curricular requirements remain among the strongest policy mechanisms for increasing student engagement with health-promoting behaviors (Bailey et al., 2022a, 2022b; Cardinal et al., 2012; Woodall et al., 2025). Studies have shown that students attending institutions with physical education or wellness requirements demonstrate higher odds of meeting recommended physical activity guidelines and may retain healthier behaviors years after graduation (Bailey et al., 2022b; Pearman et al., 1997). Although the present course was not formally a physical education class, students nevertheless engaged in consistent physical activity alongside mindfulness and reflective practices, reinforcing broader literature linking movement to improved cognitive functioning, mental health, emotional regulation, and academic performance (Gothe et al., 2019; Mandolesi et al., 2018; Wanjau et al., 2023). The present findings similarly suggested meaningful relationships between physical wellbeing, psychological wellbeing, and academic outcomes, supporting the argument that wellbeing-oriented curricular experiences may contribute to students' broader educational functioning.

The seminar also offered insight into how curricular integration may help address longstanding barriers related to access, stigma, and engagement with wellbeing resources. Prior research has shown that historically underserved students, including first-generation students, students of color, LGBTQ+ students, and lower-income students, often experience elevated wellbeing challenges while simultaneously utilizing campus mental health services at lower rates than their peers (Abelson et al., 2022; Lipson et al., 2018; Lipson et al., 2023; Sontag-Padilla et al., 2016). Because this seminar was embedded within the curriculum and fulfilled degree requirements, students encountered wellbeing practices within a familiar academic setting rather than through separate clinical or extracurricular systems that may carry additional barriers or stigma. The qualitative findings suggested that students from a wide range of racial, socioeconomic, and academic backgrounds were willing to engage deeply with contemplative practices when these opportunities were normalized within coursework. These findings parallel Johnston et al.'s (2026) conclusion that structured, credit-bearing mindfulness and wellbeing courses often produce stronger and more sustained outcomes than self-guided applications, workshops, or optional campus programming, even though such courses may require greater institutional investment and coordination. Viewed alongside broader literature on contemplative education and curricular wellness integration (Baik et al., 2019; Conley et al., 2013; Long et al., 2021; Zhao et al., 2025), the present study suggests that embedding wellbeing into the curriculum may represent one promising pathway for making holistic wellbeing support more equitable, accessible, and institutionally integrated within higher education.

Implications of the Study

Institutional and Policy Implications

The findings of this study suggest that student wellbeing is deeply woven into the everyday structure of higher education. Across both the quantitative and qualitative findings, wellbeing was closely connected to students' schedules, workloads, finances, relationships, physical habits, and sense of belonging. Students carried these experiences into their classrooms, shaping how they focused, participated, connected with others, and persisted through challenges. Viewed collectively, the findings position wellbeing as an educational and institutional concern intertwined with the conditions through which students experience college life itself. This perspective carries important implications because institutional responses to student distress have largely concentrated on downstream supports such as counseling services, crisis intervention, and individualized treatment models (ACHA, 2024; HMN, 2024; Lipson et al., 2022). While these services remain essential, the present findings suggest that institutions are already shaping student wellbeing through academic structures, expectations, and campus culture long before distress escalates into a clinical concern.

Several dimensions identified in this study, particularly physical, psychological, occupational, financial, and sociocultural wellbeing, demonstrated meaningful relationships with academic performance, belonging, persistence, and satisfaction. These patterns place wellbeing within the broader infrastructure of student success. Lower composite scores across physical, psychological, and occupational wellbeing mirror national concerns surrounding stress, burnout, sleep disruption, uncertainty, and mental health challenges among college students (Abelson et al., 2022; HMN, 2024; Lipson et al., 2022). Although these patterns are consistent with national trends, they may also reflect characteristics of the institutional context in which the study was

conducted. Financial wellbeing also emerged as closely tied to students' academic and emotional experiences. For many students, financial strain extended far beyond tuition or budgeting concerns; it shaped stress levels, time use, belonging, and long-term stability. These findings suggest that financial literacy initiatives, emergency aid, basic needs programs, and wellbeing supports may be most effective when treated as interconnected components of student support systems, particularly for first-generation and lower-income students (Adams et al., 2016; Castleman & Meyer, 2019; Moore et al., 2021).

The findings also suggest that responsibility for student wellbeing cannot rest solely within counseling centers or health promotion offices. Because wellbeing was associated with academic experiences, financial circumstances, social belonging, and daily routines, supporting student wellbeing requires a coordinated, campus-wide approach. Senior administrators, academic affairs leaders, student affairs professionals, faculty, advisors, residential life staff, and health and wellness personnel each shape aspects of the student experience that influence wellbeing. For example, institutional leaders determine priorities and resource allocation, faculty influence course design and workload expectations, advisors and student affairs professionals facilitate belonging and connection, and health promotion staff provide education and support services. Viewed through this lens, wellbeing becomes a shared institutional responsibility rather than the sole responsibility of individual students or specialized support units.

The findings also point toward the importance of expanding structural access to wellbeing practices through the curriculum itself. Physical education and wellness requirements once occupied a central place within higher education, yet these requirements have steadily declined despite continued evidence linking movement and wellness education to long-term health behaviors and wellbeing (Bailey et al., 2022a, 2022b; Cardinal et al., 2012; Pearman et al.,

1997; Watkins et al., 2011; Woodall et al., 2025). The yoga-based seminar examined in this study offered one example of how wellbeing practices can become integrated into academic life through coursework and shared educational experiences. Students encountered movement, reflection, mindfulness, and contemplative practices consistently across the academic quarter, including many who may never have independently sought out wellness programming or counseling services. These findings suggest opportunities for institutions to expand credit-bearing wellness, mindfulness, contemplative, or movement-based courses across general education pathways, first-year seminars, residential education programs, transfer transition initiatives, and other high-impact educational spaces. More broadly, the findings invite higher education institutions to reconsider the role wellbeing occupies within college life, shifting it from the margins of extracurricular programming toward a more intentional and integrated component of the educational experience.

Pedagogical and Curricular Implications

At the pedagogical level, the findings suggest that wellbeing can become part of how learning environments are structured and experienced within higher education. In the yoga-based seminar, students engaged repeatedly with breathing, movement, reflection, and contemplative awareness across the academic quarter. Over time, many students described becoming more attentive to their stress patterns, internal dialogue, physical tension, emotional responses, and habits surrounding productivity and rest. Students also connected these practices to their ability to focus during class, recover from setbacks, remain present during stressful periods, and navigate academic demands with greater intentionality. These experiences align with contemplative education scholarship emphasizing that reflection, embodiment, and awareness can strengthen both personal development and academic engagement (Barbezat & Bush, 2014;

Zajonc, 2013). One implication emerging from these findings is that educators may benefit from viewing wellbeing practices as part of the broader learning process itself, particularly in an era where many students enter classrooms already carrying significant stress, fatigue, uncertainty, and emotional strain.

The implications extend well beyond yoga-based courses alone. Across disciplines, educators can incorporate small but intentional practices that support attention, reflection, self-awareness, and emotional regulation within classroom settings. Examples may include brief grounding or breathing exercises before exams or discussions, reflective writing activities connecting course material to lived experience, structured pauses during long lectures, opportunities for metacognitive reflection, or assignments encouraging students to examine how learning intersects with wellbeing, identity, or daily habits. The findings from this study suggest that these practices can help cultivate classroom environments where students feel more focused, regulated, and engaged in the learning process. Existing research similarly demonstrates that yoga, mindfulness, and contemplative practices can strengthen attention, executive functioning, emotional regulation, and psychological wellbeing among students (Bamber & Morpeth, 2019; Gothe et al., 2019; Kumawat & Metri, 2025; Mandolesi et al., 2018; Shapiro et al., 2011). Taken collectively, this body of evidence points toward a broader pedagogical shift in which wellbeing practices support the underlying conditions through which learning, participation, and persistence is nurtured.

While colleges and universities play an important role in shaping the conditions that support wellbeing, students themselves remain active participants in the process. Many students in this study described learning skills that required intentional practice, including breath regulation, self-reflection, mindfulness, stress management, and awareness of personal habits.

These findings suggest that wellbeing should not be assumed to emerge automatically from access to resources alone. Just as institutions cannot assume students will independently seek counseling, attend wellness programs, exercise regularly, or develop effective coping strategies on their own, they also cannot assume that students arrive with the knowledge and skills necessary to cultivate wellbeing. Educational experiences may therefore serve an important role not only in supporting wellbeing, but also in teaching students how to practice, sustain, and take ownership of their wellbeing throughout college and beyond. From this perspective, wellbeing becomes a shared responsibility between students and institutions, with colleges providing the opportunities, resources, and learning environments that help students develop the knowledge, skills, and habits needed to support their own wellbeing.

The findings also raise broader questions about what higher education recognizes as legitimate forms of learning and development. Universities have historically privileged cognitive and intellectual labor while giving far less attention to embodiment, emotional regulation, attention, and self-awareness within academic spaces. Yet students in this study frequently described how learning to regulate their breathing, energy, stress, and attention directly shaped their academic engagement and overall functioning within college life. These patterns suggest that cognition and embodiment operate far more closely together than traditional academic structures often acknowledge. From this perspective, contemplative and wellbeing-oriented practices function less as peripheral “extras” and more as foundational supports that shape students’ capacity to learn, connect, persist, and participate fully within higher education environments.

Measurement and Research Implications

The findings of this study suggest that student wellbeing is multidimensional, context-dependent, and only partially captured through survey measurement alone. National surveys such as the Healthy Minds Study (HMS) and National College Health Assessment (NCHA) continue to play an essential role in documenting student mental health, health behaviors, and service utilization (ACHA, 2024; HMN, 2024). The present findings largely reinforced the importance of many dimensions already emphasized within these surveys, particularly physical, psychological, and social wellbeing, which showed strong relationships with GPA, belonging, persistence, and satisfaction. Furthermore, the findings suggest that existing approaches to measurement may benefit from giving greater attention to eudaimonic and evaluative dimensions of wellbeing, including meaning, purpose, self-reflection, identity, fulfillment, and students' broader judgments about whether their lives feel balanced or aligned with their values (Deci & Ryan, 2008; Huta & Waterman, 2014; Ryff, 1989; VanderWeele et al., 2020).

The study further suggests that wellbeing operates through related yet distinguishable dimensions rather than as one generalized condition. Unlike prior wellness measurement research that ultimately supported a broad unidimensional wellness factor (Swarbrick et al., 2024), the HAY Survey findings supported a multidimensional structure in which different dimensions related to student outcomes in different ways. This distinction matters because a single overall wellbeing score may conceal important differences in how students experience academic life, navigate institutional pressures, and engage with their environments. Another consideration is that measurement invariance testing identified several instances of partial invariance between first-generation and continuing-generation students, suggesting that some wellbeing items and dimensions may carry different meanings or levels of salience for different

student populations. These findings highlight the importance of continued survey refinement and future research examining how wellbeing is conceptualized across diverse groups. Future measurement development efforts may benefit from incorporating more culturally responsive and contextually grounded approaches to ensure that wellbeing measures accurately capture the experiences of all students.

The findings also highlight the limitations of relying on surveys alone to understand student wellbeing. While quantitative analyses identified broader patterns, the qualitative findings revealed how students interpreted wellbeing through their relationships, identities, values, habits, and lived experiences within higher education. Students often described wellbeing less as a stable condition and more as an ongoing process of trying to maintain balance, manage competing demands, and remain connected to themselves and others. Future wellbeing research would therefore benefit from combining multidimensional survey approaches with qualitative and mixed-methods designs capable of capturing the lived experiences, interpretations, and contextual realities that numerical scores alone cannot fully explain.

This study also highlights the emerging potential of AI-assisted qualitative analysis in educational research. While tools like AILYZE cannot replace the interpretive role of the researcher, they may offer valuable support in organizing large datasets, identifying preliminary patterns, and facilitating iterative cycles of coding and thematic development. In the present study, using AI enabled multiple rounds of thematic exploration across journal reflections and interview transcripts, allowing for the comparison of alternative coding structures and thematic interpretations that would have been substantially more time-intensive using traditional approaches alone. More importantly, meaningful interpretation remained dependent upon my own judgment, theoretical knowledge, and familiarity with the educational context. As AI-

assisted analytic tools continue to evolve, future researchers may increasingly integrate them into qualitative and mixed-methods studies. Doing so will require continued attention to transparency, reflexivity, and the ways human and artificial forms of analysis can complement one another to generate deeper insights into complex educational phenomena.

Theoretical Implications

At the theoretical level, this study conceptualizes wellbeing as hierarchical (Maslow, 1943), self-determined (Deci & Ryan, 2000; Ryan & Deci, 2001), dynamic, and multidimensional (Norozi, 2023; Swarbrick, 2006, 2012). Drawing from Maslow's hierarchy of needs, the framework proposed in this dissertation positions physical, psychological, and spiritual wellbeing as foundational conditions that shape one's broader capacity to pursue growth, engagement, connection, and development across other areas of life. Across the study, students experiencing exhaustion, emotional distress, chronic stress, or lack of meaning often described difficulty concentrating, sustaining relationships, managing responsibilities, or envisioning future goals. From this perspective, wellbeing operates developmentally, where foundational forms of internal wellbeing create the conditions through which other dimensions of wellbeing can be more fully cultivated and sustained.

The framework also draws from self-determination theory's emphasis on autonomy, competence, and relatedness as core psychological needs shaping wellbeing (Deci & Ryan, 2000; Ryan & Deci, 2001). Within Yang's Relational Model of Holistic Wellbeing, these principles provide the conceptual logic for organizing the eight dimensions into three broader domains: autonomy aligns most closely with physical, psychological, and spiritual wellbeing; competence aligns with intellectual, financial, and occupational wellbeing; and relatedness aligns with sociocultural and environmental wellbeing. This structure was further supported through the

higher-order confirmatory factor analyses, including the third-order model, which demonstrated strong overall model fit despite minimal differences across competing multidimensional models. This carries important theoretical implications because it offers a more accessible and institutionally relevant framework for understanding how multiple dimensions of wellbeing may operate within higher education contexts.

Moreover, Yang's Relational Model of Holistic Wellbeing reflects many of the major infrastructures already embedded within colleges and universities. The internal domain aligns closely with student health and wellness systems concerned with physical health, mental health, counseling, recreation, and spiritual wellbeing. The liminal domain maps onto areas traditionally associated with student development, including intellectual growth, financial navigation, academic support, leadership development, and career preparation. The external domain connects to student engagement efforts focused on belonging, sociocultural connection, campus climate, community-building, and environmental sustainability initiatives. Viewed together, these domains offer a framework that bridges institutional areas that are often separated administratively even though students experience them simultaneously in everyday college life.

This framework also extends longstanding higher education theories emphasizing involvement (Astin, 1984), student development (Chickering & Reisser, 1993), belonging (Strayhorn, 2018), and institutional integration and persistence (Tinto, 1993). Collectively, these foundational theories demonstrate that learning, development, identity formation, and persistence emerge through students' interactions with institutional environments, relationships, and opportunities for engagement. Yet wellbeing itself has often remained secondary within these conversations, treated as adjacent to student success instead of foundational to it. Yang's Relational Model of Holistic Wellbeing advances these traditions by positioning wellbeing as a

central developmental process through which students are able to learn, participate, persist, build relationships, and contribute meaningfully within society. At a time when higher education faces rising concerns related to mental health, burnout, disengagement, loneliness, and uncertainty, this framework offers a more integrated approach for understanding how colleges and universities can support student wellbeing not only as learners, but as developing human beings navigating increasingly complex social, economic, and institutional realities.

Directions for Future Research

This study establishes an initial foundation for understanding and measuring holistic wellbeing among college students while also pointing toward several important directions for future research. Future studies should continue validating the HAY Survey across different institutional settings, geographic regions, and student populations. Because the present study was conducted within a single university context, additional longitudinal and multi-institutional research is needed to examine the stability, generalizability, and sensitivity of the survey over time and across diverse educational environments.

Although the sample was composed primarily of students of color, this representation was driven largely by Asian and Hispanic/Latino/a/x/e students. Several racial groups, particularly Black, American Indian or Alaska Native, Native Hawaiian or Pacific Islander, and Middle Eastern or North African students, remained underrepresented. In addition, a substantial proportion of Black participants identified with multiple racial identities and were classified within the multiracial category for analytic purposes, highlighting the complexity of measuring race/ethnicity through mutually exclusive categories. These patterns underscore the importance of being transparent about broad aggregate "students of color" classifications. Future research should therefore continue prioritizing historically underserved and underrepresented student

populations while also refining survey language and measurement approaches to improve cultural responsiveness across groups. The partial invariance findings in this study further suggest that certain wellbeing items may function or be interpreted differently across populations, highlighting the importance of continued psychometric refinement and subgroup validation in future research.

Second, future research should further investigate the effects of yoga, mindfulness, contemplative education, and wellness-oriented curricular interventions through longitudinal, comparative, and experimental designs. Although students in this study described meaningful changes related to stress management, self-awareness, emotional regulation, and academic engagement, additional research is needed to determine how long these effects persist and which types of interventions are most effective across different populations and institutional contexts. Much of the existing literature focuses on clinical interventions, extracurricular programming, or short-term wellness initiatives, while comparatively little research examines contemplative and wellbeing practices embedded directly within academic coursework, particularly within required or general education curricula. Future studies should therefore examine how required wellness-oriented courses influence students' wellbeing, health behaviors, coping strategies, and educational experiences over time, especially among students who may be less likely to independently seek out counseling or wellness programming.

Third, there is a strong need for comparative institutional research examining wellness and physical activity requirements across higher education. Despite growing evidence supporting the benefits of movement, mindfulness, and wellness education, relatively little research has systematically compared institutions with and without such requirements. Future work could examine how policy structures, curricular models, institutional investment, and delivery formats

shape student wellbeing, academic performance, persistence, and mental health outcomes. Developing a comprehensive typology of wellness and physical activity requirements across colleges and universities may also help identify which curricular policies are most effective, scalable, and equitable for diverse student populations. Such work could provide important guidance for institutions seeking structural approaches to student wellbeing beyond traditional counseling-centered and reactive models.

Finally, future research should continue examining how wellbeing is shaped through intersecting identities and structural conditions. Although the present study identified important differences across groups, particularly among first-generation students, LGBTQ+ students, and students with health conditions, these findings represent only an initial step. Additional qualitative and mixed-methods research is needed to better understand how race/ethnicity, class, gender, disability, sexuality, spirituality, and cultural context shape how students experience, interpret, and pursue wellbeing within higher education. This line of inquiry remains especially important as colleges and universities continue navigating widening equity gaps, mental health concerns, financial instability, and growing student disconnection. Expanding holistic wellbeing research across diverse populations and institutional contexts will remain essential for ensuring that future models of wellbeing remain culturally responsive, developmentally grounded, and attentive to the realities of students' lived experiences in the 21st century.

Conclusion

I began this dissertation with a personal reflection on my own experience navigating higher education, one marked by achievement but also by disconnection, stress, and a quiet sense that something essential was missing. Through yoga, I began to understand that absence more clearly. What I had been searching for was deeper than success or stability. I was searching for

alignment: a way of being in my body, my mind, and my life that felt grounded, intentional, and whole. Yoga did not erase the pressures of academic life, though it changed the way I moved through them. It offered awareness in moments of overwhelm, steadiness in periods of uncertainty, and compassion in environments that often rewarded exhaustion more than balance. Most importantly, it taught me something higher education had never explicitly taught: how to care for myself while moving through systems that continuously ask for more.

This dissertation emerges from that tension and that possibility. Across the quantitative and qualitative findings, holistic wellbeing emerged as measurable, lived, relational, and deeply intertwined with students' educational experiences. Students enter classrooms carrying stress, identity, grief, hope, financial pressure, relationships, histories, responsibilities, and aspirations. These dimensions shape their ability to learn. When wellbeing is cultivated, students become more capable of engaging fully in their education and in their lives. When wellbeing deteriorates, learning is compromised. The evidence presented throughout this study ultimately points to a simple reality that wellbeing already exists at the center of higher education. The question is whether institutions choose to support it.

This realization opens the door to a broader reimagining of what higher education can become. College represents far more than professional preparation or credential attainment. It is one of the few environments where young adults gather and encounter sustained opportunities for intellectual growth, identity exploration, community building, and personal transformation all at once. Habits are formed there. Values are questioned there. Ways of relating to the self and to others take shape there. For that reason, higher education holds enormous potential to cultivate ways of living alongside ways of knowing. The yoga-based seminar explored in this study offers one example of what this can look like in practice. When students were given structured

opportunities to pause, reflect, breathe, move, and reconnect with themselves and others, they developed skills that extended far beyond the classroom. Students described becoming more aware of how they responded to stress, how they cared for their bodies, how they related to productivity, and how they understood balance within their lives. If implemented more broadly, these educational experiences could contribute to the development of future doctors, teachers, lawyers, and leaders who are better equipped to navigate complexity, sustain their wellbeing, and serve others with greater care and presence.

At its core, this dissertation argues for a more human vision of higher education, one where academic development and holistic wellbeing are understood as deeply interconnected parts of the educational process. Yang's Relational Model of Holistic Wellbeing offers one framework for moving toward that vision by illustrating how wellbeing develops across internal, liminal, and external domains of students' lives. Through this framework, wellbeing becomes woven into student health, student development, and student engagement simultaneously, helping institutions think more holistically about how humans learn to learn, persist, connect, and grow. In many ways, this work asks higher education to remember something it has always claimed to value: the development of whole human beings prepared to participate meaningfully in society.

Yoga taught me how to return to myself. Higher education has the capacity to offer students that same opportunity. In an era marked by high rates of anxiety, burnout, loneliness, uncertainty, and disconnection, this dissertation ultimately returns to a broader institutional question, one that sits beneath every statistic, policy conversation, wellness initiative, and classroom practice explored throughout this study. If wellness challenges persist despite decades of research, growing demand for mental health services, and widespread recognition of the

problem, then the urgency of this question only grows: “What are we doing about the student wellness crisis?”

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APPENDICES

Appendix A

Pilot Study Findings

Table A1

Yang's Holistic Wellbeing Survey: Dimension Definitions and Survey Items Across Pilot Phases

Survey Item	Phase 1	Phase 2	Phase 3
Considering this past month, to what extent do you agree or disagree with each of the following: (1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=somewhat agree, 5=agree, 6=strongly agree)			
<u>Physical Wellbeing - is about one's relationship with their body</u>			
I take very good care of my body (e.g., hydration, hygiene, posture).	X	X	X
I maintain a healthy, balanced diet while limiting ultra-processed foods.	X	X	
I maintain a nourishing, balanced diet that limits ultra-processed foods.			X
I engage in at least two hours of physical activity each week.	X	X	
I engage in diverse physical activities as part of my daily routine or lifestyle.			X
I often feel tired throughout the day or have trouble with sleep.	X	X	
I usually sleep well.			X
Overall, I am satisfied with my physical health and body.	X	X	X
<u>Psychological Wellbeing - is about one's relationship with their mind (i.e., mental and emotional health).</u>			
I often deal with stress by turning to counterproductive patterns (e.g., excessive screen time...).	X		
I feel overwhelmed managing all my stress.		X	
I handle stress using healthy coping methods.			X
I have the tools and resources to maintain happiness and contentment.	X	X	
I maintain a strong sense of happiness and contentment.			X
My thought patterns often lead me to feel anxious or distressed.	X		
I often feel worried or anxious about things outside my control.		X	
I approach my worries with a positive mindset.			X

I use strategies to effectively manage my mental and emotional health.	x	x	x
Overall, I am satisfied with my mental and emotional health.	x	x	x
<u>Spiritual Wellbeing - is about one's relationship with their conscience and sense of meaning and purpose (spirit)</u>			
I lead with non-violence, compassion, and forgiveness in my thoughts, words, and actions.	x		
My inner voice speaks kindly to myself and others.		x	x
I devote time to personal practices or a higher purpose (e.g., meditation, prayer, journaling, spirituality, acts of giving, volunteering).	x		
I devote time to personal or communal practices that help me feel grounded.		x	x
At times, my behaviors conflict with my core values and beliefs.	x		
I sometimes cause harm to others, whether by intention or accident.		x	
My actions align with my values.			x
I prioritize owning up to my mistakes.	x		
I maintain a deep sense of purpose in the way I live my life.		x	x
Overall, I am satisfied with my sense of meaning and purpose.	x	x	x
<u>Intellectual Wellbeing - is about one's relationship with data/information</u>			
I value engaging with viewpoints I disagree with.	x		
I seek to learn from viewpoints that I disagree with.		x	x
I find it challenging to receive constructive feedback.	x		
I find myself avoiding constructive feedback.		x	
I treat constructive feedback as an opportunity for growth.			x
I reserve time to learn new things and stimulate my mind.	x		
I regularly exercise my critical thinking skills (e.g., reading, puzzles, debates).		x	x
I have the skills to communicate my ideas using multiple methods.	x		
I articulate my ideas clearly and effectively.		x	x
Overall, I am satisfied with how I learn and process information.	x	x	x
<u>Financial Wellbeing - is about one's relationship with money and finances</u>			
My financial situation causes me stress or anxiety.	x	x	
I feel at ease with my financial situation.			x
I feel prepared to cover my living expenses and financial emergencies.	x	x	

I am prepared to cover my living expenses and financial emergencies.			X
I make informed and effective decisions about money.	X	X	X
I often turn to overspending or impulse purchases to cope with emotions.	X		
I often overspend or make impulse purchases to cope with emotions.		X	
Money plays a healthy role in my life.			X
Overall, I am satisfied with my financial choices.	X	X	X
<u>Occupational Wellbeing - is about one's relationship with time (e.g., work, academic pursuits, managing household duties)</u>			
My time is often spent in distressing or unsatisfying environments.	X	X	
My time is often spent in fulfilling environments.			X
The time and effort I put into my responsibilities lead to satisfying outcomes.	X	X	X
I feel a strong sense of motivation in my daily responsibilities.	X	X	X
Much of my time is well-spent on important goals.	X	X	X
Overall, I am satisfied with how I spend most of my daily time.	X	X	X
<u>Sociocultural Wellbeing - is about one's relationships with others</u>			
I feel a strong sense of belonging in my social environments.	X	X	X
I feel comfortable adapting to diverse social settings or cultural norms.	X		
I feel comfortable following diverse social and cultural norms.		X	X
I play an important role in contributing to my community.	X	X	X
I often feel misunderstood by others.	X	X	
I get along with most people.			X
Overall, I am satisfied with my interactions with others.	X	X	X
<u>Environmental Wellbeing - is about one's relationship with the nature</u>			
I feel a personal connection to the food I consume and its preparation.	X		
The food in my diet is sourced and prepared mindfully.		X	X
I often worry about my safety or surroundings.	X		
I feel disconnected from nature or the surrounding environment.		X	
I feel a strong sense of belonging in the local environment where I live.			X
I reserve time to go outdoors and connect with nature.	X		
I feel safe when I spend time outdoors.		X	X

I engage in daily practices that support environmental sustainability.	x	x	x
Overall, I am satisfied with my interactions with the environment.	x		
Overall, I am satisfied with my connection to nature.		x	x

Holistic Wellbeing - is about one's subjective sense of wellbeing across all aspects of their lives

How would you rate your overall holistic wellbeing? (<i>1=very poor, 2=poor, 3=average, 4=good, 5=very good</i>)	x	x	x
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Note. These results have been published in Yang, 2026.

Table A2

Evaluative Holistic Wellbeing Factor Loadings

Item No.	Survey Item	Factor Loading	Cronbach's Alpha
	Evaluative Holistic Wellbeing Factor		.86
1	Physical	.516	
2	Psychological	.756	
3	Spiritual	.754	
4	Intellectual	.646	
5	Financial	.461	
6	Occupational	.763	
7	Sociocultural	.523	
8	Environmental	.529	
9	Holistic Wellbeing	.747	

Note. These results have been published in Yang, 2026.

Appendix B

How Are You Survey Instrument

SCREENING QUESTION

Are you 18 years of age or older?

Yes

No

Reminder: You may skip any questions you do not wish to answer.

Demographic and Health Information

(16 questions)

1. What is your current age?

18

19

20

21

22

23

24

25 or older

2. Please select your institution:

University of California, Los Angeles (UCLA)

Another institution (please specify)

Shown only if “Another institution” is selected:

2a. What type of institution do you attend?

Public 4-year college or university

Private 4-year college or university

Community college (2-year)

For-profit college or university

Other/Not sure

3. What is your year in college?

First-year undergraduate student

Second-year undergraduate student

Third-year undergraduate student

Fourth-year undergraduate student

Fifth-year or more undergraduate student

Another academic standing (e.g., extension, temporary student)

4. What is your current enrollment status?

Full-time student

Part-time student

Another enrollment status (e.g., in absentia, leave of absence)

5. Which option(s) best describes your primary major or field of study? (Select all that apply)

Arts and Humanities (e.g., English, History, Philosophy, Languages)

Biological & Life Sciences (e.g., Biology, Neuroscience, Environmental Science)

Business, Finance, & Management (e.g., Accounting, Marketing, Human Resources)

Computer & Technology Sciences (e.g., computer science, information technology)

Design, Media, and Architecture (e.g., Graphic Design, Film, Architecture)

Education (e.g., Elementary Education, Higher Education, Administration)

Engineering (e.g., Chemical, Electrical, Mechanical, Software)

Health Sciences & Public Health (e.g., Nursing, Kinesiology, Pre-Med)

Information Studies (e.g., Library Science)

Mathematics, Statistics, & Data Sciences (e.g., Applied Mathematics, Data Analytics)

Physical Sciences (e.g., Chemistry, Physics, Geology)

Social & Behavioral Sciences (e.g., Psychology, Sociology, Political Science, Anthropology)

Another major or field of study (please specify)

Undecided/Undeclared

6. What is the highest level of education completed by any of your parent(s)/guardian(s)?

Did not complete high school

High school diploma or GED

Some college, no degree

Associate's degree (2-year)

Bachelor's degree (4-year)

Graduate or professional degree

7. What is your most recent cumulative GPA?

Below 2.0

2.0 to 2.2

2.3 to 2.5

2.6 to 2.8

2.9 to 3.1

3.2 to 3.4

3.5 to 3.7

3.8 to 4.0 or above

8. How would you rate your agreement with each of the following statements? [Response options: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree]

a) This college provides the support I need to succeed.

b) I feel like I belong at this college.

c) I expect to complete my degree as planned (e.g., within four years).

d) I feel confident in my ability to succeed academically.

e) I use campus resources to support my wellbeing when I need them.

- f) I have seriously considered leaving or taking a break from college.
- g) Overall, I am satisfied with my college experience.

9. In this section, “access” means that resources are available and possible for you to use when you need them. While enrolled at this college, do you have enough access to:

[Response options: No, Sometimes, Yes, Not Sure]

- a) Food
- b) Stable housing or shelter
- c) Medical care or health insurance
- d) Mental health support (e.g., counseling, therapy)
- e) Academic support (e.g., tutoring, writing help, study groups)
- f) Career opportunities (e.g., internships, work-study, part-time jobs)
- g) Community or social support (e.g., friends, clubs, faith groups)
- h) Green spaces or natural environments (e.g., parks, gardens, beaches)

10. Which option best describes your gender identity?

Man
 Woman
 Non-binary
 Trans man
 Trans woman
 Trans non-binary
 Another gender identity (please specify)

11. Which option best describes your sexual orientation?

Heterosexual / Straight
 Gay
 Lesbian
 Bisexual
 Pansexual
 Asexual
 Queer
 Another sexual orientation (please specify)

12. Which option best describes your racial/ethnic background? (Select all that apply)

American Indian or Alaska Native (e.g., Native American)
 Black (e.g., African American, Afro-Caribbean, African)
 East Asian (e.g., Chinese, Japanese, Korean)
 South Asian (e.g., Indian, Pakistani, Nepalese)
 Southeast Asian (e.g., Filipino/a/x/e, Vietnamese, Hmong, Thai)
 Native Hawaiian or Pacific Islander
 Hispanic or Latino/a/x/e (e.g., Mexican, Puerto Rican, Dominican)
 Middle Eastern or North African (e.g., Arab, Armenian, Egyptian, Persian)
 White (e.g., European, Caucasian)
 Another race/ethnicity (please specify)

13. Which option best describes your citizenship status?

U.S. citizen
Permanent resident (e.g., green card)
International student (e.g., F-1, J-1, M-1 visa)
DACA recipient (Deferred Action for Childhood Arrivals)
Another citizenship status

14. What is your best estimate of your household's total annual income before taxes?

Less than \$20,000
\$20,000 – \$39,999
\$40,000 – \$59,999
\$60,000 – \$79,999
\$80,000 – \$99,999
\$100,000 – \$119,999
\$120,000 – \$139,999
\$140,000 – \$159,999
\$160,000 – \$179,999
\$180,000 – \$199,999
\$200,000 – \$219,999
\$220,000 – \$239,999
\$240,000 or more

15. Which option best describes your religious/spiritual background? (Select all that apply)

Agnostic
Atheist
Buddhist
Catholic (Roman Catholic)
Christian
Eastern Orthodox
Hindu
Jewish
Latter-day Saints
Muslim
Protestant
Shamanism
Spiritual (general)
Another religious/spiritual background (please specify)
None

16. Which of the following health or wellness challenges do you personally experience? (Select all that apply)

Persistent stress or burnout (e.g., feeling exhausted, overwhelmed, or emotionally drained)
Sleep-related challenge (e.g., insomnia, sleep apnea)
Eating-related challenge (e.g., disordered eating, binge eating)
Substance use-related challenge (e.g., alcohol, marijuana, nicotine)

Mental health condition (e.g., anxiety, depression, PTSD, bipolar disorder, obsessive-compulsive disorder)
Chronic health condition (e.g., asthma, autoimmune condition, diabetes, cancer)
Chronic pain or musculoskeletal condition (e.g., back pain, knee injury, ligament injury)
Cognitive or developmental disability (e.g., ADHD, dyslexia, autism spectrum disorder)
Sensory or physical disability (e.g., hearing or visual impairments, mobility challenges)
Long-term effects of past illness (e.g., long COVID)
Another health or wellness challenge (please specify)
None

How Are You Survey

(10 questions)

1. Reflecting on the past month, how would you rate your agreement with each of the following statements? *[Response options: Strongly Disagree, Disagree, Neither agree nor Disagree, Agree, Strongly Agree]*

1. I take good care of my body (e.g., hydration, hygiene, posture).
2. I maintain a healthy diet (e.g., eating a variety of nourishing foods, limiting ultra-processed products).
3. I engage in regular physical activity.
4. I usually get enough restful sleep.
5. Overall, I am satisfied with my physical health.

2. Reflecting on the past month, how would you rate your agreement with each of the following statements? *[Response options: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree]*

1. I am managing my stress well.
2. I carry a sense of happiness with me.
3. I seek support for my mental health when I need it (e.g., talking with friends/family, peer support, counseling).
4. I can regulate my own emotions (e.g., anger, sadness, anxiety).
5. Overall, I am satisfied with my psychological wellbeing (e.g., mental and emotional health).

3. Reflecting on the past month, how would you rate your agreement with each of the following statements? *[Response options: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree]*

1. I feel connected to something greater than myself (e.g., a cause, a higher power, nature).
2. I engage in practices that help me feel grounded (e.g., journaling, prayer, community service).
3. I remain aware of what gives my life meaning.
4. I can return to a sense of peace when life feels challenging.
5. Overall, I am satisfied with my sense of meaning and purpose.

4. Reflecting on the past month, how would you rate your agreement with each of the following statements? *[Response options: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree]*

1. I remain open to ideas that challenge my thinking.
2. I thoughtfully engage with feedback to improve my learning.
3. I push myself to think critically about what I am learning.
4. I take initiative to learn new things on my own.
5. Overall, I am satisfied with my thinking and learning habits.

5. Reflecting on the past month, how would you rate your agreement with each of the following statements? *[Response options: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree]*

1. I feel at ease with my financial situation.
2. I can comfortably cover my living expenses.
3. I make responsible decisions around money.
4. I manage my own money effectively (e.g., saving, budgeting, spending).
5. Overall, I am satisfied with my financial habits.

6. Reflecting on the past month, how would you rate your agreement with each of the following statements? *[Response options: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree]*

1. What I do each day feels worthwhile.
2. I have enough time in my day to take care of my personal needs.
3. I feel motivated to carry out my daily responsibilities.
4. I make good use of my time to pursue what's important to me.
5. Overall, I am satisfied with my daily use of time.

7. Reflecting on the past month, how would you rate your agreement with each of the following statements? *[Response options: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree]*

1. I feel a sense of belonging in the communities that matter to me.
2. I can adapt comfortably to different social and cultural settings.
3. I make meaningful contributions to my community.
4. I feel supported by the people in my life.
5. Overall, I am satisfied with my social relationships.

8. Reflecting on the past month, how would you rate your agreement with each of the following statements? *[Response options: Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree]*

1. I am mindful of how my behaviors impact the environment.
2. I feel connected to the local natural environment.
3. I appreciate spending time outdoors.
4. I take actions that support environmental sustainability.
5. Overall, I am satisfied with my relationship with nature.

9. How are you in terms of your holistic wellbeing?

Very unwell
Unwell
Okay (somewhere in between)
Well
Very well

**10. Is there anything else you'd like to share about how you are doing or your wellbeing?
(Free response)**

End of Survey

Thank you for completing *the How Are You Survey*. Your response has been recorded. If you have any questions, comments, or concerns, please do not hesitate to contact the principal investigator John "Johnnie" Yang at johnniey47@ucla.edu.

Raffle Entry Form

As a thank-you, you are invited to enter a raffle for a \$10 coffee gift card (via Tango.com). This raffle is optional and collected through a separate form to protect your confidentiality.

Password to access the raffle: HAYS2026

Instructions: Enter the password on the first page of the raffle form.

Enter the raffle here: https://ssc UCLA.qualtrics.com/jfe/form/SV_78rIEhzS5JKKt8y

Appendix C

Journal Reflection Prompts

Week 0 Welcome Survey Prompts (March 24 – March 28, 2025):

Week 0 Welcome Survey Prompt #1:

Please describe any physical injuries, conditions, or sensitive areas I should be aware of. (This will help ensure your safety and comfort during yoga practice.)

Week 0 Welcome Survey Prompt #2:

Please describe your previous experience with yoga, if any. (This could include the styles of yoga you've practiced, breathwork, or meditation, your frequency, online or in-person, and what you've found most beneficial or challenging. If you are new to yoga, please tell me more about what you think of it, broadly.)

Week 0 Welcome Survey Prompt #3:

Why did you choose to take this seminar? (Your response will help me understand your motivations and tailor the course to your expectations.)

Week 0 Welcome Survey Prompt #4:

What are your personal goals for this course? (Feel free to reflect on physical, emotional, mental, or spiritual aspects.)

Week 0 Welcome Survey Prompt #5:

Please describe your experience having used ChatGPT or other Generative Artificial Intelligence models? (This is question is to help gauge your prior experience with AI and will help me prepare workshops on how to properly use it for this class.)

Week 1 Reflection Journal Prompts (March 31 – April 4, 2025):

Week 1 Reflection Prompt #1:

In your own words, provide a definition for each of the following terms based on your understanding of them. You may refer to this week's readings or lecture. Please pull a direct quote from the assigned texts to support each of your definitions for: (1) Yoga, (2) Asana, (3) Pranayama, (4) Mudra, and (5) Holistic Wellbeing.

Week 1 Reflection Prompt #2:

How was Fall quarter for you compared to Winter quarter? How are you feeling about Spring quarter looking forward? Please also share any thoughts, concerns, or comments you might have after our first day of class this week.

Week 1 Reflection Prompt #3:

Please take 10-20 minutes to complete Yang's Holistic Wellbeing Survey. Participation is entirely voluntary and confidential. By completing the survey, you will also have the option to

enter a raffle for a chance to win a \$20 Target gift card. If you're not comfortable participating, you can still browse the survey to reflect on your wellbeing and use that as the basis for this journal assignment. Using at least 100 words per section, please reflect on and describe your: (1) physical wellbeing, (2) psychological wellbeing, (3) spiritual wellbeing, (4) intellectual wellbeing, (5) financial wellbeing, (6) occupational wellbeing, (7) sociocultural wellbeing, and (8) environmental wellbeing. Feel free to reference your survey results to aid in your reflection. I recommend printing your results at the end of the survey to keep record of your wellbeing score.

Week 2 Reflection Journal Prompts (April 7 – April 11, 2025):

Week 2 Reflection Prompt #1:

Re-read Sutra 1:2 and, in your own words, explain your understanding of Satchidananda's translation of the definition of yoga. In other words, what is citta, what is vritti, and what is nirodhah? DO NOT use the direct translation from the book. Instead, use synonyms or describe it using your own words. After re-defining this classical definition of yoga, reflect on the examples Satchidananda provided. There is an example about (1) cheese, (2) the long-lost father, and (3) prison inmates. Pick one of these examples and re-tell it to me to demonstrate your understanding of the example.

Week 2 Reflection Prompt #2:

Take some time to reflect on your experience in this week's yoga session. Your reflection may include responding to some or all of the following questions: How did it make you feel? What did you notice about yourself? What stood out to you about the practice? Did you notice any changes about yourself afterward? What did you enjoy? What did you not enjoy?

Week 2 Reflection Prompt #3:

What are 3 specific practices that you learned in class this week? You can choose practices from one or more categories (asana, pranayama, mudra). I encourage you to pick the practices that resonated with you the most. Then refer to the AMPB textbook (Saraswati, 2008), pull a quote for each of the practices you chose, and reflect briefly on them.

Week 2 Reflection Prompt #4:

In lecture, we reviewed the following sections:

- 1) what is yoga (1:1-1:4)
- 2) un-coloring thoughts (1:5-1:11)
- 3) practice/non-attachment (1:12-1:16)
- 4) concentration (1:17-1:18)
- 5) efforts and commitment (1:19-1:22)
- 5) "OM" and teachers (1:23-1:29)
- 6) obstacles and solutions (1:30-1:32)
- 8) stabilization (1:33-1:51)

Select and reflect on 2 of these sections that really resonated with you and explain why you chose them. Feel free to pull from your own personal experience to support your reflection. Select and reflect on 1 of the sections that did not resonate with you, remains unclear, or that you did not understand or agree with. Explain why. Be sure to pull a direct quote from the Yoga

Sutras (or the lecture slides) for each section (3 total quotes) you want to reflect on and include proper in-text citations. (Satchidananda, 2012, 1:x) OR (Yang, 2025, p. x).

Week 3 Reflection Journal Prompts (April 14 – April 18, 2025):

Week 3 Reflection Prompt #1:

During practice this week, we learned some postures from pages 45-73 in the APMB textbook, as well as Nadi Shodhana (alternate nostril breathing), and Yoni Mudra (Charlie's Angels hand gesture). Using at least 100 words and pulling ONE direct quote from Saraswati (2008) to support your reflection, reflect on your overall experience in class this week. You may answer some or all of these questions: What did you notice about yourself? What did you find challenging, interesting, or unclear? How did you feel before, during, and after practice?

Week 3 Reflection Prompt #2:

Do you believe in karma (actions/reactions) and/or past lives? Briefly explain your reasoning (you can pull from your own personal experiences and/or the textbook with in-text citations). You can keep this reflection shorter if you'd like (a few sentences is okay).

Week 3 Reflection Prompt #3:

This week, we learned about the kleshas (sources of suffering):

- 1) Avidyā (Ignorance)
- 2) Asmitā (Ego)
- 3) Rāga (Attachment)
- 4) Dveṣa (Avoidance)
- 5) Abhiniveśa (Fear of death/endings)

Select ONE of these sources of suffering that resonates with you and reflect on it using at least 100 words. Feel free to pull from your own personal experiences and pull ONE quote from the sutras to support your reflection (with in-text citations).

Week 3 Reflection Prompt #4:

This week, we learned about the 8 limbs of yoga (how to do yoga). More specifically, we learned about the first limb, the Yamas (ethical guidelines):

- 1) Ahimsa (Non-violence)
- 2) Satya (Truthfulness)
- 3) Asteya (Non-stealing)
- 4) Brahmacharya (Moderation)
- 5) Aparigraha (Non-possessiveness)

To what extent do you follow these guidelines? You can reflect using a scale (1=not at all, 5=all the time) or just freely reflect on them. Try your best to reflect without judgment or fear of judgment. There is no correct answer. There is no suggested word limit, so long as you thoughtfully tackle each Yama.

Week 3 Reflection Prompt #5:

Pulling at least 1 direct quote (with in-text citations) from the Yoga Sutras Book 2, briefly reflect on at least 1 of the following questions related to the sanding activity in class:

- 1) During the casual conversation round #1, did you find listening and talking to be distracting, or did it make the activity more enjoyable? Refer to the 5th limb pratyahara (withdrawing senses and turning inward despite the noise or stimulation) to support your reflection.
- 2) During the silent round #2, what came up for you? Was it uncomfortable or peaceful? Can you connect this to tapas (inner fire/discipline)?
- 3) When the goal was to win in round #3— how did that change your attitude, teamwork, or energy? Did any attachments or ego come up (related to kleshas)?

Week 4 Reflection Journal Prompts (April 21 – April 25, 2025):

Week 4 Reflection Prompt #1:

This week, we learned yoga exercises for the eyes, cooling breath and hissing breath, as well as nose tip gazing, etc. Discuss your experience practicing yoga this week in class. Choose one or two practices that resonated with you, pulling one quote from the APMB textbook to support your reflection. Also tell me something cool you learned!

Week 4 Reflection Prompt #2:

In our “Eye” Spy activity, I had you count your breaths within a 3 minute time frame, and that if you lost count, you would have to start your count over. How many counts of breaths did you reach at the end of the 3 minutes and what did you notice about your consciousness while doing it? Were you surprised at your result? Was it easy, or challenging? Take some time to reflect.

Week 4 Reflection Prompt #3:

How long can you hold your breath? We did this in class as a way to better connect with our breath, “our best friend” who is there for us, always. What was your results and how did you feel about your result? Did you feel any light-headedness? Emotions? Challenges?

Week 4 Reflection Prompt #4:

Lastly, we did the liberation activity where you had to maintain your peace while shutting out external stimuli (my crazy remarks in class). Take some time to reflect on your experience doing the activity (if you did it). Then answer the following:

Do you agree with the Yoga Sutra’s definition of absoluteness/freedom/liberation? What does liberation/freedom mean to you? Feel free to pull from your own personal experience to define liberation. Please also pull ONE quote from the yoga sutras to support your reflection.

Week 5 Reflection Journal Prompts (April 28 – May 2, 2025):

Week 5 Reflection Prompt #1:

This week, we learned Vajrasana (thunderbolt) poses and standing poses, as well as bhamari (humming bee breath) and Bhairava mudra (“palm sandwich”). Take some time to reflect on this week’s yoga practice. You may describe how you felt, any challenges, or what you learned. Pull ONE quote from the APMB book to support your reflection.

Week 5 Reflection Prompt #2:

I invite you to re-take Yang's Holistic Wellbeing Survey. Linked here: https://sscucla.qualtrics.com/jfe/form/SV_1HctEqkFAPH4kyW. Using at least 200 words, take some time to reflect on how you are doing. You may compare your week 1 survey results to week 5 results. If you did not keep track of your scores, you can email me directly and I can email your week 1 results to you. If you did not take the survey or do not want to take the survey, you're welcome to freely reflect on each of the 8 aspects of holistic wellbeing: physical, psychological, spiritual, intellectual, financial, occupational, sociocultural, and environmental.

Week 5 Reflection Prompt #3:

Look over the 2016 Yoga in America Report. Reflect on what you found interesting from this report and pull at least 2 statistics, percentages, or quotes that you plan to use for your final paper, and why you want to use these statistics. You may also refer to week 1 Slides 1-19, too.

Week 6 Reflection Journal Prompts (May 5 – May 9, 2025):

Week 6 Reflection Prompt #1:

This week in class, we practiced guiding the sun salutation and we learned the moon salutation. Take a moment to reflect on what you think of these sequences. Is there one you like more? And why? What are the benefits of these sequences? Pull at least ONE quote from the APMB book to support your reflection. Feel free to also reflect on your overall experience in this week's yoga practice session. I'd also be curious to know if there is anything you think I can consider to improve my yoga teaching.

Week 6 Reflection Prompt #2:

After reading/skimming Gothe et al. (2019) on Bruin Learn, reflect on one key takeaway. Include a quote you might use in your final paper and briefly discuss what stood out, what confused you, or what questions you still have.

Week 7 Reflection Journal Prompts (May 12 – May 16, 2025):

Week 7 Reflection Prompt #1:

Freely respond to ONE or more of what we did in class this week or the assigned texts:

- (1) learning about eastern vs western medical perspectives
- (2) Healers and Seekers Game
- (3) Yin Yoga with Sandy Duarte
- (4) APMB textbook, forward bends, backbends, twists, kapalbhati <—we'll revisit this later during week 10.
- (5) Podcast on Ayurvedic Medicine in the West.

Week 7 Reflection Prompt #2:

Share a brief note/comment that I will send to Sandy (include your name at the end!). It can be about what you enjoyed about her class, what you noticed about yourself, or any other kind words of affirmation.

For example:

Sandy, your class was so amazing. It made me feel so relaxed and loved. I loved it when you were singing the crystal bowls. Thank you for sharing your energy!

-NAME

Week 8 Reflection Journal Prompts (May 19 – May 23, 2025):

Week 8 Reflection Prompt #1:

What is consciousness? Where does it come from? How can we measure it? Pulling from your own experience or from the assigned podcast, take some time to reflect on what consciousness means to you. What happens to consciousness after we pass away?

Week 8 Reflection Prompt #2:

Please write a note of gratitude to Caro, our guest lecture from class today. Feel free to share anything about your experience, something you found challenging, or something that you enjoyed about her Ashtanga class.

Week 8 Reflection Prompt #3:

Since we will not have class during Week 9 in observance of Memorial Day, we'll use this time for individual 1-on-1 meetings. Link to sign up here: <https://calendly.com/yang47/yoga>. During our meeting, we'll discuss your final paper and reflect on your overall experience in the Yoga and Holistic Wellbeing seminar. I'll ask you a few questions about your learning, your well-being, and key takeaways from the quarter. Please come prepared with three questions—these can be related to the course content, your final paper, or broader topics such as college life, personal growth, or wellness. Write your three questions here in your journal reflection. The meeting will be video and audio recorded to support grading purposes. In your journal reflection here, please confirm that you are comfortable with the meeting being video recorded. If you're uncomfortable with recording, I'm happy to take notes instead. Your consent and comfort will be prioritized. While the meeting is scheduled for 60 minutes, it may not take the full time.

NO Week 9 Reflection Journal Prompts (May 26 – May 30, 2025):

Week 10 Reflection Journal Prompts (June 2 – June 6, 2025):

Week 10 Reflection Prompt #1:

For this first prompt, reflect on the last day of class on Monday. We did the sun salutation test, a final yoga class with Johnnie, a small sound bath (with the wooden pieces instrument), letter to your future self, the wind blows activity, award ceremony, and sharing circle. Take a moment to reflect on how this day went for you. What feelings and emotions did you notice?

Week 10 Reflection Prompt #2:

I invite you to re-take Yang's Holistic Wellbeing Survey. Linked here: https://sscucla.qualtrics.com/jfe/form/SV_1HctEqkFAPH4kyW. Take some time to reflect on how you are doing as we approach the end of the quarter. You may compare your week 5 survey results to week 10 results. If you did not keep track of your scores or do not want to take the

survey again, you can freely reflect on your wellbeing. You might consider talking about some of the 8 dimensions of holistic wellbeing: physical, psychological, spiritual, intellectual, financial, occupational, sociocultural, and environmental.

Week 10 Reflection Prompt #3:

Pick one or both of the following exercises from Week 4 to do again and reflect on:

- 1) How long can you hold your breath? Re-visit your Week 4 reflection and compare your results then to your new results. What do you notice? Any better or worse changes? Take a moment to reflect on your lung capacity.
- 2) Set a time for 3 minutes, close your eyes and naturally breathe in and out through your nose. One full inhale and one full exhale counts as one breath. Within those 3 minutes, see how many breaths you can count. If you lose count, you must re-start your counting from zero without resetting the timer. Reflect on the number of breaths you're able to count up to. Re-visit your Week 4 journal and discuss any differences in your results.

Week 10 Reflection Prompt #4:

A haiku is a poem that is 5 syllables, 7 syllables, and then 5 syllables. Tap into your creativity and write a haiku about anything related to this seminar. It can be about yoga, your personal experience, or anything you've learned this quarter. Here is one haiku I send you off with!

The student has gone
Into the deep, deep waters
Finding inner self

Week 10 Reflection Prompt #5:

Read your letter to your future self. Take a moment to reflect and discuss any details from it. What challenges did you overcome? What were your plans? Did you achieve your goals? How does it feel reading the letter today?

Week 10 Reflection Prompt #6:

This last prompt is open, I just wanted to give you some space to write me anything you'd like to share. It's been my pleasure and joy to read your journals every week this quarter. I wish you good luck on your finals and I hope you have a great summer!

Semi-Structured Interview Protocol

Introduction Script

Thank you for participating in this interview. The purpose of this conversation is to learn more about your experiences in the Yoga & Holistic Wellbeing seminar, including what you learned, how you engaged with the practices, and how the class may have influenced your perspectives on wellbeing.

Your participation is completely voluntary, and your responses will be kept confidential. You may skip any question you do not wish to answer, and you can stop the interview at any time without penalty. With your permission, I would like to audio-record this interview to ensure accuracy in capturing your words.

Do I have your consent to begin recording?

Interview Agenda

1. Check-in
2. Review of final paper and grades (if applicable)
3. Student reflections
4. Instructor questions

Interview Questions

Background & Expectations

1. What prior experience, if any, did you have with yoga before this class?
2. What initially drew you to take this seminar?
3. What were your expectations coming into this class?
4. Do you feel your expectations were met? Why or why not?
5. Is there anything you were hoping to learn or experience more of that we didn't get to?

Learning & Reflection

6. What are the most meaningful things you learned from this seminar?
7. Were there any moments, topics, or insights that shifted your perspective?
8. Which activities or class sessions stood out to you the most? Why?
9. What are some things you learned about yourself through those activities?
10. How has your view of yoga changed as a result of this course?
11. How has your view of holistic wellbeing changed?
12. Has your view of yourself changed in any way?

Integration Into Life

13. How do you think you'll apply what you've learned in your daily life?
14. Do you see yourself continuing with yoga or any of the practices we explored? Why or why not?
15. Have you found yourself thinking differently about stress, rest, or balance in your life since taking this class?

Community & Conversations

16. Did you talk about this class or yoga with anyone outside of class?
17. Who did you talk to (friends, family, roommates, etc.), and what were those conversations like?
18. How did others respond to your experiences or what you shared from class?
19. Did any of those conversations help you process or understand the material more deeply?

Writing & Academic Expectations

20. How did you feel about the writing assignments in this class?
21. Did the writing help you process or reflect on your experiences? Or did it feel excessive?
22. Did you find the feedback on your writing helpful? Why or why not?
23. How was your experience writing the final paper? What was your process for choosing and integrating sources?

Physical Practice & Embodiment

24. What was your experience with the physical (asana) practice in class?
25. Were there any poses or sequences that felt especially meaningful or challenging for you?
26. Did you notice any changes in your body, breath, or awareness through the physical practice?
27. Was there anything about the physical practice you wish we had done more or less of?
28. How did you feel about the sun salutation test? Did you practice with anyone outside of class?

Suggestions & Final Thoughts

29. What's something you wish we had spent more time on?
30. Were there any parts of the class that felt unclear, inaccessible, or uninteresting to you?
31. If you could design one new class session or activity for this seminar, what would it be?
32. What advice would you give a future student taking this seminar?
33. Is there anything else you'd like to share about your experience?

Closing Script

Thank you for taking the time to share your experiences and reflections. Your feedback will be very helpful in understanding how students engage with yoga and holistic wellbeing in an academic setting. If you have any additional thoughts after this interview, please feel free to reach out to me.