THE INFLUENCE OF ENVIRONMENTAL FACTORS, INCLUDING DIVERSITY, EQUITY, AND INCLUSION, ON THE EMOTIONAL WELL-BEING OF STUDENTS, STAFF, AND FACULTY

Ryan M. Travia, EdD, Babson College
Andrew Wall, PhD, University of Redlands
James Larcus, MA, NBC-HWC, Grit Digital Health and Metropolitan State University of Denver
Kim Thibodeau, Well-being Consultant
Valerie C. Merriweather, MHA, MA, North Carolina Central University
Crystal R. Hutchinson, MEd, CHES, Organizational Well-being Consultant
Acknowledgements

The writing and research team wishes to thank the American College Health Foundation (ACHF) Board of Directors and Aetna Student Health for their encouragement and support throughout the duration of this project. We are deeply indebted to the institutions that administered this survey. We are also grateful to our colleagues and partners from the American College Health Association (ACHA) and Aetna Student Health, particularly Alex Phelan and Dr. Wendy Shanahan Richards, Chief Medical Officer at Aetna Student Health, who took time to review drafts of this whitepaper. Your feedback helped to strengthen and sharpen the findings from this study.

A Note from the Authors: This paper was developed to better understand the importance of taking environmental approaches to well-being for students, staff and faculty on college campuses. Particular focus on bridging the work of well-being and diversity, equity, and inclusion emerged over the course of this project. The authors implore a more explicit understanding and shared responsibility over these mutually supported goals of our academic environments.
Objective: The purpose of this study was to explore the range and variation of subjective well-being metrics among students, staff, and faculty from a cross-section of colleges and universities. Health disparities related to emotional well-being were examined as well as the influence of environmental factors that impact mental health. Participants: 7,953 students, staff, and faculty from nine participating institutions of higher education completed the American College Health Foundation (ACHF) Emotional Well-being Survey. The survey was administered to six volunteer institutions in spring 2021 and three additional institutions in fall 2021. Methods: Missing and outlier data were examined, followed by descriptive item analysis. Next, scales were examined in relation to students, staff, faculty, sex, and race/ethnicity. Exploratory factor analysis was conducted with a particular focus on background variables and institutional scales. Results: Students scored lower than both staff and faculty across all scales of emotional well-being and reported higher levels of depression, loneliness, stress, and anxiety. Perceptions of institutional support for individuals, their mental health, and institutional commitment to diversity were consistently low among all three groups, with faculty perceptions scoring lower than students and staff. Conclusions: There are real differences in mental health and emotional well-being between students, staff, and faculty. Ultimately, students show lower levels of emotional well-being. Perception of the environment is an important factor in predicting emotional well-being. Further, perception of institutional support for diversity is the strongest predictor of emotional well-being among students, staff, and faculty.
Introduction

This is the third paper in a series of research projects related to framing and measuring well-being among higher education students, staff, and faculty. The first paper, *Framing Well-being in a College Campus Setting* (Travia et al., 2020), was an investigatory study that examined the range and variation of well-being initiatives across a selection of U.S. and Canadian colleges and universities. Several key findings emerged from this study: (1) Institutions of higher education have not adopted a universally accepted definition of well-being; (2) There does not appear to be a dominant model for structuring or measuring well-being initiatives among colleges and universities; (3) There appears to be a systemic shift away from using the term “wellness,” instead moving towards “well-being”; (4) While many institutions are still utilizing traditional health education practices, there is a movement toward more systemic, environmental approaches to well-being, including structural, organizational, and financial strategies, in addition to a range of policy initiatives; (5) There is a range of engagement in well-being initiatives, with significant variance based on institutional philosophy; and (6) Many institutions are designing well-being initiatives that address health disparities, particularly among underrepresented or systemically oppressed populations (Travia et al., 2020).

The second paper, *Measuring Well-being in a College Campus Setting* (Travia et al., 2021), discussed the process of developing, testing, and validating a new survey instrument that can be used to measure mental health and emotional well-being of the whole on-campus community, including students, staff, and faculty. Drawing upon existing validated scales, the ACHF Emotional Well-being Survey measures the following dimensions: (1) Community and Belonging (social connectedness, confidence, safety, and trust); (2) Coping and Stress Management (resilience, flexibility, adaptability, and anxiety); (3) Purpose and Meaning; (4) Subjective Well-being (happiness, life satisfaction, depression, and loneliness); and (5) Institutional Environment (Travia et al, 2021). Of note, and as hypothesized in the *Framing Well-Being* paper, “perceptions of environmental factors (i.e., institution values mental health and emotional well-being, support for diversity, and feeling connected to and valued by the institution) showed meaningful results in the regression analysis” (Travia et al., 2021, pp. 3-4).

This paper extends the focus on the mental health and emotional well-being disparities found among students, staff, and faculty. While this data was not collected to be representative, a post-collection comparison to publicly available institutional profiles was done to gauge how the demographic characteristics compared to the overall student population of the institution. This was accomplished by examining the Integrated Postsecondary Education Data System (IPEDS) and revealed that the sample collected was in line with the publicly available demographic profile of each institution, for only the student segment of the campus population. The research team then ran exploratory analysis to better understand the range and variation of mental health and emotional well-being disparities among the populations being studied. Finally, perceptions of environmental factors that influence mental health and emotional well-being were considered to examine their relationship, if any, to student, staff, and faculty well-being.
Literature Review

While many theories and opinions exist about the purpose of higher education, one of the more prominent ideologies is a tripartite mission. Simply put, the mission of colleges and universities includes teaching, research, and service (Scott, 2006). Furco and Gross (2001) systematically reviewed the mission statements of more than 300 U.S.-based higher education institutions. Their findings showed that 95 percent of college and university mission statements made overt references to preparing students for academic and civic pursuits (teaching), producing knowledge that benefits society (research), and creating positive influence on behalf of local and global communities (service) (Furco & Gross, 2001).

The aforementioned three-pronged mission of higher education primarily emerged out of the faculty and academic affairs units of colleges and universities. As higher education expanded through the 20th century, with diversifying student populations, booming enrollments, and a move to on-campus, residential education, student affairs units emerged to support and enhance the academic environment (Schwartz & Stewart, 2017). Two foundational documents that outlined the emergence and diversifying student experience on campuses across the globe were The Student Personnel Point of View, 1937 and revised edition in 1949 (American Council on Education 1937, 1949). Core to both iterations of these documents is an emphasis on the development of the “whole student.” The focus on “whole person” development integrates a student’s social, emotional, and identity development in addition to academic and career progression (American Council on Education 1937, 1949).

An emphasis on whole person development correlates to modern wellness and well-being literature. According to Myers and Sweeney (2005), wellness or well-being refers to a multi-dimensional construct oriented toward maximizing each individual's inherent potentiality. Furthermore, well-being is depicted as the interplay and interconnectedness of a variety of dimensions within a person’s life, including physical health, emotional or mental health, spirituality and purpose, social connectedness and belonging, and intellectual development (Gieck & Olsen, 2007; Myers & Sweeney, 2008; Travia et al., 2020; Travia et al., 2021).

The well-being paradigm transcends a diagnostic, treatment-based orientation to individual biological health and mental health. Well-being involves cultivating capacities and the promotion of health and mental health through gains in knowledge, awareness, and growth (Travis & Ryan, 2004).

A current shortcoming of the modern well-being movement has been an overemphasis on individual behavior change and happiness. While a worthwhile goal, seen to show impact and promise through a variety of instances (LaFountaine, Neisen, & Parsons, 2006; Myers & Sweeney, 2008; Myers & Mobley, 2004; Gibbs & Larcus, 2015; Larcus, Gibbs, & Hackmann, 2016; Choate & Smith, 2003; Conley, Travers, & Bryant, 2013; Gibbs, 2017), there is a lack of focus on environmental interventions. Travia et al. (2020) highlighted the importance and need of creating environmental interventions that promote a culture of care where each student, staff, and faculty has the opportunity to realize their full potential. The focus on embedding health and well-being cross-functionally into all aspects of campus culture, supported by infrastructure, assessment, and as a desired outcome, is supported by foundational documents in the higher education literature (Council for the Advancement of Standards, 2019; Harward, 2016; American College Health Association, 2022; International Conference on Health Promoting Universities & Colleges, 2015; NIRSA, 2020).

An additional shortcoming of the modern well-being movement is a departure from an explicit focus on health and health equity for all. While equity drives major theories in public health
(CDC, 2022) and higher education (Council for the Advancement of Standards, 2019; Harward, 2016; American College Health Association, 2022; International Conference on Health Promoting Universities & Colleges, 2015; NIRSA, 2020), many well-being movements focus solely on individual well-being, satisfaction, and happiness. The Geneva Charter (World Health Organization, 2022) re-centers the urgency for creating sustainable “well-being societies” committed to achieving equitable health for current and future generations. In fact, two of their five foundations to well-being include:

- principles of human rights, social and environmental justice, solidarity, gender and intergenerational equity, and peace
- focusing health promotion on empowerment, inclusivity, equity, and meaningful participation (World Health Organization, 2022, p. 2).

Perhaps the best summary of the key constructs of the modern well-being movement in higher education is offered by the work of Health and Well-being in Higher Education: A Commitment to Student Success (NIRSA, 2020). While campuses often define wellness and well-being on their own and no one universally accepted definition exists (Travia et al., 2020; Travia et al., 2021), this collective effort of more than 10 leading higher education associations adopted a foundational definition of well-being from which college and universities can work. Entitled the Inter-association Definition of Well-Being, well-being is characterized as “an optimal and dynamic state that allows people to achieve their full potential” (NIRSA, 2020, p. 2). This first pass at a collective effort captures core elements of well-being, mainly that it is inherently geared toward positive outcomes (Keyes 2002, 2005, 2007), is a process and is multi-faceted and interconnected (Gieck & Olsen, 2007; Myers & Sweeney, 2005; Myers & Sweeney, 2008, Travia et al., 2020, Travia et al., 2021; Travis & Ryan, 2004). Where this definition advances the work in higher education is the explicit interplay on individual and community (or environmental) well-being.

Individual well-being is defined within three broad and interrelated categories: (a) the perceived assessment of one’s own life as being generally happy and satisfying, (b) having one’s human rights and needs met, and (c) one’s contribution to the community (NIRSA, 2020, p. 2).

Community well-being is defined by relationships and connectedness, perceived quality of life for all people in the community, and how well the community meets the needs of all members (NIRSA, 2020). There is a clear focus here on advancing beyond just “being happy” or defining well-being as a positive process, but to focus on whole systems that support all. As the paper suggests, “by focusing on the whole—the whole person, the whole educational experience, the whole institution, the whole community—well-being becomes a multifaceted goal and a shared responsibility for the entire institution” (NIRSA, 2020, p. 2).

As one considers the evolution of well-being and the tripartite mission of higher education, namely how institutions focus on civic duty and inclusion (Furco & Gross, 2001), one must consider the influence that diversity, equity, and inclusion (DEI) has had in this space. Over the last several years, DEI efforts have gained traction in a variety of industries, including higher education. However, the term DEI is not without various interpretations. The terms diversity, equity, and inclusion are often used interchangeably; however, in the higher education space, we must look at how these definitions are understood. For context, the following definitions are taken from the Association of American Colleges and Universities (AAC&U, n.d.).

- Diversity is defined as “individual differences (e.g., personality, prior knowledge, and life experiences) and
group/social differences (e.g., race/ethnicity, class, gender, sexual orientation, country of origin, and ability as well as cultural, political, religious, or other affiliations” (McKinley & Dunnagan, 2021, p. 72).

- **Equity** is defined as “prioritizing the creation of opportunities for minoritized students to have equal outcomes and participation in educational programs that can close achievement gaps in student success and completion” (McKinley & Dunnagan, 2021, p. 74).

- **Inclusion** is defined as “the active, intentional, and ongoing engagement with diversity—in the curriculum, in the co-curriculum, and in communities (intellectual, social, cultural, geographical) with which individuals might connect—in ways that increase awareness, content knowledge, cognitive sophistication, and empathic understanding of the complex ways individuals interact within systems and institutions” (McKinley & Dunnagan, 2021, p. 73).

While standard definitions exist, DEI terms are constantly evolving in higher education. For example, equity is defined as equal access to success in higher education among ethnic-minority and low-income students whereas inclusion is defined as making sure that all students and employees feel welcome and their unique learning and working styles are attended to and valued (Özturgut, 2017). Although diversity may be defined differently, the consensus is that diversity primarily refers to race, ethnicity, immigration status, sexual orientation, religion, mental and physical abilities, first-generation status, socioeconomic status, and military service (Özturgut, 2017).

Given the plethora of DEI initiatives across higher education, some would argue that their lens should be broad rather than narrow (Özturgut, 2017). As DEI Initiatives expand on campuses, the Intersectionality Framework is front and center. Coined in 1989 by Kimberlé Crenshaw, a civil rights activist and legal scholar, intersectionality is a theoretical framework for understanding how multiple social identities such as race, gender, sexual orientation, socioeconomic status, and disability intersect at the micro-level of individual experience to reflect interlocking systems of privilege and oppression (i.e., racism, sexism, heterosexism, classism) at the macro social structural level (Rassim & Mahdjoub, 2022). Just as the field of well-being takes a holistic approach, (Travia, et al, 2020) the emphasis on intersectionality embodies a whole-person approach. For example, if students do not feel as if they fit into the culture of the institution because of their race, ethnicity, or socio-cultural background, no matter the quality of the academics, there can be a disconnect and increased rates of attrition (Carver, 2020). Additionally, as interconnecting marginalized characteristics have an increasingly negative impact on the lives of many students, the framework of intersectionality must be considered in mission statements that portray social justice as important to their mission (Carver, 2020). This revelation is paramount to our understanding of well-being as it relates to DEI and the environment that prepares and equips our students for long-term success.

Interestingly, while there are emerging definitions and frameworks for DEI and well-being in higher education, there is a relative dearth of explicit, practical connections between the two movements on colleges and university campuses across the country (Travia et. al, 2020). For example, one institution may look at DEI as it relates to onboarding, programming, or training while another institution may focus on the importance of well-being for overall student success. However, when examining how DEI efforts impact the well-being of students in higher education, there is scant evidence in the literature. One subtle aspect of well-being was referenced
in a study of student affairs professionals. For example, research has shown that student affairs professionals experience an emotional toll when educating colleagues about social justice, as well as burnout and fatigue from engaging in diversity educational initiatives with college students (Garcia, Walker, Morgan & Shi, 2021). As DEI work evolves in higher education, a shift to whole-system/environmental interventions, similar to well-being moving from a focus on individuals to creating cultures of care and equity, may become more pronounced.

Students want and expect diverse collegiate experiences, but they need help navigating these spaces to reduce the likelihood that they will engage in negative interactions with diverse peers (Barnett, 2020). “Addressing diversity must be done from multiple frames of reference in order to understand the political, administrative, and cultural context” (Özturgut, 2017 p. 84). This approach can support efforts to help students address their well-being in a holistic nature within the context of DEI in higher education. Given the impacts of the coronavirus pandemic, coupled with the killing of innocent black and brown people and the public outrage that followed, the need for DEI initiatives to address equity gaps underscore the importance of this work (Luster, Cooper, Aikman, Sanders, Jacobs, & Tierney, 2021).

There is both synergy and intersectionality between DEI efforts and well-being initiatives. For instance, DEI and well-being take a whole-system, whole-person approach to provide the opportunity for everyone to succeed and reach their full potential. Moreover, both movements show recent growth and developments from individual programs and services to developing ecosystems that benefit from taking an environmental approach. In considering the tripartite mission of higher education, institutions have an obligation to respond to the needs of their communities through the intersectionality of teaching, research, and service in an increasingly multicultural world (Özturgut, 2017). This study builds upon the advances in well-being to better understand its connection to diversity, equity, and inclusion.

**Research Questions**

- What mental health and emotional well-being disparities, if any, exist among student, staff, and faculty respondents?

- What is the influence of environmental factors on the mental health and emotional well-being of students, staff, and faculty?

**Methods**

This research project used survey data collected from students, staff, and faculty who are at least 18 years of age. A 41-question survey was developed primarily from existing well-being surveys and scales to measure emotional well-being through the following dimensions of well-being: community and belonging; social connectedness/belonging; confidence, safety, and trust; coping and stress management; flexibility and adaptability; anxiety; purpose and meaning; subjective well-being; loneliness and depression; and institutional environment (Travia et al., 2021). The process for survey assembly examined research on existing items and scales via a review of the literature, using an expert panel, and developing a construct map to plot out latent variables. The emphasis on construct validity was designed to increase the trustworthiness of the survey (Travia et al., 2021).

The survey included previously published items and scales for all constructs, with the exception of new questions associated with institutional environment (Travia et al., 2021). Institutional environment questions drew from concepts found in the Guarding Minds@Work workplace survey and modified them to address not only employees but also student members of a campus population (Samra et al., 2020). Following an initial survey draft, an iterative process of review, revision, and refinement was conducted to arrive at the current version of the ACHF Emotional Well-Being Survey.
Survey Methods

Participating institutions were solicited broadly with an aim to have a diversity of institutions along the following dimensions: institutional size, institutional type, geographic location, and population to participate (i.e., staff, students, faculty). Ultimately, nine institutions participated, six in the spring of 2020 (January to April) and three in the fall of 2021 (September to November). Participants were part of a convenience sample of institutions who agreed to use the new survey instrument. Participating institutions included three East Coast schools, four Midwestern schools, one Northwest, and one institution from the Southwest.

Participating institutions agreed to three items. First, they agreed to participate as an institution. Second, they agreed to develop a sample of staff, students, and faculty. Sample size was determined by each institution. Third, they agreed to provide the research team with their samples’ contact first name, email address, and whether the contact is a staff member, student, or faculty. Human subject approval was completed through an independent Institutional Review Board for the entire project, then as necessary at each institution.

The survey at each participating campus was open for two weeks. An invitation to participate email came from the research team during week one, and two reminder messages were sent during week two. Emails were personalized messages as opposed to static block invitations to increase response rate. To increase participation, the ACHF offered a drawing of twenty $50 Amazon gift cards to participants, though not all institutions could participate in this incentive due to institutional or state limitations. Institutions were able to provide advertising and promotional materials to increase participation but were not able to provide incentives themselves. Survey administration was completed electronically via Qualtrics. The Qualtrics interface can be completed on phone, tablet, and personal computer and is accessible via screen readers but may not be fully accessible to keyboard-only users or screen magnified users. Individual consent was programmed into the beginning of the Qualtrics survey platform.

Data Analysis

Data were downloaded and cleaned using SPSS 26. Missing and outlier data were examined, removing outliers and using mean replacement for missing data due to the very limited missing data (less than 50 for any item in the dataset). After descriptive item analysis, scale mean scores were examined in relation to student, staff, faculty, gender, and race/ethnicity. Ultimately, two well-being scores were selected in relationship to background variables and institutional scales to answer the research questions. These included the depression scale as a measure of well-being from a more conventional mental health and disease perspective and the Satisfaction with Life scale to examine not just the absence of negative emotion but also the presence of positive emotional well-being components. These two scales represent two of the most salient factors available within the survey to examine how institutional environmental factors correlate with emotional well-being across older models of health and disease through to newer conceptions of dynamic well-being.

An exploratory factor analysis was completed using the Principal Component Factor Analysis with Varimax rotation retaining factors with an eigenvalue of 1 or greater. The conceptual scales in the dataset were consistent with the mapping chart created to develop the ACHF Emotional Well-being Survey. Based upon the exploratory factor analysis, the following scales were then calculated:

Community/ Belonging Scales including:

1. Belonging ($\alpha = .791$)
2. Personal Anxiety ($\alpha = .927$)
3. Social Anxiety ($\alpha = .898$)
Coping/ Stress Management Scales including:
(1) Positive coping ($\alpha = .816$)
(2) Negative coping ($\alpha = .615$)
(3) Stress Level ($\alpha = .798$);
Purpose and Meaning Scales including:
(1) Purpose of Life ($\alpha = .921$)
(2) Working on Life Purpose ($\alpha = .878$)
(3) Meaningful Contribute ($\alpha = .890$);
Subjective Well-Being including:
(1) Satisfaction with life ($\alpha = .886$)
(2) depression ($\alpha = .907$)
(3) loneliness($\alpha = .914$);
Institution Perception Scales:
(1) Institutional support for mental health ($\alpha = .921$),
(2) the institution’s value of individuals ($\alpha = .815$),
(3) the institution’s support for diversity ($\alpha = .931$),
(4) the perception of trust in institution ($\alpha = .807$). These scales are scored using simple sum scores and placed on standardized 100-point scales.

Findings
The student responses ($n = 5,584$) were from nine participating institutions, six of whom took the survey in the spring of 2021 and three in fall of 2021. Table A reports the background of respondents to the survey.

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th></th>
<th>Staff</th>
<th></th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>(5,584)</td>
<td>(1,644)</td>
<td>(725)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>65.8% (3,670)</td>
<td>71.8% (1,179)</td>
<td>63% (455)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>33.8% (1,887)</td>
<td>27.8% (456)</td>
<td>35.9% (259)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersex</td>
<td>.1% (4)</td>
<td>.1% (1)</td>
<td>.4% (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alaskan</td>
<td>2.8% (155)</td>
<td>2.6% (43)</td>
<td>1.8% (13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian/Asian American</td>
<td>12.1% (673)</td>
<td>4.6% (75)</td>
<td>10.2% (74)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black/African American</td>
<td>4.9% (273)</td>
<td>6.3% (104)</td>
<td>3.7% (27)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.9% (611)</td>
<td>10.3 (170)</td>
<td>7.2% (52)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>1.8% (99)</td>
<td>.5% (9)</td>
<td>1.2% (9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hawaiian</td>
<td>.4% (25)</td>
<td>.3% (5)</td>
<td>.1% (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>74.9% (4,184)</td>
<td>77.1% (1,268)</td>
<td>75.4% (547)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unknown/Other</td>
<td>1.8% (102)</td>
<td>2.1% (35)</td>
<td>3.0% (22)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is important to note that student, staff, and faculty are not mutually exclusive categories. An individual respondent could be both a student and a staff member. A faculty member could also be a student. There were 5,584 individuals who indicated they were students, with 65.8% of those reporting being female and 74.9% of respondents identifying as white. 12.1% of students identified as Asian, 10.9% identified as Hispanic, and 4.9% identified as Black/African American. There were 1,644 responses who indicated they were staff, with 74.8% female and 77.1% white. 10.3% of staff respondents identified as Hispanic, 6.3% as Black/African American, and 4.6% as Asian/Asian American. There were 725 responses who indicated they were faculty, with 63% female and 75.4% white. 10.2% of faculty respondents identified as Asian/Asian American, 7.2% as Hispanic, and 3.7% as Black/African American.
The survey sought to examine well-being through measuring four constructs: (1) community/belonging (social connectedness, belonging, confidence, safety, and trust); (2) coping/stress management (resilience, flexibility, adaptability, and anxiety); (3) purpose and meaning; and (4) subjective well-being (life satisfaction, depression, and loneliness). Each of these latent constructs was measured through three scales for a total of 12 scales across the four constructs (Travia, et al., 2021, Appendix A).

Table B describes findings across the four constructs by students, staff, and faculty. All scales are standardized to be 100-point scales. Findings across the 12 scales and four constructs show variation between students, staff and faculty.

Between students, staff, and faculty we see variation in all four constructs. Students report less community belonging, less coping, more stress, lower purpose and meaning, and more depression and isolation. In each instance these differences are statistically significant.

Table B: ACHF Subjective Well-being Constructs by Students, Staff, and Faculty

<table>
<thead>
<tr>
<th>Well-Being Construct</th>
<th>Scales Within Well-Being Construct</th>
<th>Students Scale Mean (N)</th>
<th>Staff Scale Mean (N)</th>
<th>Faculty Scale Mean (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community/Belonging</td>
<td>Belonging</td>
<td>72.19 (5,568)</td>
<td>77.56 (1,640)</td>
<td>77.68 (724)</td>
</tr>
<tr>
<td></td>
<td>Personal Anxiety</td>
<td>62.85 (5,584)</td>
<td>51.03 (1,644)</td>
<td>52.80 (725)</td>
</tr>
<tr>
<td></td>
<td>Social Anxiety</td>
<td>48.21 (5,584)</td>
<td>36.55 (1,644)</td>
<td>37.78 (725)</td>
</tr>
<tr>
<td>Coping/Stress Management</td>
<td>Positive Coping</td>
<td>60.27 (5,584)</td>
<td>67.33 (1,644)</td>
<td>67.09 (725)</td>
</tr>
<tr>
<td></td>
<td>Negative Coping</td>
<td>56.57 (5,584)</td>
<td>46.05 (1,644)</td>
<td>45.78 (725)</td>
</tr>
<tr>
<td></td>
<td>Stress Level</td>
<td>74.73 (5,584)</td>
<td>69.67 (1,644)</td>
<td>73.26 (725)</td>
</tr>
<tr>
<td>Purpose and Meaning</td>
<td>Purpose of Life</td>
<td>49.63 (5,584)</td>
<td>55.87 (1,644)</td>
<td>58.60 (725)</td>
</tr>
<tr>
<td></td>
<td>Working on Life Purpose</td>
<td>58.79 (5,584)</td>
<td>55.05 (1,644)</td>
<td>58.86 (725)</td>
</tr>
<tr>
<td></td>
<td>Meaningful Contribute</td>
<td>63.37 (5,584)</td>
<td>63.06 (1,644)</td>
<td>64.67 (725)</td>
</tr>
<tr>
<td>Subjective Well-Being</td>
<td>Satisfaction with Life</td>
<td>60.94 (5,584)</td>
<td>67.24 (1,644)</td>
<td>67.87 (725)</td>
</tr>
<tr>
<td></td>
<td>Depression</td>
<td>44.65 (5,584)</td>
<td>35.27 (1,644)</td>
<td>36.27 (725)</td>
</tr>
<tr>
<td></td>
<td>Loneliness</td>
<td>46.12 (5,584)</td>
<td>36.10 (1,644)</td>
<td>37.89 (725)</td>
</tr>
</tbody>
</table>

Table C reports satisfaction with life scores from the Diener Satisfaction with Life Scale for student, staff, and faculty respondents. The questions from the ACHF Emotional Well-being Survey are:

- In most ways my life is close to my ideal.
- The conditions of my life are excellent.
- I am satisfied with my life.
- So far I have gotten the important things I want in life, and
- If I could live my life over, I would change almost nothing.
The key finding here is that students report significantly lower satisfaction with life, as compared to staff and faculty, with an overall score of 60.94 (out of 100). As a trend, female respondents report higher satisfaction with life scores than males across all three groups. With respect to race/ethnicity, Black/African American respondents show lower scores, particularly for students and staff, though not among faculty. Finally, the mean scores appear to be driven by white respondents.

Table C: Satisfaction with Life Scale by Students, Staff, and Faculty and Sex and Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Students Scale Mean (N)</th>
<th>Staff Scale Mean (N)</th>
<th>Faculty Scale Mean (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>60.94 (5,584)</td>
<td>67.24 (1,644)</td>
<td>67.87 (725)</td>
</tr>
<tr>
<td>Female</td>
<td>61.63 (3,670)</td>
<td>68.10 (1,179)</td>
<td>68.14 (455)</td>
</tr>
<tr>
<td>Male</td>
<td>59.69 (1,887)</td>
<td>65.07 (456)</td>
<td>67.75 (259)</td>
</tr>
<tr>
<td>Intersex</td>
<td>78.57 (4)</td>
<td>62.86 (1)</td>
<td>82.85 (3)</td>
</tr>
<tr>
<td>Alaskan</td>
<td>63.55 (155)</td>
<td>66.58 (43)</td>
<td>65.71 (13)</td>
</tr>
<tr>
<td>Asian/Asian American</td>
<td>60.24 (673)</td>
<td>64.91 (75)</td>
<td>65.56 (74)</td>
</tr>
<tr>
<td>Black/African American</td>
<td>56.93 (273)</td>
<td>62.90 (104)</td>
<td>72.16 (27)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>62.59 (611)</td>
<td>67.07 (170)</td>
<td>67.25 (52)</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>57.20 (99)</td>
<td>65.40 (9)</td>
<td>66.98 (9)</td>
</tr>
<tr>
<td>Hawaiian</td>
<td>63.2 (25)</td>
<td>62.28 (5)</td>
<td>82.86 (1)</td>
</tr>
<tr>
<td>White</td>
<td>61.12 (4,184)</td>
<td>67.71 (1,268)</td>
<td>68.50 (547)</td>
</tr>
<tr>
<td>Unknown/Other</td>
<td>59.76 (102)</td>
<td>59.25 (35)</td>
<td>65.82 (22)</td>
</tr>
</tbody>
</table>

Table D shows perceptions of the institutional culture (“environmental factors”) which was based on questions taken from the Guarding Minds@Work survey that were modified to include students, staff, and faculty. The questions from the ACHF Emotional Well-being Survey asked questions in four scales:

1. Perception of Institutional Support for Mental Health
2. Perception of Institutional Value of Individuals
3. Perception of Institutional Support for Diversity
4. Perception of Trust in the Institution

Specific questions for **Perception of Institutional Support for Mental Health** are:

1. I would describe my institution as psychologically healthy.
2. My institution prioritizes student mental well-being.
3. My institution prioritizes staff mental well-being.
4. My institution prioritizes faculty well-being.
5. People at my institution have a good understanding of the importance of mental health.

Specific questions for **Perception of Institutional Value of Individuals** are:

1. I feel that I am part of a community at my institution.
2. I feel valued and respected by my manager, supervisor, or instructor.
3. I feel my work is valued by my manager, supervisor, or instructor.
Specific questions for **Perception of Institutional Support for Diversity** are:
1. People from diverse backgrounds are treated with respect and fairness at my institution,
2. People treat each other with respect and consideration at my institution,
3. People at my institution show sincere respect for others’ ideas, values and beliefs,
4. People from all backgrounds are treated fairly at our institution.

Specific questions for **Perception of Trust in the Institution** are:
5. 1) My institution offers services or benefits that adequately address my psychological and mental health.
6. 2) I trust my institution.

Scores were relatively low across all three groups, with perception of institutional support for diversity coming in lowest at 38.85%, 30.32%, and 31.65% for students, staff, and faculty, respectively. Faculty perceptions of institutional support are lower (as a general trend) across all four variables than students and staff.

### Table D: Institutional Perceptions Variables by Students, Staff and Faculty

<table>
<thead>
<tr>
<th>Perception of Institutional Support</th>
<th>Students Scale Mean (N)</th>
<th>Staff Scale Mean (N)</th>
<th>Faculty Scale Mean (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of Institutional Support for Mental Health</td>
<td>63.90 (5,584)</td>
<td>65.23 (1,644)</td>
<td>59.41 (725)</td>
</tr>
<tr>
<td>Perception of Institutional Value of Individuals</td>
<td>68.05 (5,584)</td>
<td>74.01 (1,644)</td>
<td>69.52 (725)</td>
</tr>
<tr>
<td>Perception of Institutional Support for Diversity</td>
<td>38.85 (5,584)</td>
<td>30.32 (1,644)</td>
<td>31.65 (725)</td>
</tr>
<tr>
<td>Perception of Trust in the Institution</td>
<td>68.21 (5,584)</td>
<td>67.34 (1,644)</td>
<td>61.28 (725)</td>
</tr>
</tbody>
</table>

Table E looks at subjective well-being of students, staff, and faculty, especially depression and the Diener Satisfaction with Life scales. This model also controls for other variables such as race/ethnicity and gender. While there are differences in depression, satisfaction with life, and perceptions of institutional support for mental health, individuals, and diversity as well as trust in the institution, no statistically significant differences in sex were found across the groups when controlling for other variables. There are limited statistically significant differences when controlling for other variables in the model related to race/ethnicity and these two measures of well-being. A key finding is that **perceptions of the institution are the strongest predictors of emotional well-being when controlling for other variables**. Among the perception variables, the perception of support for diversity is the strongest predictor (when looking at standardized Beta) of emotional well-being.
Table E: Regression Models for Measures of Subjective Well-being: Depression and Satisfaction with Life Scales

<table>
<thead>
<tr>
<th></th>
<th>Depression B</th>
<th>Depression Beta</th>
<th>Diener B</th>
<th>Diener Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>23.624**</td>
<td></td>
<td>53.102**</td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td>-1.850**</td>
<td>-0.05</td>
<td>4.320**</td>
<td>0.063</td>
</tr>
<tr>
<td>Faculty</td>
<td>-2.569**</td>
<td>-0.05</td>
<td>0.810</td>
<td>0.017</td>
</tr>
<tr>
<td>Female</td>
<td>-1.919</td>
<td>-0.042</td>
<td>2.226</td>
<td>0.052</td>
</tr>
<tr>
<td>Male</td>
<td>-2.518</td>
<td>-0.055</td>
<td>0.24</td>
<td>0.001</td>
</tr>
<tr>
<td>Alaskan</td>
<td>-0.834</td>
<td>-0.006</td>
<td>1.739</td>
<td>0.014</td>
</tr>
<tr>
<td>Asian/Asian American</td>
<td>.377</td>
<td>0.011</td>
<td>-0.946*</td>
<td>-0.028</td>
</tr>
<tr>
<td>Black/African American</td>
<td>-0.362</td>
<td>-0.011</td>
<td>-0.900*</td>
<td>-0.029</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.066</td>
<td>-0.004</td>
<td>0.505*</td>
<td>0.030</td>
</tr>
<tr>
<td>Middle Eastern</td>
<td>0.114</td>
<td>0.003</td>
<td>-0.042</td>
<td>-0.001</td>
</tr>
<tr>
<td>Hawaiian</td>
<td>-0.232</td>
<td>-0.004</td>
<td>0.486</td>
<td>0.009</td>
</tr>
<tr>
<td>White</td>
<td>-0.072</td>
<td>-0.010</td>
<td>0.257*</td>
<td>0.038</td>
</tr>
<tr>
<td>Perception of Institutional Support for Mental Health</td>
<td>-0.037**</td>
<td>-0.034</td>
<td>0.039*</td>
<td>0.038</td>
</tr>
<tr>
<td>Perception of Institutional Value of Individuals</td>
<td>-0.027*</td>
<td>-0.025</td>
<td>0.186**</td>
<td>0.185</td>
</tr>
<tr>
<td>Perception of Institutional Support for Diversity</td>
<td>0.820**</td>
<td>0.724</td>
<td>-0.443**</td>
<td>-0.420</td>
</tr>
<tr>
<td>Perception of Trust in the Institution</td>
<td>-0.062**</td>
<td>-0.062</td>
<td>0.105**</td>
<td>0.112</td>
</tr>
<tr>
<td>R</td>
<td>.780</td>
<td></td>
<td>.616</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.609</td>
<td></td>
<td>.379</td>
<td></td>
</tr>
</tbody>
</table>

Limitations and Future Research

This study has a series of limitations that are important to identify. First, while the sample size of this study was large, it was not collected with the intention to be representative of college students, staff, or faculty. It is also unclear to what extent the data from each institution is representative of that institution. Future implementation should attend specifically to representativeness. Second, this research was conducted during the COVID-19 pandemic and thus the results related to well-being must be considered in that context. Third, data was gathered from students, staff, and faculty at each institution, and these groups are not mutually exclusive, but rather overlapping, making clear distinctions between these groups complex and worthy of more analysis. Fourth, like all surveys, this project saw challenges in low survey response rates in the college environment. Finally, future research to examine the relationship between institutional environment and the other dimensions of emotional well-being captured in the survey but not specifically addressed in this analysis may yield supporting or differing results. Such research would continue to advance our understanding of how institutional environment and individual emotional well-being interact across a whole campus population.

Discussion

What the above analysis reveals is the degree to which people feel supported by their institution can be predictive of individual emotional well-being, both in terms of the absence of mental health disease (i.e., markers of depression) and in terms of the presence of positive markers of thriving (i.e., satisfaction with life). The correlation between institutional factors and individual well-being holds when controlling for gender identities.
and remains when controlling for racial/ethnic identities as well, though with limited statistically significant variation. The differences among students, staff, and faculty were more meaningful by subgroup than were differences based upon race/ethnicity or gender.

That said, the perception of institutional support for individuals, their mental health, and overall commitment to diversity proved to be a significant predictor of emotional well-being across all three groups. Thus, environmental factors appear to play a key role in subjective emotional well-being. Institutions of higher education that are committed to promoting mental health and emotional well-being within their communities should continue to invest in programs and services across campus constituencies, including students, staff, and faculty. Given that perceptions appear to play such an important role in subjective well-being, marketing and promoting these resources widely may be a valuable strategy for colleges/universities to consider as well. Further, the perception of institutional support for diversity was the environmental factor that proved to be the most prominent variable that influences mental health and emotional well-being. As colleges and universities continue to focus on advancing diversity, equity, inclusion, and belonging (DEIB), it is imperative that there is meaningful action taking place behind the rhetoric. To say that an organization is confronting institutional racism or that they believe in DEI is one thing. Institutions must invest in training and professional development opportunities for all community members. They need to hire more faculty and staff of color who reflect the rich diversity of their student bodies. They must take an active role in dismantling existing systems of oppression within the higher education community. This study suggests that institutions that truly value equity, diversity, and inclusion and follow through on that commitment with meaningful action may be contributing to higher levels of mental health and emotional well-being among their students, staff, and faculty. Further, this research points to the ways in which diversity, equity, inclusion, and belonging and well-being are mutually supported goals of higher education and should be understood, pursued, and promoted as such.

Conclusion

While there are several worthy contributions to the conversation that can be derived from this research, the two most compelling to this research team are: (1) Students have lower emotional well-being as compared to staff and faculty; and (2) Perception of the environment is a critically important factor in predicting emotional well-being both in the absence of mental disease (i.e., depression) and the presence of thriving (i.e., satisfaction with life), with perception of institutional support for diversity being the most important among all variables considered.
References


Crystal R. Hutchinson, MEd, CHES, is an organizational wellbeing consultant, health promotion practitioner and strategist. In her current role as Workplace Wellbeing Practices and Learning Consultant within Human Resources at the University of British Columbia, Crystal leads and evaluates systemic, and comprehensive university-wide initiatives to enhance employee wellbeing and advance psychologically healthy and safe workplaces. Crystal’s knowledge, skills and expertise span 13 years in the areas of health education and health promotion. She has over 8 years of experience working specifically within higher education settings, as a key collaborator in the development of the 2015 Okanagan Charter: An International Charter for Health Promoting Universities and Colleges and as author and co-author of numerous publications. Crystal is an advocate for health equity and applies this lens in all decision making. She is passionate about shifting systems, policies, and practices to advance the wellbeing of people, environments, and communities. As a settler, she gratefully acknowledges she lives and works on the unceded and traditional territories of the Musqueam, Squamish and Tsleil-Waututh peoples.

James Larcus, MA, NBC-HWC serves as Content Manager at Grit Digital Health and Lecturer at Metropolitan State University of Denver in their Health Professions Department. He is a demonstrated innovator focused on the strategy, design, and implementation of holistic well-being initiatives on college campuses. James is committed to cultivating an environment that supports student success and fosters equitable well-being for all. He has authored 6 whitepapers, book chapters, or peer-reviewed journal articles along with over 40 state, regional, or national presentations. James stays diligent to the intersecting national and higher education trends related to well-being practices and develops and consults on community-based strategies within university contexts. He has overseen programs that have been awarded national and state innovative program awards and been named a rising star and emerging outstanding professional in wellness by leading higher education organizations. A native of Arizona, James is a double Buckeye, receiving his Bachelor of Science in Sports Management and a Master in Student Affairs Administration from The Ohio State University. In his free time, you can find James on one of Colorado’s mountain vistas, cooking with his partner, or playing with his spunky cat, Pete.

Valerie C. Merriweather, MHA, MA serves as the Director of Health Promotion and Education at North Carolina Central University (NCCU). In this role she leads campus-wide health and well-being initiatives as well as all health promotion messaging for the University. Her goal is to empower students, faculty and staff to live healthy lives in order to create healthier communities. In her previous role at NCCU, Valerie led the Garrett Lee Smith Suicide Prevention Program. In this role, she collaborated with campus and community partners to deliver signature suicide awareness programming and chaired the Suicide Prevention Coordination Committee on a variety of initiatives to expand programs across campus. Valerie serves in a variety of capacities that seek her expertise in the health and well-being space such as The University DEI Committee, the North Star Consortium Vaccine Workgroup, Health and Well-Being Student Ambassadors Advisor, and certified Mental Health First Aid instructor.

A native of Riverside, California, Valerie received a Bachelor of Science in Radiation Therapy from Howard University, a Master’s in Health Administration degree from The Ohio State University and recently completed her Master of Arts in Educational Technology (Summa Cum Laude) with an emphasis on health and well-being and technology. Her executive health coaching programs have been instrumental in helping
leaders from around the country increase personal productivity and enhance well-being. She is a speaker on health and wellness topics, consultant, and entrepreneur. Valerie’s accomplishments and contributions as a healthcare executive have been recognized by the White House State of Women under the Obama administration, Kaiser Permanente, and a host of other organizations dedicated to health and well-being.

Kim R. Thibodeau is an accomplished well-being innovator focused on strategic development, consulting, designing, implementing, and evaluating well-being programs and services. While at Aetna she was responsible for developing the enterprise well-being strategy and delivering the well-being product development for commercial, B2B, and B2C markets, including Aetna Student Health and CVSHealth HUB customers. Aetna’s collaboration with Harvard T.H. Chan School of Public Health was studying Aetna’s six determinants of well-being, the correlations to engagement and productivity and the effectiveness of various interventions. Kim was the subject matter expert responsible for leading the groundbreaking personalized well-being approach for four of the six dimensions; social connectedness, purpose, character strengths and emotional health. She also evaluated and expanded the commercial well-being culture assessment tool and toolkits. Previously Kim designed and led professional multidisciplinary workshops, integrating kinesthetic movement from the National Core Arts Standards into the Common Core State Standards the State of Connecticut. She also pioneered a business that created and launched a national program named Recess Rocks, recognized as a highly successful program reaching classrooms virtually and in-person. The Recess Rocks approach targeted childhood obesity with four programs: Recess, Lesson Plan Tie-Ins, Celebrations and customized Trainings for movement instructors and schoolteachers. She has presented at TEDx, Go Red for Women, and at several Connecticut colleges. Kim holds a BA from University of Connecticut. She enjoys volunteering at a local garden that donates pesticide and herbicide free produce to soup kitchens and invests her free time practicing mindfulness and exploring the Connecticut shoreline with her husband and dog, Slater.

Dr. Ryan M. Travia is Associate Vice President for Student Success at Babson College. In this role, Ryan provides leadership and strategic direction for a comprehensive portfolio that includes accessibility services, alcohol & other drug services, the Campus Assessment, Response, & Evaluation (CARE Team), counseling and psychological services, COVID-19 Testing Center, health promotion, health services, religious & spiritual life, student advising & success, and sexual assault prevention & response services. Prior to joining Babson, Ryan spent a decade at Harvard University as the founding director of the Office of Alcohol & Other Drug Services and founding director of the Department of Health Promotion & Education. Previously, Ryan led the substance abuse prevention program at Dartmouth College. Ryan holds a Bachelor’s degree in Human Development and Elementary Education/Moderate Special Needs and a Master’s in Educational Administration, both from Boston College, and a doctorate in Higher Education Management from the University of Pennsylvania. His research interests include institutional decision-making about restructuring at institutions that have been intentional about leveraging the connectivity between student and academic affairs to develop a more seamless learning experience for students. Most recently, Ryan served as the lead author for the peer-reviewed journal article, Framing Well-being in a College Campus Setting, and lead author for the Measuring Well-being in a College Campus Setting whitepaper.

Dr. Andrew Wall is a Professor at the School of Education, Department of Leadership and Higher Education, University of Redlands University. Andrew F. Wall served as the Robert A. & Mildred Peronia Naslund Endowed Dean of the School of Education at the University of Redlands from July
2014 to June 2020. Prior to his time as Dean, Wall served as Associate Professor and Department Chair of educational leadership at the Margaret Warner Graduate School of Education and Human Development at University of Rochester in New York. While at Rochester, Wall also served as the higher education program director and interim co-director of the Warner Center for Professional Development and Education Reform.

In those roles, Wall has been key player in leadership strategy. His curriculum and pedagogical innovations helped to build robust and thriving academic programs. A skilled relationship-builder, Wall counts his key accomplishments as building community of scholars and a student-focused culture at the institutions he has served. Additionally, he has cultivated strong links within the local and national K-12 and higher education communities.

The author of numerous book chapters and journal articles, Wall is also the co-author of two books, "Assessment Reconsidered" and "Case Studies in Higher Education Leadership: An Instructional Tool." He is a member of the American Education Research Association, the Association for the Study of Higher Education and the National Association of Student Personnel Administrators.