

# Subjective Well-Being and Mental Health among College Students: Two Datasets for Diagnosis and Program Evaluation

Lina Martínez <sup>1,\*</sup>, Esteban Robles <sup>2</sup>, Valeria Trofimoff <sup>3</sup>, Nicolás Vidal <sup>2</sup>, Andrés David Espada <sup>2</sup>, Nayith Mosquera <sup>3</sup>, Bryan Franco <sup>4</sup>, Víctor Sarmiento <sup>5</sup> and María Isabel Zafra <sup>3,\*</sup>

<sup>1</sup> Organizational Management Department, Faculty of Administrative and Economic Sciences, Universidad Icesi, Cali 760031, Colombia

<sup>2</sup> Economics Department, Faculty of Administrative and Economic Sciences, Universidad Icesi, Cali 760031, Colombia; esteban.robles1@u.icesi.edu.co (E.R.); nevidal@icesi.edu.co (N.V.); adespada@icesi.edu.co (A.D.E.)

<sup>3</sup> Public Policy Observatory (POLIS), Faculty of Administrative and Economic Sciences, Universidad Icesi, Cali 760031, Colombia; vtrofimoff@icesi.edu.co (V.T.); njmosquera@icesi.edu.co (N.M.)

<sup>4</sup> Háptica, Bogota 110911, Colombia; bryan.granco.sarasty@gmail.com

<sup>5</sup> Research Center on Economics and Finance (CIENFI), Economics Department, Faculty of Administrative and Economic Sciences, Universidad Icesi, Cali 760031, Colombia; vmsarmiento@icesi.edu.co

\* Correspondence: lmmartinez@icesi.edu.co (L.M.); maria.zafra1@u.icesi.edu.co (M.I.Z.)

**Abstract:** This paper presents two datasets about college students' subjective well-being and mental health in a developing country. The first data set of this report offers a diagnosis of the prevalence of self-reported symptoms associated with stress, anxiety, depression, and overall evaluation of subjective well-being. The study uses validated scales to measure self-reported symptoms related to mental health conditions. To measure stress, the study used the Perceived Stress Scale (PSS-10) and the 7-item Generalized Anxiety Disorder Scale (GAD-7) to measure symptoms associated with anxiety (GAD-7), and the 9-item Patient Health Questionnaire (PHQ-9) to measure symptoms associated with depression. This diagnosis was collected in a college student sample of 3052 undergrad students in 2022 at a medium-sized university in Colombia. The second dataset reports the evaluation of a positive education intervention implemented in the same university. The Colombian Minister of Science and Technology financed the intervention to promote strategies to mitigate the consequences on college students' well-being and mental health after the pandemic. The program evaluation data cover two years (2020–2022) with 193 college students in the treatment group (students enrolled in a class teaching evidence-based interventions to promote well-being and mental health awareness) and 135 students in the control group. Data for evaluation include a broad array of variables of life satisfaction, happiness, negative emotions, COVID-19 effects, relationships valuations, and habits and the measurement of three scales: The Satisfaction with Life Scale (SWLS), a brief measurement of depressive symptomatology (CESD-7), and the Brief Strengths Scale (BSS).

**Dataset:** Diagnosis dataset: <https://data.mendeley.com/datasets/bytb22nf7m/1> (accessed on 21 February 2024), Available at Mendeley Data; Program evaluation dataset: <https://data.mendeley.com/datasets/c4nmk6h3kj> (accessed on 21 February 2024), Available at Mendeley Data.

**Dataset License:** CC BY-NC-SA

**Keywords:** positive education interventions; well-being; college students; happiness; mental health



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## 1. Summary

The pandemic had a severe toll on mental health. According to the World Health Organization, there is a massive increase of 25% in the global prevalence of anxiety and depression [1]. Furthermore, for some population groups like children and young adults,

the pandemic had more long-term consequences on their mental health than their physical health, aggravated by the decline of their mental health over the last decade [2,3].

The mental health of young adults and college students has been at the forefront of academic and policy discussion, given the worrisome trends reported in the recent past. In the UK [4], the USA [5], and Sweden [6], among other developed countries [7], there are reports of an increase in mental health disorders in young adults in the past decades. The magnitude of this trend varies depending on the context, but the increase is significant. For instance, in the USA, rates of major depressive episodes increased by 52% during 2005–2017 [5], and in the UK, levels of mental distress during the pandemic were 44% greater than pre-pandemic levels, particularly acute among those in the 16–24 age bracket [8].

Less is known about the long-term consequences on the mental health of young adults in Latin America. In Colombia, for instance, there are only national reports on mental health for 2015 [9], and researchers lack recent data to assess the consequences of the pandemic on mental health and provide valuable information to institutions—such as universities—to assist and tackle this phenomenon.

To contribute to this knowledge gap of mental health trajectories of the college population in developing countries after the pandemic, researchers at Universidad Icesi conducted two studies on the population of interest. One study aims at constructing a baseline for common mental health disorders among college students. The diagnosis, conducted in 2022, presents the trajectory of self-reported symptoms associated with stress, anxiety, depression, and overall evaluation of subjective well-being [10,11]. This diagnosis provides relevant information to understand the magnitude of the prevalence of mental health conditions among college students and possible mechanisms of interventions. The data reports on validated scales, allowing valid comparisons with other studies.

The second study, was a program evaluation of an intervention to reduce the prevalence of self-reported mental health symptoms. The intervention was a class in the science of well-being, helping to understand how college-level classes and teaching evidence-based interventions can improve overall participants' well-being. The intervention builds on the literature of positive education interventions to increase well-being [12–14].

Both studies are related but serve a different purpose. The diagnosis dataset aims at creating a baseline at the college level for the prevalence of self-reported mental health symptoms. The program evaluation data serve the purpose of implementing strategies for college students to improve their well-being and educate them about mental health conditions. Both studies were developed under an extensive campus program to address mental health literacy among college-level students after the pandemic. Both studies contribute to understanding the magnitude of mental health and subjective well-being in higher education. The data also shed light on the possible paths to address the critical increase in mental health problems using educational strategies.

The data presented in this analysis provide detailed information on treatment and control groups for two consecutive years with a baseline (before the treatment) and follow-up information (after the treatment). The study's design allows for an impact evaluation of positive education interventions. The data of this report allow for comparisons of positive education interventions in different contexts, contributing to a growing body of research about the impacts of evidence-based interventions implemented in the educational system [15].

The general results indicate the internal consistency, reliability, and convergence of each measurement instrument within each dataset. The corrected item–total correlation suggests a high correlation between each item and all items associated with the scales for subjective well-being and all self-reported symptoms of stress, anxiety, and depression. Moreover, the factor loadings vary for each scale of each construct or instrument, indicating that the variability and degree of confidence that each item has on the dimensions present mild, moderate, and high loadings; however, the expected directions or signs of each item composing the dimension are met and respected. Finally, the internal consistency for each

item exceeds the parameters proposed by the validation measures, allowing us to conclude that the scales for each dimension are reliable.

The information and data available in this report are valuable for educators and academics seeking to better understand the magnitude of self-reported symptoms of stress, anxiety, and depression and the impacts of positive education interventions at the college level in Latin America, a region with scarce information about the implementation and effects of those types of programs.

## 2. Data Description

### 2.1. *Diagnosis Dataset*

#### 2.1.1. Objective

This dataset was collected to assess the magnitude of the prevalence of symptoms associated with stress, anxiety, and depression among the college population after the pandemic. The information serves the purpose of diagnosing and providing a baseline for program implementation aimed at improving college students' mental health and well-being.

#### 2.1.2. Parameters for Data Collection

The sample consisted of undergraduate college students in a mid-size university in Cali, Colombia. Survey participation was optional, and the data were collected in a campus-wide survey during a mental health awareness campaign at the university in 2022.

#### 2.1.3. Description of Data Collection

An online survey circulated in all classrooms at the beginning of the second semester of 2022 as a part of a campus-wide campaign.

#### 2.1.4. Questionnaire and Variables

The diagnosis questionnaire of this study was designed to capture the magnitude of self-reported symptoms of stress, anxiety, depression and an assessment of the overall well-being of undergrad students in a campus-wide study. The self-responded questionnaire had three sections: (i) demographic data; (ii) subjective well-being information; and (iii) self-reported mental health symptoms.

#### 2.1.5. Timespan

Data were collected during one month between August and September of 2022.

#### 2.1.6. Datasets

This dataset is openly available at Mendeley Data [16]. Two files allow navigating the data: 1. survey; and 2. raw data in Excel format. The survey presents the study questionnaire in detail in the questionnaire and variables section. The raw data file has the collected information to reproduce the analysis.

### 2.2. *Program Evaluation Dataset*

#### 2.2.1. Objective

This information was collected to evaluate the impact of a positive education intervention aimed at improving well-being and reducing the prevalence of mental health symptoms among college students. This intervention seeks to guide positive education interventions at the college level to be implemented nationwide in Colombia.

#### 2.2.2. Parameters for Data Collection

College students enrolled in a positive education class during four semesters covering 2020–2022. Class participants identified a university classmate (not enrolled in the positive education class). Non-class participants were the control group.

### 2.2.3. Description of Data Collection

An online survey was administered to class participants (treatment) and non-class participants (control). At the beginning of the semester, class participants filled out an online survey, and identified a friend or classmate not taking the positive education class. At the end of the semester, students in the treatment and control group were asked to respond to a follow-up online survey.

### 2.2.4. Questionnaire and Variables

Researchers involved in the study designed a questionnaire to assess the overall life satisfaction and subjective well-being of the students enrolled in a college course concerning happiness and well-being before and after class participation. The same questionnaire was administered to non-class participants during the same time intervals as the class participants.

The questionnaire has seven sections: (i) demographic information; (ii) COVID-19 effects; (iii) subjective well-being and relationships valuation; (iv) meditation and habits; (v) Satisfaction with Life Scale (SWLS); (vi) a brief measurement of depressive symptomatology (CESD-7); and (vii) Brief Strengths Scale (BSS).

### 2.2.5. Timespan

Data associated with the study cover four semesters between 2020 and 2022.

### 2.2.6. Datasets

Open data are available at the Mendeley Data repository [17]. Two files allow navigating the data: 1. survey; and 2. raw data in Excel format. The survey presents the study questionnaire in detail in the questionnaire and variables section. The raw data file has the collected information to reproduce the analysis.

## 3. Methods

### 3.1. Diagnosis Dataset

#### 3.1.1. Experimental Design, Materials, and Methods

The data of this report were collected in August 2022 at the beginning of the fall semester as part of a campus-wide campaign for mental health and well-being awareness. All classrooms were visited by research assistants, who explained the study's purpose and the data's confidentiality. Students who were willing to participate scanned a QR code on their cellphones to fill out a web survey hosted on the QuestionPro platform lasting about 10 min to complete. The survey did not ask for personal information to make it anonymous. To prevent repetitions, research assistants visiting classrooms asked about survey participation. QR codes were provided to those students who still needed to complete the survey. In total, 5301 students participated in the survey. Still, only 3052 undergraduate students completed the survey, making the sample 57% of the total student body in the university.

#### 3.1.2. Piloting and Data Access

The questionnaire used in this study was tested with 15 students before implementation. After the pilot, small changes in question-wording to simplify or clarify questions were introduced to the final version. Raw data, questionnaire, and data description are available at the Mendeley Data [16] repository.

#### 3.1.3. Demographic Data

This section collects information about age, gender, ethnicity, and student's parent's educational attainment. The survey also collected information about household socioeconomic strata (SES). In Colombia, households are classified on a scale from 1 to 6; one represents the most disadvantaged and six the most affluent [18]. In this scale, 1–2 categories signal low-SES, 3–4 categories middle-SES, and 5–6 categories high-SES. This scale is used to focus on subsidies and state-sponsored programs. The SES scale is a reliable proxy

for household income and poverty in the Colombian context. Table 1 presents the overall demographic makeup of students participating in the study.

**Table 1.** Socioeconomic variables—diagnosis dataset.

Average age (years)	20.0 (3.1)
Female (%)	53.0
Household socioeconomic strata—SES (%)	
SES 1	7.1
SES 2	17.8
SES 3	21.1
SES 4	21.3
SES 5	21.8
SES 6	11.0
Ethnicity (%)	
Indigenous	2.4
Gypsy	0.2
Raizal from San Andres, Providencia and Santa Catalina, Archipelago	0.1
Palenquero from San Basilio	0.1
Black, mulatto (Afro-descendant), Afro-Colombian	9.5
None of the above <sup>a</sup>	87.8
Mother's education (average years)	15.0 (5.5)
Father's education (average years)	15.0 (6.5)

Notes: Standard deviation in parentheses. <sup>a</sup> The classification or categories of ethnicity are based on those proposed by the National Administrative Department of Statistics—DANE (acronym in Spanish). The specific category 'None of the above' indicates that it is a segment of the surveyed population that does not self-identify with any of the other ethnicity categories proposed by the DANE.

#### 3.1.4. Subjective Well-Being

Questions of this component aim at providing an overall assessment of students' life satisfaction (how satisfied are you with life as a whole these days, measured on a 0–10 scale) [19] and the frequency of positive and negative emotions experienced the day before. For positive emotions, the questionnaire included measures for experiencing emotions like happiness, laughter, learning something new, and enjoyment. To measure negative emotions, the questionnaire included worry, depression, anger, stress, and loneliness. The information on positive and negative emotions allows for measuring affect balance [19]. Table 2 presents information on subjective well-being, variable correlation, and factor loading.

**Table 2.** Subjective well-being information. Correlation, factor loading, and Cronbach's alpha.

Subjective Wellbeing							
	Average	Standard Deviation	Corrected Item–Total Correlation <sup>a</sup>	Factor Loading <sup>b</sup> (Factor 1)	Factor Loading <sup>b</sup> (Factor 2)	Cronbach's Alpha <sup>c</sup>	N
Life satisfaction (average scale 0–10)	6.9	1.9					
The following questions are about how you felt yesterday on a scale of 0 to 10. Zero means that you didn't experience these feelings "at no time" while 10 means that you experienced these feelings "all the time".							
Happy	6.6	2.3	0.71 *	−0.34	0.79	0.82	2992
Laugh	6.1	2.5	0.60 *	−0.19	0.81	0.83	2992
Learning or doing something interesting	6.1	2.6	0.34 *	0.11	0.74	0.86	2992
Enjoyment	6.6	2.5	0.63 *	−0.20	0.83	0.83	2992
Worried	5.7	3.0	0.48	0.82	−0.03	0.85	2992
Depressed	3.8	3.0	0.71	0.71	−0.42	0.82	2992
Anger	3.0	2.9	0.50	0.70	−0.16	0.84	2992
Stress	5.1	3.0	0.59	0.83	−0.14	0.82	2992
Loneliness	3.6	3.2	0.60	0.60	−0.41	0.83	2992
<b>Test scale</b>						<b>0.85</b>	

<sup>a</sup> Corrected item: Correlation between the respective item and the total sum score (without the respective item). <sup>b</sup> Factor loading: represents the relationship between an observed variable (item) and a latent factor identified during factor analysis. <sup>c</sup> Cronbach's Alpha: measures the internal consistency reliability of a set of items or scale. Values above 0.70 are recommended. \* Reverse-scaled items.

### 3.1.5. Mental Health

To measure the frequency of self-reported symptoms of stress, anxiety, and depression among college students in the context of this study, the questionnaire used three validated scales. For measuring self-reported symptoms of stress, the study uses the Perceived Stress Scale (PSS-10). The PSS-10 [20] is a widely used scale that allows self-reports of stress in a 0 to 4 scale (0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often, 4 = very often), with a cut-off point of  $\geq 15$  as an indicative of perceived stress [21]. This 10-item psychological instrument has been widely used to measure self-reported symptoms of stress in university students and health workers, showing high values of internal consistency, factor structure, and adequate reliability, in addition to correlating with life events, physical symptoms, and depression, use of health services and anxiety, among others [20,22,23].

To measure self-reported symptoms of anxiety, the study uses the 7-item Generalized Anxiety Disorder Scale (GAD-7) [24]. The scale inquires about frequency of symptoms using a 0–3 scale (0 = not at all; 1 = several days; 2 = more than half of the days; and 3 = nearly every day), with a cut-off point of  $\geq 5$  as an indicator of perceived anxiety [24]. This scale has been widely used in the literature to identify not only anxiety symptoms but also probable cases of general anxiety disorder in complex and stressful environments such as the work environment and COVID-19, finding validity and internal consistency of the measurement instrument [23,25].

Lastly, to measure symptoms associated with depression, the questionnaire included the 9-item Patient Health Questionnaire (PHQ-9), which measures a range of levels of depression—from 1–4 (minimal), 5–9 (mild), 10–14 (moderate), 15–19 (moderately severe) and 20–27 (severe)—with a cut-off point of  $\geq 7$  as an indicator of perceived depression [26]. This scale has reported compliance with validity and reliability criteria not only in the educational field but in contexts of immediate care for patients with COVID-19 and primary care in adults with cases of depression, identifying that this is one of the mental disorders more common in low-, middle-, and high-income countries and that exposure to complex and dysfunctional work, academic, and social environments leads to the development of mental symptoms such as depression [25,26].

The cut-off points for all scales are determined based on the total points obtained in the battery of questions associated with each self-reported symptom (stress, anxiety, and depression). All scales have been translated into Spanish and used in population studies in Colombia [25]. Table 3 presents the average results of the scales and measures for reliability and validity. Appendix A presents the results of convergent validity for the mental health scales and life satisfaction.

**Table 3.** Self-reported scales PSS-10, GAG-7, PHQ-9. Correlation, factor loading, and Cronbach's alpha.

Perceived Stress Scale (PSS)						
For Each Question, Choose from the following Values: 0: Never; 1: Almost Never; 2: Sometimes; 3: Fairly Often; 4: Very Often	Average	Standard Deviation	Corrected Item–Total Correlation <sup>a</sup>	Factor Loading <sup>b</sup> (Factor 1)	Factor Loading <sup>b</sup> (Factor 2)	Cronbach's Alpha <sup>c</sup>
In the last month, how often have you been upset because of something that happened unexpectedly?	2.3	0.9	0.6	0.74	−0.16	0.85
In the last month, how often have you felt that you were unable to control the important things in your life?	2.2	1.0	0.7	0.69	−0.40	0.84
In the last month, how often have you felt nervous and stressed?	2.8	0.9	0.6	0.74	−0.14	0.85
In the last month, how often have you felt confident about your ability to handle your personal problems?	2.5	0.9	−0.50 *	−0.17	0.73	0.85
In the last month, how often have you felt that things were going your way?	2.6	0.8	0.57 *	−0.27	0.72	0.85
In the last month, how often have you found that you could not cope with all the things that you had to do?	2.2	1.0	0.6	0.66	−0.29	0.85
In the last month, how often have you been able to control irritations in your life?	2.7	0.8	0.48 *	−0.10	0.78	0.86
In the last month, how often have you felt that you were on top of things?	2.2	0.9	0.58 *	−0.29	0.71	0.85
In the last month, how often have you been angered because of things that happened that were outside of your control?	2.3	1.0	0.5	0.71	−0.06	0.86
In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	2.0	1.1	0.7	0.70	−0.35	0.84
<b>Test scale</b>						<b>0.86</b>
General Anxiety Disorder (GAD-7)						
Over the Last Two Weeks, How Often Have You Been Bothered by the following Problems? 0: Not at All; 1: Several Days; 2: More Than Half the Days; 3: Fairly Often; 4: Nearly Every Day	Average	Standard Deviation	Corrected Item–Total Correlation <sup>a</sup>	Factor Loading <sup>b</sup>		Cronbach's Alpha <sup>c</sup>
Feeling nervous, anxious, or on edge	1.2	0.9	0.69	0.79		0.84
Not being able to stop or control worrying	1.0	0.9	0.63	0.74		0.85
Worrying too much about different things	1.3	0.9	0.73	0.82		0.84

Table 3. Cont.

Perceived Stress Scale (PSS)					
Over the Last Two Weeks, How Often Have You Been Bothered by the following Problems? 0: Not at All; 1: Several Days; 2: More Than Half the Days; 3: Fairly Often; 4: Nearly Every Day	Average	Standard Deviation	Corrected Item–Total Correlation <sup>a</sup>	Factor Loading <sup>b</sup>	Cronbach's Alpha <sup>c</sup>
Trouble relaxing	1.2	0.9	0.72	0.81	0.84
Being so restless that it is hard to sit still	1.1	1.0	0.61	0.72	0.85
Becoming easily annoyed or irritable	1.1	0.9	0.53	0.64	0.86
Feeling afraid, as if something awful might happen	1.0	1.0	0.59	0.70	0.86
<b>Test scale</b>					<b>0.87</b>
Patient Health Questionnaire-9 (PHQ-9)					
Over the Last Two Weeks, How Often Have You Been Bothered by Any of the following Problems? 0: Not at All; 1: Several Days; 2: More Than Half the Days; 3: Fairly Often; 4: Nearly Every Day	Average	Standard Deviation	Corrected Item–Total Correlation <sup>a</sup>	Factor Loading <sup>b</sup>	Cronbach's Alpha <sup>c</sup>
Little interest or pleasure in doing things	1.0	0.9	0.6	0.7	0.87
Feeling down, depressed, or hopeless	0.9	0.9	0.7	0.8	0.86
Trouble falling or staying asleep or sleeping too much	1.2	1.1	0.6	0.7	0.87
Feeling tired or having little energy	1.5	1.0	0.6	0.7	0.86
Poor appetite or overeating	1.1	1.1	0.6	0.7	0.86
Feeling bad about yourself or that you are a failure or have let yourself or your family down	1.1	1.1	0.7	0.8	0.86
Trouble concentrating on things, such as reading the newspaper or watching television	1.0	1.0	0.6	0.7	0.86
Moving or speaking so slowly that other people could have noticed. Or the opposite, being so fidgety or restless that you have been moving around a lot more than usual	0.7	0.9	0.6	0.6	0.87
Thoughts that you would be better off dead or hurting yourself	0.4	0.8	0.6	0.7	0.87
<b>Test scale</b>					<b>0.88</b>

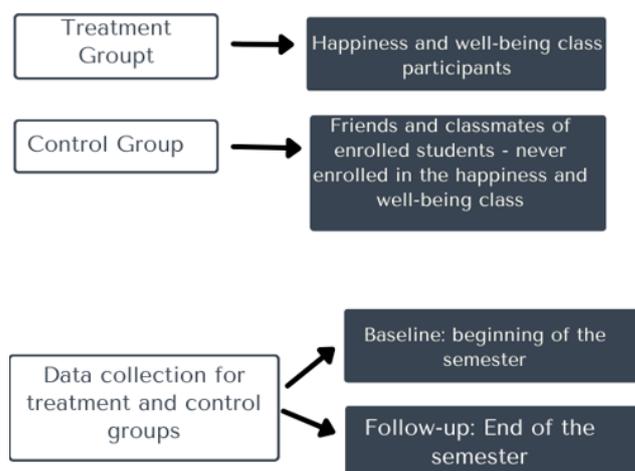
<sup>a</sup> Corrected item: correlation between the respective item and the total sum score (without the respective item). <sup>b</sup> Factor loading: represents the relationship between an observed variable (item) and a latent factor identified during factor analysis. <sup>c</sup> Cronbach's Alpha: measures the internal consistency reliability of a set of items or scale. Values above 0.70 are recommended. \* Reverse-scaled items.

### 3.2. Program Evaluation Dataset

#### 3.2.1. Experimental Design, Materials, and Methods

The data of this study correspond to an evaluation of positive education intervention at the college level in one university in Colombia. Students in any program's sixth semester or higher semesters could enroll in an elective class called Happiness and Well-being, computing three academic credits. Students choose to enroll in the class as an elective class in their career. For two groups, the class was open for the first time in the second semester of 2020 (July–November). It was offered for the first time in the university, seeking to teach evidence-based interventions to enhance students' overall happiness and well-being during the pandemic. The class lasts 16 weeks (three hours per week), and students enroll as part of their academic load. The entire class is a positive education intervention covering 3 areas of study during the semester: (i) positive psychology and emotional intelligence; (ii) cognitive biases and habits; (iii) mental health and science-based findings to promote well-being and happiness. During the semester, students also have weekly activities like journaling, meditation practices, gratitude journals and letters, and habits reviews. A short version of the class is available online free of charge. The online class was financed by the Colombian Minister of Science and Technology to promote strategies to mitigate the consequences on college students' well-being and mental health after the pandemic. The class is now part of the academic offering of the university.

To evaluate the impacts of class participation on overall well-being, the researcher designed an evaluation with treatment and control groups and two points of data collection: baseline and follow-up. This experimental design allowed for measuring the effects of class participants compared with no-class participants and enrolled students' overall improvement in well-being during the semester. Figure 1 presents the experimental evaluation design.



**Figure 1.** Experimental evaluation design.

#### 3.2.2. Treatment and Control Groups

In this evaluation, students enrolled in the class Happiness and Well-being, a 16-week college class, were deemed as the treatment group (193 students in total). Class participants were instructed to identify a friend or classmate in the university who was not currently enrolled (and never enrolled) in the happiness and well-being class to create a control group (135 students in total). Students in the treatment group asked their peers in the control groups to participate in the study by filling out two online surveys, taking about 10–12 min to complete.

#### 3.2.3. Data Collection

This evaluation collected information using an online survey on the QuestionPro platform, with two points of data collection: baseline and follow-up. At the beginning of

the semester, class participants were asked to fill out an online survey (explained above in detail), serving as a baseline measure. Class participants sent a link to a friend or classmate to fill out the same online survey. Each student in the control group had a personal link to send to a friend or classmate, and this allowed researchers to match students in the treatment and control groups. The follow-up measure was collected at the end of the semester. Students in the treatment and control groups were asked to respond to a second online survey collection. The follow-up survey had minimal changes as compared to the baseline measure. For instance, time-invariant information was removed for the follow-up survey, like gender or birth of the year, since that information was collected at baseline.

#### 3.2.4. Piloting and Data Access

The questionnaire used in this study was tested with 10 students before implementation. After the pilot, small changes in wording and question order were introduced to the final version. Raw data, questionnaire, and data description are available at the Mendeley Data [17] repository.

#### 3.2.5. Demographic Data

This section describes the general demographic characteristics of class participants (treatment) and non-class participants (control). Demographic data collected for this study include age, gender, socioeconomic strata (SES), race/ethnicity, and parent's years of educational attainment. Table 4 presents the demographic information for treatments and control groups at baseline (beginning of each semester).

**Table 4.** Socioeconomic variables—program evaluation dataset.

Demographic Data—Pooled Data 2020–2022—Baseline		
	Treatment	Control
Average age (years)	21.2 (1.3)	21.6 (3.4)
Female (%)	56.0	60.7
Household socioeconomic strata—SES (%)		
SES 1	5.2	3.7
SES 2	8.3	11.9
SES 3	22.3	20.7
SES 4	24.9	25.2
SES 5	25.9	28.9
SES 6	13.5	9.6
Ethnicity (%)		
White	33.7	31.1
Multi-racial	59.1	57.0
Native	5.2	8.9
Black/Afro	1.0	2.2
Other	1.0	0.7
Mother's education (average years)	15.8 (5.0)	15.0 (5.3)
Father's education (average years)	15.6 (6.5)	14.7 (6.1)

Notes: Standard deviation in parentheses.

### 3.2.6. COVID-19 Effects

Tables 5 and 6 present the results of the questionnaire section inquiring about three types of consequences during the pandemic. The first set of questions (Table 2) provides information about COVID-19 infections among students participating in the study, loss due to the virus, employment, quality of life in the households during the crisis, deterioration of family relationships, and overall adaptation to online learning. This set of questions was collected only at baseline.

**Table 5.** COVID-19 effects.

COVID-19 Effects—Pooled Data 2020–2022	Treatment	Control
Idled COVID (%)	63.2	74.8
Have you lost a loved one or acquaintance as a result of the pandemic? (%)	23.8	24.4
Has anyone in your household lost their job as a result of the pandemic? (%)	23.3	20.7
Has the quality of life in your home been affected as a result of the pandemic? (%)	43.5	42.2
Since the pandemic, the economic situation in your household: (%)		
Improved	15.5	11.9
Stayed the same	57.5	58.5
Has gotten worse	26.9	29.6
Have you felt deterioration in family relationships during the pandemic? (%)	34.2	29.6
Does anyone in your family work in the health care system? (%)	31.1	31.1
Do you like the virtual learning process? (%)	47.7	36.3

**Table 6.** COVID-19 effects—cont.

COVID-19 Effects—Pooled Data 2020–2022	Baseline		Follow-Up	
	Treatment	Control	Treatment	Control
How have you been negatively affected by the Coronavirus crisis? (%)				
Increased anxiety	68.4	63.0	63.2	63.7
I have felt depressed	51.3	43.0	36.8	37.9
I get bored most of the time	50.8	48.9	40.9	58.5
I feel that the plans I had can no longer be realized	43.5	50.4	35.7	45.9
The economic situation in my home is difficult	21.2	18.5	20.7	21.5
I experience negative emotions more often	44.6	40.0	34.2	34.8
I have loved ones or people close to me who have become ill	32.1	30.4	22.8	28.9
I am worried about my personal and professional future	63.2	54.8	56.9	47.4
The current crisis hasn't affected me negatively	10.4	7.41	8.3	10.4
Other	0.0	0.0	0.0	0.0
How have you been positively affected by the Coronavirus crisis? (%)				
I have more free time	62.2	54.1	59.6	45.2
I can share quality time with my family	67.4	64.4	65.3	57.0
I have read more	31.6	31.8	35.7	28.9
It has allowed me to find another meaning in life	48.7	31.1	55.7	28.1
I learned that I can adapt to difficult situations	66.4	62.9	61.9	61.5
I have learned to stay optimistic	49.2	38.5	54.9	40.0

Table 6. Cont.

COVID-19 Effects—Pooled Data 2020–2022	Baseline		Follow-Up	
	Treatment	Control	Treatment	Control
I have found new hobbies	51.3	51.8	50.8	45.2
I have learned to work/study autonomously and responsibly	53.1	36.3	54.9	37
I do not find anything positive in the current crisis	2.1	7.4	0.5	5.9
Other	0.0	0.0	0.0	0.0

The second set of questions (Table 6) related to COVID-19 inquires about the students and the negative consequences perceived because of the pandemic. Questions in this component refer to negative emotions, changes in plans, and worries related to the pandemic. The third set of questions about the pandemic refers to the positive side of the quarantine and restrictions, such as having more time, cultivating new hobbies, and having quality time with the family.

### 3.2.7. Subjective Well-Being and Relationships Valuation

This section provides information about an overall assessment of life satisfaction. The questionnaire uses an evaluative judgment measure for life satisfaction (overall, how satisfied are you with life as a whole these days—0–10 scale) [19] and five questions about affect (happiness, worry, depression, anxiety, and stress). The questions about affect inquire about emotions the day before and weeks before the pandemic. This distinction seeks to capture the emotional changes associated with the crisis. This section also asks for a general valuation of relationships with family members and people outside the family circle. Table 7 presents the results for treatment and control and baseline and follow-up.

### 3.2.8. Meditation and Habits

Table 8 presents the average scores of questions referring to meditation and habits by class participants and non-participants and at each data collection point. Questions in this section inform students' perception of meditation and if they have meditated before. Likewise, this questionnaire component includes questions about habits students regularly implement, like exercising, sleeping on a regular schedule, healthy eating, being grateful, and being optimistic.

### 3.2.9. Satisfaction with Life Scale (SWLS)

The questionnaire uses a five-item scale to measure life satisfaction. This validated scale evaluates life satisfaction and allows comparisons with various population groups, including gender and age. This scale has favorable psychometric properties like high internal consistency and high temporal stability [27]. This scale is a good complement to other scales aimed at measuring life satisfaction and overall well-being [28], in addition to having managed to systematically identify a negative relationship with anxiety, depression, and other psychopathological problems [29]. The SLWS consists of five items rated on a Likert scale of five points (5 = strongly agree; 1 = strongly disagree). Table 9 presents average scores (scale 1–5) for SWLS for treatment and control groups and at baseline and follow-up.

**Table 7.** Subjective well-being. Cronbach’s alpha, correlation, and factor loading.

Subjective Well-Being and Relationships—Pooled Data 2020–2022	N	Cronbach’s Alpha <sup>c</sup>	Baseline		Follow-Up		Corrected Item–Total Correlation <sup>a</sup>	Factor Loading <sup>b</sup>
			Treatment	Control	Treatment	Control		
Life satisfaction (average scale 0–10)			7.1 (1.45)	6.98 (1.62)	7.78 (1.93)	7.61 (1.59)		
The following questions are about how you felt yesterday on a scale of 0 to 10. Zero means that you didn’t experience these feelings “at no time” while 10 means that you experienced these feelings “all the time”.								
Happy	328	0.87	7.39 (1.78)	7.05 (1.92)	7.69 (1.85)	7.16 (1.86)	0.33 *	−0.46
Worried	328	0.79	5.33 (3.02)	5.67 (5.67)	5.19 (2.80)	6.09 (2.71)	0.62	0.78
Depressed	328	0.78	2.26 (2.56)	3.53 (2.92)	2.40 (2.76)	3.58 (3.06)	0.67	0.81
Anxiety	328	0.76	4.65 (3.42)	4.48 (3.15)	4.31 (3.11)	5.04 (3.18)	0.75	0.87
Stress	328	0.76	4.86 (3.17)	5.51 (3.03)	5.13 (2.96)	5.89 (2.96)	0.71	0.86
<b>Test scale</b>		<b>0.83</b>						
Try to recreate in your mind the emotions you felt before the pandemic was decreed. Try to go back to a few weeks before the crisis. How often did you feel the following emotions in your daily life:								
Happy	328	0.88	7.94 (1.91)	7.88 (1.94)	7.63 (1.93)	7.57 (2.01)	0.33 *	−0.48

Table 7. Cont.

Subjective Well-Being and Relationships—Pooled Data 2020–2022	N	Cronbach's Alpha <sup>c</sup>	Baseline		Follow-Up		Corrected Item–Total Correlation <sup>a</sup>	Factor Loading <sup>b</sup>
			Treatment	Control	Treatment	Control		
Worried	328	0.79	5.39 (2.68)	5.40 (2.70)	5.02 (2.74)	5.82 (2.89)	0.68	0.83
Depressed	328	0.79	2.77 (2.91)	3.32 (2.90)	3.00 (2.89)	3.62 (3.31)	0.70	0.82
Anxiety	328	0.76	4.63 (3.16)	4.54 (2.98)	4.30 (3.16)	4.31 (3.37)	0.80	0.90
Stress	328	0.78	5.46 (2.76)	5.37 (2.78)	5.18 (2.90)	5.06 (2.95)	0.71	0.88
<b>Test scale</b>		<b>0.84</b>						

<sup>a</sup> Corrected item: correlation between the respective item and the total sum score (without the respective item). <sup>b</sup> Factor loading: represents the relationship between an observed variable (item) and a latent factor identified during factor analysis. <sup>c</sup> Cronbach's Alpha: measures the internal consistency reliability of a set of items or scale. Values above 0.70 are recommended. \* Reverse-scaled items. Notes: Standard deviation in parentheses.

Table 8. Meditation and habits.

Meditation and Habits—Pooled Data 2020–2022	Baseline		Follow-Up	
	Treatment	Control	Treatment	Control
Have you ever meditated? (%)	54.9	54.07	75.44	54.9
The comments you have heard about meditation are: (%)				
Mostly positive	95.7	91.04	94.34	93.88
Mostly negative	1.1	2.99	1.89	4.08
Never heard	3.3	5.97	3.77	2.04
Which of the following habits do you implement in your life regularly—most of the time and without difficulty? (%)				
Play sports/do exercise	58.0	59.26	56.99	51.85
Eat healthy	47.7	43.7	42.49	41.48
Sleep at least 7 h a day	59.1	54.07	63.21	48.15
Be attentive to your emotions	46.1	51.11	56.48	46.67
Take care of your words	50.3	43.7	52.33	43.7
Take care of dealing with others	70.0	62.22	66.32	60
Being grateful	72.5	77.78	68.39	60.74
Being optimistic	56.0	50.37	53.89	45.93

### 3.2.10. Brief Measurement of Depressive Symptomatology (CESD-7)

The CESD-7 is a tested and reliable brief measure to identify symptoms of depression. The scale was piloted and tested by Hispanic-American scholars and is widely used in the region. The large version of the scale has 20 items. We use the brief scale given its reliability and easiness of application [30]. The scale consists of seven items measuring the most common symptoms related to depression, like motivation, concentration, or sleeping difficulties. The scale is rated with a 4-point scale (0 = rarely or never/ less than a day; 1 = few times/1–2 days; 2 = few times/3–4 times; 3 = most of the time/5–7 days). Table 10 presents the results at baseline and follow-up for treatment and control groups.

### 3.2.11. Brief Strengths Scale (BSS)

The BSS comprises 12 items rated on a 5-point Likert scale (1 = totally disagree; 5 = totally agree). The scale aims to measure three character strengths: temperance strengths (composed of four items related to the achievement of goals and self-control of people), intellectual strengths (constructed of four items that measure a person's curiosity and enthusiasm for creativity), and interpersonal strengths (organized by four items that capture people's love, concern, and gratitude toward others). The three factors are grouped into an overall factor of total strengths [29], which has been widely studied and validated for its clinical effectiveness in improving well-being, increasing resilience, and reducing distress [31,32]. Table 11 presents the average scores, reliability, validity, and correlations for class and non-class participants at baseline and follow-up.

**Table 9.** Satisfaction with Life Scale (SWLS).

Satisfaction with Life Scale (SWLS)—Pooled Data 2020–2022	N	Cronbach's Alpha <sup>c</sup>	Baseline		Follow-Up		Corrected Item–Total Correlation <sup>a</sup>	Factor Loading <sup>b</sup>
			Treatment	Control	Treatment	Control		
Indicate your agreement with each item by placing the appropriate number on the line preceding that item. The 5-point scale is 1 (Strongly Disagree) to 5 (Strongly Agree).								
In most ways, my life is close to my ideal	318	0.78	3.50 (0.91)	3.63 (0.91)	3.75 (0.81)	3.61 (0.83)	0.67	0.80
So far, I have gotten the important things I want in life	318	0.80	3.88 (0.85)	3.82 (0.90)	3.97 (0.82)	3.72 (0.86)	0.60	0.75
I am satisfied with my life	318	0.76	3.86 (0.87)	3.87 (0.98)	4.09 (0.76)	3.79 (0.92)	0.72	0.84
If I could live my life over, I would change almost nothing	318	0.80	3.33 (1.29)	3.43 (1.33)	3.57 (1.13)	3.29 (1.16)	0.60	0.74
The conditions of my life are excellent	318	0.80	4.30 (0.72)	4.20 (0.74)	4.32 (0.74)	3.98 (0.84)	0.60	0.75
<b>Test scale</b>		<b>0.82</b>						

<sup>a</sup> Corrected item: correlation between the respective item and the total sum score (without the respective item). <sup>b</sup> Factor loading: represents the relationship between an observed variable (item) and a latent factor identified during factor analysis. <sup>c</sup> Cronbach's Alpha: measures the internal consistency reliability of a set of items or scale. Values above 0.70 are recommended. Notes: Standard deviation in parentheses.

**Table 10.** Brief measurement of depressive symptomatology (CESD-7).

Brief Measurement of Depressive Symptomatology (CESD-7)—Pooled Data 2020–2022	N	Cronbach's Alpha <sup>c</sup>	Baseline		Follow-Up		Corrected Item–Total Correlation <sup>a</sup>	Factor Loading <sup>b</sup>
			Treatment	Control	Treatment	Control		
During the past week, how often have you experienced the following situations? Response and coding options: 0: rarely or none of the time (less than 1 day); 1: some or a little of the time (1–2 days); 2: occasionally or a moderate amount of time (3–4 days); 3: most or all of the time (5–7 days).								
I felt that I could not shake off the blues, even with help from my family or friends.	318	0.78	0.81 (0.91)	0.91 (0.96)	0.77 (0.91)	0.94 (0.99)	0.81	0.84
I had trouble keeping my mind on what I was doing.	318	0.81	1.54 (1.00)	1.61 (1.02)	1.61 (0.95)	1.57 (0.91)	0.67	0.66
I felt depressed	318	0.77	0.75 (0.90)	1.01 (0.97)	0.76 (0.93)	0.91 (1.01)	0.82	0.85
I felt that everything I did was an effort	318	0.80	1.15 (0.98)	1.22 (1.07)	0.96 (0.96)	1.31 (1.00)	0.73	0.73
My sleep was restless	318	0.82	1.29 (1.02)	1.56 (1.09)	1.35 (1.03)	1.63 (1.03)	0.61	0.58
I enjoyed life	318	0.84	2.19 (0.74)	2.16 (0.84)	2.29 (0.77)	2.18 (0.84)	0.51 *	−0.45
I felt sad	318	0.78	1.06 (0.87)	1.21 (0.92)	1.13 (0.90)	1.25 (0.90)	0.80	0.83
<b>Test scale</b>		<b>0.82</b>						

<sup>a</sup> Corrected item: correlation between the respective item and the total sum score (without the respective item). <sup>b</sup> Factor loading: represents the relationship between an observed variable (item) and a latent factor identified during factor analysis. <sup>c</sup> Cronbach's Alpha: measures the internal consistency reliability of a set of items or scale. Values above 0.70 are recommended. \* Reverse-scaled items. Notes: Standard deviation in parentheses.

**Table 11.** Brief Strengths Scale (BSS).

Brief Strengths Scale (BSS)—Pooled data 2020–2022	N	Cronbach's Alpha <sup>c</sup>	Baseline		Follow-Up		Corrected Item–Total Correlation <sup>a</sup>	Factor Loading <sup>b</sup> (Factor 1)	Factor Loading <sup>b</sup> (Factor 2)	Factor Loading <sup>b</sup> (Factor 3)
			Treatment	Control	Treatment	Control				
Indicate the degree of agreement with each of the following statements: 1 = totally disagree to 5 = totally agree.										
I am a persistent person.	318	0.80	4.25 (0.77)	4.13 (0.79)	4.40 (0.69)	4.09 (0.85)	0.42	0.07	0.03	0.86
I am a hardworking person.	318	0.79	4.33 (0.74)	4.22 (0.84)	4.45 (0.71)	4.36 (0.75)	0.49	0.13	0.18	0.77
I ask myself to persist in face of difficulty.	318	0.79	4.29 (0.78)	4.13 (0.80)	4.39 (0.70)	4.2 (0.82)	0.56	0.17	0.19	0.81
I am a person with strong self-control.	318	0.81	3.62 (1.12)	3.63 (1.02)	3.77 (0.95)	3.69 (1.05)	0.29	0.24	0.06	0.35
I am a person with compassion.	318	0.80	4.15 (0.97)	4.20 (0.91)	4.39 (0.82)	4.08 (1.04)	0.42	0.76	0.01	0.11
I strongly treasure my relationships with the people around me.	318	0.79	4.52 (0.73)	4.53 (0.69)	4.49 (0.74)	4.44 (0.74)	0.52	0.83	0.12	0.12
I appreciate people's gratitude to me.	318	0.79	4.52 (0.69)	4.57 (0.67)	4.55 (0.70)	4.46 (0.71)	0.57	0.80	0.19	0.15
I feel happy for other people's happiness.	318	0.79	4.57 (0.67)	4.57 (0.68)	4.67 (0.59)	4.46 (0.87)	0.58	0.64	0.43	0.11
I am a person who likes to find new things.	318	0.79	4.52 (0.71)	4.32 (0.79)	4.49 (0.74)	4.45 (0.80)	0.50	0.13	0.79	0.12
I always revel in some interesting things.	318	0.79	4.59 (0.60)	4.46 (0.73)	4.59 (0.65)	4.42 (0.70)	0.53	0.18	0.79	0.11
I am excited when I can think of the possibility of producing a new creation.	318	0.80	4.51 (0.75)	4.34 (0.84)	4.45 (0.85)	4.35 (0.82)	0.47	0.11	0.65	0.23
I think there are a lot of interesting things in this world to be explored.	318	0.80	4.71 (0.57)	4.59 (0.71)	4.67 (0.58)	4.61 (0.60)	0.45	0.14	0.67	0.14
<b>Test scale</b>		<b>0.81</b>								

<sup>a</sup> Corrected item: correlation between the respective item and the total sum score (without the respective item). <sup>b</sup> Factor loading: represents the relationship between an observed variable (item) and a latent factor identified during factor analysis. <sup>c</sup> Cronbach's Alpha: measures the internal consistency reliability of a set of items or scale. Values above 0.70 are recommended. Notes: Standard deviation in parentheses.

## 4. User Notes (Optional)

### 4.1. Value of the Data

- The datasets discussed in this report are relevant to understanding the magnitude of the prevalence of self-reported stress, anxiety, and depression among college students and possible mechanisms of interventions to address the growing rates of mental health distress among this population. The data reports on validated scales allow for valid comparisons with other studies. The data provide relevant information from developing countries where there is less research and fewer resources from the health system to address the population's mental health diagnosis and treatment.
- The dataset reporting on program evaluation helps understand how college-level classes teaching evidence-based interventions aimed at improving well-being and the awareness of the prevalence of mental health conditions affect participants' subjective well-being. The data provide detailed information on treatment and control groups for two consecutive years with a baseline (before the treatment) and follow-up information (after the treatment). The study's design allows for an impact evaluation of positive education interventions.
- The information and data available in this report are valuable for educators and academics seeking to better understand the magnitude of self-reported symptoms of stress, anxiety, and depression and the impacts of positive education interventions at the college level in Latin America, a region with scarce information about the implementation and effects of those types of programs.
- The data of this report allow for comparisons of positive education interventions in different contexts, contributing to a growing body of research about the impacts of evidence-based interventions implemented in the educational system.
- The information related to program evaluation provides granular details on the impacts of COVID-19 on the subjective well-being of college students for two years, allowing researchers to study the pandemic's impact over time in this population group.

### 4.2. Limitations and Future Work

The data sets presented in this analysis face several limitations. One of the significant limitations of both data sets is that the data were collected in one college, limiting generalizations for the entire population. For the diagnosis dataset, it is not possible to establish whether students participated in the survey more than once, creating duplications in the observations. Since the survey was anonymous and voluntary, developing controls to avoid duplications was not feasible.

The data about program evaluation also face limitations. First, students self-selected into the class, creating a possible selection bias, in which students with lower well-being may self-select into the class. Another limitation is related to the control group, which are friends of students. Despite this limitation, it was a feasible alternative, leading to similar observable and non-observable characteristics of participants in the treatment and control groups.

Despite the limitations of the studies, the data are valuable for broader comparisons of college students in a context with an important lack of information about mental health trajectories. These limitations also improve the design and quality of future work in the area. Further research in this area should take into account gender, racial, and socioeconomic differences, and context-related variables like access to health care, crime and violence, and the general cultural orientation towards the acceptance of mental health problems.

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**Institutional Review Board Statement:** The ethics committee of Universidad Icesi approved both studies, the subjective well-being and mental health diagnosis project (code # 490) and program evaluation of a positive education intervention (code # 302). The study was conducted in accordance with the Declaration of Helsinki, and approved by the Ethics Committee of Universidad Icesi the subjective well-being and mental health diagnosis project (code # 490) and program evaluation of a positive education intervention (code # 302).

**Informed Consent Statement:** Students participating in both studies were assured confidentiality, and their participation was voluntary. Respondents provided consent to use the information for academic purposes. In the program evaluation study, students in the treatment group were informed that participation did not affect their grades or class participation. Students participating in the study were under 18 years old (minors under Colombian legislation), provided consent for participation, and since the anonymous nature of the study the ethics committee allowed their inclusion into the survey.

**Data Availability Statement:** Both datasets are available at the Mendeley Data repository.

**Acknowledgments:** The contents and opinions expressed in this paper are those of the authors only. We thank students for their participation and support.

**Conflicts of Interest:** The authors declare that they have no known competing financial interests that could have influenced the work reported in this paper. The class evaluated was instructed by one of the authors (Lina Martínez).

### Appendix A. Convergent Validity Scales—Diagnosis Dataset

For this exercise, particularly in the context of the diagnostic dataset, convergent validity is assessed by calculating correlations among scores from various measures/scales of a construct (self-reported symptoms such as stress, anxiety, and depression) against a specific construct. The aim is to examine whether the instruments that are intended to measure these constructs are correlated with each other. This process ensures the robustness of the scales that elucidate potential relationships between mental health and well-being.

In general terms, the convergent validity of subjective well-being was tested by examining its correlation with anxiety (GAD-7), depression (PQH-P), and stress (PSS-10). Additionally, correlations of each self-reported mental health measure with subjective well-being were calculated. Thus, the following tables display the main results presented below:

- As expected, higher well-being exhibited a significant negative correlation with anxiety, depression, and stress. Meanwhile, lower well-being showed a significant positive correlation with each self-reported mental health symptom [33].
- PSS-10 demonstrated significant positive correlations with depression (PQH-P) and anxiety (GAD-7) for each item. Higher well-being orientation measures or scales of PSS-10 showed a significant negative correlation with anxiety, depression, and subjective well-being.
- GAD-7 revealed significant correlations with depression (PQH-P), stress (PSS-10), and well-being for each item. GAD-7 item scores were also negatively associated with life satisfaction.
- PQH-P exhibited significant positive correlations with anxiety (PQH-P) and stress (PSS-10) for each item. PQH-P item scores were also negatively associated with life satisfaction.

**Table A1.** Subjective wellbeing correlations with anxiety, depression, and stress.

	(GAD-7)	(PQH-P)	(PSS-10)	<i>n</i>
Happy	−0.38	−0.45	−0.44	2992
Laugh	−0.28	−0.32	−0.33	2992

**Table A1.** *Cont.*

	(GAD-7)	(PQH-P)	(PSS-10)	<i>n</i>
Learning or doing something interesting	−0.21	−0.30	−0.27	2992
Enjoyment	−0.31	−0.40	−0.39	2992
Worried	0.43	0.34	0.39	2992
Depressed	0.51	0.56	0.52	2992
Anger	0.37	0.34	0.34	2992
Stress	0.50	0.41	0.45	2992
Loneliness	0.45	0.49	0.45	2992

All correlations are significant,  $p < 0.05$ .

**Table A2.** Perceived Stress Scale-10 correlations with anxiety, depression, and overall well-being.

	(GAD-7)	(PQH-P)	Life Satisfaction	<i>n</i>
In the last month, how often have you been upset because of something that happened unexpectedly?	0.52	0.47	−0.35	2992
In the last month, how often have you felt that you were unable to control the important things in your life?	0.54	0.56	−0.45	2992
In the last month, how often have you felt nervous and stressed?	0.58	0.48	−0.35	2992
In the last month, how often have you felt confident about your ability to handle your personal problems?	−0.31	−0.34	0.34	2992
In the last month, how often have you felt that things were going your way?	−0.41	−0.34	0.52	2992
In the last month, how often have you found that you could not cope with all the things that you had to do?	0.48	−0.46	−0.34	2992
In the last month, how often have you been able to control irritations in your life?	−0.32	0.50	0.37	2992
In the last month, how often have you felt that you were on top of things?	−0.39	−0.35	0.42	2992
In the last month, how often have you been angered because of things that happened that were outside of your control?	0.47	−0.42	−0.23	2992
In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0.59	0.38	−0.42	2992

All correlations are significant,  $p < 0.05$ .

**Table A3.** Generalized Anxiety Disorder-7 correlations with depression, stress, and overall well-being.

	(PQH-P)	(PSS-10)	Life Satisfaction	<i>n</i>
Feeling nervous, anxious, or on edge	0.56	0.57	−0.36	2992
Not being able to stop or control worrying	0.52	0.49	−0.32	2992
Worrying too much about different things	0.59	0.58	−0.37	2992
Trouble relaxing	0.62	0.57	−0.41	2992
Being so restless that it is hard to sit still	0.55	0.44	−0.27	2992
Becoming easily annoyed or irritable	0.5	0.46	−0.27	2992
Feeling afraid, as if something awful might happen	0.54	0.52	−0.30	2992

All correlations are significant,  $p < 0.05$ .

**Table A4.** Patient Health Questionnaire-9 correlations with anxiety, stress, and overall well-being.

	(GAD-7)	(PSS-10)	Life Satisfaction	<i>n</i>
Little interest or pleasure in doing things	0.48	0.48	−0.43	2992
Feeling down, depressed, or hopeless	0.64	0.61	−0.48	2992
Trouble falling or staying asleep or sleeping too much	0.45	0.39	−0.30	2992
Feeling tired or having little energy	0.54	0.5	−0.37	2992
Poor appetite or overeating	0.5	0.43	−0.32	2992
Feeling bad about yourself or that you are a failure or have let yourself or your family down	0.59	0.63	−0.47	2992
Trouble concentrating on things, such as reading the newspaper or watching television	0.54	0.48	−0.37	2992
Moving or speaking so slowly that other people could have noticed. Or the opposite, being so fidgety or restless that you have been moving around a lot more than usual	0.54	0.4	−0.28	2992
Thoughts that you would be better off dead or of hurting yourself	0.46	0.46	−0.42	2992

All correlations are significant,  $p < 0.05$ .

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