



Development, Validation, and Multi-tier Applications of the California Student Wellness Index

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OVERVIEW

This document reports on a recent enhancement to the CHKS Core Module (WestEd and California State Department of Education). In 2021/22 and 2022/23, ten new items expanded student mental health and well-being coverage. These items ask students about their life satisfaction (modified Brief Multidimensional Student Life Satisfaction Scale, BMSLSS) and past-month emotional distress experiences (Social Emotional Distress Scale, SEDS). This report provides information about these assessments and how 626,940 California students answered them. Scoring, norming, and interpretation information is provided. The report provides examples of how the California Student Wellness Index (CSWI) can be used for research, to support Tier 1 Universal wellness screening, and for Tier 2 individual student assessments and progress monitoring.

The report presents the following information about the CSWI.

- The report summarizes the BMSLSS and SEDS core psychometric and response distribution information.
- Drawing from the Dual-Factor Model of complete mental health, we introduce the CSI based on the BMSLSS and SEDS joint distribution. Currently, the ten CSWI items are used in anonymous surveillance-like surveys, providing school districts with a standardized way to become more aware of the range of their students' complete mental well-being. A few districts administer the ten CSWI items to monitor all students' well-being so that schoolbased care teams can reach out, as needed, to support students.
- The CSWI can be used to monitor student wellness periodically.
- Concurrent and predictive validation information shows the association between the CSWI and two items from the Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance Survey (past year chronic sadness and suicidal ideation). Interested parties can use this information to evaluate how the CSWI might support efforts to provide school-based mental health promotion, prevention, and intervention services. Additional validation analyses compare students' CSWI responses with the Social Emotional Health Survey-Secondary–2020 and the Mental Health Continuum–Short Form.
- There are administration, interpretation, and monitoring forms.
- There are examples of using the CSWI for research and multi-tier applications.
- Tier 2 follow-up assessment resources support counseling services.

SECTION 1. NEED AND RATIONALE FOR THE CALIFORNIA STUDENT WELLNESS INDEX



MOTIVATION FOR THE CALIFORNIA STUDENT WELLNESS INDEX

Concerns about the impacts of students' exposure to health risks and the disruptions associated with the COVID-19 pandemic have raised policymakers' and the public's concerns about young people's mental health. The U.S. Surgeon General articulated these concerns in a special report highlighting the pressing need to identify and respond to the mental health challenges of young people (Murthy, 2021). The California Legislature responded to these critical concerns by funding a \$4.5 billion Children and Youth Behavioral Health Initiative to address the mental health and well-being needs of children and youth ages birth to age 25. One component of these efforts is the need for meaningful information about the mental health status of adolescents.

Monitoring adolescent risk behaviors, mental illness, and distress indicators is an essential element of mental health prevention and early intervention (Hoover & Bostic, 2021); however, these assessments are insufficient to evaluate if youths are developing optimally. Part of life is experiencing challenges and learning the mindsets and skills that facilitate the future successfully adapting to new challenges. Even when young people manifest their resilient capacity and do not report substantial adverse social or emotional distress, they could experience other development impediments. For instance, adolescent depression and anxiety increased during the COVID-19 pandemic (CDC, 2022; Houghton et al., 2022), and social (Furlong et al., 2023) and global positive well-being (De France et al., 2022) declined. Fair and Gotlib (2022) even reported finding accelerated brain age indicators (reduced cortical thickness, larger hippocampal and amygdala volume) when comparing prepandemic to lockdown adolescent MRI scans.

In the context of the COVID-19 pandemic, interest in enhancing the California Healthy Kids Survey focused on students' positive mental health and well-being. This effort was informed by Anderson et al.'s (2023) observation that during the 2010s-decade, social indicators of adolescent well-being improved while subjective indicators of mental health declined. A Centers for Disease Control (2020) report found a substantial increase in the percentage of adolescents reporting past year chronic sadness and suicidal ideation. The Anderson et al. report points out that populationlevel surveys such as the Youth Risk Behavior Surveillance Survey have included content skewed substantially towards social indicators and undervalued students' subjective well-being indicators. They specifically recommended that" well-being measures should be added to more nationally representative repeated cross-sectional data sources" (p. 274) that measure life satisfaction and multidimensional components of students' mental health and well-being.

Youth surveys must include items assessing risk behaviors and psychological distress, but they are comprehensive only when they have validated items assessing positive well-being. In California, a primary source of information about youth mental health and well-being is the California Healthy Kids Survey (CHKS). This report describes how the Brief Multidimensional Student Life Satisfaction Scale

(BMSLSS; Huebner et al., 2006) and the Social Emotional Distress Scale (Dowdy et al., 2023) were combined to create a valid, cost-effective way to monitor students' mental health status, their need for prevention/intervention services, and to assess the impact of the programs and services provided.

RATIONALE INFORMING DEVELOPMENT OF THE CALIORNIA STUDENT WELLNESS INDEX

Informal psychosocial screening occurs in all schools every day. When a school staff member notices a child looking down or not playing or interacting with their schoolmates, they check in with the student. Moreover, even if a child is not visibly down, scared, or anxious, school staff often check in with students: "How are you doing? Is everything okay?" In such circumstances, the school staff focuses on, monitors, and attends to each student's needs. They informally assess whether the child feels well or is generally getting along with their schoolmates and that their schoolwork is progressing. They are usually concerned about whether the child is doing "well." This watch, care, response sentiment happens informally on school campuses daily. Reflecting on the overall reasoning behind informal screening at school, universal student surveys offer a careful, systematic way to offer students the opportunity for self-care reflection. The emphasis on checking in on all students is further emphasized due to the known systematic biases in schools and the cultural mismatch between school staff and students (Raines et al., 2009). Specific subgroups of students may be more or less likely to be attended to when relying solely on school staff to randomly check in on students, further highlighting the need for a systematic approach to asking all students how they are doing. Such an effort should include a way to assess whether each child has experienced recent distress. It should also advance a way to monitor positive psychosocial development (Is a student's life going well?) while limiting potential referral biases (Weathers, 2019).

A formal school mental health screening and monitoring process grounded in positive youth development principles does not emphasize the detection of psychological and social problems. Instead, its primary purpose is to alert school staff about the need to follow up with vulnerable students and learn more about their experiences than is readily available via direct observation (Dowdy et al., 2015). Moreover, a secondary purpose is to provide information that helps school staff support youth who are generally doing well and help them thrive and reach optimal development levels (Kim et al., 2014). Universal monitoring is ideally implemented within a multitiered comprehensive student health and wellness plan (Moore et al., 2019).

CALIFORNIA HEALTHY KIDS SURVEY

Dynamic, Responsive Resource with Positive Youth Development Emphasis

The CHKS, a student survey, is part of the Cal Schools (CLSCHLS) assessment resources, which include school staff and parent surveys. The information generated from these surveys informs public policy in education and human services to help districts meet local control accountability plan priorities and to improve school climate, pupil engagement, parent involvement, and academic achievement of students. In 1997, The California Department of Education merged content from the California Student Survey (a youth substance use survey), the Youth Risk Behavior Surveillance Survey, and other validated measures to create the CHKS. The CHKS is part of a set of surveys modules developed by the state Department of Education and West Ed to assist schools and communities in their efforts to understand students' developmental needs better.

Since its development, the CHKS has undergone a process of ongoing adjustments and refinements to ensure that the questions provide relevant and meaningful information about students' educational and developmental needs. Particularly illustrative of this is, for example, the addition of the Resilient Youth Development Module (RYDM) in the early 2000s, based on Bonnie Benard's (2005) contributions, which added a focus on understanding factors associated with student resilience. More recently, supported by an Institute of Education Sciences grant, were efforts to validate and add the Social Emotional Health Survey-Secondary (SEHS-S) and the Social Emotional Distress Scale-Secondary-2020 (SEDS; Furlong et al., 2021).

The CHKS core module includes detailed demographic information to evaluate the sample's representativeness and identify all students' equitable positive developmental needs. Rather than a list of survey items that assess risk and related behaviors, a resilience theory of change model grounds the CHKS. The items include the assessment of developmental supports (caring relationships, high expectations, and opportunities for participation and contribution), youths need for positive development (safety, love, belonging, respect, autonomy, power, challenge, mastery, and meaning), and the school/community conditions that support adolescents' developmental. Meeting these developmental needs promotes students' connectedness and engagement in school and the community, lessens their vulnerability to risk factors in their environments, and promotes their resilient assets and social-emotional capacities. Youth outcomes will be more likely to experience positive academic, social, emotional, behavioral, and health outcomes if schools and communities achieve these objectives. The CHKS survey scrutinizes the value of its current items and considers the importance of new perspectives. Before the COVID-19 pandemic and its impact on the school instructional context, the CHKS did not adequately assess students' beliefs about their perceived quality of life. Hence, there was interest and a need to enhance its mental wellness coverage.

A challenge facing all population epidemiological surveys, such as the CHKS, is to provide relevant and meaningful information on the mandated reporting needs of the agencies that provide funding streams to support the survey. For example, in California, the CHKS is supported partly by funding generated by state tobacco tax funds, which mandate that the study include items asking students about their use of tobacco products. Over 25 years, the CHKS has had an annual review to evaluate the contribution of existing items against the interest to address previously met or emerging issues related to understanding adolescents' health and well-being. Hence, adding items must prioritize data needs, be efficient, provide meaningful information to schools, and, more widely, inform public policy. In this context, we considered an increasing realization and interest in obtaining information about the students' perception of their overall quality of life.

DUAL-FACTOR MODEL (DFM) PROOF OF CONCEPT

Following the Suldo and Shaffer (2008) analysis, an impressive research body has further examined the DFM (e.g., Antaramian et al., 2010; Grych et al., 2020; Kelly et al., 2012; Lyons et al., 2012, 2013; Zhou et al., 2020). These studies contribute to the proof of concept of the value of considering symptoms and wellness, which provide researchers and practitioners with a richer understanding of youth's psychosocial development. Differences among dual-factor mental health groups have been identified across developmental periods (e.g., children [Smith et al., 2020], adolescents in the middle [e.g., Antaramian et al., 2010] and high schools [Suldo et al., 2016], and adults [e.g., Renshaw & Cohen, 2014]) and quality of life indicators. Across investigations, individuals with high well-being and low psychopathology (complete mental health) experience the most favorable outcomes. For example, adolescents with complete mental health had more optimal school engagement (Antaramian et al., 2010; Lyons et al., 2013; Smith et al., 2020), academic achievement (Antaramian et al., 2010; Lyons et al., 2013), social skills (Suldo et al., 2016), physical health (Suldo & Shaffer, 2008; Suldo et al., 2016), identity development (Suldo et al., 2016), and social support (Smith et al., 2020). That youth with complete mental health experience more positive outcomes than vulnerable youth indicates that the absence of psychopathology is insufficient in realizing positive outcomes (e.g., Antaramian et al., 2010). Further, in the presence of distress, research has indicated that wellbeing can protect against adverse outcomes—individuals with symptomatic but content mental health experience more favorable outcomes than youth with struggling mental health (e.g., Grych et al., 2020; Lyons et al., 2013; Suldo et al., 2016; Smith et al., 2020).

Overall, studies examining the DFM model in school-based research (Moore et al., 2019a, 2019b; Peterson et al., 2020; Suldo et al., 2016; Thayer et al., 2021) report robust differences in outcomes between groups with similar pathology levels but different levels of subjective well-being. Additionally, this approach's prototypical complete mental health and troubled groups significantly differ on numerous quality-of-life indicators. As proof of concept, a sufficient body of knowledge supports the core DFM principle that an optimal assessment of youth mental health is grounded by

simultaneously considering distress and wellness factors, an observation supported in a scoping review of 83 studies reporting on the Dual-Factor Model. These studies "consistently demonstrated that positive mental health and mental illness differentially predict various outcomes ...the absence of illness was not sufficient to predict various desirable outcomes such as academic achievement and interpersonal relationship quality" (lasiello et al., 2020, p.8).

Despite DFM's contributions, research and practice must develop a standard procedure that simultaneously facilitates measuring its factors. Even more pressing, it has yet to bridge the science-to-practice gap. Research studies show that the DFM is not readily accessible by school mental health professionals. Research-employed measures and algorithms do not readily translate for individual student case assessment or universal school-wide screening and monitoring.

Among DFM's limitations are:

- Measures have too many items for surveillance and universal screening.
- Practitioners cannot replicate the sample-specific distribution.
- Co-normed wellness and distress factors are unavailable.
- Consensus is not established on the cut scores to guide the interpretation.
- Large samples of co-normed wellness and distress distributions are unavailable.

The CSWI was designed to address DFM limitations:

- It is adaptable for research studies, population-focused surveillance, schoolwide universal wellness screening, individual student assessments, and wellness monitoring.
- With only ten items co-normed with more than 600,000 students, the CSWI provides a baseline standard index of student wellness applicable to individual students, groups of students, or research study samples.
- The scoring and interpretation resources and approach suggested in this report deemphasized using binary cut points to categorize students into discreet mental well-being groups. Instead, this report provides a way to evaluate the pattern of student responses to life satisfaction and distress items while considering a student's answers against the full array of possible student responses.
- The CSWI interpretation approach increases understanding of the needs of students with mid-level wellness.
- Because the CSWI items are part of the CHKS, its associations with risk (e.g., chronic sadness and suicidal ideation) and protective factors (e.g., school belonging and optimism) are known for each discreet satisfaction x distress response pattern.
- Using and interpreting the CSWI does not require advanced quantitative technical skills.

SECTION 2. CALIFORNIA STUDENT WELLNESS INDEX ITEMS





CALIFORNIA STUDENT WELLNESS INDEX

Brief Multidimensional Life Satisfaction Scale

I would describe my satisfaction with my...

- 1. Family life
- 2. Friendships
- 3. School experience
- 4. Myself
- 5. Where I live

Social Emotional Distress Scale

In the past month...

- 1. It was hard for me to get excited about anything.
- 2. It was hard for to cope and I thought I would panic.
- 3. I felt sad and down.
- 4. I had a hard time relaxing.
- 5. I was easily irritated.



Figure 1. California Student Wellness Index Items

CSWI Sample

The California Healthy Kids Survey (CHKS) is an anonymous comprehensive school-based surveillance survey used in California for over 25 years, administered by Wrested for the California Department of Education. The data used in this report was provided by 626,940 students who completed the CHKS core module during the 2021/22 and 2022/2023 academic school years (August to June). The sample consists of students who answered all ten CSWI items and passed response quality checks. Parents provided permission, and students provided assent. District and school coordinators managed the CHKS online administration following a well-developed survey protocol (see https://calschls.org/survey-administration/). Students complete the core CHKS module in Grades 7, 9, and 11. Schools sometimes administer the survey to all Grades 6, 8, and 12. See Table 2 (p. 29) for sample demographic characteristics.

Social Emotional Distress Scale

The original Social Emotional Distress Survey–Secondary (SEDS) asks about distress—not long-term diagnostic symptoms. Instead, it is a briefer measure of emotional discomfort and stresses a student experienced in the past month, allowing its meaningful use more than once in a school year. Given the continued need for and use of brief measures of student social-emotional distress, this study examined a five-item version to evaluate its validity to monitor adolescents' wellness in schools. Three samples completed the SEDS. Sample 1 included a cross-section of 105,771 students from 113 California secondary schools. These students' responses were used to examine the SEDS's



internal structure validity. Sample 2 included 10,770 secondary students who completed the Social Emotional Health Survey-Secondary-2020, Mental Health Continuum-Short Form, Multidimensional Student Life Satisfaction Scale, and selected Youth Risk Behavior Surveillance items (chronic sadness and suicidal ideation). Sample 2 responses examined validity evidence based on relations to other well-being constructs. Sample 3 included 1,889 secondary students who completed the SEDS in October 2022 and 2023, providing response stability coefficients. The SEDS's validation analyses found invariance across students based on sex, grade level, and Latinx status, supporting its use with diverse school groups. Additional analyses indicated moderate to strong convergent and discriminant validity characteristics and one- and two-year temporal stability.

SEDS Scoring Example

The following section shows the five SEDS items and an example of calculating the total score. Error! Reference source not found. shows the standard score (Mean = 100, *SD* = 15) for each SEDS raw total score value. (CSWI Scoring Practice Worksheet).

I had a hard time relaxing.

0 Not at All True	1 A Linle True	2 Pretty Much True	3 Very Much True	1
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I felt sad and down.

0 Not at All True	1 Æittle True	2 Pretty Much True	3 Very Much True	1
-------------------	---------------	--------------------	------------------	---

I was easily irritated.

0 Not at All T	1 A Little True	2 Pretty Much True	3 Very Much True	0
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It was hard for me to cope, and I thought I would panic.

0 Not at All True	1 A Line True	2 Pretty Much True	3 Very Much True	1
-------------------	---------------	--------------------	------------------	---

It was hard for me to get excited about anything.

0 Not at All True	1 A Little True	2 Pretty Much True	3 Very Much True	1
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SEDS distress total score <u>4 (S.S. = 97) (</u>0-15)

Brief Multidimensional Student Life Satisfaction Scale (BMSLSS)

Global life satisfaction has been defined as a cognitive evaluation of one's life as a whole... It is distinguished from transitory affective states ... it refers to more general, enduring background appraisals encompassing one's life overall or major facets of one's life. p. 5, Huebner (2004)

The Brief Multidimensional Student Life Satisfaction Scale (Huebner et al., 2006; Seligson et al., 2003) is based on Scott Huebner's pioneering efforts to examine student life satisfaction. Huebner and colleagues Valois and Zullig included questions about young people's perceived quality of life (QOL) in the 1997 South Carolina Youth Risk Behavior Surveillance Survey. These researchers included scale items related to students' life satisfaction judgments, proposing that such information would enhance understanding of associated risk behaviors. The BMSLSS filled this purpose by efficiently asking students to rate their satisfaction in the five BMSLSS domains: Family, Peers, School, Myself, and Neighborhood/Environment.

A high-quality stratified random sample of 5,405 South Carolina high school students provided data for preliminary validation. Subsequent analyses documented negative relationships between students' life satisfaction and their involvement in various risk behaviors: *physical and mental; health* (Valois et al., 2004); *substance use* (Zullig et al., 2001); *dieting and weight* (Valois et al., 2003); and youth developmental assets (Valois et al., 2009). In addition, a recent study (Cavioni et al., 2021) demonstrated that helping students build and sustain positive life satisfaction cognitions supports their overall mental wellness. More specifically, higher levels of life satisfaction moderate (enhance) the mental health benefits of adolescents' positive school relationships. School connectedness fosters student life satisfaction, and in turn, higher life satisfaction strengthens and sustains positive, supportive interpersonal relationships at school (Yuen & Wu, 2023).

A life satisfaction measure is part of the CSWI because previous research identifies its association with students' overall mental health and other positive developmental indicators. Students reporting higher life satisfaction are likelier to report higher personal assets such as selfefficacy and self-esteem. Importantly, in the school context, higher life satisfaction students also have better engagement and academic achievement and lower absenteeism and behavioral problems (Fergusson et al., 2015; Proctor et al., 2009). Conversely, students with lower life satisfaction are likelier to report emotional or behavioral problems. Assessing overall life satisfaction is particularly vital because of its association with reduced mental health risks and positive academic and social functioning (Guzmán et al., 2020).

BMSLSS Scoring Example

The following section shows the five BMSLSS items and an example of calculating the total score. Figure 3 shows the standard score (Mean = 100, SD = 15) for each BMSLSS raw total score value.

Record the response value in the far-right-hand column.

I would describe my satisfaction with my FAMILY life as...

0	1	2	3	4	5	
Very		Mildly	Mildly		Very	4
Dissatisfied	Dissatisfied	Dissatisfied	Satisfied	Satisfied	Satisfied	

I would describe my satisfaction with my FRIENDSHIPS as...

		5	7				
Ī	0	1	2	3	4	5	
	Very Dissatisfied	Dissatisfied	Mildly Dissatisfied	Mildly Satisfied	Satisfied	Verv Satisfied	5

I would describe my satisfaction with my SCHOOL EXPERIENCES as...

0	1	2	3	4	5	
Very Dissatisfied	Dissatisfied	Mildly	Mildly Satisfied	Satisfied	Very Satisfied	2
Dissatisfied	Dissatisticu	Dissatisfied	Satisfied	Satisfied	Satisfied	

I would describe my satisfaction with MYSELF as...

0	1	2	3	4	5	
Very		Mildly	Mildly		Very	3
Dissatisfied	Dissatisfied	Dissatisfied	Satisfied	Satisfied	Satisfied	

I would describe my satisfaction with WHERE I LIVE as...

0	1	2	3	4	5	
Very Dissatisfied	Dissatisfied	Mildly Dissatisfied	Mildly Satisfied	Satisfied	Very Satisfied	4

Life Satisfaction BMSLSS total score 18 (S.S. = 100) (0-25)

Example: Calculating the California Student Wellness Index Score

Life Satisfaction: Record the BMSLSS Life Satisfaction raw score here ______ (0-25)

Past-Month Distress: Record the **reverse scored** SEDS score here _____(0-15)

California Student Wellness Index: CSWI: BMSLSS + SEDS (0-40) 29 (SS = 102)

Original Raw Score of 7 Reverse Score Conversion = 8

Original Raw Score	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Reverse Scored	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

(When SEDS values are reversed, 0 = highest distress...15 = lowest distress)

SECTION 3. CALIFORNIA HEALTHY KIDS SURVEY DESCRIPTION, SURVEY ADMINISTRATION PROCEDURES, AND SAMPLE CHARACTERISTICS



CALIFORNIA HEALTHY KIDS SURVEY

TOM Correct as Needed

In 1997, the California Department of Education (CDE) initiated CalSCHLS to provide school districts and their partner communities with efficient, cost-effective measures to provide local data to improve students' academic performance and foster their social–emotional, behavioral, and physical health. Most California districts use CalSCHLS data as Local Control and Accountability Plan (LCAP) indicators.

CalSCHLS provides data to districts, schools, and communities on school climate and safety, learning supports and barriers, youth development, health, and wellness. Designed as a flexible system that delivers data mapped to individual needs, CalSCHLS can be customized to explore local concerns and interests. The CDE surveys assess perceptions of students, staff, and parents/guardians about school climate, student well-being, and the learning environment in California public schools.

The CalSCHLS system includes three surveys:

- California School Staff Survey (CSSS) measures staff perceptions about learning and teaching conditions
- California School Parent Survey (CSPS) provides teachers, administrators, and school staff with information directly from parents.
- California Healthy Kids Survey (CHKS) items focus on resiliency, protective factors, risk behaviors, and school climate.

CHKS Questionnaire

The CSWI uses CHKS items, with high school (grades 9-12) and middle school versions (grades 6-8). The 2023/24 high school version has 142 items. The middle school (grades 6-8) has seven fewer items (135), omitting age-inappropriate items. Both questionnaire forms include all ten CSWI items that are presented near the end of the survey ([SEDS high school items = 129-133 and middle school =122-126] BMSLSS high school items = 137-141 and middle school =130-134]).

Students receive the following survey introduction as they decide if they want to participate.

This survey asks about your behavior, experiences, and attitudes about your school, health, and well-being. The survey also includes questions about the use of alcohol, tobacco, and other drugs, and bullying and violence.

The survey is anonymous and confidential. No one will ever be able to connect you with your answers. Your answers are private.

You do not have to answer these questions, but your answers will be very helpful in improving school and health programs. You can answer whether you have done or experienced any of these things.

This survey asks about things you may have done during different periods, such as during your lifetime (you ever did something), the past 12 months, or 30 days. Each provides other information. Please pay careful attention to these periods.

Thank you for taking this survey!

CHKS Survey Administration Procedures

CHKS survey management and administration procedures, refined over the past 25 years, include the resources needed to complete this school-based wellness survey. Schools are not mandated to ask parents and students to complete CHKS; however, most have elected to do so. Many now elect to administer the survey annually. Schools use the survey results to assess student wellness, assess the health of a school's climate, and inform and evaluate school improvement plans. For example, each school reviews and revises its safety plan using CHKS information.

The CHKS oversight and management involves the efforts of WestEd technical advisors, a district coordinator, and school-site coordinators. WestEd staff have also prepared a CHKS management and administration video library.

District coordinators (a) identify and train school site coordinators and (b) distribute survey URLs to school site coordinators and classroom teachers/proctors who administer the survey to students. They also communicate with school site coordinators to increase participation and survey completion.

As part of informed consent, site coordinators (a) provide parents/guardians access to the survey modules via the school website, other electronic communication, and hard copies available at the school office and (b) track students who do not have permission (obtaining parental consent) to participate in the survey. They also distribute the survey URL (sharing survey link) to classroom teachers/proctors. The site coordinator notifies proctors if students do not have parental consent to participate and provides them with a Survey Administration Packet, including scripts, instructions, and the assurance of confidentiality. Site coordinators collect and return parental consent forms and confidentiality assurance when surveying is complete.

Students typically complete the CHKS in a regular classroom setting proctored by a school staff, often a teacher. The teacher packet provides an administration protocol, including steps to assure that students whose parents refused permission do not take the survey, seating students to maximize the privacy of responding, and reading an introductory script (Secondary Survey Administration Packet, p. 4). Proctors monitor to ensure privacy and confidentiality but are instructed

not to wander around the room while students complete the survey. They assist students as needed but do not define any substance use beyond what is in the questionnaire.

All school personnel involved in the management administration of the CHKS sign an Assurance of Confidentiality (Secondary Survey Administration Packet, p. 5).

CHKS Online Administration Platform

Add a brief statement about Qualtrics platform setup. TOM???

CHKS Data Dashboard

During the survey administration, response counts are available on a password-protected dashboard. The district coordinator can access it automatically to track progress daily. The response counts are part of a dashboard of past and current CHKS administrations (see video overview of the public dashboard).

CSWI SAMPLE

The student responses in this CSWI report were from district administrations during the 2021/22 and 2022/23 academic years. Responses came from 2,608 schools in 660 districts in 57 of California's 58 governmental counties. District CHKS administrations do not use a random sampling plan; they contact all parents requesting permission for their child to take the survey. All districts request parental permission for Grades 7, 9, and 11 students. Districts can invite other grade levels to participate per their preference and discretion. Table 2 shows the CSWI sample characteristics These students answered all ten CSWI items and passed the response quality checks described in the following section.

CHKS RESPONSE QUALITY CHECKS

Case Rejection Rules

Using CHKS responses, a total score is calculated based on:

- 1. Inconsistencies in AOD use.
- 2. Report of lifetime use of a fictitious drug.
- 3. Adjusted counts of daily AOD use.
- 4. Report of dishonesty in answering survey questions.

If a respondent scores 3 or above, the variable "rejectx" is coded 2 (yes, rejected).

- a. Inconsistency (ranging from 0 to 4); score is one if...
 - "No" on lifetime whole cigarette use and "Yes" on current cigarette smoking.
 - "No" on lifetime one drink of alcohol and "Yes" on current alcohol use



- "No" on lifetime marijuana use and "Yes" on current marijuana use.
- "No" on lifetime inhalant use and "Yes" on current inhalant use.
- b. Fictitious drug use (ranging from 0 to 1)
 - Score is one if "Yes" on lifetime use of "Relevan."
- c. Adjusted counts of current daily AOD use (ranging from 0 to 4 for 7th graders, 0 to 3 for 9th and 11th graders, and 0 to 2 for students in non-traditional schools)
 - Total counts of current daily AOD use (ranging from 0 to 4 for middle and high school grades); the score is one if.....
 - i. "20-30 days" on current alcohol use, current binge drinking, OR current alcohol use at school
 - ii. "20-30 days" on current marijuana use OR current marijuana use at school.
 - iii. "20-30 days" on current inhalant use
 - iv. "20-30 days" on current any other illegal drug or pill to get "high."
 - Counts adjusted downward 1 point for respondents in Grades 9 to 12 in traditional public schools.
 - Counts adjusted downward 2 points for respondents in non-traditional schools.
- d. *Dishonesty* (ranging from 0 to 2; How many questions in this survey did you answer honestly?")
 - The score is one if you answered only some survey questions honestly.
 - The score is two if you answered hardly any survey questions honestly.

Among the students answering all ten CSWI items in 2021/22 and 2022/23, 0.7% were excluded because they had a *rejectx* score of 3 or higher. All students in the final CSWI sample passed the *rejectx* data quality check.

"Straight-Line" Responders

The CHKS case rejection rule primarily evaluates if a student provides an excessive number of significantly elevated low-incidence responses, such as excessive daily use of multiple substances. These answers are the highest response scale options (e.g., 4 or 5 on Likert or frequency formats). The rejectx rule does not effectively evaluate whether a student provides straight-line responses, particularly those repeatedly selecting the lowest (0) response option across multiple items.

The CSWI items, administered online, are presented using matrix response format, as shown in Figure 7. For the CSWI, some low survey investment students could provide all "0" (not like me, Figure 7, lower left quadrant) or all "4" (very much like me, Figure 22, upper right quadrant)

responses. The four patterns In Figure 7 show the extreme straight-line patterns and the prototypic Dual-Factor Mental Health (DFM) groups they would define. We use the DFM category labels as the four extreme response patterns, which, if valid, would otherwise represent category exemplars.

Comple	ete Men	tal He	alth			Symptom	atic Bu	it Cont	tent		
:	Satisfact	ion				Si	atisfacti	on			
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my friendships as	0	0	0	0	•	my friendships as	0	0	0	0	
my school experience as	0	0	0	0	•	my school experience as	0	0	0	0	
myself as O	0	0	0	0	٠	myself asO	0	0	0	0	
where I live os	0	0	0	0	•	where I live as O	0	0	0	0	
	Distres	s					Distress	5			
	Not At All	-	Pretty M	uch V	ery Much		Not At All	A Little True	Pretty M		Very Ti
	True	A Little True	True		True	I had a hard time relation	True	O	True		ł
I had a hard time relaxing.	•	0	0		0	I had a hard time relaxing.	0	0	0		
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I was easily irritated.	•	0	0		0	it was hard for me to cope and I thought		-	-		
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Figure 2. BMSLSS-SEDS Straight-Line Responding Patterns: DFM Mental Groups

Complete Mental Health (5–0). These students indicated they were "very satisfied" (5) with all five life satisfaction areas and had no (0) past month's emotional distress (5-0). In numbers, this was the most common single response cell among the 626,940 students. About 5% of students had this straight-line response pattern. These students generally do not appear to have been giving socially desirable answers, but some might have been "satisfiers;" that is, they provided minimal effort to provide *differentiated answers*.



Troubled (0–3). These students reported being "very dissatisfied" (0) with all five life satisfaction areas and answered, "very much like me" (3) for all five distress items (0-3). These students reported high sadness, suicidal ideation, low school belonging, and low optimism. Compared to other students in the lower-right BMSLSS-SEDS response quadrant, some might have exaggerated responses. This pattern is rare. It occurred only 1 per 1000 students. Also, other adjacent BMSLSS-SEDS SEDS matrix cells occurred less often.

Symptomatic but Content (5–3). These students gave the counter-intuitive response pattern of "very satisfied" (5) for all life satisfaction items and "very much true" (3) for all distress items (5-3). They said they had a lot of distress in the past month but were pleased with all aspects of their lives. This pattern is rare. It occurred only 1 per 1000 students. Also, other adjacent BMSLSS-SEDS matrix cells occurred less often. Some students with this straight-line response pattern could have exaggerated distress experiences or invested little effort in taking the survey by selecting the highest response for each item.

Languishing (0–0). These students also gave counter-intuitive responses. They answered that they experienced no distress in the past month (0), indicating they were completely dissatisfied with their lives (0). These students' straight-line response pattern was to select the lowest response option (0-0) for each item, indicating low investment in giving survey responses. Although not a typical straight-line response, this pattern occurred in 9 of 1000 students. Another observation is that students in this single BMSLSS-SEDS response cell accounted for 70% of all students who answered "very dissatisfied" to all five life satisfaction items. Also, there are essentially no adjacent, lower-left matrix cells that had even 1 per 1000 responses. These students reported low rates of chronic sadness and suicidal ideation. Students giving this response pattern could reflect minimal survey effort and mischievous responders. The CSWI distribution characteristics *change* negligibly when *these students are included* in the sample-wide calculations.

Factors Associated with Straight-Line Responding

The CSWI items embedded in the CHKS were presented in a matrix format, with the items on the left with matrix response options, as shown in Figure 2. This item format efficiently asks students to complete surveillance surveys with more than 100 items (like CHKS and the YRBS). Matrix response formats can make it easier for respondents to answer the items with minimal effort and thoughtfulness. As an initial look at the effect of satisficing responders, particularly for the 0-0 responders, we examined responses from one school district's fall 2023 wellness survey. The district's wellness survey had 36 items, making it possible to present them one at a time. The online survey used the Qualtrics platform. The BMSLSS and SEDS items appeared in a random order for each student. Students in Grades 6-12 (N = 3,143) completed the survey.

Compared with the large 600,000+ CHKS sample, these students were less likely to provide "straight-line" responses. The district students were much less likely to report 0-0 straight-line responses compared with the large CHKS sample:

- 1. Languishing: CHKS 9 per 1000, District 0.6 per 1000
- 2. Complete Mental Health: CHKS 49 per 1000, District 25 per 1000
- 3. Symptomatic but Content: CHKS = 1 per 1000, District 0.3 per 1000
- 4. Troubled: CHKS = 1 per 1000, district 0.6 per 1000

We completed one additional analysis to assess the quality of the straight-line responders. The SEDS (129-133) and BMSLSS (137-141) items appear at the end of the CHKS questionnaire. In between the SEDS and BMSLSS Items are three optimism items from the Social Emotional Health Survey-Secondary-2020 (see p. 62, this report). We examined responses to these three items to explore if straight-line responding persisted. For example, did the 0–0 responders answer "0" to all three optimism items? Table 1 shows the optimism item response patterns for the four straight-line response groups.

Of the students who answered "0" to all ten CSWI, 86.3% persisted by answering "0" to all three optimism items. *Most of these students selected the lowest response across all 13 items*. The 3–5 (SBC) students also had less response persistence; they answered "3" to the SEDS items, and 64.3% answered "3" to all three optimism items.

The 0–5 (CMH) and 3–0 (Troubled) groups had the least response persistence. The 0–5 students answered "0" to all SEDS items, and only 18% gave the same response to all optimism items. The 3–0 students responded "3" to all SEDS items, yet only 18.9% persisted with the same optimistic response, and 63.3% gave a "0" response. The 0–5 students answered "0" to the five SEDS items, and only 18% answered "0" to the optimism items.

Table 1. Percentage All "0" (Lowest Response Option) and All "3" (Highest Response Option) responses to Optimism Items Appearing in the CHKS Survey In between the SEDS and BMSLSS Items

	0–0	0–5	3–5	3–0	All Other
	Languishing	СМН	SBC	Troubled	Students
Optimism all "0" responses	86.3%	18.0%	11.6%	63.3%	10.1%
Optimism all "3" responses	3.9%	47.6%	64.3%	18.9%	7.3%

0 responses = (not at all true) to all three optimism items. The lowest response option.

4 responses = (very much true) to all three optimism items. The highest response option.

0-0 = AII BMSLSS answered very dissatisfied (0), and all SEDS answered not at all true (0).

5-0 = All BMSLSS answered very satisfied (5), and all SEDS answered not at all true (0).

5-3 = All 5 BMSLSS answered very satisfied (5), and all 3 SEDS answered very much true (3).

0-3 = All 5 BMSLSS answered very dissatisfied (0), and all 3 SEDS answered very much true (3).

CMH = Complete Mental Health. SBC = Symptomatic by Content.

CSWI SAMPLE CHARACTERISTICS

Data Quality Check Implications

Social desirability, careless/unengaged responding, response inconsistencies (Cornell et al., 2012), and mischievous responding (Robinson-Cimpian, 2014) can affect students' survey responses. Large or small data sets must be scrutinized to assess their quality (Furlong et al., 2017). The preceding report section described the analyses we undertook to evaluate the CSWI sample data quality. Our takeaways from this analysis are as follows:

- The CHKS survey administration and management is well developed and provides an essential foundation to obtain high-quality data.
- As with all lengthy, population-level surveillance surveys, various types of response bias were present. The multicomponent rejectx rules evaluated responses for possible random responding, response inconsistencies, and exaggerated extreme responding. We interpret the 0.7% *reject* rate as indicating that most students answered reasonably.
- Our analysis provided evidence that straight-line (low investment) responses had a minimal impact on overall data quality. Six percent (38,131) of the responses had a straight-line pattern.
- The 0-0 (Languishing) response pattern uniquely stands out because the adjacent cells in its lower left CWSI response pattern matrix area are nearly all less than one student per 1000. Based on this analysis and evidence, there is reason to question the quality of their responses. We excluded the 5,448 0-0 responders from the CSWI norming and validation sample. Combined with the students excluded by the reject rules, 1.6% of students who answered all ten CSWI items were removed.¹
- The 0–5 (CMH) response pattern—students reporting the highest level of life satisfaction and the lowest level of distress—was the most numerous for the entire sample. Although straight-line, this pattern showed that most other nonstraight-line students' responses were in this upper left CSWI response pattern matrix. Furthermore, these students' responses to the other items (e.g., chronic sadness, suicidal ideation, school belonging, and optimism) corresponded with the responses of students in adjacent response cells.
- The SBC (n = 764) and Troubled (n = 671) constituted only 0.1% of the CSWI sample. Given their small numbers, we kept them in the CSWI development sample.

¹ Having done this, we observe that excluding cases had negligible effects on the CSWI psychometrics and distribution. The CSWI mean was 27.94 with 0-0 responders and 28.05 when excluded. The median of 29 was unchanged. Omitting all four corner groups also had a negligible effect on the CSWI distribution characteristics: M = 27.45, SD = 7.77, range 1-39, Skew = -.68, kurtosis = -0.19, N = 594227, Md = 29, 5th = 13, 15th = 19, 25th = 22, 50th = 29, 75th = 45, 85th = 35.

- The 0-0 (Languishing) response pattern uniquely stands out because the adjacent cells in its lower left CWSI response pattern matrix area are nearly all less than one student per 1000. Based on this analysis and evidence, there is reason to question the quality of their responses. We excluded the 5,448 0-0 responders from the CSWI norming and validation. Combined with the students excluded by the reject rules, 1.6% of students who answered all ten CSWI items were.
- The low percentage of straight-line responses when the CASWI items were presented individually in a district wellness survey suggests a methodological way to increase data quality.

Although no data quality check will identify all questionable responses, the CSWI sample had proportionally few invalid responses. And, for those still in the sample, the numbers are so small that they did not meaningfully affect overall distribution characteristics. Nevertheless, response quality checks are recommended when using the CSWI to evaluate specific student responses.



Sample Descriptive Information	N = 626,0	940
	school-wide n	%
Grade		
6 th	19156	3.1
7 th	178736	28.6
8 th	28068	4.5
9 th	174949	28.0
10 th	34899	5.6
11 th	152010	25.3
12 th	23665	3.8
Other/Ungraded	14247	2.3
Declined to answer	1210	0.2
Gender Identification		
Male	307741	49.2
Female	292429	46.8
Nonbinary	13129	2.1
Another Identification	11563	1.9
Declined to answer	2078	0.3
Ethnicity (could select more than 1)		
American Indian, Alaskan Native	5057	1.0
Asian	92941	18.7
Black, African American	20470	4.1
Latinx	299612	47.8
Native Hawaiian, Pacific Islander	3223	0.7
White	127506	25.7
Other Identification	26512	5.4
Two or more groups	129256	20.7
Declined to answer	2171	0.3
Living circumstances		
Home with 1+ parents/guardians	578386	92.4
Another relative	9093	1.5
Home more than one family	21598	3.5
Friend's home	959	0.2
Foster, group home	1291	0.2
Hotel, motel	895	0.1
Shelter, car, temporary housing	1266	0.2
Other	12368	2.0
Declined to answer	1094	0.2
Parent Education		
Did not finish high school	70512	11.4
Graduated high school	95828	15.5
Attended some college	64246	10.4
College degree (4-year)	273737	44.3
Do not know	113905	18.4
Declined to answer	8712	1.4

Table 2. California Healthy Kids Survey CHKS 2021/22 and 2022/23 Sample Description

Note. This Table includes students who answered all five BMSLSS and all five SEDS items. There are more students in Grades 7, 9, and 11 because, historically, the CHKS has been administered to those grades. The students' responses in Grades 6, 8, 10, and 12 are from schools that invited all students to respond.

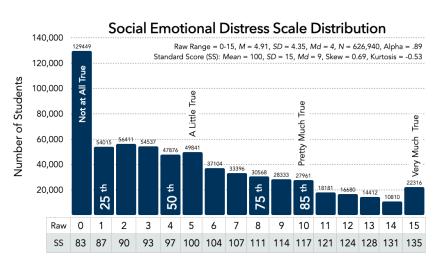
SECTION 4. CSWI PSYCHOMETRIC CHARACTERISTICS

ADD Brief Introduction



CWSI SCALE DISTRIBUTIONS

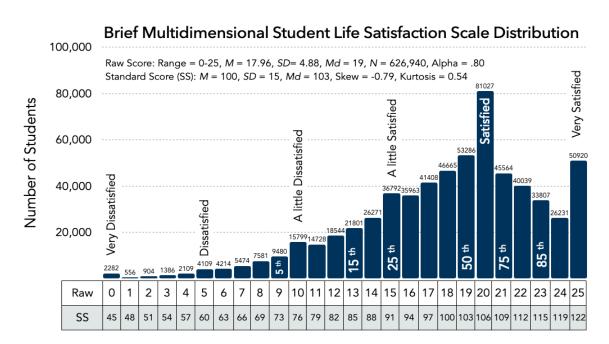
Figure 3 and Figure 4 show the SEDS and distributions, respectively.



SEDS Distribution

Note. Find the student's total score in the row labeled "Raw." The S.S. row shows the Standard Score (Mean = 100, *SD* = 15). A total score of 4 is at about the 50th percentile. Most students reported no substantial distress in the past month.

Figure 3. SEDS Response Distribution and Standard Score Values



BMSLSS Distribution

Figure 4. BMSLSS Response Distribution and Standard Score Values

Note. Find the student's total score in the row labeled "Raw." The following row shows the Standard Score (Mean = 100, SD = 15). The chart shows the percentile range of each value. Total scores of 18-19 are in the middle of the distribution.



California Student Wellness Index Distribution and Standard Scores

Figure 5 shows the SEDS and BMSLSS joint CSWI distribution and core psychometric properties.

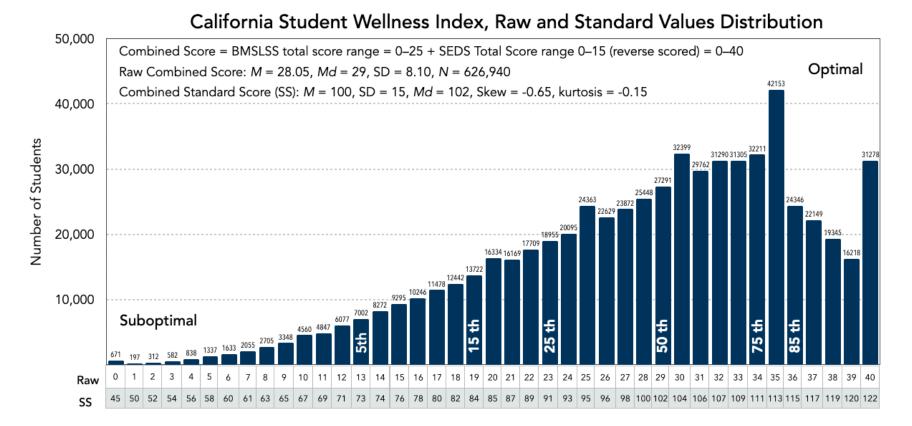


Figure 5. California Student Wellness Index Distribution



			Not Like Me					A Little Like Me					Pretty Much Like Me					Very Much Like Me	
		SEDS		25th			50th				75th							SEDS	
	BMSLSS		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Very Satisfied		25	122	120	119	117	115	113	111	109	107	106	104	102	100	98	96	95	81
		24	120	119	117	115	113	111	109	107	106	104	102	100	98	96	95	93	42
		23	119	117	115	113	111	109	107	106	104	102	100	98	96	95	93	91	54
		22	117	115	113	111	109	107	106	104	102	100	98	96	95	93	91	89	64
	75th	21	115	113	111	109	107	106	104	102	100	98	96	95	93	91	89	87	73
Satisfied		20	113	111	109	107	106	104	102	100	98	96	95	93	91	89	87	85	12
	50th	19	111	109	107	106	104	102	100	98	96	95	93	91	89	87	85	84	85
		18	109	107	106	104	102	100	98	96	95	93	91	89	87	85	84	82	74
		17	107	106	104	102	100	98	96	95	93	91	89	87	85	84	82	80	66
		16	106	104	102	100	98	96	95	93	91	89	87	85	84	82	80	78	57
Little Satisfied	25th	15	104	102	100	98	96	95	93	91	89	87	85	84	82	80	78	76	59
		14	102	100	98	96	95	93	91	89	87	85	84	82	80	78	76	74	42
		13	100	98	96	95	93	91	89	87	85	84	82	80	78	76	74	73	35
		12	98	96	95	93	91	89	87	85	84	82	80	78	76	74	73	71	- 30
		11	96	95	93	91	89	87	85	84	82	80	78	76	74	73	71	69	23
Little Dissatisfied		10	95	93	91	89	87	85	84	82	80	78	76	74	73	71	69	67	25
		9	93	91	89	87	85	84	82	80	78	76	74	73	71	69	67	65	15
		8	91	89	87	85	84	82	80	78	76	74	73	71	69	67	65	63	12
		7	89	87	85	84	82	80	78 76	76	74	73	71	69	67	65	63	61	9
		6	87	85	84	82	80	78		74	73	71	69	67	65	63	61	60	7
Dissatisfied		5	85 84	84 82	82 80	80 78	78 76	76 74	74 73	73 71	71 69	69 67	67 65	65 63	63 61	61 60	60 58	58 56	7
		4	84	82 80	78	78	76	74	73	69	69 67	67	65 63	63 61	60	58	58	56 54	3 2
		2	80	78	76	76	74	73	69	67	65	63	61	60	58	56	50 54	54	2
		2	78	76	74	73	71	69	67	65	63	61	60	58	56	54	52	50	1
Very Dissatisfied	BMSLSS	0		74	73	71	69	67	65	63	61	60	58	56	54	52	50	48	4
			199	86	90	87	76	79	59	53	49	45	45	29	27	23	17	36	100

Figure 6. CSWI Standard Score Values for BMSLSS-SEDS Response Patterns

CSWI CONTENT AND STRUCTURAL VALIDITY

A confirmatory factor analysis evaluated construct validity. Across two random subsamples, the BMSLSS and SEDS had a satisfactory fit for a one-factor model. Satisfactory one-factor fit was replicated for gender groups (male, female, and nonbinary) and grade levels (grades 6-8, 9-10, 10-12). Table 3 and Table 4 show the fit statistics and sample sizes for the BMSLSS and SEDS with randomly selected subsamples drawn from the original sample of 626,940.

Model	N	χ^2	df	CFI	SRMR	RMSEA 90% [CI]	Omega
Sample 1	39,242	1090.766*	5	.972	.028	.074 [.071, .078]	0.83
Sample 2	39,117	1133.400*	5	.971	.028	.076 [.073, .079]	0.83
Sample 1 Male	19638	214.010*	5	.986	.028	.046 [.042, .051]	0.83
Sample 1 Female	18,596	592.540*	5	.970	.030	.079 [.075, .077]	0.82
Sample 1 Nonbinary	854	27.012*	5	.964	.033	.072 [.048, .070]	0.75
Grade 6-8	14,053	415.567*	5	.970	.029	.076 [.071, .080]	0.83
Grade 9-10	13,255	355.932*	5	.973	.027	.073 [.067, .079]	0.83
Grade 10-12	11,892	327.353*	5	.972	.028	.074 [.068, .080]	0.82

 Table 3. Brief Multidimensional Student Life Satisfaction Scale Fit Statistics

Note. CFI = Comparative Fit Index; SRMR = Standardized Root Mean- Square Residual; RMSEA = Root Mean-Square Error of Approximation. One factor 10-item model: poor model fit. Two factors 10-item model: SRMR = .041, RMSEA .057, CFI = 969, χ^2 = 4491.964* *df* = 34, correlation between BMSLSS and SEDS is .67. **p* < .001.

Model	N	χ^2	df	CFI	SRMR	RMSEA 90% [CI]	alpha
Sample 1	39,242	207.096*	5	.997	.009	.032 [.029, .035]	0.90
Sample 2	39,117	232.418*	5	.996	.010	.034 [.031, .037]	0.90
Male	19,638	104.993*	5	.996	.011	.032 [.028, .036]	0.88
Female	18,617	149.047*	5	.996	.011	.039 [.035, .044]	0.90
Nonbinary	857	8.565	5	.997	.012	.029 [.000, .056]	0.89
Grades 6-8	14,053	67.296*	5	.997	.010	.030 [.025, .035]	0.89
Grade 9-10	13,255	85.105*	5	.996	.010	.035 [.030, .040]	0.90
Grade 10-12	11,892	85.471*	5	.996	.010	.037 [.031, .042]	0.91

 Table 4. Social Emotional Distress Scale Fit Statistics

Note. CFI = Comparative Fit Index; SRMR = Standardized Root Mean- Square Residual; RMSEA = Root Mean-Square Error of Approximation. *p < .001.

BMSLSS AND SEDS OMEGA COEFFICIENTS

The Omega coefficients for BMSLSS ranged from .75 to .83, and for SEDS, from .88 to .91 within each subsample, indicating adequate internal consistency of the five items on each scale). Table 3 and Table 4 show the Omega values of each subsample.

Table 5. Brief Multidimensional Student Life Satisfaction Scale Invariance

Invariance Comparison (Sample 1)	X ²	df	SRMR	RMSEA 90% [CI]	CFI	Model Comparison	Δ S-B χ^2	∆ df	∆CFI
Across Grade									
Model 1: configural invariance	240.072*	15	.009	.034 [.031, .037]	.997				
Model 2: metric invariance	321.307*	23	.014	.031 [.029, .034]	.996	2 vs. 1	61.837*	8	001
Model 3: scalar invariance	436.687*	31	.016	.031 [.029, .034]	.995	3 vs. 2	116.324*	8	001
Across Gender (three groups)									
Model 1: configural invariance	268.134*	15	.009	.036 [.033, .049]	.996				
Model 2: metric invariance	825.464*	23	.038	.052 [.049, .054]	.989	2 vs. 1	725.35*	8	007
Model 3: scalar invariance	1824.468*	31	.048	.067 [.064, .069]	.977	3 vs. 2	1128.90*	8	012
Model 3a: partial invariance (free 1 parameter, easily irritated)	1160.396*	29	.042	.055 [.052, .057]	.985	3a vs. 2	357.03*	6	.004

 $\Delta CFI > .01$ indicates non-invariance.

*p < .001.

Table 6. Social Emotional Distress Scale Invariance

Invariance Comparison (Sample 1)	X ²	df	SRMR	RMSEA 90% [CI]	CFI	Model Comparison	Δ S-B χ^2	∆df	∆CFI
Across Grade									
Model 1: configural invariance	1141.789*	15	.024	.075 [.072, .078]	.974				
Model 2: metric invariance	1264.956*	23	.029	.064 [.061, .066]	.972	2 vs. 1	99.129*	8	002
Model 3: scalar invariance	1735.857*	31	.032	.061 [.059, .064]	.967	3 vs. 2	288.004 *	8	005
Across Gender (3 groups)									
Model 1: configural invariance	1215.449*	15	.025	.078 [.075, .080]	.973				
Model 2: metric invariance	1320.386*	23	.028	.066 [.063, .069]	.971	2 vs. 1	81.07*	8	002
Model 3: scalar invariance	1881.696*	31	.034	.068 [.065, .070]	.961	3 vs. 2	672.97*	8	01
Model 3a: partial invariance (free 1 parameter, myself)	1753.146*	29	.033	.068 [.065, .070]	.963	3a vs. 2	445.97*	6	008

 Δ CFI > .01 indicates noninvariance.

*p < .001.

BMSLSS AND SEDS INVARIANCE

Testing across grade levels, the BMSLSS and SEDS items had invariance for factorial structure, factor loadings, and intercept levels (Table 5 and Table 6). For invariance across gender groups (i.e., male, female, and nonbinary), configural and metric invariance was achieved in BMSLSS and SEDS, respectively. However, full invariance was not supported for both scales at the intercept level. For BMSLSS, the intercepts of my satisfaction with "Myself" were unconstrained across groups to achieve partial invariance. For SEDS, the intercepts of "I was easily irritated" were unconstrained across groups to achieve partial invariance. The results of invariance testing supported the assumption that students from 6th to 8th grade and students identified as male, female, and nonbinary interpreted the surveys equivalently. Comparing scores across these student groups can be considered meaningful and valid.

CSWI VALIDATION EVIDENCE

The following sections summarize various analyses to assist your evaluation of the CSWI's psychometric properties. These analyses include reliability and concurrent and predictive validity evidence.

Sample 1: Concurrent Validity with Social Emotional Health Survey

A nonrandom subset of the 626,940 students completing the California Healthy Kids Survey in 2020/21 and 2021/22 also completed the Social and Emotional Health Survey– Secondary (SEHS-S-2020). The responses of 78,769 students (Grades 6-12, 48.8% male-identifying, 47.1% female-identifying, 2.2% nonbinary identifying, and 1.9% other gender identification) provided an initial examination of the CSWI's concurrent validity.

The SEHS-S-2020 (36 items) comprehensively measures students' social and emotional strengths (Furlong et al., 2021, 2023). Previous research supports a model with four domains and 12 subscales (three items per subscale) that load onto four domains:

- 1. Belief in Self (self-awareness, persistence, self-efficacy).
- 2. Belief in Others (school support, family coherence, peer support).
- 3. Emotional *Competence* (empathy, self-control, behavioral self-control).
- 4. Engaged Living (gratitude, zest, and optimism).

Confirmatory factor analysis (CFA) and measurement invariance provide validity and reliability evidence.

The CSWI was correlated with the SEHS-S-2020 four domain scores. The CSWI concurrent validity coefficients were as follows: Belief in Self (r = .57), Belief in Others (r = .51), Emotional Competence (r = .25), and Engaged Living (r = .62). This information indicates that 10-item CSWI moderate associations with other relevant aspects of students positive social-emotional health.

Sample 2: Concurrent/Predicative Validity with the MHC-SF

To further examine the reliability and stability of the California Student Wellness Index, we used information gathered as part of one California school district's annual student wellness survey. The survey included the BMSLSS, the SEDS, and other well-being measures. Students completed the survey during October of 2022 and 2023.

Procedures

Students participated in a voluntary school-wide wellness survey, which the district had initiated ten years previously. Parents could refuse permission, and students could decline to take the survey. The students completed the online survey in a regularly scheduled class proctored by a teacher following established procedures. Students had the option to skip items they did not want to answer. School staff reviewed the survey results to evaluate and provide support services to facilitate students' positive social-emotional development.

Participants

For this analysis, we identified 1,839 students who completed the survey in both years. In 2022, they were in Grades 6 (172, 9.4%), 7 (200, 10.9%), 8 (209, 11.4%), 9 (448, 24.4%), 10 (433, 23.5%), or 11 (377, 20.5%). In response to a question asking the students to identify their preferred gender identity, most indicated they identified as female (45.7) or male (48.7%). A smaller proportion of the participants identified as nonbinary (2.7%), as having a different identity (not listed, 2.9%), or declined to answer the gender identity question (0.2%). The students responded to the following question, "Some people describe themselves as transgender when their sex at birth does not match how they think or feel about their gender. Are you transgender?" In response to this question, most of the students indicated that they did not identify as transgender (91.3%), 2.8% of the students identified as transgender, 2.6% of the students indicated they were unsure if they were transgender, and 3.3% of the students declined to respond to this question. When asked which sexual orientation best describes them, most of the students identified as straight, not gay or lesbian (71.4%), bisexual (10.9%), not sure of their sexual orientation yet (7.4%), identifying as some other sexual orientation (4.2%), gay or lesbian (3.0%), or declined to respond to this question (3.8%). Students identified with the following ethnic groups: White, not Hispanic or Latinx (51.4%), Latinx or Hispanic



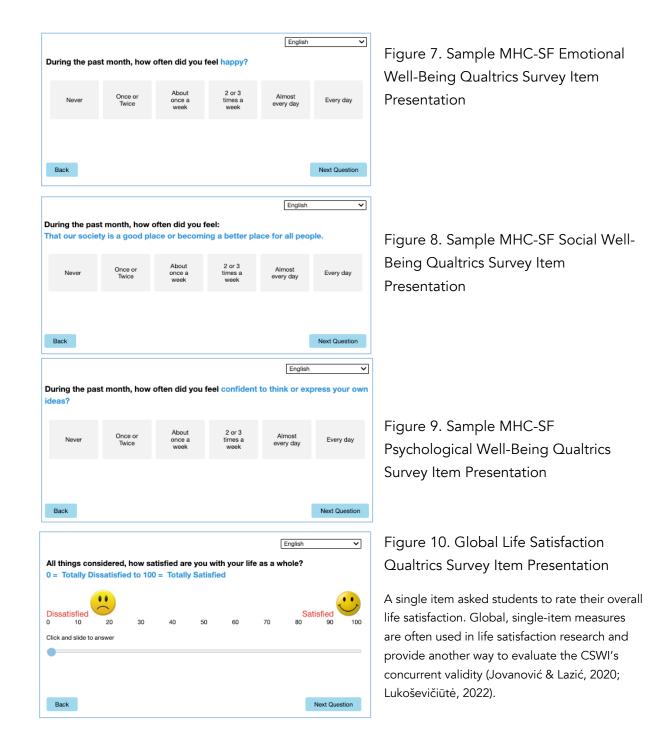
(28.2%), two or more groups (12.7%), Asian (3.0%), Black or African American (2.5%), Native Hawaiian or Pacific Islander (0.8%), American Indian or Alaskan Native (0.5%), and some declined to respond (0.2%).

DISTRICT WELLNESS SURVEY

The wellness survey included the BMSLSS, and the SEDS described in this technical report. It also consists of the following measures to evaluate the CSWI's concurrent and predictive validity.

Mental Health Continuum–Short Form

The Mental Health Continuum Short Form (Keyes, 2006) measures Emotional Well-Being (EWB), Psychological Well-Being (PWB), and Social Well-Being (SWB), with previous studies supporting its three-component structure (Lamers et al., 2011). The item stem is: *During the past month, how often did you feel the following ways*: (a) an example item for the PWB is that. you *liked most parts of your personality*, and (b) an example item for SWB is that *people are good*. Response options are 0 = *never*, 1 = *once or twice*, 2 = *about once a week*, 3 = 2 or 3 *times a week*, 4 = *almost every day*, and 5 = *every day*. Responses of "*every day*" or "*almost every day*" are considered to reflect flourishing mental health, and responses of "*never*" or "*once or twice*" reflect languishing mental health. The correlation of the 2022 and the 2023 CSWI with their same-year EWB, PWB, and SWB total scores provided concurrent validity coefficients. Significant CSWI-MHC-SF validity coefficients would indicate that the CSWI measures vital aspects of adolescents' overall well-being.



	Measures	One-Year Stability	2022 α	2023 α
All Genders ($N = 1839$) ^a	BMSLSS	.58	.73	.72
	SEDS	.52	.82	.82
	CSWI	.61 ^b	_	_
Female (<i>N</i> = 841)		One-Year Stability	2022 α	2023 α
	BMSLSS	.55	.72	.70
	SEDS	.52	.83	.82
	CSWI	.59	_	_
2 Male (N = 895)		One-Year Stability	2022 α	2023 α
	BMSLSS	.66	.75	.73
	SEDS	.71	.77	.79
	CSWI	.48	_	_

Table 7. CSWI Reliability (Alpha) and One-Year Stability Coefficients

^a Coefficients (Pearson correlation) for all students, including those reporting nonbinary or another gender identification.

^b Stability coefficient range = r = .55-.57 for gender identification and r = .42-.61 for ethnic identification.

Table 8. CSWI Concurrent and Predictive Stability Coefficients by Gender Identification

All Students (N = 1839)	Validity	0-100	EWB	PWB	SWB
2022 CSWI —> 2022 Indicators	Concurrent	.71	.74	.64	.70
2023 CSWI —> 2023 Indicators	Concurrent	.67	.74	.69	.66
CSWI 2022—> 2023 Indicators	Predictive	.43	.52	.50	.50
Female (<i>n</i> = 841)		0-100	EWB	PWB	SWB
2022 CSWI —> 2022 Indicators	Concurrent	.71	.74	.72	.65
2023 CSWI —> 2023 Indicators	Concurrent	.65	.74	.69	.65
CSWI 2022—> 2023 Indicators	Predictive	.42	.50	.49	.51
Male (n = 895)	Validity	0-100	EWB	PWB	SWB
2022 CSWI —> 2022 Indicators	Concurrent	.66	.70	.65	.60
2023 CSWI —> 2023 Indicators	Concurrent	.68	.71	.68	.64
CSWI 2022—> 2023 Indicators	Predictive	.42	.50	.48	.45
Nonbinary ($n = 49$)	Validity	0-100	EWB	PWB	SWB
2022 CSWI —> 2022 Indicators	Concurrent	.72	.63	.59	.50
2023 CSWI —> 2023 Indicators	Concurrent	.73	.80	.66	.67
CSWI 2022—> 2023 Indicators	Predictive	.41	.46	.23	.37
Another Identification ($n = 54$)	Validity	0-100	EWB	PWB	SWB
2022 CSWI —> 2022 Indicators	Concurrent	.75	.71	.64	.57
2023 CSWI —> 2023 Indicators	Concurrent	.53	.72	.68	.61
CSWI 2022—> 2023 Indicators	Predictive	.35	.55	.57	.49

Note. 0-100 = All things considered, how satisfied are you with your life as a whole? 0 equals completely dissatisfied, and 100 equals completely satisfied. EWB = Mental Health Continuum-Short Form Emotional Well-being. PWB = Mental Health Continuum-Short Form Psychological Well-being. SWB = Social Well-Being. CWSI = California Student Wellness Index = Mental Health Continuum-Short Form Social Well-being.



RELIABILITY AND STABILITY COEFFICIENTS

Cronbach's alpha (

Figure 7. Sample MHC-SF Emotional Well-Being Qualtrics Survey Item Presentation

Figure 8. Sample MHC-SF Social Well-Being Qualtrics Survey Item Presentation

Figure 9. Sample MHC-SF Psychological Well-Being Qualtrics Survey Item Presentation

Figure 10. Global Life Satisfaction Qualtrics Survey Item Presentation

A single item asked students to rate their overall life satisfaction. Global, single-item measures are often used in life satisfaction research and provide another way to evaluate the CSWI's concurrent validity (Jovanović & Lazić, 2020; Lukoševičiūtė, 2022).



Table 7) assessed BMSLSS and SEDS internal consistencies. Across all students, the reliability coefficients for these measures were between .72 and .82 in 2022 and 2023, with acceptable levels of reliability for both male and female-identifying students. The one-year CSWI (r = .61) stability coefficient indicated a moderate consistency of students' responses from one year to the next while retaining some sensitivity to assess change in students' life experiences.

CONCURRENT AND PREDICTIVE STABILITY COEFFICIENTS

Students' CSWI scores were compared to their responses on related well-being measures to further assess its utility as a general indicator of students' well-being. The 2022 CSWI and the 2022 CSWI indicator scores were compared to their corresponding validity measures, as shown in Table 8. The same-year validity coefficients (r = .67-.74) indicate that all students' CWSI scores were strongly and consistently related to their overall life satisfaction and emotional, psychological, and social well-being measures. These validity coefficients provide evidence that the CSWI measures central aspects of students' social-emotional health. The same supportive validity coefficient pattern was identified across students' gender identification preferences.

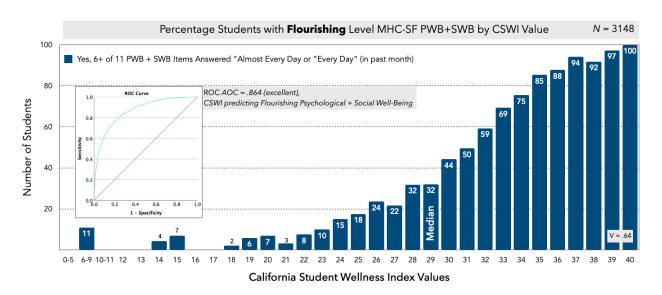


Figure 11. Flourishing Social + Psychological Well-Being by CSWI Values

CSWI Concurrent Validity with Flourishing and Languishing Well-Being

The MHC-SF can be scored as a criterion, not a normative distribution, measure (see Figure 30). The MHC-SF has five Social Well-Being (SWB) and six Psychological Well-Being (PWB) items. Students answering a majority (6 or 11) of these items, "almost every day" and "every day," are considered to report *flourishing* well-being. Students answering a majority (6 or 11) items "never" or "once or twice" are regarded as reporting *languishing* well-being. Figure 11 shows the percentage of students with flourishing level responses for each CSWI value. Figure 12 shows the percentage of students with languishing level responses. The graphs show that the CSWI values at the continuum ends showed good discrimination between students reporting flourishing and languishing well-being.

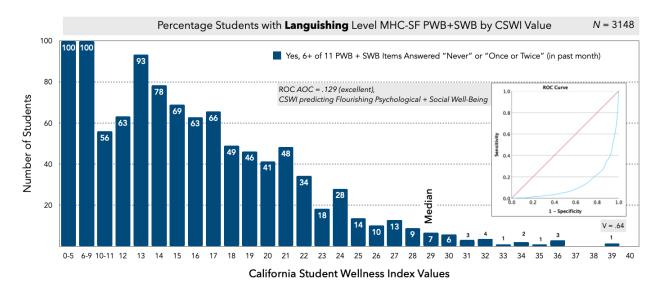


Figure 12. Languishing Social + Psychological Well-Being by CSWI Values

Note. This chart shows the strong association between CSWI values and languishing well-being responses. For example, more than 60% of students with CSWI scores \geq 17 also reported languishing well-being, and few students with CSWI scores below 25 reported the same. *Languishing* = Answered 6 or 11 items "never," or "once or twice (in the past month)

SECTION 5. CSWI APPLICATIONS





EVALUATING AND INTERPRETING CSWI RESPONSES

One of the intended uses of the CSWI is to provide researchers with a brief, efficient index of students' overall mental well-being assessed within the dual-factor model framework. To this end, the CSWI index has favorable psychometric characteristics concerning reliability, structural validity, and structural, concurrent, and predictive validity. Combining the BMSLSS and the SEDS responses provides an efficient index to rank students from low to high levels of mental well-being. The CSWI supports research, schoolwide universal wellness screening, and individual student psychoeducational assessments.

Figures 13-22 in this section of the report present information about the association between CSWI scores and other relevant student-reported information—specifically chronic sadness, suicidal ideation, school belonging, and optimism. Each chart/graph includes an descriptive note. This information serves two purposes. First, it provides additional CWSI validation information. Students with high CWSI values should be less likely than students with low values to report adverse experiences (chronic sadness and suicidal ideation) and more likely to report positive psychological states (school belonging and optimism). Second, taking advantage of the large CSWI sample, most cells have sufficient student responses to ascertain the percentage of students expressing adverse and positive sentiments. This information provides a way to evaluate a student's comparative strength-risk profile. Of course, it is a matter of continued research to explore associations with other adolescent assets and resources.



Past-Year Chronic Sadness

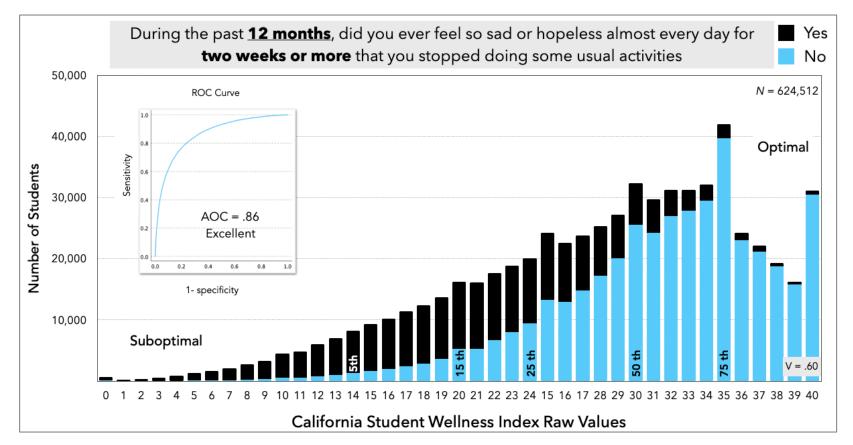


Figure 13. Number Reporting Chronic Sadness for Each CSWI Value, ROC Curve Analysis

Note.

This chart shows the relationship between the CSWI values and students reporting past-year chronic sadness. The **blue bars** show the number of students answering "no." The black bar indicates the number of students answering "yes." More than half of the students with CSWI scores \leq 23 reported chronic sadness. A Receiver Operating Characteristic (ROC) analysis examined how the CSWI values predicted chronic sadness (0/1). The Area of the Curve value of .86 indicates that the CSWI predicts chronic sadness well, balancing sensitivity and specificity. Thirty-four percent of all students reported chronic sadness in the past year.



Past-Year Suicidal Ideation

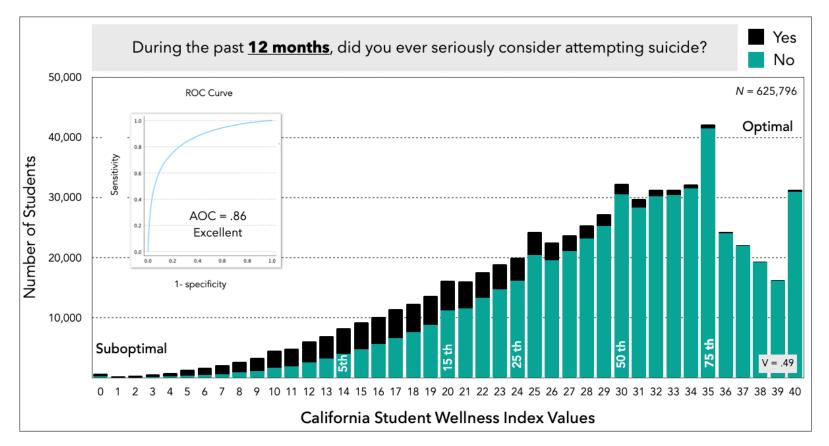


Figure 14. Number Reporting Suicidal Ideation for Each CSWI Value, ROC Curve Analysis

Note. This chart shows the relationship between the CSWI values and students reporting past-year suicidal ideation. The **green bars** indicate the number of students answering "no." The black bar shows the number of students answering "yes." More than half of the students with CSWI scores \leq 12 reported suicidal ideation. A Receiver Operating Characteristic (ROC) analysis examined how the CSWI values predicted suicidal ideation (0/1). The Area of the Curve value of .86 indicates that the CSWI predicts suicidal ideation well, balancing sensitivity and specificity. Sixteen percent of all students reported past-year suicidal ideation.



Past-Year Sadness + Suicidal Ideation

Figure 15. Number, Percentage Sadness/Suicidal Ideation Below/Above CSWI Median

Note. This chart shows similar information to that presented in Figures 9 and 10. Here, the chart shows the percentage of students reporting chronic sadness and suicidal ideation with CSWI scores below and above the distribution median. For example, 57% of students with CSWI scores below the median reported chronic sadness.

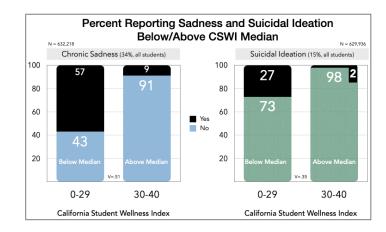
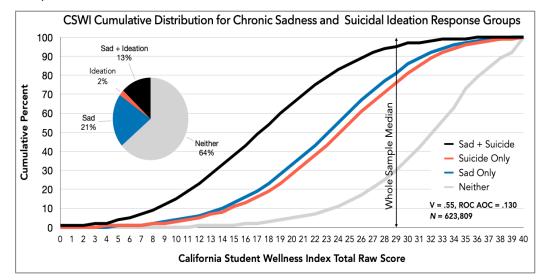


Figure 16. CSWI Cumulative Distribution for Chronic Sadness, Suicidal Ideation Groups



Note. This chart shows CSWI values association with students' past year's chronic sadness and suicidal ideation questions. Combining responses for these two binary-response (no/yes) items created four groups: neither (no sadness-no ideation, 64.2%), sadness only, 21.1%, ideation only, 2.3%, and sadness + ideation, 12.4%). One in 8 students reported yes to both sadness and suicidal ideation, presenting possibly more profound and more complex social-emotional health challenges. Figure 16 shows the CSWI and the cumulative percentage of CSWI values from 0 to 40. The black line shows that students reporting sadness + ideation had much lower CSWI values (90% below the whole sample median) than the other three groups and substantially divergent from students reporting no sadness or ideation. A Receiver Operating Characteristics analysis using the CSWI values as the predictor returned an AOC of .13).

Students Reporting Past-Year Chronic Sadness by CSWI Response Cell

			Not Like					A Little Like					Pretty Much					Very Much	
			Me					Me					Like Me					Like Me	
			SEDS	25th			50th				75th							SEDS	
	BMSLSS		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Very Satisfied		25	2	4	6	10	15	20	25	31	37	44	50					56	81
		24	1	3	5	8	13	20	24	28									42
		23	2	3	6	9	14	20	27	35	40	49	52						54
		22	2	4	7	11	17	22	30	38	43	53	56	60					64
	75th	21	3	5	8	12	18	25	31	39	47	55	61	62	72				73
Satisfied		20	3	6	9	13	19	25	32	40	48	61	62	67	72	71	81	74	129
	50th	19	4	6	11	16	21	28	36	45	53	62	66	70	76	81	86	85	85
		18	5	8	13	18	25	33	41	49	57	67	70	77	78	80	87	85	74
		17	6	9	15	20	29	37	42	51	59	69	73	75	80	83	89	88	66
		16	8	11	16	24	31	38	46	55	61	72	75	80	82	86	91	89	57
Little Satisfied	25th	15	7	13	19	25	34	39	50	55	64	74	76	80	84	88	90	87	59
		14	10	15	23	29	35	45	53	61	70	75	78	82	86	89	92	91	42
		13	12	20	22	30	39	47	52	62	69	77	81	85	86	90	92	93	35
		12	15	20	25	33	40	46	58	63	72	77	82	85	90	91	93	93	30
		11	16	17	19	32	44	50	56	66	73	80	83	85	89	92	94	92	23
Little Dissatisfied		10	10	19	26	32	41	41	58	70	70	80	80	85	90	91	94	90	25
		9	16				51	55	63	69	76	83	83	87	91	92	94	94	15
		8						54	62	64	74	82	84	88	92	94	96	94	12
		7									78	79	86	90	89	93	95	94	9
Dissatisfied		6	10										87	90	92	95	97	96	7
Dissatisfied		5	12															92 95	3
		4																95	2
		2																70	2
		1																	1
Very Dissatisfied	BMSLSS	0																81	4
			199	86	90	87	76	79	59	53	49	45	45	29	27	23	17	36	1000

Explanation Note. This chart shows the association between CSWI response patterns and reported chronic sadness in the past year. The value in each cell is the percentage of students with that specific CSWI response pattern who also report chronic sadness—to illustrate—85% of the students with the BMSLLS (10)-SEDS (11) response pattern indicated that they experienced chronic sadness. Only 13% of students with the BMSLLS (20)—SEDS (3) reported chronic sadness. Shaded cell values are \leq 34%, the average for the entire sample (N = 625,796). Blank cells had low endorsement, with less than 1@1000 students.

Figure 17. Percent Reporting Chronic Sadness by BMSLSS-SEDS Response Pattern

	BMSLSS		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Very Satisfied		25	1	1	1	2	3	6	6	10	11	14	15					34	81
		24	1	1	1	1	3	4	5	6									42
		23	1	1	1	2	3	5	5	6	8	12	16						54
		22	1	1	1	2	4	4	6	9	10	10	15	17					64
	75th	21	1	1	2	3	4	6	8	10	12	11	17	18					73
Satisfied		20	1	1	2	3	5	6	8	10	13	16	19	22	23	28	33	34	129
	50th	19	1	1	2	3	5	8	10	13	16	19	22	25	25	30	36	39	85
		18	2	2	4	5	6	9	12	15	17	21	27	29	31	34	39	42	74
		17	3	3	5	6	8	11	14	18	22	24	28	33	37	41	43	48	66
		16	4	4	4	7	10	12	17	19	23	28	32	37	41	41	49	50	57
Little Satisfied	25th	15	3	3	5	9	11	14	18	22	26	31	35	37	43	46	52	52	59
		14	5	5	8	10	12	16	20	25	28	35	38	42	48	49	54	57	42
		13	6	6	9	12	15	19	21	27	31	37	40	43	51	51	56	57	35
		12	8	8	8	12	16	18	25	28	34	39	45	49	54	57	61	62	30
		11	7	7	10	12	18	21	24	32	34	42	45	50	55	60	65	64	23
Little Dissatisfied		10	5	5	9	17	17	18	27	34	38	43	45	54	56	63	65	66	25
		9	10				22	24	32	37	42	46	50	57	59	63	72	68	15
		8						28	33	33	41	48 51	51	61	67	70 68	71	70 72	12 9
		6									45	51	53 53	61 61	61 66	73	68 75	72	7
Dissatisfied		5	15										55	01	00	/3	/5	76	7
Dissuisined		4	15															74	3
		3																78	2
		2																	1
		1																	1
Very Dissatisfied	BMSLSS	0																70	4
			199	86	90	87	76	79	59	53	49	45	45	29	27	23	17	36	1000

Students Reporting Past-Year Suicidal Ideation by CSWI Response Cell

Explanation Note. This chart shows the association between CSWI response patterns and reported past-year suicidal ideation. The value in each cell is the percentage of students with that specific CSWI response pattern to also report suicidal ideation—to illustrate—56% of the students with the BMSLLS (10)-SEDS (12) response pattern reported suicidal ideation. Only 2% of students with the BMSLLS (18)—SEDS (1) reported suicidal ideation. Shaded cell values are \leq 16%, the average for the entire sample (N = 624,512). Blank cells had low endorsement, with less than 1@1000 students.

Figure 18. Percent Reporting Suicidal Ideation by BMSLSS-SEDS Response Pattern



Students Reporting High Level of School Belonging by CSWI Response Cell

			Not Like Me					A Little Like Me					Pretty Much Like Me					Very Much Like Me	
			SEDS	25th			50th				75th							SEDS	
	BMSLSS		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Very Satisfied		25	79	85	83	79	78	71	73	74	69	66	70					47	81
		24	81	83	83	79	80	78	79	75									42
		23	72	76	76	74	72	71	70	70	71	72	66						54
		22	66	71	71	70	68	64	65	64	64	64	62	63					64
	75th	21	61	64	65	63	6 <mark>2</mark>	60	61	60	59	58	59	61	55				73
Satisfied		20	57	61	60	59	5 <mark>8</mark>	Sort	55	55	55	53	52	51	50	56	56	41	129
	50th	19	47	52	51	51	51	49	49	49	48	48	49	50	49	49	47	44	85
		18	38	44	44	44	44	44	43	43	43	43	42	41	43	40	43	43	74
		17	34	38	39	38	38	37	37	39	37	39	37	41	38	37	40	34	66
		16	29	33	35	34	35	34	35	35	35	32	33	34	35	37	39	31	57
Little Satisfied	25th	15	30	34	34	31	31	30	30	31	32	31	30	30	29	30	31	27	59
		14	27	28	29	29	27	28	28	27	26	27	26	28	28	27	28	25	42
		13	23	34	27	26	25	22	25	25	25	24	23	25	25	24	23	22	35
		12	23	24	27	23	23	22	21	21	23	22	22	22	20	22	20	20	30
		11	21	29	22	22	18	22	21	18	19	19	20	21	21	19	22	19	23
Little Dissatisfied		10	24	32	25	24	22	20	20	19	19	19	19	17	19	17	16	19	25
		9	21				19	15	19	18	16	17	15	16	14	16	15	15	15
		8						20	17	14	14	17	13	13	17	12	13	13	12
		7									11	11	12	12	14	13	10	11	9
		6											10	10	11	11	13	11	7
Dissatisfied		5	34															9	7
		4																6	3
		3																/	2
		2 1																	1
Very Dissatisfied	BMSLSS	0																12	4
, j Diocationica	21110200	0	199	86	90	87	76	79	59	53	49	45	45	29	27	23	17	36	1000

Explanation Note. This chart shows the association between CSWI response patterns and reported school belonging. The value in each cell is the percentage of students with that specific CSWI response pattern to also report high school belonging levels—to illustrate—52% of the students with the BMSLLS (20)-SEDS (10) response pattern indicated that they had high school belonging. This item measured School Belonging; I feel like I am part of this school. Students answering "pretty much true" or "very much true" were rated as having a high sense of school belonging. Shaded cell values are \geq 48%, the average for the entire sample (N = 622,211). Blank cells had low endorsement, with less than 1@1000 students.

Figure 19. Percent Reporting Higher School Belonging by BMSLSS-SEDS Response Pattern

			Not Like Me					A Little Like Me					Pretty Much Like Me					Very Much Like Me	
			SEDS	25th			50th				75th							SEDS	
	BMSLSS		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Very Satisfied		25	77	88	86	82	78	69	75	71	71	69	71					74	81
		24	89	90	88	85	83	78	81	74									42
		23	82	85	81	78	76	73	72	69	69	64	62						54
		22	77	80	78	72	68	64	63	61	59	59	58	60					64
	75th	21	71	74	71	66	62	57	57	56	53	52	49	49	49				73
Satisfied		20	59	66	63	59	54	48	50	47	45	41	45	43	41	39	48	40	129
	50th	19	57	58	55	51	48	43	45	42	39	38	35	34	35	33	36	35	85
		18	47	52	48	46	42	39	37	37	34	31	30	27	29	26	30	27	74
		17	42	47	42	40	37	32	31	29	30	27	26	27	25	23	21	21	66
		16	34	39	37	34	33	29	29	27	24	24	22	21	20	22	24	18	57
Little Satisfied	25th	15	28	37	32	31	29	23	26	24	22	20	20	18	17	16	17	18	59
		14	27	36	33	28	26	23	23	23	19	20	17	17	16	14	16	13	42
		13	26	32	30	24	24	20	22	21	18	16	15	15	16	13	13	12	35
		12	23	31	30	27	21	19	19	17	16	15	12	12	11	12	11	11	30
		11	20	32	23	22	21	17	18	15	16	13	11	11	12	11	8	10	23
Little Dissatisfied		10	16	30	27	22	21	14	18	16	13	15	15	10	11	10	11	12	25
		9	18				23	14	14	13	13	11	10	9	8	7	7	9	15
		8						17	13	11	11	11	10	8	7	8	8	7	12
		7									12	9	9	7	11	5	5	6	9
Discussion		6	10										9	5	5	7	8	6	7
Dissatisfied		5	19															9	7
		4																5	2
		2																5	2
		1																	1
Very Dissatisfied	BMSLSS	0																22	4
			199	86	90	87	76	79	59	53	49	45	45	29	27	23	17	36	1000

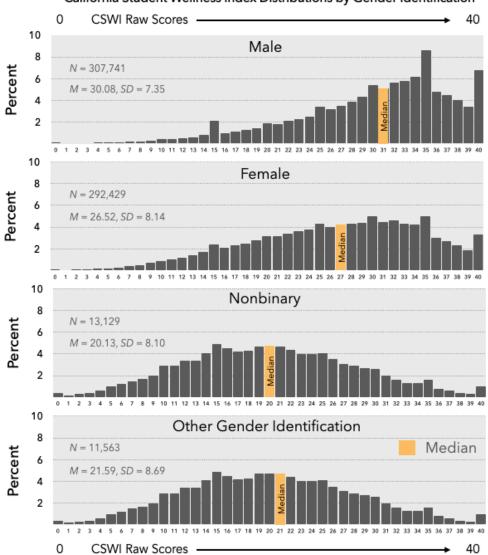
Students Reporting High Level of Optimism by CSWI Response Cell

Explanation Note. This chart shows the association between CSWI response patterns and reported optimism. The value in each cell is the percentage of students with that specific CSWI response pattern to also report high optimism—to illustrate—78% of the students with the BMSLLS (22)-SEDS (2) response pattern indicated that they had optimism. This item measured Optimism; *I usually* expect to have a good day. Students answering "pretty much true" or "very much true" were rated as having a higher sense of optimism. Shaded cell values are \geq 47%, the average for the entire sample (N = 625,780). Blank cells had low endorsement, with less than 1@1000 students.

Figure 20. Percent Reporting Higher Optimism by BMSLSS-SEDS Response Pattern



Interpretation Notes for Gender Identification



California Student Wellness Index Distributions by Gender Identification

Explanation Note. This chart shows the CSWI distributions by student gender identification. Students' mean CSWI scores differed substantially by gender identification (eta2 = .075): Male > Female > Other gender identification > nonbinary. ²

Figure 21. CSWI Distributions—Means and Medians by Gender Identification

² The Health Behaviour in School-aged Children Survey (2021/2022) found that female-identifying adolescents were more likely than males (38% to 23%) to report that the COVID-19 pandemic negatively affected their mental health (Cosma et al., 2023). A U.S. Centers for Disease Control (2023) indicated that 41% of females had poor mental health in the past month, compared to 29% of males. The CSWI patterns mirror these reports and others (e.g., Campbell et al., 2022). This technical guide does not examine the factors associated with gender-related wellness reports. This crucial topic requires further investigation.

Interpretation Notes for Age

Explanation Note. This chart shows the CSWI distributions by student grade level. Students' mean CSWI differed only slightly (eta2 = .011). Middle school students had somewhat higher scores than high school students. The decline in life satisfaction from early to late adolescence is consistent with previous research (e.g., Aymerich et al., 202; Orben et al., 2022).

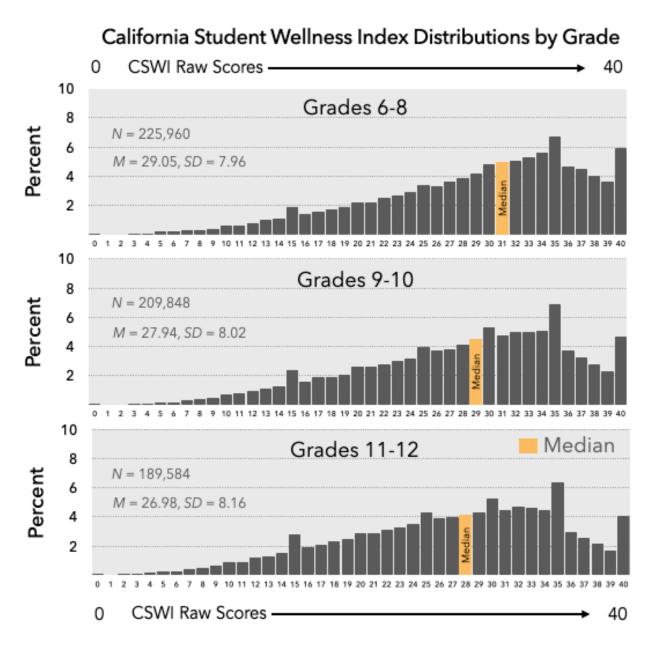
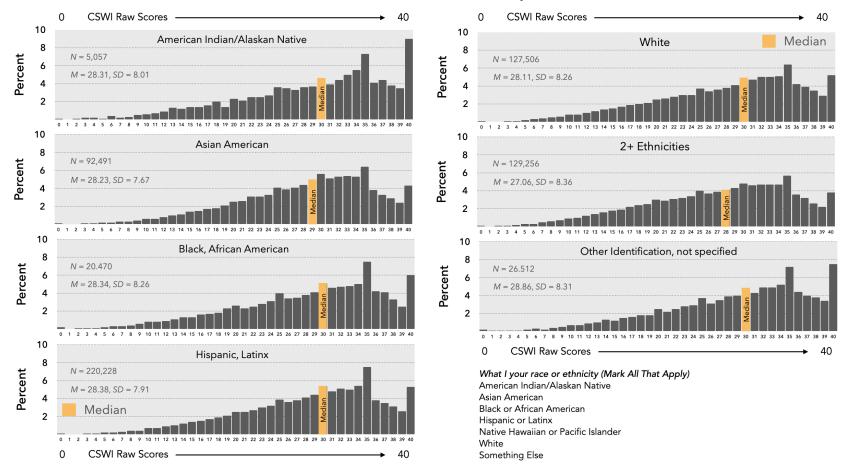


Figure 22. CSWI Distribution—Means and Medians by Grade Level



Interpretation Notes for Ethnic Identification

Explanation Note. Students' ethnicity was elicited by asking them to identify with which group(s) they identified (Figure 24). About half of the students were Hispanic/Latinx, consistent with the statewide school-age population. Reflecting California's multiethnic diversity, students identifying with two or more groups were the next largest group. CSWI values were similar across all groups.



California Student Wellness Index Distributions by Ethnic Identification

Figure 23. CSWI Distributions—Means, and Medians by Ethnicity

55



CSWI ADMINISTRATION FORMS (TIER 1 APPLICATIONS)

CSWI Student Response Form

Name Date

Generally, how satisfied are you with your life?

,	- /			
	A Little	A Little		Very
Dissatisfied	Dissatisfied	Satisfied	Satisfied	Satisfied
my satisfaction w	ith my FRIENDSHI	PS as		
	A Little	A Little		Very
Dissatisfied	Dissatisfied	Satisfied	Satisfied	Satisfied
my satisfaction w	ith my SCHOOL EX	XPERIENCES as	5	
	A Little	A Little		Very
Dissatisfied	Dissatisfied	Satisfied	Satisfied	Satisfied
my satisfaction w	ith MYSELF as			
	A Little	A Little		Very
Dissatisfied	Dissatisfied	Satisfied	Satisfied	Satisfied
my satisfaction w	ith WHERE I LIVE	as		
	A Little	A Little		Very
Dissatisfied	Dissatisfied	Satisfied	Satisfied	Satisfied
	Dissatisfied my satisfaction w Dissatisfied my satisfaction w Dissatisfied my satisfaction w Dissatisfied my satisfaction w	A Little Dissatisfied Dissatisfied my satisfaction with my FRIENDSHI A Little Dissatisfied A Little A Little	DissatisfiedDissatisfiedSatisfiedmy satisfaction with my FRIENDSHIPS asA LittleDissatisfiedA LittleA LittleDissatisfiedDissatisfiedSatisfiedmy satisfaction with my SCHOOL EXPERIENCES asA LittleDissatisfiedDissatisfiedSatisfiedDissatisfiedDissatisfiedSatisfiedDissatisfiedDissatisfiedSatisfiedmy satisfaction with MYSELF asA LittleA LittleDissatisfiedDissatisfiedSatisfiedmy satisfaction with WHERE I LIVE asA LittleA LittleA LittleA Little	A LittleA LittleDissatisfiedDissatisfiedSatisfiedDissatisfiedDissatisfiedSatisfiedmy satisfaction with my FRIENDSHIPS asA LittleDissatisfiedDissatisfiedSatisfiedDissatisfiedDissatisfiedSatisfiedSatisfiedDissatisfiedSatisfiedmy satisfaction with my SCHOOL EXPERIENCES asA LittleA LittleDissatisfiedDissatisfiedSatisfiedSatisfiedDissatisfiedSatisfiedSatisfiedDissatisfiedSatisfiedDissatisfiedDissatisfiedSatisfiedSatisfiedDissatisfiedSatisfiedSatisfiedDissatisfiedSatisfiedSatisfiedDissatisfiedSatisfiedSatisfiedDissatisfiedSatisfiedSatisfiedDissatisfiedSatisfiedSatisfiedDissatisfiedSatisfiedSatisfiedSatisfiedSatisfiedMy satisfaction with WHERE I LIVE asA LittleA LittleA LittleA Little

I would describe my satisfaction with my FAMILY life as...

Over the past 30 days, how true do you feel these statements are about you?

I had a hard time relaxin	ıg.		
Not At All True	A Little True	Pretty Much True	Very Much True
I felt sad and down.			
Not At All True	A Little True	Pretty Much True	Very Much True
I was easily irritated.			
Not At All True	A Little True	Pretty Much True	Very Much True
It was hard for me to co	pe, and I thought I w	ould panic.	
Not At All True	A Little True	Pretty Much True	Very Much True
It was hard for me to ge	t excited about anytl	ning.	
Not At All True	A Little True	Pretty Much True	Very Much True

CSWI SCORING AND INTERPRETATION

You can evaluate a student by comparing their total response score (sum of all items) to the average responses of 626,940 California students who completed the BMSLSS and SEDS during the 2021/22 or the 2022/23 school years. First, find the student's total scores and compare them to the charts on the following page.

Record the response value in the far-right-hand column.

3 Very Much True

3 Very Much True

I would describe m	ny satisfaction with	my FAI	MILY life as.				
0	1		2	3	4	5	
Very		Ν	Aildly	Mildly		Very	
Dissatisfied	Dissatisfied	Diss	satisfied	Satisfied	Satisfied	Satisfied	
I would describe n	ny satisfaction with	n my FR	IENDSHIPS	as	•	•	
0	1		2	3	4	5	
Very		Ν	Лildly	Mildly		Very	
Dissatisfied	Dissatisfied	Diss	satisfied	Satisfied	Satisfied	Satisfied	
I would describe m	y satisfaction with	my <mark>SCI</mark>	HOOL EXPER	RIENCES as			
0	1		2	3	4	5	
Very		Ν	Aildly	Mildly		Very	
Dissatisfied	Dissatisfied	Diss	satisfied	Satisfied	Satisfied	Satisfied	
I would describe m	ny satisfaction with	MYSEL	F as				
0	1		2	3	4	5	
Very		Ν	Aildly	Mildly		Very	
Dissatisfied	Dissatisfied	Diss	satisfied	Satisfied	Satisfied	Satisfied	
I would describe m	ny satisfaction with	WHER	E I LIVE as				
0	1		2	3	4	5	
Very		Ν	∕lildly	Mildly		Very	
Dissatisfied	Dissatisfied	Diss	satisfied	Satisfied	Satisfied	Satisfied	
BM I had a hard time r	SLSS Life Satisfactio	on Tota	l Record the	e sum of the fiv	ve satisfaction i	tems here	(0-25
0 Not at All Tru	ue 1 A Little	Гrue	2 Pretty	Much True	3 Very M	luch True	
I felt sad and dowr	ı.		-		·		
0 Not at All Tru	ue 1 A Little	Гrue	2 Pretty	Much True	3 Very M	luch True	
I was easily irritate	ed.						
0 Not at All Tru	ue 1 A Little	Гrue	2 Pretty	Much True	3 Very M	luch True	
	· · ·						

0 Not at All True 1 A Little True 2 Pretty Much True It was hard for me to get excited about anything.

0 Not at All True

It was hard for me to cope, and I thought I would panic.

1 A Little True

SEDS Distress Total Record sum of five distress items (note reserve scored) (0-15)

2 Pretty Much True



Calculating CSWI Scores

45 50

SS

52 54

Life Satisfaction Record the BMSLSS Life Satisfaction raw score here _____ (0-25)

Past-Month Distress Record the reverse scored SEDS score here _____(0-15)

California Student Wellness Index (CSWI): BMSLSS + SEDS (0-40) _____

SEDS Original Raw Score to Reverse Score Conversion. (When SEDS values are reversed, 0 = highest distress...15 = lowest distress)

Original Raw Score	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Reverse Scored	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

50,000 Combined Score = BMSLSS total score range = 0-25 + SEDS Total Score range 0-15 (reverse scored) = 0-40 Optimal Raw Combined Score: M = 28.05, Md = 29, SD = 8.10, N = 626,940 42153 Combined Standard Score (SS): *M* = 100, SD = 15, *Md* = 102, Skew = -0.65, kurtosis = -0.15 40,000 Number of Students 31290 31305 32211 32399 31278 30,000 2729 25448 24363 24344 23873 2149 20,000 1770 16334 16169 13723 12442 11478 10246 10,000 .9295 8272 7002 Suboptimal 6077 4560 4847 1337 1633 2055 2705 16 582 197 312 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 2 8 9 10 11 12 13 3 5 6 7 14 Raw

California Student Wellness Index, Raw and Standard Values Distribution

56 58 60 61 63 65 67 69 71 73 74 76 78 80 82 84 85 87 89 91 93 95 96 98 100 102 104 106 107 109 111 113 115 117 119 120 122

Figure 24. CSWI Distribution and Standard Scale Values

Expected Number of Responses per 1000 for CWSI Cell Patterns

			Not Like Me					A Little Like Me					Pretty Much Like Me					Very Much Like Me	
			SEDS	25th			50th				75th		LIKE MIE					SEDS	
	BMSLSS		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Very Satisfied		25	50	9	6	5	3	3	1	1	1	1	1					1	81
		24	17	8	6	4	2	2	1	1									42
		23	17	10	8	6	4	3	2	1	1	1	1						54
		22	15	10	10	8	6	5	3	2	2	1	1	1					64
	75th	21	14	10	10	9	7	6	4	3	2	2	1	1	1				73
Satisfied		20	37	14	15	14	11	11	7	5	4	3	3	2	1	1	1	1	129
	50th	19	12	8	10	10	9	8	6	5	4	3	3	2	1	1	1	1	85
		18	8	5	7	8	8	8	6	5	5	4	3	2	2	1	1	1	74
		17	6	4	5	6	6	7	6	5	5	4	4	2	2	2	1	2	66
		16	4	2	4	5	5	6	5	5	5	4	4	2	2	2	1	2	57
Little Satisfied	25th	15	7	2	3	4	4	6	4	4	4	4	4	3	2	2	1	2	59
		14	2	1	2	2	3	4	3	4	4	4	4	2	2	2	1	2	42
		13	2	1	1	2	2	3	3	3	3	3	3	2	2	2	1	2	35
		12	1	1	1	1	2	2	2	2	2	3	3	2	2	2	1	3	30
		11	1		1	1	1	2	1	2	2	2	2	2	2	2	1	2	23
Little Dissatisfied		10	3	1	1	1	1	2	1	2	2	2	2	2	2	1	1	3	25
		9	1				1	1	1	1	1	1	2	1	1	1	1	2	15
		8						1	1	1	1	1	1	1	1	1	1	2	12
		7									1	1	1	1	1	1	1	2	9
		6											1	1	1	1	1	1	7
Dissatisfied		5	1															1	7
		4																1	3
		3																1	2
		2																	1
Manu Disectiof	BMSLSS	1																1	<u>1</u>
Very Dissatisfied	DIVISLSS	0	199	86	90	87	76	79	59	53	49	45	45	29	27	23	17	36	4
			177	00	90	0/	/0	/9	27	55	47	45	45	27	27	23		30	

Figure 25. Expected Number Per 1000 for 416 BMSLSS-SEDS Response Patterns

Note. Empty cells indicate less than one student per 1000 were found in the California Sample. The upper left matrix areas with the highest expected numbers represent more optimal mental health patterns. The lower left areas are students reporting low life satisfaction and higher distress—suboptimal mental health patterns.

			Not Like Me					A Little Like Me					Pretty Much Like Me					Very Much Like Me	
		SEDS		25th			50th				75th							SEDS	
	BMSLSS		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Very Satisfied		25	122	120	119	117	115	113	111	109	107	106	104	102	100	98	96	95	81
		24	120	119	117	115	113	111	109	107	106	104	102	100	98	96	95	93	42
		23	119	117	115	113	111	109	107	106	104	102	100	98	96	95	93	91	54
		22	117	115	113	111	109	107	106	104	102	100	98	96	95	93	91	89	64
	75th	21	115	113	111	109	107	106	104	102	100	98	96	95	93	91	89	87	73
Satisfied		20	113	111	109	107	106	104	102	100	98	96	95	93	91	89	87	85	129
	50th	19	111	109	107	106	104	102	100	98	96	95	93	91	89	87	85	84	85
		117	109	107	106	104	102	100	98	96	95	93	91	89	87	85	84	82	74
		17	107	106	104	102	100	98	96	95	93	91	89	87	85	84	82	80	66
		16	106	104	102	100	98	96	95	93	91	89	87	85	84	82	80	78	57
Little Satisfied	25th	15	104	102	100	98	96	95	93	91	89	87	85	84	82	80	78	76	59
		14	102	100	98	96	95	93	91	89	87	85	84	82	80	78	76	74	42
		13	100	98	96	95	93	91	89	87	85	84	82	80	78	76	74	73	35
		12	98	96	95	93	91	89	87	85	84	82	80	78	76	74	73	71	30
		11	96	95	93	91	89	87	85	84	82	80	78	76	74	73	71	69	23
Little Dissatisfied		10	95	93	91	89	87	85	84	82	80	78	76	74	73	71	69	67	25
		9	93	91	89	87	85	84	82	80	78	76	74	73	71	69	67	65	15
		8 7	91 89	89 87	87 85	85 84	84 82	82 80	80 78	78 76	76 74	74 73	73 71	71 69	69 67	67 65	65 63	63 61	12
		6	89	87	85	84	82 80	78	78	76	74	73	69	69	67	65	63	60	7
Dissatisfied		5	85	84	82	82	78	76	76	74	73	69	67	65	63	63	60	58	7
choutoned		4	84	82	80	78	76	74	73	71	69	67	65	63	61	60	58	56	3
		3	82	80	78	76	74	73	71	69	67	65	63	61	60	58	56	54	2
		2	80	78	76	74	73	71	69	67	65	63	61	60	58	56	54	52	1
		1	78	76	74	73	71	69	67	65	63	61	60	58	56	54	52	50	1
Very Dissatisfied	BMSLSS	0		74	73	71	69	67	65	63	61	60	58	56	54	52	50	48	4
			199	86	90	87	76	79	59	53	49	45	45	29	27	23	17	36	100

Standard Score Values for Each BMSLSS x SEDS Response Pattern

Figure 26. CSWI Standard Score for 416 BMSLSS-SEDS Response Patterns

Note. This chart shows all possible 416 BMSLLS x SEDS responses. The value in each cell is the standard score from the CSWI (Figure 5). To obtain the standard score for any student, (a) get the total raw sum for the BMSLSS items (rows) and (b) the total raw sum for the SEDS items (columns). For example, the CSWI standard score for BMSLSS (16) and SEDS (3) is 100. The shading shows response patterns with standard scores of 100 and 85.

Example Tracking CWSI Responses Over One School Year

Watch, Care, Respond: Monitoring Student Wellness

Student: Example Student School: Elysian Heights High School

Date 1: September 15, 2023			ptember 15, 2023 Date 2: December 15, 2023						Date 3: March 15, 2024					Date 4: May 15, 2024					
			Not Like Me					A Little Like Me					Pretty Much Like Me					Very Much Like Me	
		SEDS		25th			50th				75th							SEDS	
	BMSLSS		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Very Satisfied		25	122	120	119	117	115	113	111	109	107	106	104	102	100	98	96	95	81
		24	120	119	117	115	113	111	109	107	106	104	102	100	98	96	95	93	42
		23	119	117	115	113	111	109	107	106	104	102	100	98	96	95	93	91	54
		22	117	115	113	111	109	107	106	104	102	100	98	96	95	93	91	89	64
	75th	21	115	113	111	109	107	106	104	102	100	98	96	95	93	91	89	87	73
Satisfied		20	113	111	109	4	106	104	102	100	98	96	95	93	91	89	87	85	129
	50th	19	111	109	107	106	104	102	100	98	96	95	93	91	89	87	85	84	85
		117	109	107	106	104	102	100	98	96	95	93	91	89	87	85	84	82	74
		17	107	106	104	102	100	98	96	95	93	91	89	87	85	84	82	80	66
		16	106	104	102	100	98	96	95	93	- 21	89	87	85	84	82	80	78	57
Little Satisfied	25th	15	104	102	100	98	96	95	93	91	2 9	87	85	84	82	80	78	76	59
		14	102	100	98	96	95	93	91	89	87	85	84	82	80	78	76	74	42
		13	100	98	96	95	93	3	89	87	85	84	82	80	78	76	74	73	35
		12	98	96	95	93	91	89	87	85	84	82	80	78	76	74	73	71	30
		11	96	95	93	91	89	87	85	84	82	80	78	76	1 4	73	71	69	23
Little Dissatisfied		10	95	93	91	89	87	85	84	82	80	78	76	74	73	71	69	67	25
		9	93	91	89	87	85	84	82	80	78	76	74	73	71	69	67	65	15
		8	91 89	89 87	87	85	84	82	80	78	76 74	74	73	71	69	67 65	65	63	12
		6	89	87	85 84	84 82	82 80	80 78	78 76	76 74	74	73 71	71 69	69 67	67 65	65	63 61	61 60	7
Dissatisfied		5	87	85	84	82	78	78	76	74	73	69	69	67	65	63	61	58	7
Disatisticu		4	84	82	80	78	76	74	73	71	69	67	65	63	61	60	58	56	3
		3	82	80	78	76	74	73	71	69	67	65	63	61	60	58	56	54	2
		2	80	78	76	74	73	71	69	67	65	63	61	60	58	56	54	52	1
		1	78	76	74	73	71	69	67	65	63	61	60	58	56	54	52	50	1
Very Dissatisfied	BMSLSS	0		74	73	71	69	67	65	63	61	60	58	56	54	52	50	48	4
			199	86	90	87	76	79	59	53	49	45	45	29	27	23	17	36	100

Figure 27. Example of Tracking a Student's BMSLSS-SEDS Response Patterns



ASSESSMENT AND COUNSELING RESOURCES (TIER 2 APPLICATIONS)

Assessing Life Satisfaction

Multidimensional Student Life Satisfaction Scale (MSLSS)

The MSLSS, a 40-item Multidimensional Student Life Satisfaction Scale, includes positive and negative worded items related to various aspects of the BMSLSS's five domains Huebner et al., 1998). The instrument was designed and validated for students in Grades 3 through 12 (Gilman et al., 2000; Huebner & Gilman, 2002). As a Tier 2 follow-up assessment, it can be used as part of a counseling interview, engaging the student in a deeper discussion of their life satisfaction domains.

Response options: 0 = Strongly Disagree, 1 = Moderately Disagree, 2 = Mildly Agree, 3 = Mildly Agree, 4 – Moderately Agree, and 5 = Strongly Agree.

Sample Items. MSLSS Description and MSLSS Items

- Family (8 items): I like spending time with my parents.
- Friends (9 items): I have a lot of fun with my friends.
- School (8 items): School is interesting.
- Living Environment (9 items): There are lots of fun things to do where I live.
- Self (7 items): There are lots of things I can do well.

Assessing Dual-Factor Mental Well-Being

Mental Health Continuum-Short Form

Corey Keyes' mental health model considers the dimensions of emotional, psychological, and social well-being (Keyes, 2002, 2005). Emotional well-being is the perception of positive affect and life satisfaction over time. Psychological well-being includes six components (self-acceptance, personal growth, purpose in life, positive relations with others, autonomy, and environmental mastery), collectively indicating individuals' pursuit to maximize their potential (Keyes, 2002). Social well-being considers individuals' perception of their relationship with and engagement in society (Keyes, 1998, 2016; social integration, social contribution, social coherence, social actualization, and social acceptance). Individuals have positive mental health when their well-being profile suggests frequent weekly or daily experiences of positive psychological experiences, with few indications of mental distress symptoms (Keyes, 2005, 2006).

The Mental Health Continuum-Short Form (MHC-SF) considers the correlated but distinct influences of an ill-being continuum and a subjective well-being continuum. The ill-being continuum is grounded in the Diagnostic and Statistical Manual criteria for major depressive episodes, in which diagnosis requires symptoms of anhedonia and malfunctioning. The well-

Emotional (EWB)	Socia	l (SWB)	Psyc	holog	jical (PWB)	Well-Being Components			
3 items Positive Affect, Quality of Life happy interested in life satisfied with life	Social Accep Growth, Soci Contribution Coherence, S Integration that our so good place,	, Social Social ociety is a or is better place,	Self-Ac Growth Enviror Autono Relatio that sense o meanin	n, Purp nment omy, P ns with your li of dire	Mental Health Continuum- Short Form (MHC-SF)				
During the past month,			llowing	ways	:				
Never Once or Twice	Once or About Once 2-3 Times Almost					Response Format			
\downarrow \downarrow			Ļ						
Minimum 1 EWB item and 6 of 11 PWB & SWB items	Responses Langui or Flourishi	ishing	Minimum 1 EWB item and 6 of 11 PWB & SWB items			Criteria			
Ļ					Ļ				
anguishing Mode	rate Mental H	ealth (MMH)		Fl	ourishing	Health			
e ow	Vental Health	Continuum			High	and			
	vientai rieatti	continuum				Illness			
If mental illness continua below 60 on a symptom s Languishing, Moderate M and Flourishing could hav	creener) then us ental Health, or	se well-being o Flourishing. Se	lassificati	on:	Languishing & Elevated Mental Illness Continuum	Continua Considered Together			
⋖ Low	Mental Illness	s Continuum			Elevated				
Note. MHC-SF description, it FEnglish.pdf. The cell sizes i I., 2007) rows illustrate the p	n Mental Health C	Continuum (see,	Keyes, 20	06) an	d Mental Illness (

Figure 28. MHC-SF Scoring Procedures



being continuum considers the presence of hedonic experiences and eudemonic positive psychological functioning (Keyes, 2002). Adapted from the 40-item MHC-Long Form (MHC-LF; Keyes, 2002, 2005), the MHC-SF includes the 14 MHC-LF items that best represented each construct under three dimensions of well-being: emotional (EWB; i.e., life satisfaction, positive affect, negative affect), psychological (PWB; i.e., autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance), and social wellbeing (SWB; i.e., social integration, social acceptance, social contribution, social actualization, and social coherence; Keyes, 2005). Example items are: How often did you feel interested in life? (EWB), How often did you feel that the way our society works made sense to you? (SWB), and how often did you feel confident to think or express your own ideas and opinions? (PWB). The MHC–SF asks students to report on past-month experiences using a six-point frequency response format (0 = never, 1 = once or twice, 2 = about once a week, 3 = two or three times a week, 4 = almost every day, and 5 = every day). The MHC-SF has shown acceptable internal consistency and discriminant reliability for adolescents (e.g., Joshanloo, 2019; Söderqvist & Larm, 2021; Zemojtel-Piotrowska et al., 2018). See Figure 28 for MHC-SF scoring procedures. MHC-SF Description and Form.

Kessler Psychological Distress Scale

Kessler (Harvard University) developed the Kessler Symptom Scale (K10) as part of the redesign of the U.S. National Health Interview Survey. The scale was first reported in 2003 and has been used worldwide in support of mental health research, mainly to increase understanding of the prevalence of mental health disorders. The National Comorbidity Survey Replication and the World Mental Health Initiative uses these items. The measure assesses emotional distress symptoms (Ferro, 2019; Green et al., 2010; Kessler et al., 2002; Mewton et al., 2016; Smout, 2019).

A Tier 2 school-base well-being follow-up from the California Student Wellness Index provides the resource to obtain additional information about a student's social and emotional symptoms in more depth than the SEDS. The K10 asks students and adolescents to report on anxiety and depressive symptoms. A sample depressive symptom item is, *During the last 30 days, how often did you feel hopeless*? A sample anxiety symptom question is: *During the last 30 days, how often did you feel so nervous that you could not calm down*? The measure uses a five-point frequency response format: 1 = none of the time, 2 = a little of the time, 3 = some of the time, 4 = most of the time, and 5 = all the time.

The K10 has self-administered and interview-administered forms, offering flexibility as a school-based mental well-being Tier 2 measure (access Items and scoring rules).



Using the K10 with the MHC-SF

K10 symptoms and the MHC-SF well-being information can be combined. A student reporting high or flourishing levels of well-being on the mental health continuum and low symptomatology on the K10 would be regarded as manifesting complete mental health. A student with a languishing response pattern on the MHC-SF elevated scores on the K10 would be judged to manifest struggling mental health.

ASSESSING POSITIVE ASSETS & RESOURCES

A long research tradition (e.g., Rutter, 1979) has demonstrated that understanding the development and persistence of psychopathology in childhood, through adolescence, and into early adult years is linked to environmental, personal, and family risk and associated trauma experiences. An axiomatic orientation of this research is that the greater the risk factors present in a young person's life, the likelihood of poor mental health outcomes increases. As the number of risk factors increases, they have a multiplicative on the odds of developing mental health problems (Goebel et al., 2021). Longitudinal research even shows that when youth develop complex multiple symptoms, they have less favorable development trajectory and persistent mental health concerns. (Goebel et al., 2022). Comorbidity is the term used to describe the combination of environmental, social, and psychological risk factors.

The MHC-SF and the K10 provide additional perspectives about risk challenges. While this information is essential to developing an understanding of an adolescent's experiences, complete understanding should consider measures positive, strengths-focused measures providing complementary details on student mindsets, personal values, and other quality of life indicators; that is, their developmental protective factors (Masten, 2002; Rutter, 1979). The SEHS-S-2020 (used as a CSWI concurrent validity measure in this report) is such a measure; it is in the CalSCHLS Social Emotional Health Module.

Social Emotional Health Survey-Secondary-2020 (SEHS-S-2020)

The SEHS-S-2020 measures the Covitality construct, "the synergistic effect of positive mental health resulting from the interplay among multiple positive psychological building blocks" (Furlong et al., 2014, p. 3). The covitality principle considers psychosocial strengths as adaptive self-schemas linked with youth resilience and thriving development. These psychosocial strengths have the most impact when they co-occur in harmony rather than as isolation strengths (Furlong et al., 2020); the whole is greater than the sum of its parts. From a transactional development lens, fostering balanced development of multiple core psychosocial strengths (e.g., gratitude, empathy, and persistence) promotes positive interpersonal

transactions within a child's socio-ecological systems, contributing to optimal developmental outcomes (Furlong et al., 2020).

The 36-item Social Emotional Health Survey-Secondary (SEHS-S-2020) has 12 subscales measuring psychosocial strengths derived from the social-emotional learning (SEL) and positive youth development (PYD) literature (Furlong, Dowdy et al., 2021; Furlong, Paz et al., 2023; Hinton et al., 2022; Ito et al., 2015; Piqueras et al., 2019; You, Dowdy et al., 2014; You, Furlong et al., 2015). The 12 subdomains are associated with four correlated positive social-emotional health domains that assess the higher-order Covitality construct. The first domain, Belief in Self, consists of three subscales grounded in constructs from self-determination theory literature: self-efficacy, self-awareness, and persistence. The second domain, Belief in Others, comprises three subscales derived from constructs found in childhood resilience literature: school support, peer support, and family support. The third domain, Emotional Competence, consists of three subscales based on constructs drawn from the SEL scholarship: emotion regulation, empathy, and behavioral self-control. The final domain, Engaged Living, comprises three subscales grounded in constructs derived from the positive youth psychology literature: gratitude, zest, and optimism. Research supports the cumulative resilience advantage as measured by the 12 SEHS-S subdomains. Students with more SEHS-S strengths report positive mental well-being and low emotional risk behaviors (Lenzi, Dowdy, et al., 2015; Lenzi, Furlong,





`et al., 2015; Moore et al., 2019). The SEHS-S research grounding and positive asset emphasis provide an alternative to emotional problem-focused universal school mental health screeners.

The SEHS-S-2020 student response form and scoring procedures are included in the following pages. Also included are forms to record subdomain profiles with comparative normative information based on 94,134 California students in Grades 7-12. For additional information about the 12 SEHS domains, see Covitality Counseling and Classroom Resources.

Social Emotional Health Survey-Secondary (SEHS-S-2020)

(Project Covitality)

you chơ rigi	ections: You are invited to complete this survey about how a have felt over the past few weeks. Read each item and pose the response that best describes you. There are no nt or wrong answers. You can skip questions you don't nt to answer.	Not at all true 1	A little true 2	Pretty much true 3	Very much true 4
1	I can work out my problems.	Not at all true	A little true	Pretty much true	Very much true
2	I can do most things if I try.	Not at all true	A little true	Pretty much true	Very much true
3	There are many things that I do well.	Not at all true	A little true	Pretty much true	Very much true
4	There is a purpose to my life.	Not at all true	A little true	Pretty much true	Very much true
5	I understand why I do what I do.	Not at all true	A little true	Pretty much true	Very much true
6	l understand my moods and feelings.	Not at all true	A little true	Pretty much true	Very much true
7	When I do not understand something, I ask the teacher again and again until I understand.	Not at all true	A little true	Pretty much true	Very much true
8	I try to answer all the questions asked in class.	Not at all true	A little true	Pretty much true	Very much true
9	When I try to solve a math problem, I will not stop until I find a final solution.	Not at all true	A little true	Pretty much true	Very much true
10	At my school, there is a teacher or some other adult who always wants me to do my best.	Not at all true	A little true	Pretty much true	Very much true
11	At my school, there is a teacher or some other adult who listens to me when I have something to say.	Not at all true	A little true	Pretty much true	Very much true
12	At my school, there is a teacher or some other adult who believes that I will be a success.	Not at all true	A little true	Pretty much true	Very much true

you chơ rigi wa	ections: You are invited to complete this survey about how a have felt over the past few weeks. Read each item and pose the response that best describes you. There are no ht or wrong answers. You can skip questions you don't nt to answer.	Not at all true 1	A little true 2	Pretty much true 3	Very much true 4
13	My family members really help and support one another.	Not at all true	A little true	Pretty much true	Very much true
14	My family really gets along well with each other.	Not at all true	A little true	Pretty much true	Very much true
15	There is a feeling of togetherness in my family.	Not at all true	A little true	Pretty much true	Very much true
16	I have a friend my age who really cares about me.	Not at all true	A little true	Pretty much true	Very much true
17	I have a friend my age who talks with me about my problems.	Not at all true	A little true	Pretty much true	Very much true
18	I have a friend my age who helps me when I'm having a hard time.	Not at all true	A little true	Pretty much true	Very much true
19	l accept responsibility for my actions.	Not at all true	A little true	Pretty much true	Very much true
20	When I make a mistake, I admit it.	Not at all true	A little true	Pretty much true	Very much true
21	I can deal with being told no.	Not at all true	A little true	Pretty much true	Very much true
22	I feel bad when someone gets their feelings hurt.	Not at all true	A little true	Pretty much true	Very much true
23	I try to understand what other people go through.	Not at all true	A little true	Pretty much true	Very much true
24	I try to understand how other people feel and think.	Not at all true	A little true	Pretty much true	Very much true
25	I can wait for what I want.	Not at all true	A little true	Pretty much true	Very much true
26	I don't bother others when they are busy.	Not at all true	A little true	Pretty much true	Very much true
27	I think before I act.	Not at all true	A little true	Pretty much true	Very much true
34	Each day, I look forward to having a lot of fun.	Not at all true	A little true	Pretty much true	Very much true
35	Overall, I expect more good things to happen to me than bad things.	Not at all true	A little true	Pretty much true	Very much true
36	I usually expect to have a good day.	Not at all true	A little true	Pretty much true	Very much true

you chơ rigi	ections: You are invited to complete this survey about how a have felt over the past few weeks. Read each item and pose the response that best describes you. There are no ht or wrong answers. You can skip questions you don't nt to answer.	Not at all true 1	A little true 2	Pretty much true 3	Very much true 4
30	On most days, I feel appreciative	Not at all true	A little true	Pretty much true	Very much true
31	On most days, I feel energetic	Not at all true	A little true	Pretty much true	Very much true
32	On most days, I feel active	Not at all true	A little true	Pretty much true	Very much true
36	I usually expect to have a good day.	Not at all true	A little true	Pretty much true	Very much true

Social Emotional Health Survey–Secondary (SEHS-S-2020) Items and Scoring

1. I can work out my problems. (0-3)	
2. I can do most things if I try. (0-3)	
3. There are many things that I do well. (0-3)	
Self-Efficacy (Sum 0-9)	
4. There is a purpose to my life. (0-3)	
5. I understand my moods and feelings. (0-3)	
6. I understand why I do what I do. (0-3)	
Self-Awareness (Sum 0-9)	
7. When I do not understand something, I ask the teacher again and again until I understand. (0-3)	
8. I try to answer all the questions asked in class. (0-3)	
9. When I try to solve a math problem, I will not stop until I find a final solution. (0-3)	
Persistence (Sum 0-9)	
BELIEF IN SELF (SUM 0-27)	
10. At my school, there is a teacher or some other adult who always wants me to do my best. (0-3)	
11. At my school, there is a teacher or some other adult who listens to me when I have something to say. (0-3)	
12. At my school, there is a teacher or some other adult who believes that I will be a success.	
School Support (Sum 0-9)	
13. My family members really help and support one another. (0-3)	
14. There is a feeling of togetherness in my family. (0-3)	
15. My family really gets along well with each other. (0-3)	
Family Support (Sum 0-9)	
16. I have a friend my age who really cares about me. (0-3)	
17. I have a friend my age who talks with me about my problems. (0-3)	
18. I have a friend my age who helps me when I'm having a hard time. (0-3)	
Peer Support (Sum 0-9)	
BELIEF IN OTHERS (SUM 0-27)	
19. I accept responsibility for my actions. (0-3)	
20. When I make a mistake, I admit it. (0-3)	
21. I can deal with being told no. (0-3)	
EMOTIONAL REGULATION (SUM 0-9)	
22. I feel bad when someone gets their feelings hurt. (0-3)	
23. I try to understand what other people go through. (0-3)	
24. I try to understand how other people feel and think. (0-3)	

EMPATHY (SUM 0-9)	
25. I can wait for what I want. (0-3)	
26. I don't bother others when they are busy. (0-3)	
27. I think before I act. (0-3)	
SELF-CONTROL (SUM 0-9)	
EMOTIONAL COMPETENCE (SUM 0-27)	
28. Each day, I look forward to having a lot of fun. (0-3)	
29. I usually expect to have a good day. (0-3)	
30. Overall, I expect more good things to happen to me than bad things. (0-3)	
OPTIMISM (SUM 0-9)	
31. On most days, I feel grateful. (0-3)	
32. On most days, I feel thankful. (0-3)	
33. On most days, I feel appreciative. (0-3)	
GRATITUDE (SUM 0-9)	
34. On most days, I feel energetic. (0-3)	
35. On most days, I feel active. (0-3)	
36. On most days, I feel enthusiastic. (0-3)	
ZEST (SUM 0-9)	
ENGAGED LIVING (SUM 0-27)	

Domain Summary Scores	
Belief in Self (Sum = 0-27)	
Belief in Others (Sum = 0-27)	
Emotional Competence (Sum = 0-27)	
Engaged Living (Sum = 0-27)	
Total Covitality (Sum 0-108)	

SEHS-S-2020 Combined Covitality Score

Range: 0-108, Mean = 70.16, Md = 71, SD = 20.96, N = 94,134, alpha = .95



Social Emotional Health Survey-Secondary-2020 Subdomains, Domains, and Covitality Record Sheet

Green shading shows values between the 25^{th} and 75^{th} Percentiles

	Self-	Self-	Persist	Peer	School	Family	Empathy	Emotional	Self-	Optimism	Gratitude	Zest	
	Efficacy	Awareness					, i	Regulation	Control				
9													9
8													8
7													7
6													6
5													5
4													4
3													3
2													2
1													1
0													0

Social Emotional Health Survey-Secondary-2020 Domains

	Belief in Self	Belief in Others	Emotional Competence	Engaged Living	
27					27
26					26
25					25
24					24
23					23
22					22
21					21
20					20
19					19
18					18
17					17
16					16
15					15
14					14
13					13
12					12
11					11
10					10
9					9
8					8
7					7
6					6
5					5
4					4
3					3
2					2
1					1
0					0

Covitality Total Score Raw Values and Percentile Rank Zones

	5 th %tile		15 th %tile		25 th %tile		50 th %tile		75 th %tile		85 th %tile		95 th %tile	
0-34	35	36-47	48	49-56	57	58-70	71	72-84	85	86-92	93	94-102	103	104-108

SECTION 6. ANSWERING YOUR CSWI QUESTIONS

The following sections address questions about evaluating, using, and interpreting the CSWI. Please email us with any other questions you may have.



HOW CAN I USE THE CSWI?

As a Global Wellness Index ³

California's efforts to develop and validate adolescent positive mental wellness measures predated the onset of the COVID-19 pandemic. Still, the efforts were accelerated by the frustration of not having a wellness indicator to compare adolescents' pre-post-pandemic mental health. The three-year process to validate the CSWI was motivated by the need to create an adolescent global wellness index score. The CSWI responses from an adolescent sample produced a raw score median of 29 on the 0-40 scale. Although response biases will occur in any population surveillance survey, the sheer size of the sample provided a robust central tendency estimate for the CSWI. With this central tendency established, the CWSI offers a point of reference to ascertain whether adolescents' mental wellness is improving or decreasing. And, most critically, to evaluate wellness trends across students of all backgrounds. It also provides a tool to monitor the need for and impacts of Tier 1 programs and services.

As a Research Study Variable

Formal studies evaluating various latent traits and the outcome effectiveness for Tier 1 and Tier 2 prevention and intervention programs can use the CWSI as a well-being indicator.

As a Standard Classification for DFM Studies

If DFM studies included CSWI 10 items in their protocols and a standard cut score (such as those in Figure xx), the four-group classification would be comparable across samples. Adopting such a research convention would facilitate studies evaluating classification stability and cross-sample comparisons. We note adopting such a convention does not preclude using other measures but would provide a way to assess the characteristics of smaller opportunity samples.

For School Universal Student Wellness Surveys

Some school districts are already using the CSWI in schoolwide student wellness surveys. These districts invite students to participate in an annual survey that includes the ten CSWI items and other school-relevant indicators, such as school belonging and optimism). Students

³ We acknowledge that the CSWI focuses on adolescents' internalization distress experiences only. However, some DFM studies have created a combined internalizing-externalize distress indicator (e.g., Petersen et al., 2022). We focused on self-reported internalizing distress as the most prominent need for school wellness monitoring, considering the concerns of adding items to a population-based survey. See Furlong et al. (2022) for a related discussion.

electing to complete the survey enter their unique school ID number. Following the survey, a school care team reviews the students' responses to consider whether the school's student services programs generally meet students' behavioral and emotional health needs—the school care team members also follow up with students with lower CSWI scores. The school reviews reports providing summary response information for each school and the whole district. This information includes the BMSLSS-SEDS response, as shown in Figure 32.

For Individual Student Wellness Assessments and Monitoring

In the school context, the CSWI can be included as a social-emotional measure for students' special education assessment plans to evaluate if more in-depth assessments are needed. A related application would be to use the CSWI to monitor if a student is progressing towards attaining their individual education plan's emotional and behavioral goals.

WHAT ARE SOME CONSIDERATIONS FOR CSWI RESEARCH APPLICATIONS?

We developed the California Student Wellness Index to provide a brief, efficient measure to indicate overall adolescent well-being. However, this ten-item instrument is not a comprehensive measure of the various multidimensional components comprising adolescent well-being, with its focus on positive mental health.

When it comes to evaluating straight-line responders, we know that the complete mental health responders (5-0 pattern) and the troubled responders (0-3 pattern) responded in a way in which they at least changed their response pattern from one from the high to the low end of the response options. The remaining students' symptomatic but content response pattern (5-3) selected the highest response option across all ten items. We know, however, that this group was a sporadic response pattern occurring in less than one per thousand students. As such, this response pattern did not affect the overall distribution of the California Student Wellness Index. The students in the languishing response pattern (0-0) are the one response pattern that stands out from the others. These students selected the lowest response option across all ten items presented in the matrix format. This group of students accounted for 75% of all the students in the sample who selected zero response on all life satisfaction items. Students providing a 00-response pattern stood out and did not present high levels of vulnerable risk-related experiences.

Although we excluded 00-responders for California Student Wellness Index psychometric analyses, school-based Wellness Care Teams will want to identify these students and follow up to clarify if these students were reporting accurately or just not invested in thoughtfully answering items. In contrast, researchers consider these students to be outliers in



some circumstances and might want to exclude them from their sample. An example of this is the work by Cummins with the Personal Well-being Index (Cummins & Lau, 2023). The standard scoring procedure excludes any student who gives all high or all low straight-line responses, arguing that it introduces unnecessary variation into the sample.

For the current sample, we evaluated how excluding or including students who provided straight-line responses affected the overall central tendency of the CSWI distribution. After excluding the four straight-line responder types, the CSWI mean was 27.45, SD = 7.77, compared to M = 28.05, SD = 8.18, with the straight-line responders included. In addition, the 25th, 50th, and 75th percentiles and median were unchanged.

The complete mental health (5-0) responders are the only straight-line responses likely to be encountered in most research samples. We included all students who answered the BMSLSS and SEDS items because the overall sample distribution and psychometric characteristics did not change when excluded. In addition, when students participate in online wellness screening, the example from this large California sample is that various types of response biases will manifest in a small percentage of students (Furlong et al., 2018). Limited investment in taking the survey had no meaningful impact on the general patterns found. Additionally, when the CSWI is used to screen for and monitor individual students, school care providers can now be alerted that languishing (0-0) response patterns might reflect low survey investment and not deeper concerns. Our final observation is that when schools invite students to participate in a school-wide self-reflection process that includes completing a self-report survey, a few students will decide they do not want to participate. Some will participate but not provide entirely thoughtful responses. However, most students respond sincerely, giving schools one source of information to evaluate students' social-emotional patterns and consider strategies designed to enhance all students' flourishing well-being.

Health Behavior in School-Age Children Studies

As researchers consider the utility of using a combined dual factor index score in their research, they should also review another viable approach offered in the World Health Organization's Health Behaviour in School-Aged Children (HBSC). This survey started in 1982 and is now used in 50 countries. The HBSC includes items assessing global life satisfaction (Cantril Life Satisfaction Ladder), self-efficacy (achieving goals and problem-solving), feeling lonely, mental health complaints (irritability, sleep difficulties, nervous, feeling low), and the WHO-5 Well-Being index (a 5-items measure of past-week positive experiences, e.g., I have active and vigorous; added in the 2020-21 survey). The survey is administered every four years. Its items focus broadly on adolescent health issues but recently added information more specifically on mental health and well-being. Three related but slightly different approaches to using the

HSBC survey items to create a brief dual-factor measure have been explored using data from Canada, the United States, and Italy.

HSBC Canadian Sample

The HBSC items offer researchers another approach to developing a well-being index—for example, King and colleagues (2021, 2022). Using items from the 2014 Canadian Adolescent Health Behavior Survey, pulled 18 items to assess subjective well-being (single-item Cantril life satisfaction ladder (Cantrill,1965), one positive affect item, and two negative effect items), past 6-month internalizing symptoms (4 items), and eight externalizing risk behaviors items). The scores were combined to create an overall index, with low scores reflecting low subjective well-being and higher levels of emotional distress and symptoms and higher scores reflecting higher subjective well-being in the absence of symptomatology.

HSBC United States Sample

Renshaw and Bolognino (2017) pointed out one of the reasons that a dual factor of mental health (author use the term bidimensional model) approach has not been used more frequently in schools is because there was limited uniformity of the measures used to measure both dimensions did not lend themselves to school-wide wellness screening or for use as a population level index. Using HSBC Psychological Well-being (e.g., Thinking about last week, have you had fun with friends?) and distress (e.g., Thinking about last week, have you felt sad?) items from the 2009/10 HBS United States sample, these authors examined the psychometric characteristics of a brief bidimensional model scale, called the Psychological Wellbeing and Distress Screener (PWDS). A careful analysis determined that these ten items formed negatively correlated dimensions with acceptable fit for a two-factor model with general measurement invariance for gender, grade, race/ethnicity, and place of residence. The new index significantly predicted students' responses to the Cantril Global Life Satisfaction ladder item. The PWDS was cross validated with a sample of Turkish (Renshaw & Arslan, 2019) adolescents and in other studies (Arslan, 2018; Arslan & Coşkun, 2022); Jiang et al., 2021; Zhang et al., 2020).

HSBC Italian Sample

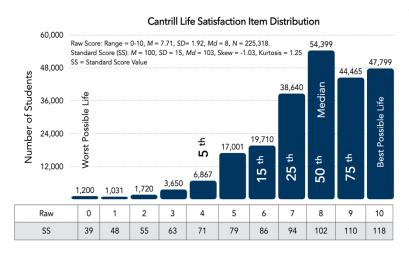
Bersia et al. (2022) use responses of Italian adolescents to the HSBC 2010, 2014, and 2018 administrations, evaluating the 165,000 student responses from a dual-factor mental health framework. The Cantril life satisfaction (ladder format) item (range 0-10) measured positive well-being. The HSBC five-item psychological complaints scale measured the distress dimension of the dual-factor model. This report used Cottrell scores of zero to 6 to designate nonoptimal positive well-being and scores of 7 to 10 to represent optimal well-being. Scores of zero to 8 on the distress measure indicated low distress, and scores of 9 through 16 indicated elevated distress. The Bersia et al. paper is the only one that examined the joint distribution of

life satisfaction crossed with distress, showing each of the unique response patterns, as we have applied in this report. However, this report did not combine these two scores into an index. It did not report the percentages classified into the four dual-factor distribution areas.

HBSC 2017/18 Data Set Illustration

To further explore the viability of our dual-factor model approach to create an adolescent wellbeing index, we provide another example using an HBSC dataset. We examined the responses of adolescents from 45 countries (N = 225,218; 48.8% male, 51,2% female) completing the HBSC survey in 2017 (17.8%), 2018 (79.2%), and 2019 (3.0%). Following the approaches illustrated by King (2021), Renshaw and Bellagio (2017), and Brescia (2022), we selected items to measure the wellness and distress components within a dual-factor framework. This analysis provides researchers and others with another example of the CWSI development approach.

The Cantril life satisfaction item measured the wellness dimension with the response distribution shown in Figure 29. Here is a picture of a ladder. The top of the ladder, "10" is the best possible life for you, and the bottom, "0" is the worst possible life for you. In general, where on the ladder do you feel you stand at the moment? Tick the box next to the number



that best describes where you stand. Response Scale: (Worst Possible Life) 0 1 2 3 4 5 6 7 8 9 10 (Best Possible Life).

Four items inquiring about aspects of adolescent internalizing experiences measured the distress dimension scale with the distribution shown in Figure 30. In the last six months, how often have you had the following....? Please tick one box for each line. (a) Feeling low, (b) Irritability or

Figure 29. HBSC Cantril Life Satisfaction Item Distribution

bad temper, (c) Feeling nervous, and (d) Difficulties getting to sleep. Response Options: 0 (about every day), 1 (more once/week), 2 (about every week), 3 (about every month), 4 (rarely or never).

HSBC Emotional Distress Scale Distribution Higher Distress Lower Distress 40,000 Raw Range = 0-16, M = 10.68, SD = 4.21, Md = 11, N = 22, Alpha = .89 Standard Score (SS): Mean = 100, SD = 15, Md = 101, Skew = -0.64, Kurtosis = -0.45, Alpha = .75 Number of Students Every Week 30,000 More once/week Day 20,000 About I Month Rarely or Never Every [Even I About 10,000 ÷ ÷ ÷ About 22 22 20 Raw 0 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 62 66 SS 69 73 76 80 83 87 90 94 98 101 105 108 112 115 119

Figure 30. HBSC Psychological Problem Scale Distribution

Higher HBSC responses reflect lower distress and were also negatively skewed. On average, most adolescents reported experiencing distress about once a month or less in the past six months. The four-item scale has an alpha of .75. Following the same procedures, we used to create the combined index for the CWSI, we added the raw scores for life satisfaction and distress into a continuous

index with values ranging from zero to 26. We then converted the raw scores to standard scores to make the raw scores interpretable within their joint distribution. Figure 31 shows the joint distribution for the combined Wellness index, which illustrates another example of how this approach to crafting a brief adolescent wellness index.

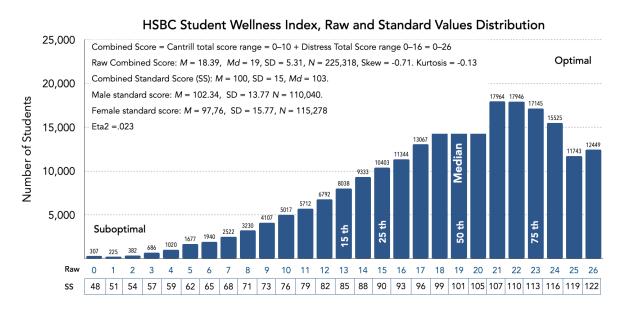


Figure 31. HSBC Student Wellness Index Illustration



Dual-Factor Model Protective Factors

We highlight one other study because it offers another viable brief wellness and distress measures within a DFM approach. The Jefferies et al. (2023) study employed a large sample of 3841 school-aged children aged 11 to 14 in England. The seven-item Short Wartburg *Edinburgh Mental Well-being Scale* (Stewart-Brown et al., 2009) with scores of 7-20 defining lower (24%) and 21-35 higher (76%) well-being. The *Strength and Difficulty Questionnaire's* (Goodman, 1997) emotional symptoms subscale measured internalizing symptoms with values of 0-4 defining minimal (59%) and 5-10 defining elevated (41%) problems. After using the score cut points to create the customary four DFM groups, these researchers examined differences in their protective factor networks (e.g., empathy, emotional regulation, problem-solving, goals & aspirations, school participation, home & school participation) and community participation). This study provides an example of an emerging phase of DFM research to understand better the development trajectories of the four DFM groups and associated risk and protective factors.

SHOULD THE CSWI USE GENDER-SPECIFIC NORMS?

The analysis indicated that gender identification was substantially related to students' overall social and emotional well-being. Male-identifying students reported higher life satisfaction and lower emotional distress than any other gender-identification group, as shown in Figures 26 and 27. One of the issues concerning comparing all students' responses to the sample-wide normative information for the CWSI is that this identifies more nonmale-identifying individuals as having poorer mental health and well-being. One way to address this potential inequity would be to create norms for each gender-identifying group. It will be important when evaluating information for specific students to take the overall gender differences into account when interpreting the results.

Nonetheless, we have more difficulty determining the need for specific gender-specific norms. For example, for the nonbinary identifying students, the median response would be equivalent to answering the life satisfaction question as mildly satisfied, contrasted with the male respondents' median moderately satisfied level. From a clinical perspective, we do not see the value of readjusting the norms for nonbinary students so that they are mildly satisfied would be considered normative. At least, in our view, the reason for using a population-wide distribution is to inform schools about well-being inequities associated with student intersectionality. This awareness is consistent with UNESCO's values statement that every child has the fundamental human right to positive mental health and well-being (Mcloughlin & Hart, 2015). A reasonable criterion for evaluating whether equity exists is to know whether every child falls on the distribution compared to **ALL** their peers. The interpretation of students' mental health should consider inequities in their social contexts and life experiences and evaluate the healthy promoting capacity of their school and community.

CAN I USE CSWI AS A SCHOOLWIDE WELLNESS MONITOR?

Hoover and Bostic (2021) consider wellness screening a core component of Gold Star School mental health promotion programs. Schools use the CWSI items to watch, care for, and respond to students' emotional and behavioral needs. Figure 32 shows the BMSLSS-SEDS response matrix of one district.

WHAT ARE THE SUGGESTED TIER 2 TRIAGE CUT-POINTS?

The CSWI can be part of a universal school comprehensive mental health monitoring to evaluate if some students might benefit from additional follow-up, care, and services at school. As in the examples provided in this guide, students' total CSWI scores can be used as a triage tool to evaluate the prioritized students for follow-up support services. Although students with lower CSWI scores are more likely to report having other adverse social-emotional experiences, such as chronic sadness, we do not support any specific cut score. Our approach to using the CSWI for screening purposes is to consider the **scores falling within different wellness zones**. The charts we provided show the standard scores across the 416-cell matrix of responses, including boundaries for the lowest and highest quartiles. These quartiles broadly differentiate between lower and higher responses to the life satisfaction and risk-related items and can define different zones to target for follow-up with students. Furthermore, when considering the comparative strengths-risks associated with the CSWI cell response patterns, it is apparent that an equity goal is to foster developmental trajectories that move all adolescents toward the upper-left matrix complete mental health zone.

Note for Figure 32. The horizontal axis in Figure 32 shows total distress values from 0 (no distress) to 15 (high distress). The vertical axis shows the total life satisfaction values from 0 (low satisfaction) to 25 (high satisfaction). The chart shows the number of SCCS students (Grades 6-12) whose response pattern landed in each cell. For example, the cell for a student with a satisfaction score of 18 and a distress score of 6 is shaded green. Response patterns in the upper-left zone represent optimal social-emotional wellness. Response patterns in the lower-right zone represent suboptimal social-emotional wellness. The **bold lines** show the median split for life Satisfaction (0-18 vs. 19-25) and the top 15% (0-8 vs. 9-15) of distress responses. These values are from a sample of 626,940 California students.

		Social Emotional Distress Scale Total Score																
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
0	25	78	24	9	7	7	5	1		1	1						1	134
Satisfaction Scale	24	47	31	26	15	11	1	4	5					1				141
	23	44	47	40	33	25	13	9	3				2	1				217
	22	38	57	55	42	29	11	21	10	3	5	2	1	3				277
	21	34	60	54	59	40	26	16	7	9	2	4	1		2			314
	20	33	57	56	69	64	41	33	26	13	16	6	5	2	3			424
Sfi	19	7	21	38	53	39	54	32	26	13	10	7	5	3	2			310
ati	18	10	22	33	31	41	43	31	31	11	8	11	5	2	1	1		281
	17	4	13	23	30	39	34	30	27	21	14	11	6	3	2		2	259
Life	16	4	7	11	21	21	27	23	17	15	16	8	7	4	4	1	1	187
	15	4	2	1	15	14	23	18	29	14	7	13	6	4	4	2		156
Student	14		2	5	7	10	13	17	12	12	8	9	9	1	1	3	1	110
ď	13		4	2	4	7	7	5	8	6	9	7	7	6	3	1		76
tt	12	1		4	2	4	6	9	6	7	12	4	4	4	5		4	72
	11	1	1	1	3	4	4	4	4	6	7	9	4	1		1		50
na	10	1		1		1	5	6	1	4	4	2	2	6	1	1	1	36
.0	9				1	1	2	1	3	3	7	6	3	2	1		1	31
ns	8				4			1	2		1	2	4	1	1	1	2	19
l e	7				2	1		2	2	5	1	2	2	1				18
<u>-</u>	6					1	1		1		3		1			1	1	9
Ę	5						1		2			2			1	1	2	9
Multidimensional	4					1		1	1		1							4
2	3								1		1				1			3
ief	2											1						1
Brief I	1	1																0
	0	2			1												2	5
		308	348	359	399	360	317	264	224	143	133	106	74	45	32	13	18	3143

Figure 32. Sample School District CSWI BMSLSS-SEDS Response Pattern Matrix

HOW DOES THE CSWI FIT IN AMONG OTHER ADOLESCENT WELLNESS MEASURES?

The CWSI provides a brief, efficient index that supports researchers and practitioners interested in applying the dual-factor mental health model. Its advantage is that, for the first time, it was co-normed on a large sample, enabling examination joint distribution of students' distress experiences and life satisfaction. As such, the CSWI, per se, is not a direct measure of subjective well-being or a comprehensive measure of quality-of-life indicators. We suggest using the MHC-SF and the Kessler 10 as a follow-up assessment for those interested in getting more information about students' wellness from a dual-factor model perspective. Additionally, we recognize that various other measures offer researchers and practitioners complementary ways to evaluate students' social and emotional health. Ettinger et al. (2022) conducted a scoping review. They identified 79 child and youth thriving measures assessing one or more of the following well-being components:

- 1. strong minds and bodies (physical and mental health),
- 2. positive identity and self-worth,
- 3. caring families and relationships,
- 4. safety,
- 5. fun and happiness,

- 6. racial justice, equity, and inclusion,
- 7. healthy environments, and
- 8. vibrant communities (neighborhood and community resources).

The Ettinger review is an excellent resource to consult when considering which thriving youth measures and constructs best fit your research, clinical services, or program evaluation purposes. We briefly describe two online open-access measures identified by Ettinger et al., widely used by researchers—the Student Subjective Well-Being Questionnaire and the Personal Wellness Index School Children.

Student Subjective Wellbeing Questionnaire (SSWQ)

The SWQ (Renshaw et al., 2015) has 16 items for students ages 11 to 18, grades 6 through 12. It is available for use by researchers and in schools for student school-based mental health assessments. Its items assess the joy of learning, school connectedness, educational purpose, and academic efficacy. These four subscales combined into an overall student well-being score. The SWQ is an open-access measure with online access to documentation, manual (Renshaw, 2022), and forms.

Personal Wellbeing Index – School Children (PWI–SC)

The PWI–SC (Cummins & Lay, 2023) is grounded in the extensive well-being research by Robert Cummins, Deakin University in Australia. This instrument evaluates the *quality-of-life* construct. Cummins argues that quality of life cannot be norm-referenced to a general population because the quality-of-life components are interpreted differently across sociocultural contexts. Hence, like the MHC-SF, the PWI-SC is a criterion-referenced resource. The PWSI-SC asks adolescents to rate their *standard of living*, *personal health*, *achievement in life*, *personal relationships*, *personal safety*, *feelings of being part of a community*, and *future security on an* 11-point response scale (0 = not at all happy...10 = very, very happy). The mean response of the seven items is standardized on a 0 to 100 percentage point scale, with research indicating that scores between 70 and 80 in Western cultural contexts are normative. The PWI-SC is available in multiple languages. The PWI-SC 4th edition manual is available online.

DOES THE CSWI CONTRIBUTE NEW PERSPECTIVES TO THE DFM?

The overarching objective of this report was to introduce the CWSI and offer the research clinical community sufficient information to judge its technical adequacy and to evaluate its valid uses in schools and communities. We used the DFM as an organizing frame to select constructs and items for a brief wellness screening measure; however, we want to emphasize that the analyses presented in this report do not comprehensively scrutinize the DFM approach. Having stated that, we offer two critical observations that have implications for interpreting past DFM research and future research considerations.

Many BMSLSS-SEDS Response Patterns Were Rare

A prominent observation is that 40% of the 416 BMSLSS-SEDS response patterns appeared only once or less per 1000 students, even with a sample of more than 600,000 adolescents. Using one standard DFM nomenclature, Figure 32 shows that the percentage of lowoccurrence response patterns ranged from 9% for the complete mental health group to an *astonishing 80% for the Symptomatic but Content group*. The CWSI sample is the first extensive data set to glimpse the full range of DFM response patterns. An implication for DFM research is to consider if studies should establish the joint distribution of their wellness and distress measures, as demonstrated in the current report, not with the study sample distribution. More research is needed to enumerate the full range of wellness x distress joint response distributions.

Response Patterns Adjacent to the BMLSS and SEDS Cut Scores

Although previous DFM studies have not employed standard measures or criteria for defining lower and higher wellness and distress, several studies have used sample quartiles as cut scores. We used this approach, as shown by the heavy lines in Figure 34. Higher life satisfaction includes values at/above the median corresponding with "satisfied" or "very satisfied" responses. Higher distress included values in the top 25% corresponding with "pretty much like me" responses. The gray cells in Figure 33 are adjacent to the BMSLSS and SEDS cut score values. These neighboring cells account for 24% of the entire sample. Only 18% of the CMH and 23% of the Troubled responders abutted a cut score. The Languishing (34%) and SBC (41%) responders had more adjacent scores. This observation shows a change of just a single BMSLSS or SEDS raw score value would change the DFM classification of one-quarter of the CSWI sample, which suggests inherent instability. Research is needed to understand the generalizability of this observation.

The CSWI distribution pattern with many students' scores falling near a BMLSS and/or SEDS cut score has at least two implications for how DFM research has been conducted and analyzed.

			Not Like Me					A Little Like Me					Pretty Much Like Me					Very Much Like Me	
			SEDS	25th			50th				75th							SEDS	
	BMSLSS		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Very Satisfied		25	9% (cells < 1	L@ 100	0 5	3	3	1	1	1	1	1		809	% cells	< 1@ 1	000 -	81
		24			100	1	2	2	1	1					007	, cens			42
		23	17	10	8	6	4	3	2	1	1	1	1						54
		22	1-		10	8	6	5	3	2	2	1	1	1			– SE		64
	75th 21		1 C	МН 🗌	10	9	190/ 0	diacont		3	2	41% adjacer			1			·~	73
Satisfied		20	3,	1 14	15	14	18% at	djacent ce	cens	5	4	41%	adjacei	nt cells		1	1	1	129
	50th	19	12 8		10	10	9	8	6	2	1%	3	3	2	1	1	1	1	85
		18	8	5	7	8	8	8	6	2-	- 70	4	3	2	2	1	1	1	74
		17	6	4	5	6	34% adjacent	diacent	مالد	5	5	23%	23% adjacent cells			2	1	2	66
		16	4	4 2		5	3470 at		CCII3	5	5	2370	aujacei	-		2	1	2	57
Little Satisfied	25th	15	7	2	3	4	4	6	4	4	4	4	4	3	2	2	1	2	59
		14	2	1	2	2	3	4	3	4	4	4	4	2	2	2	1	2	42
		13	2	1	1	2	2	3	3	3	3	3	3	2	2	2	1	2	35
		12	1	1	1	1	2	2	2	2	2	3	3	2	2	2	1	3	30
		11	1		1	1	1	2	1	2	2	2	2	2	2	2	1	2	23
Little Dissatisfied		10	3	1	1	1	1	2	1	2	2	2	2	2	2	1	1	3	25
		9	1				1	1	1	1	1	1	2	1	1	1	1	2	15
		8						1	1	1	1	1	1	1	1	1	1	2	12
		7									1	1	1	1	1	1	1	2	9
		6											1	1	1	1	1	1	7
Dissatisfied		5	Languishing													Trouble		k	7
		4													l 1 1			3	
		3																1	2
		2																	1
Very Dissatisfied	BMSLSS	1	64%	6 cells ≤	1@ 10	00 -									- 59	% cells	≤1@	≤1@1000 -	
very Dissatisfied	DIVISESS	0	199	86	90	87	76	79	59	53	49	45	45	29	27	23	17	36	4
			199	00	90	67	/0	19	59	55	49	45	45	29	2/	23		30	1000

Figure 33. Number of Responders in CSWI Cells Adjacent to BMSLSS and SEDS Cut Scores

Note. For the gray cells, a change of one raw score point of the BMSLSS or SEDS would also change the DFM classification would change DFM classification group.

First, all DFM studies employing the standard or similar four-group (CMS-SBC-Languishing-Troubled) organization with a nonclinical sample consistently report that the CMH group is the largest and report and compare in-study DFM class proportions to those in other DFM studies. Given the proportion of the CSWI sample with scores falling within one raw score of a different DFM classification, differences in class proportions across studies could be partially due to measurement imprecision.

A second more substantive implication concerns the longitudinal patterns of standard DFM classifications, which only a few studies have examined—they report less than optimal stability. DiLeo et al. (2022) reported that 53% of their sample changed the DFM group over 1.5 years from ninth to tenth grade. In the Kelly et al. (2012) study of DFM stability over five months, the CMH group had 85% classification consistency. In contrast, more than one-half of the troubled

and SBC groups (53% and 58%, respectively) and 71% of the languishing group changed the classification. In a study of Chinese adolescents, Xiong et al. (2017) reported 64% classification consistency. Like the studies by DiLeo and Kelly et al., stability was highest for the CMH group (80%), but stability was less than 50% for the other three DFM groups (34.5%–43.6%).

Adolescence is a developmental stage of growth, fluctuations, and change; hence, DFM classifications will have some instability. In addition, the distribution of the sizeable CSWI sample suggests another possible source of classification instability. Longitudinal DFM stability analyses should consider proximity to other classes at Time 1 to evaluate if a class change is substantive or associated with measurement imprecision.

HOW DO I ACCESS ADDITIONAL CSWI INFORMATION AND RESOURCES?

This CSWI Technical Guide is copyrighted, but the CSWI is an open-access measure. We encouraged you to use it for non-commercial research and school/community mental health initiatives seeking to foster flourishing mental health and help adolescents build their foundation for a rewarding and meaningful life. If you use the CWSI, please cite this document. The use of the CWSI should follow appropriate human subject protocols, including parental and adolescent informed consent, and follow procedures affirming adolescents' agency, dignity, and confidentiality.

See the *Resources* section of this report to access support materials. Contact Mike Furlong (mfurlong@ucsb.edu) for other requests.

WHAT ARE THE FUTURE CSWI DEVELOPMENTS?

If you use the CSWI, please let us know what you have done, what you learned, and if you have any suggestions for future enhancements.

REFERENCES

- Antaramian, S. P., Huebner, E. S., Hills, K. J., & Valois, R. F. (2010). A dual-factor model of mental health: Toward a more comprehensive understanding of youth functioning. *American Journal of Orthopsychiatry*, 80(4), 462–472. https://doi.org/10.1111/j.1939-0025.2010.01049.x
- Arslan, G. (2018). Social exclusion, social support, and psychological wellbeing at school: A study of mediation and moderation effect. *Child Indicator Research*, 11, 897–918. https://doi.org/10.1007/s12187-017-9451-1
- Arslan, G., & Coşkun, M. (2022). School belongingness in academically at-risk adolescents: Addressing psychosocial functioning and psychological well-being. *Journal of Happiness and Health*, 3(1), 1– 13. https://doi.org/10.47602/johah.v3i1.9
- Aymerich, M., Cladellas, R., Castelló, A., Casas, F., & Cunill, M. (2021). The evolution of life satisfaction throughout childhood and adolescence: Differences in young people's evaluations according to age and gender. *Child Indicator Research*, *14*, 2347–2369. https://bit.ly/3SZZILJ
- Benard, B. (2005), Resiliency: What we have learned. WestEd. https://bit.ly/46zhLf1
- Bersia, M., Charrier, L., Berchialla, P., Cosma, A., Comoretto, R. I., & Dalmasso, P. (2022). The mental well-being of Italian adolescents in the last decade through the lens of the Dual Factor Model. *Children*, 9(12), 1981. MDPI AG. http://dx.doi.org/10.3390/children9121981
- Campbell, O. L., Bann, D., & Patalay, P. (2021). The gender gap in adolescent mental health: a crossnational investigation of 566,829 adolescents across 73 countries. *SSM-population Health*, *13*, 100742. https://doi.org/10.1016/j.ssmph.2021.100742
- Cantril, H. (1965). The pattern of human concerns. Rutgers University Press.
- Cavioni, V., Grazzani, I., Ornaghi, V., Agliati, A., & Pepe, A. (2021). Adolescents' mental health at school: The mediating role of life satisfaction. *Frontiers in Psychology*, *12*. https://bit.ly/49TXzXN
- Centers for Disease Control and Prevention. (2020). Youth Risk Behavior Survey: Data summary & trends Report 2009-2019. Centers for Disease Control and Prevention. http://bit.ly/3WEiKXb
- Centers for Disease Control and Prevention. (2023). Youth Risk Behavior Survey: Data summary & trends Report 2011–2021. Centers for Disease Control and Prevention. https://bit.ly/46wX0QP
- Cornell, D., Klein, J., Konold, T., & Huang, F. (2012). Effects of validity screening items on adolescent survey data. *Psychological Assessment*, 24, 21–35. https://doi.org/10.1037/a0024824
- Cosma, A., Abdrakhmanova, S., Taut, D., Schrijvers, K., Catunda, C., & Schnohr, C. A. (2023). A focus on adolescent mental health and well-being in Europe, Central Asia, and Canada. Health Behaviour in School-aged Children International Report from the 2021/2022 survey. Volume 1. WHO Regional Office for Europe; 2023. https://iris.who.int/handle/10665/373201
- Cosma, A., Bersia, M., Abdrakhmanova, S., Badura, P., & Gobina, I. (2023). Coping through crisis: COVID-19 pandemic experiences and adolescent mental health and well-being in the WHO European Region. Impact of the COVID-19 pandemic on young people's health and well-being from the findings of the HBSC survey round 2021/2022. WHO Regional Office for Europe. https://www.who.int/europe/publications/i/item/WHO-EURO-2023-7680-47447-69735
- Cummins, R. A., & Lau, A. L. (2023). Personal Wellbeing Index—School Children (PWI-SC) manual. Deakin University. https://www.acqol.com.au/uploads/pwi-sc/pwi-sc-english-4th%20Ed.pdf

- De France, K., Hancock, G. R., Stack, D. M., Serbin, L. A., & Hollenstein, T. (2022). The mental health implications of COVID-19 for adolescents: Follow-up of a four-wave longitudinal study during the pandemic. *American Psychologist*, 77(1), 85–99. https://doi.org/10.1037/amp0000838
- DiLeo, L. L., Suldo, S. M., Ferron, J. M., & Shaunessy-Dedrick, E. (2022). Three-wave longitudinal study of a dual-factor model: Mental health status and academic outcomes for high school students in academically accelerated curricula. School Mental Health, 14, 514–530. https://bit.ly/40UkUVe
- Dowdy, E., Furlong, M. J., Nylund-Gibson, K., Arch, D., Hinton, T., & Carter, D. (2023). Validating a brief student distress measure for school-wide wellness surveillance. Assessment for Effective Intervention, 48(3), 159–169. https://doi.org/10.1177/15345084221138947
- Dowdy, E., Furlong, M. J., Nylund-Gibson, K., Moore, S., & Moffa, K. (2018). Initial validation of the Social Emotional Distress Scale to support complete mental health screening. Assessment for Effective Intervention, 43(4), 241–248. https://doi.org/10.1177/1534508417749871
- Ettinger, A. K., Risser, L., Rahman, S., Rigas, D., Abromitis, R., Stokes, L. R., Chavis, V., & Miller, E. (2022). Defining and measuring child and youth thriving: A scoping review. *Pediatrics*, *150*(5), e2022056902. https://doi.org/10.1542/peds.2022-056902
- Fergusson, D. M., McLeod, G. F., Horwood, L. J., Swain, N. R., Chapple, S., & Poulton, R. (2015). Life satisfaction and mental health problems (18 to 35 years). *Psychological Medicine*, 45(11), 2427– 2436. https://doi.org/10.1017/s0033291715000422
- Ferro, M. A. (2019). The psychometric properties of the Kessler Psychological Distress Scale (K6) in an epidemiological sample of Canadian youth. *The Canadian Journal of Psychiatry*, 64(9), 647–657. https://doi.org/10.1177/0706743718818414
- Furlong, M. J., Dowdy, E., Nylund-Gibson, K., Wagle, R., Carter, D., & Hinton, T. (2021). Enhancement and Standardization of a universal social-emotional health measure for students' psychological strengths. *Journal of Well-Being Assessment*, 4, 245–267. https://bit.ly/46zhZmn
- Furlong, M. J., Fullchange, A., & Dowdy, E. (2017). Effects of mischievous responding on universal mental health screening: I love rum raisin ice cream, really, I do! School Psychology Quarterly, 32(3), 320–335. https://doi.org/10.1037
- Furlong, M. J., Paz, J. L., Carter, D., Dowdy, E., & Nylund-Gibson, K. (2023). Extending validation of a social-emotional health measure for middle school students. Contemporary School Psychology, 27, 92–103. https://doi.org/10.1007/s40688-022-00411-x
- Furlong, M. J., You, S., Renshaw, T. L., Smith, D. C., & O'Malley, M. D. (2014). Preliminary development and validation of the Social and Emotional Health Survey for secondary students. *Social Indicators Research*, 117, 1011–1032. http://link.springer.com/article/10.1007/s11205-013-0373-0
- Furukawa, T. A., Kessler, R. C., Slade, T., & Andrews, G. (2003). The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-Being. *Psychological Medicine*, 33, 357–362. https://bit.ly/46yYj1U
- Göbel, K., & Cohrdes, C. (2021). The whole is greater than the sum of its parts: Profiles of multiple mental health risk factors using Latent class analysis. *Child Adolescent Psychiatry Mental Health* 15, 27. https://doi.org/10.1186/s13034-021-00380-8

- Göbel, K., Ortelbach, N., Cohrdes, C., Baumgarten, F., Meyrose, A-M., Ravens-Sieberer, U., & Scheithauer, H. (2022). Co-occurrence, stability and manifestation of child and adolescent mental health problems: A latent transition analysis. *BMC Psychology*, *10*, 267. https://bit.ly/3SYJWkn
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 38*(5), 581–586. https://bit.ly/3sQmWsY
- Green, J. G., Gruber, M. J., Sampson, N. A., Zaslavsky, A. M., & Kessler, R. C. (2010). Improving the K6 short scale to predict serious emotional disturbance in adolescents in the USA. International *Journal of Methods in Psychiatric Research* 19(S1), 23–35. https://doi.org/10.1002/mpr.314
- Grych, J., Taylor, E., Banyard, V., & Hamby, S. (2020). Applying the dual-factor model of mental health to understanding protective factors in adolescence. *American Journal of Orthopsychiatry*, *9*(4), 458–467. http://dx.doi.org/10.1037/ort0000449
- Guzmán, J., Green, J. G., Oblath, R., & Holt, M. K. (2020). Life satisfaction mediates the association between mental health risk and perceptions of school functioning among children and adolescents. *Contemporary School Psychology*, *24*, 389–399. https://bit.ly/49UYkjn
- Hinton, T., Dowdy, E., Nylund-Gibson, K., Furlong, M. J., & Carter, D. (2021). Examining the Social Emotional Health Survey-Secondary for use with Latinx youth. *Journal of Psychoeducational* Assessment, 39, 242–246. https://doi.org/10.1177/0734282920953236
- Hoover, S., & Bostic, J. (2021). Schools as a vital component of the child and adolescent mental health system. *Psychiatric Services*, 72(1), 37–48. https://doi.org/10.1176/appi.ps.201900575
- Houghton, S., Kyron, M., Hunter, S. C., Lawrence, D., Hattie, J., Carroll, A., & Zadow, C. (2022).
 Adolescents' longitudinal trajectories of mental health and loneliness: The impact of COVID-19 school closures. *Journal of Adolescence*, *94*(2), 191–205. https://doi.org/10.1002/jad.12017
- Huebner, E. S., Seligson, J. L., Valois, R. F., & Suldo, S. M. (2006). A review of the Brief Multidimensional Students' Life Satisfaction Scale. Social Indicators Research, 79(3), 477–484. https://doi.org/10.1007/s11205-005-5395-9
- Iasiello, M., van Agteren, J., & Muir-Cochrane, E. (2020). Mental health and/or mental illness: A scoping review of the evidence and implications of the dual-continua model of mental health. *Evidence Base*, (1). https://doi.org/10.21307/eb-2020-001
- Ito, A., Smith, D. C., You, S., Shimoda, Y., & Furlong, M. J. (2015). Validation of the Social Emotional Health Survey–Secondary for Japanese students. *Contemporary School Psychology*, 19, 243– 252. http://link.springer.com/article/10.1007/s40688-015-0068-4
- Jefferies, P., Fritz, J., Deighton, J., & Ungar, M. (2023). Analysis of protective factors in schoolchildren in England using the Dual-factor Model of mental health. *Research on Child and Adolescent Psychopathology*, 51(7), 907–920. https://doi.org/10.1007/s10802-023-01038-z
- Jiang, S., Jiang, C., Ren, Q., & Wang, L. (2021). Cyber victimization and psychological well-being among Chinese adolescents: Mediating role of basic psychological needs satisfaction and moderating role of positive parenting. *Children and Youth Services Review*, 130, 106248. https://doi.org/10.1016/j.childyouth.2021.106248
- Johns, M. M., Lowry, R., Haderxhanaj, L. T., Rasberry, C. N., Robin, L., Scales, L., Stone, D., & Suarez, N. A. (2020). Trends in violence victimization and suicide risk by sexual identity among high school students—Youth Risk Behavior Survey, United States, 2015-2019. MMWR supplements, 69(1), 19–27. https://doi.org/10.15585/mmwr.su6901a3

- Jovanović, V., & Lazić, M. (2020). Is longer always better? A comparison of the validity of single-item versus multiple-item measures of life satisfaction. *Applied Research in Quality of Life*, 15, 675–692. https://doi.org/10.1007/s11482-018-9680-6
- Kelly, R. M., Hills, K. J., Huebner, E. S., & McQuillin, S. D. (2012). The longitudinal stability and dynamics of group membership in the dual-factor model of mental health: psychosocial predictors of mental health. *Canadian Journal of School Psychology*, 27(4), 337–355. https://bit.ly/3QUP2LD
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S.-L. T., Walters, E. E., & Zaslavsky, A. (2002). Short screening scales to monitor population prevalences and trends in nonspecific psychological distress. *Psychological Medicine*, 32(6), 959–976. https://doi.org/10.1017/S0033291702006074
- Keyes, C. L. M. (1998). Social well-being. Social Psychology Quarterly, 61(2), 121–140. https://doi.org/10.2307/2787065
- Keyes, C. L. M. (2006). Mental health in adolescence: Is America's youth flourishing? *American Journal of Orthopsychiatry*, 76(3), 395–402. https://doi.org/10.1037/0002-9432.76.3.395
- Keyes, C. L., Yao, J., Hybels, C. F., Milstein, G., & Proeschold-Bell, R. J. (2020). Are changes in positive mental health associated with increased likelihood of depression over a two-year period? A test of the mental health promotion and protection hypotheses. *Journal of Affective Disorders, 270*, 136–142. https://doi.org/10.1016/j.jad.2020.03.056
- Kim, E. K., Dowdy, E., & Furlong, M. J. (2014). Exploring the relative contributions of the strength and distress components of dual-factor complete mental health screening. *Canadian Journal of School Psychology*, 29, 127–140. http://cjs.sagepub.com/content/29/2/127.abstract
- King, N., Davison, C. M., & Pickett, W. (2021). Development of a dual-factor measure of adolescent mental health: An analysis of cross-sectional data from the 2014 Canadian Health Behaviour in School-aged Children (HBSC) study. *BMJ Open*, *11*(9), e041489. https://bit.ly/47PPO3v
- King, N., Davison, C. M., & Pickett, W. (2022). Development of a novel continuous measure of adolescent mental health inspired by the dual-factor model. *Frontiers in Psychology*, 13, 918894. https://doi.org/10.3389/fpsyg.2022.918894
- Lukoševičiūtė, J., Gariepy, G., Mabelis, J., Gaspar, T., Joffė-Luinienė, R., & Šmigelskas, K. (2022). Singleitem happiness measure features adequate validity among adolescents. *Frontiers in Psychology*, 13, 884520. https://doi.org/10.3389/fpsyg.2022.884520
- Lee, S., You, S., & Furlong, M. J. (2016). Validation of the Social Emotional Health Survey for Korean school students. *Child Indicators Research*, *9*, 73–92. https://bit.ly/49RLjap
- Lyons, M. D., Huebner, E. S., & Hills, K. J. (2013). The dual-factor model of mental health: A short-term longitudinal study of school-related outcomes. *Social Indicators Research*, *114*(2), 549–565. https://doi.org/10.1007/s11205-012-0161-2
- Lyons, M. D., Huebner, E. S., Hills, K. J., & Shinkareva, S. V. (2012). The dual-factor model of mental health: Further study of the determinants of group differences. *Canadian Journal of School Psychology*, 27, 183–196. https://doi.org/10.1177/0829573512443669
- Masten, A. S. (2002). Resilience comes of age. In M.D. Glantz, J. L. Johnson (Eds.), *Resilience and development longitudinal research in the social and behavioral sciences: An Interdisciplinary Series* (pp. 281–296). Springer. https://doi.org/10.1007/0-306-47167-1_15

- Mcloughlin, C., & Hart, S. (2015). Children's rights and school psychology: An introduction to the multiple journal series honoring the 25th anniversary of the United Nations Convention on the Rights of the Child Preface. *School Psychology International*, *35*(1), 3–5. https://bit.ly/3MXN4sM
- Orben, A., Lucas., R. E., Fuhrmann, D., & Kievit, R. A. (2022). Trajectories of adolescent life satisfaction. *Royal Society Open Science*, 9, 211808. https://doi.org/10.1098/rsos.211808
- Mewton L., Kessler, R. C., Slade, T., Hobbs, M. J., Brownhill, L., Birrell, L., Tonks, Z., Teesson, M., Newton, N., Chapman, C., Allsop, S., Hides, L., McBride, N., & Andrews, G. (2016). The psychometric properties of the Kessler Psychological Distress Scale (K6) in a general population sample of adolescents. *Psychological Assessment*, 28(10), 1232–1242. https://bit.ly/3R00oOu
- Moore, S. A., Dowdy, E., Nylund-Gibson, K., & Furlong, M. J. (2019a). A latent transition analysis of the longitudinal stability of dual-factor mental health in adolescence. *Journal of School Psychology*, 73, 56–73. https://doi.org/10.1016/j.jsp.2019.03.003
- Moore, S. A., Dowdy, E., Nylund-Gibson, K., & Furlong, M. J. (2019b). An empirical approach to complete mental health classification in adolescents. *School Mental Health: A Multidisciplinary Research and Practice Journal*, *11*(3), 438–453. https://doi.org/10.1007/s12310-019-09311-7
- Moore, S. A., Mayworm, A. M., Stein, R., Sharkey, J. D., & Dowdy, E. (2019). Languishing students: Linking complete mental health screening in schools to Tier 2 intervention. *Journal of Applied School Psychology*, *35*(3), 257–289. https://doi.org/10.1080/15377903.2019.1577780
- Murthy, V. H. (2021). Protecting youth mental health: The U.S. Surgeon General's advisory. https://bit.ly/3GAzJkl
- Petersen, K. J., Humphrey, N., & Qualter, P. (2020). Latent class analysis of mental health in middle childhood: Evidence for the dual-factor model. *School Mental Health: A Multidisciplinary Research and Practice Journal*, *12*(4), 786–800. https://bit.ly/3ReS3b9
- Petersen, K. J., Humphrey, N., & Qualter, P. (2022). Dual-factor mental health from childhood to early adolescence and associated factors: A latent transition analysis. *Journal of Youth and Adolescence, 51*(6), 1118–1133. https://doi.org/10.1007/s10964-021-01550-9
- Piqueras, J. A., Rodriguez-Jimenez, T., Marzo, J. C., Rivera-Riquelme, M., Martinez-Gonzalez, A. E., Falco, R., & Furlong, M. J. (2019). Social Emotional Health Survey-Secondary (SEHS-S): A Universal screening measure of social-emotional strengths for Spanish-speaking adolescents. International Journal of Environmental Research: Public Health, 16, 4982. https://www.mdpi.com/1660-4601/16/24/4982
- Proctor, C., Linley, P. A., & Maltby, J. (2009). Youth life satisfaction: A review of the literature. *Journal of Happiness Studies*, *10*, 583–630. https://doi.org/10.1007/s10902-008-9110-9
- Renshaw, T. L. (2022). Student Subjective Wellbeing Questionnaire (SSWQ). Publicly available measure. https://osf.io/48av7
- Renshaw, T. L., & Bolognino, S. J. (2017). Psychometrics of the Psychological Wellbeing and Distress Screener: A brief measure of youth's bidimensional mental health. Assessment for Effective Intervention, 42(3), 160–167. https://doi.org/10.1177/1534508416678970
- Renshaw, T. L., & Cohen, A. S. (2014). Life satisfaction as a distinguishing indicator of college student functioning: Further validation of the two-continua model of mental health. *Social Indicators Research*, *117*, 319–334. https://doi.org/10.1007/s11205-013-0342-7

- Renshaw, T. L., Long, A. C. J., & Cook, C. R. (2015). Assessing adolescents' positive psychological functioning at school: Development and validation of the Student Subjective Wellbeing Questionnaire. School Psychology Quarterly, 30(4), 534–552. https://bit.ly/3N1euhE
- Robinson-Cimpian, J. P. (2014). Inaccurate estimation of disparities due to mischievous responders: Several suggestions to assess conclusions. *Educational Researcher*, *43*, 171–185. https://psycnet.apa.org/doi/10.3102/0013189X14534297
- Rutter M. (1979). Protective factors in children's responses to stress and disadvantage. Annals of the Academy of Medicine, Singapore, 8(3), 324–338. PMID: 547874
- Seligson, J. L., Huebner, E. S., & Valois, R. F. (2003). Preliminary validation of the Brief Multidimensional Students' Life Satisfaction Scale (BMSLSS). Social Indicators Research, 61(2), 121–145. https://doi.org/10.1023/A:1021326822957
- Smith, N. D. W., Suldo, S. M., Hearon, B. V., & Ferron, J. M. (2020). An application of the dual-factor model of mental health in elementary school children: Examining academic engagement and social outcomes. *Journal of Positive Psychology & Well-being*, 4(1), 49–68. https://journalppw.com/index.php/jppw/article/view/61
- Smout, M. (2019) The factor structure and predictive validity of the Kessler Psychological Distress Scale (K10) in children and adolescents. *Australian Psychologist*, 54(2), 102–113. https://bit.ly/3usgkkW
- Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J., & Weich, S. (2009). Internal construct validity of the Warwick-Edinburgh Mental Well-being scale (WEMWBS): A Rasch analysis using data from the Scottish Health Education Population Survey. *Health and Quality of Life Outcomes*, 7(1), 15. https://doi.org/10.1186/1477-7525-7-15
- Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review*, 37, 52–68. https://bit.ly/3MXNu2k
- Suldo, S. M., Thalji-Raitano, A., Kiefer, S. M., & Ferron, J. M. (2016). Conceptualizing high school students' mental health through a dual-factor model. *School Psychology Review*, 45(4), 434–457. https://doi.org/10.17105/SPR45-4.434-457
- Thayer, A. J., Weeks, M. R., & Cook, C. R. (2021). Dual factor mental health model: Validation through mixture modeling and cut scores. *Psychology in the Schools, 58*(2), 286–306. https://doi.org/10.1002/pits.22447
- Valois, R. F., Zullig, K., Huebner, E. S., & Drane, J. W. (2001). Relationship between life satisfaction and violent behaviors among adolescents. *American Journal of Health Behavior*, 25(4), 353–366. https://doi.org/10.5993/AJHB.25.4.1
- Valois, R. F., Zullig, K. J., Huebner, E. S., & Drane, J. W. (2004). Life satisfaction and suicide among high school adolescents. *Social Indicators Research*, *66*(1-2), 81–105. https://bit.ly/47RLXCO
- Valois, R. F., Zullig, K. J., Huebner, E. S., & Drane, J. W. (2009). Youth developmental assets and perceived life satisfaction: Is there a relationship? *Applied Research in Quality of Life*, 4(4), 315– 331. https://doi.org/10.1007/s11482-009-9083-9
- Valois, R. F., Zullig, K. J., Huebner, E. S., Kammermann, S. K., & Drane, J. W. (2002). Association between life satisfaction and sexual risk-taking behaviors among adolescents. *Journal of Child* and Family Studies, 11(4), 427–440. https://doi.org/10.1023/A:1020931324426

- Weathers, E. S. (2019). Bias or empathy in universal screening? The effect of teacher-student racial matching on teacher perceptions of student behavior. *Urban Education*, 0042085919873691. https://doi.org/10.1177/0042085919873691
- Xiong, J., Qin, Y., Gao, M., & Hai, M. (2017). Longitudinal study of a dual-factor model of mental health in Chinese youth. *School Psychology International, 38*(3), 287–303. https://bit.ly/40VRBlb
- You, S., Dowdy, E., Furlong, M. J., Renshaw, T., Smith, D. C., & O'Malley, M. D. (2014). Further validation of the Social and Emotional Health Survey for high school students. Applied Quality of Life Research, 9, 997–1015. http://link.springer.com/article/10.1007/s11482-013-9282-2
- You, S., Furlong, M. J., Felix, E., & O'Malley, M. D. (2015). Validation of the Social and Emotional Health Survey for five sociocultural groups: Multigroup invariance and latent mean analyses. *Psychology* in the Schools, 52, 349–362. http://onlinelibrary.wiley.com/doi/10.1002/pits.21828/abstract
- Yuen, M., & Wu, L. (2023). Relationship between school connectedness and psychological well-being in adolescents: A meta-analysis. *Current Psychology*. https://doi.org/10.1007/s12144-023-05164-1
- Zhang, X., Han, Z., & Ba, Z. (2020). Cyberbullying involvement and psychological distress among Chinese adolescents: The moderating effects of family cohesion and school cohesion. International Journal of Environmental Research and Public Health, 17(23), 8938. http://dx.doi.org/10.3390/ijerph17238938
- Zhou, J., Jiang, S., Zhu, X., Huebner, E. S., & Tian, L. (2020). Profiles and transitions of dual-factor mental health among Chinese early adolescents: The predictive roles of perceived psychological need satisfaction and stress in school. *Journal of Youth Adolescence*, 49, 2090–2108. https://bit.ly/3sGY9I0

CSWI RESOURCES



USCB School Mental Health Collaborative

3	•••
@covitalityucsb	
UC Santa Barbara Project Covitality	
California Student Wellness Survey	
CSWI Student Response and Scoring Forms	
CSWI Tier 1 Sample Survey	
Example CSWI Tier 1 Dashboard Report	
CSWI Tier 2 Assessment Survey	
Example CSWI Tier 2 Dashboard Report	
CSWI Qualtrics Assessment Resources	
Social Emotional Health Survey-Secondary-2020 Forms	

Here are some (hopefully) helpful resources (https://linktr.ee/covitalityucsb)

- CWSI Response and Scoring Forms
- CSWI Scoring Practice Worksheet
- CWSI Tier 1 (BMSLSS and SEDS) Sample Qualtrics Survey
- CWSI Tier 1 Example Qualtrics Dashboard Report
- CSWI Tier 2 (MHC-SF and Kessler 10) Qualtrics Survey
- CWSI Tier 2 Example Qualtrics Dashboard Report
- CWSI Qualtrics Assessment Resources Links
- Social Emotional Health Survey-Secondary-2020 Forms

WestEd 😒

California School Climate, Health, and Learning



Climate, Health, and

Learning Surveys

B WestEd 🛞

Secondary Module

- Survey System
- Student Mental Health & Wellness Project
- CALSCHS Toolbox

Elementary Module

- Social Emotional Health
- Mental Health Supports

Secondary

- Social Emotional Health
- Mental Health Supports

AUTHOR INFORMATION

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