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**The California Student Wellness Index:
Development, Validation, and Multi-Tier Application**

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Abstract

This article and its *Online Supplemental Material* describe the development of the California School Wellness Index (CSWI), a tool to aid mental health research and practice in schools, specifically for wellness screening and monitoring. The CSWI is a 0-40 composite index derived from responses to the Brief Multidimensional Student Life Satisfaction Scale (BMSLSS) and the Social Emotional Distress Scale (SEDS) and rooted in the Dual-Factor Mental Health model. The development of the CSWI involved psychometric and normative analyses using data from 626,940 California secondary students during the 2021/22 and 2022/23 academic years. Analyses conducted with other independent samples examined concurrent validity with the Social Emotional Health Survey-Secondary ($N = 78,769$, collected in 2020/21) and stability and predictive validity with the Mental Health Continuum-Short Form ($N = 1,828$, collected in 2020/21 and 2021/22). Distribution and ranking information and clinical interpretation resources for the BMSLSS, SEDS, and CSWI are described. The discussion and *Online Supplemental Material* provide insights into strategies for using the CSWI within a Multi-Tiered Support System (MTSS) for various research and clinical applications. These applications include using it as a population-level global mental health index, identifying students needing more support, communicating with educators, guardians, and community members about student well-being, and evaluating the effectiveness of student support services. The *Online Supplemental Material* includes development, validation, and interpretation information and open-access resources for using the CSWI across MTSS levels.

Keywords: California Student Wellness Index, CSWI, Brief Multidimensional Student Life Satisfaction Scale, Social Emotional Distress Scale, Dual-Factor Mental Health Model, Multi-Tiered System of Support, MTSS, Mental Health Continuum, Social Emotional Health Survey

Introduction

Policymakers and the public are deeply concerned about the mental health of children and youth, hereafter referred to as young people, in part due to the health risks and disruptions associated with the COVID-19 pandemic. In one national survey, more than half of teachers (64%) reported that students' well-being was worse than before the pandemic (Educators for Excellence, 2024). A detailed public statement by the U.S. Surgeon General (Murthy, 2021) described the condition of the mental health of young people in the United States, the drivers of mental health problems among young people, and critical actions necessary to both prevent further deterioration of their mental health and treat existing mental health needs. Government agencies have moved into action in response to the sounding of such alarms from leadership. To expand the school mental health professionals (e.g., counselors, school social workers, and school psychologists) workforce, the U.S. Department of Education allocated \$5.0 billion for the Mental Health Service Professional Demonstration Grant Program (Office of Elementary & Secondary Education, n.d.). State governments have also mobilized. For example, the California legislature distributed \$4.5 billion to set up the Children and Youth Behavioral Health Initiative (California Department of Public Health, 2024) to reduce barriers to care by providing coordinated mental health-related support across government agencies serving young people and their families.

Mental Health Screening in Schools

For many young people, school is their only point of contact with community resources; schools are, therefore, identified as appropriate places to locate and support their mental health needs (Hoover & Bostic, 2021). Of course, informal systems of care already exist in schools; school staff members regularly attend to the needs of students who appear distressed or

disengaged. By checking in with these students to see how they are doing and gauging if they need any support, school personnel are working within an informal network of care. Though these informal networks support many students, evidence suggests that some are left out. Specific subgroups of students may be less likely to receive support when relying primarily on school staff observations or other metrics, such as academic achievement (Guo et al., 2017). Also under-referred are students who are not disruptive to the classroom environment but are instead experiencing internalized mental health challenges that may be more difficult to observe (Graybill et al., 2022). Some have theorized that these differences may be associated with cultural mismatches between school staff and students (Raines et al., 2012).

Universal screening is a suggested remedy for such disparities in access-to-care networks. Screening is intended to be a part of a comprehensive approach to identify mental health challenges before they become mental illnesses that severely interfere with life experiences, resulting in morbidity and mortality. It is advantageous to identify youth with internalizing behavior concerns that may be overlooked in traditional referral models (Graybill et al., 2022). Results of a randomized, controlled study suggest that students invited to respond to a universal screener were three times more likely to be identified and assigned as having symptoms of major depression and over two times more likely to initiate recommended intervention supports than their peers who were not screened (Sekhar et al., 2021). In addition to improving identification accuracy and increasing early access to care for all students, screening enhances the identification accuracy of Black and Latine youth (Eklund et al., 2023).

To perform screening effectively—that is, to accurately find all youth who need support (i.e., avoiding false negatives) and to reduce the incidences of youth needing more support (i.e., avoiding false positives)—mental health professionals need high-quality tools to gauge youth

mental health status. Just as physicians need instruments like heart rate monitors to gauge indicators of general health, mental health clinicians need instruments that can take the “pulse” of mental health status. Like heart rate monitors, such screening instruments must be noninvasive, easy to administer, and applicable for frequent administration. Moreover, they must measure mental health accurately and reliably so that their data are trustworthy and can effectively guide health-promoting decisions.

Considerable efforts have validated instruments of this type, commonly called mental health screening instruments or, more colloquially, screeners. Examples include the *Behavioral and Emotional Screening System, 3rd edition* (BESS-3; Kamphaus & Reynolds, 2015), the *Social, Academic, Emotional, and Behavioral Risk Screener* (SAEBRS, Kilgus et al., 2018), and the *Strengths and Difficulties Questionnaire* (SDQ; Theunissen et al., 2019). These screeners ask young people and/or their educators about risk behaviors, mental illness, and distress indicators; in other words, they focus on psychopathology indicators (Hoover & Bostic, 2021). They derive from a unidimensional formulation of mental health that assumes the presence of mental health is primarily equivalent to the absence of psychological distress. The use of such psychopathology-focused screeners in a comprehensive school-based mental health screening model helps to bypass reliance on educator referral alone, thereby increasing the identification of young people with mental health challenges who may commonly go unnoticed and reducing the need for less reliable indicators such as office discipline referrals or grade point average (Guo et al., 2017; Margherio et al., 2019).

Despite the abundant research illustrating the value of universal screening for young people in schools, only some schools have adopted universal screening tools and procedures. Current estimates suggest uptake rates at or below 20% (Burns & Rapee, 2022; Herman et al.,

2021), with some studies reporting rates as low as 1% (Wood & McDaniel, 2020). Investigations of determinants of universal screening implementation have revealed that participating principals, teachers, and school psychologists are generally supportive of the value of universal screening, in theory, but indicate reticence to perform universal screening without attention first being assigned to practical, cultural, and communication-related implementation barriers (Burns & Rapee, 2022; Moore et al., 2022; Wood & McDaniel, 2020).

Among the commonly reported practical concerns are budget constraints that limit the ability to pay for staff time to support screening and purchase screening tools, difficulties fitting screening into already-packed school calendars, and limited procedural guidance for how to perform universal screening in schools in a thoughtful and legally-defensible manner (Brann et al., 2021; Bruhn et al., 2014; Connors et al., 2022; March et al., 2022; Moore et al., 2015). Cultural barriers include the perception that school leaders do not understand or prioritize mental health and that stigma associated with mental health leads community members, from school board members to guardians, to resist efforts to perform universal screening, in some cases fearing they are “labeling students” (Brann et al., 2021, 2014; March et al., 2022; Wood & McDaniel, 2020). Study participants report difficulty overcoming these cultural barriers partially due to difficulty communicating the purpose, value, and results of universal screeners to their constituents (March et al., 2022; Wood & McDaniel, 2020).

Playing into many of these barriers may be the traditional unidimensional conceptualization of mental health that frames screening. The operating assumption may be that the only purpose of universal screening is to identify and “label” youth with existing indicators of mental illness, which would include only a subsection of the school’s student population for whom treatment responsibility should be with trained mental health professionals. Below, we

describe an alternative theoretical framework, the Dual Factor Model of Mental Health, which may inform opportunities to overcome some of these barriers to the uptake of universal screening in schools and contribute to a growing interest in equitable school mental health screening (Moore et al., 2023).

The Dual Factor Model of Mental Health: Implications for Screening

The Dual Factor Model of Mental Health (DFM; Greenspoon & Saklofske, 2001; Suldo & Shaffer, 2008) refers to a paradigm in which mental health and mental illness are viewed not as opposite poles of the same continuum (i.e., the unidimensional view), but as bidimensional: for a person to be mentally healthy, they must experience both the absence of mental illness symptoms and the presence of positive subjective well-being. Numerous DFM-rooted studies have helped researchers and practitioners gain a better understanding of youths' psychosocial developmental needs (Antaramian et al., 2010; Grych et al., 2020; Kelly et al., 2012; Lyons et al., 2012, 2013; Zhou et al., 2020). Used in school-based research (Moore et al., 2019a, 2019b; Petersen et al., 2020; Suldo et al., 2016; Thayer et al., 2021), the DFM has successfully shown significant differences in outcomes among groups with similar levels of psychological distress but varying levels of well-being indicators.

Several investigations have revealed that individuals experiencing *complete mental health*, defined by low psychological distress and high subjective well-being, have the most favorable life outcomes. Adolescents reporting complete mental health have the most 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). Individuals who are “symptomatic but content,”

meaning they have some psychological distress with moderate-to-high subjective well-being, often have better outcomes than those who struggle with similar levels of psychological distress but with lower subjective well-being (Grych et al., 2020; Lyons et al., 2013; Smith et al., 2020; Suldo et al., 2016). These findings suggest that the absence of psychological distress is insufficient to realize optimal life functioning, that is, to thrive.

Related to the limitations in unidimensional conceptualizations of mental health is a growing understanding that psychopathology-focused instruments may be insufficient for predicting academic, social-emotional, and personal outcomes and may, therefore, be limited in their ability to identify youth most in need of well-being-related supports. In their scoping review of 83 studies, Iasiello et al. (2020) found that researchers were better able to predict academic achievement and interpersonal relationship quality outcomes when they included in their research designs both measures of psychopathology symptoms and well-being, such as life satisfaction, than when they included only measures of psychopathology. Having performed a systematic review of 85 DFM studies, Magalhães (2024) concluded that considering both dimensions of mental health is vital for predicting outcomes.

The growing recognition of the limitations of a unidimensional understanding of mental health (i.e., the absence of psychological distress) supports the core principle of DFM: that the best assessment of youth mental health considers the joint distribution of psychological distress and subjective well-being. Until recently, however, the DFM has been the purview of researchers invested in validating the conceptual model; the instruments developed to measure DFM have not been easily applicable to practice in schools (Furlong et al., 2022). Nevertheless, the DFM may have an intuitive appeal because it aligns with the holistic conceptualization of youth as resilient and not singularly defined by psychological distress. This approach resonates with a

significant number of educators and guardians. Such values are consistent with a groundswell of interest in inverting conversations about pathology, illness, and trauma to conversations about well-being, healing, and resilience (Ginwright, 2022). It stands to reason that when framed from a DFM viewpoint, messages about screening could overcome many of the implementation barriers mentioned above.

Using DFM as their theoretical reference point, school mental health practitioners communicate that they are gauging the well-being of all students; they are looking not just for critical mental health problems among a small number of students but for the building blocks of thriving among all students. Presumably, all educators and caregivers want the children in their school communities to develop *mental wealth*, the accumulated internal resources that lead young people to a high quality of life (McGorry et al., 2022). For those caregivers and educators who embrace this stance, screening using a DFM-rooted screener may appeal. The California School Wellness Index (CSWI), introduced below, is designed to carry out the vision of measuring complete mental health among young people to help ensure all young people have opportunities to thrive.

The California Student Wellness Index

To address the need for a psychometrically sound DFM-based screener, we developed the California School Wellness Index (CSWI). The CSWI is a concise, self-report resource made up of 10 items. The CSWI assesses complete mental health for two fundamental, well-documented dimensions: *life satisfaction* (Brief Multidimensional Student Life Satisfaction Scale; BMSLSS; Huebner et al., 2006) and *emotional distress* (Social Emotional Distress Scale; Dowdy et al., 2023). As a point of clarity, we conceived of the CSWI as not a traditional scale measuring an underlying psychological construct; instead, it is an index that combines responses

from the empirically related but distinct dimensions of life satisfaction and emotional distress into a single composite score (Hagerty & Land, 2012), similar to the OCED Composite Global Well-Being Index (Chaaban et al., 2016) and the WHO-5 Well-Being Index (Topp et al., 2015). An advantage of considering the CSWI as an index is that its scores can assess individual students (e.g., targeted screening) and be used as an aggregate indicator (e.g., surveillance trend patterns; Wu, 2022). The following sections of this article describe the rationale for using the BMSLSS and SEDS for the CSWI, analyze and document its psychometric properties, and present valid evidence for its use with individual students and for aggregate-level purposes.

The Brief Multidimensional Student Life Satisfaction Scale (BMSLSS)

According to Huebner et al. (2004), global life satisfaction refers to 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). In the 1990s, Huebner and his colleagues conducted pioneering research on student life satisfaction, which led to the *Brief Multidimensional Student Life Satisfaction Scale* (BMSLSS; Huebner et al., 2006; Riemer et al., 2012; Seligson et al., 2003). The BMSLSS asks students to rate their satisfaction in five domains: family, friends, school, myself, and neighborhood/environment (see Table 1).

A study using a stratified random sample of South Carolina high school students ($N = 5,405$) showed negative relationships between students’ life satisfaction and their involvement in various risk behaviors. The study found that students involved in physical (Valois et al., 2004a) and mental health (Valois et al., 2004b) risk behaviors had low life satisfaction. Other studies have found reports of low life satisfaction among students who engaged in substance use (Zullig et al., 2001) and in dieting and weight-related behaviors (Valois et al., 2003). On the other hand,

a more recent study (Cavioni et al., 2021) showed that helping students build and maintain positive life satisfaction can support their overall mental wellness. Higher levels of life satisfaction enhance the mental health benefits of positive school relationships among adolescents. Students who feel connected to their school tend to have high life satisfaction, strengthening and sustaining positive interpersonal relationships (Yuen & Wu, 2023).

Students with high life satisfaction tend to have high personal assets such as self-efficacy and self-esteem (Proctor et al., 2009). Compared to those with low life satisfaction, they also tend to have better engagement, academic achievement, lower absenteeism, and fewer behavioral problems (Fergusson et al., 2015). Conversely, students with low life satisfaction are more likely to report emotional or behavioral setbacks (Proctor et al., 2017). A study by Athay et al. (2012) conducted a longitudinal analysis of adolescents in a mental health treatment program. The study found that as the severity of symptoms decreased over time, there was a simultaneous increase in life satisfaction and vice versa. This finding highlights the vital role of life satisfaction in promoting resilience and protecting against mental health challenges.

Assessing overall life satisfaction in school contexts is particularly relevant because it is associated with reduced mental health risks and positive academic and social functioning (Guzmán et al., 2020). Given that these existing findings show a connection between life satisfaction and students' overall mental health and other positive developmental indicators, a measure of life satisfaction was added to the CSWI.

Social Emotional Distress Survey-Secondary (SEDS)

The Social Emotional Distress Survey-Secondary (SEDS; Dowdy et al., 2018) assesses students' emotional discomfort and stressful experiences. In their validation study of a five-item version of the SEDS (see Table 1), Dowdy et al. (2023) collected three different samples.

Sample 1 consisted of 105,771 students from 113 California secondary schools, and their responses were used to evaluate the structural validity of the SEDS. Sample 2 included 10,770 secondary students who completed the SEDS, along with other surveys such as the Social Emotional Health Survey-Secondary-2020 (SEHS-S-2020; Furlong et al., 2021), Mental Health Continuum-Short Form (Keyes, 2006; Reinhardt et al., 2020), Multidimensional Student Life Satisfaction Scale, and Youth Risk Behavior Surveillance items (e.g., chronic sadness and suicidal ideation; Dowdy et al.). This sample examined the concurrent validity evidence of the SEDS based on its relation to other well-being constructs. Last, sample 3 consisted of 1,889 secondary students who completed the SEDS in October 2022 and 2023, providing stability coefficients. Dowdy et al. (2023) found that the SEDS was invariant across students based on gender identification, grade level, and Latine status, supporting its use with diverse student groups. Other analyses showed that the SEDS has moderate to strong convergent and discriminant validity characteristics and sufficient one- and two-year temporal stability (Dowdy et al.).

Validating the CSWI

California Healthy Kids Survey

The CSWI data comes from the California Healthy Kids Survey (CHKS), an anonymous student self-report survey administered by the California Department of Education (CDE) in partnership with WestEd. The information generated from the CHKS informs public policy in education and human services, supporting school districts' efforts to meet planning priorities and improve students' school experiences. The CHKS undergoes periodic updates and refinements to ensure its questions provide relevant information about students' educational and developmental needs. Most recently, funding from an Institute of Education Sciences grant supported the

inclusion of CSWI items on the CHKS. The timing of the grant award was exceptionally fortuitous; before the COVID-19 pandemic, the CHKS incorporated only two items assessing mental health, which were universally psychopathology-focused. With the addition of the CSWI, a more comprehensive picture of complete mental health among California youth became known. For more information about the CHKS and its administration procedures, refer to the *Online Supplemental Material, Section 2: California Healthy Kids Survey*.

Participants

The CHKS included the 10 CSWI items in the 2021/22 and 2022/23 administrations. The data were collected from 2,608 schools in 660 districts in 57 of California's 58 counties. Only students who answered all 10 questions in the CSWI and passed the quality checks were included. Table 2 provides an overview of the primary sample characteristics. For a description of two independent samples used for validation analyses, see *Online Supplemental Material, Section 3: CSWI Psychometric Characteristics (Concurrent Validity with Social Emotional Health Survey-Secondary Sample and Stability and Predictive Validity with Mental Health Continuum-Short Form Sample)*.

Districts request guardian consent for students in Grades 7, 9, and 11 to participate in the survey; they may also invite students in other grade levels (Grades 6-12) to participate. Guardian consent procedures, passive or active, vary by school district policy. Student assent is collected via the CHKS; at the start of the survey, participants were told their participation is voluntary, they may decline to answer any question they wish, and they may conclude their participation at any time. The survey administration procedures follow all relevant laws and regulations and offer valuable insights into the health and well-being of California's students. For more information on methodology, refer to the *Online Supplemental Material, Section 2: CHKS*

*Administration Procedures.****Descriptive Analyses***

The primary distribution and psychometric properties of the two measures forming the CSWI are shown in Figures 1 and 2. The BMSLSS items revealed a negative skew, with a median score of 19 on a range of 0 to 25 and an alpha coefficient of .80. Similarly, the SEDS item distribution showed a high positive skew, with a median score of only four on the 0 to 15 range, and an alpha coefficient of .89. For index development, it is crucial to ensure that the items are related to each other, which involves examining their multivariate relationships, a requirement for creating an index (Wu, 2022). As expected, the correlation between BMSLSS and SEDS was negative ($r = -.67$), verifying that the CSWI score composites measures were related but distinct.

Structural Validity

Another important consideration when developing indexes such as the CSWI is to evaluate the unidimensionality of its components, meaning that each should stand for only one dimension of a measured concept (Babbie, 2012). We tested the structural validity of each measure by performing separate confirmatory factor analyses with two randomly selected subsamples. The BMSLSS and SEDS each fit a one-factor model, holding up consistently across different gender groups (male, female, nonbinary) and grade levels (6-8, 9-10, 10-12). Tables 3 and 4 display the fit statistics, sample sizes, and Omega values for the BMSLSS and SEDS, obtained by randomly selecting subsamples from the original total sample. Furthermore, the invariance testing revealed promising results (see Tables 5 and 6), with both scales achieving full measurement invariance across grade levels and partial invariance across gender groups (male,

female, nonbinary).¹

Creating the CSWI

After confirming that the BMSLSS and the SEDS had acceptable distribution characteristics and measured related, unidimensional components, we created the CSWI by combining the students' responses to these measures. We reversed the SEDS total raw score to achieve this so that low values corresponded with positive mental health. The resulting 41-point index ranged from 0 to 40, with higher scores standing for the rank order of students' complete mental health status. Figure 3 displays the resulting distribution, which was negatively skewed, with most students reporting higher levels of complete mental health. The median score of the distribution was 29.

Concurrent and Predictive Validity

An index should be validated by testing its ability to predict indicators related to the composite score not used in its construction (Babbie, 2012). In one validation analysis, we compared the CSWI composite scores from an independent sample of 1,828 California students to their responses on the Mental Health Continuum Short Form (MHC-SF; Keyes, 2006), a 14-item scale that assesses emotional well-being (EWB), psychological well-being (PWB), and social well-being (SWB). These students' October 2022 CSWI and October 2023 CSWI composite scores were compared to their corresponding MHC-SF EWB, PWB, and SWB scores.

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We performed a confirmatory factor analysis (CFA) using the BMSLSS and SEDS to determine if they conform to a one-dimensional model. With all 10 items loaded onto a single factor, the one-factor model demonstrated inadequate fit indices (CFI, .793; RMSEA, .139; SRMR, .109). The correlation between the two latent factors (Distress and Wellness) is -.61. Since the one-factor model did not fit well and the correlation between the latent factors is high but not very high, it supports our argument that they are related but distinct measures.

The same-year ($r_{range} = .64-.74$) and the one-year ($r_{range} = .50-.52$) concurrent validity coefficients showed that students' CSWI scores were strongly and consistently related in the expected direction to their MHC-SF EWB, PWB, and SWB scores. See the *Online Supplemental Material, Section 3: Concurrent and Predictive Validity Coefficients, Table SR3.6* for documentation and more CSWI validation analyses.

In a second validation analysis, we performed a Receiver Operating Characteristic (ROC) analysis to evaluate how well the CSWI composite predicted the presence of two common indicators of mental health problems from the Youth Risk Behavior Surveillance Survey (YRBS): past-year chronic sadness (no/yes) and past-year suicidal ideation (yes/no; Centers for Disease Control, 2023). Based on the responses of an independent sample of 78,769 California secondary students for both chronic sadness and suicidal ideation, the AUC value of 0.86 shows that the CSWI has excellent predictive ability, balancing sensitivity and specificity. For more documentation and to review more validation analyses, see the *Online Supplemental Material, Section 4: CSWI Multitier Applications, Figure SR4.1* for past-year chronic Sadness and *Figure SR4.2* for Year Suicidal Ideation

CSWI Clinical Interpretation Considerations

Creating an index like the CSWI involves data reduction. Hence, it is necessary to evaluate if its ranking information has sufficient sensitivity to warrant its use in assessing young people's complete mental health status. For instance, research applications of the DFM approach have typically found four categories—complete mental health, troubled, symptomatic but content, and vulnerable—creating these groups by applying hi-lo cut scores. Applications of this classic DFM data reduction procedure *yield just four scores*. In comparison, while the CSWI also involves data reduction, its DFM-based index has 41 resulting values, producing a 10-fold

increase in the potential differentiation of its rank order of young people's bidimensional mental health, compared to the classic DFM classification procedure.

Nevertheless, more than the CSWI composite alone is needed for meaningful clinical interpretation. For example, combinations of high and low BMSLSS/SEDS responses can produce identical raw scores (see Table 7) and their related standard scores. Due to the skewed nature of these BMSLSS/SEDS distributions, there are fewer counterintuitive patterns (e.g., high satisfaction/ high distress) compared to patterns more closely aligned with the expected patterns (e.g., low satisfaction/high distress or high satisfaction/low distress). The practical outcome is that while there is some ambiguity in interpreting the meaning of CSWI values, scores on the lower end of the continuum are more likely to be students who responded with low life satisfaction and moderate-to-high levels of distress. Conversely, students on the upper end of the CSWI continuum are more likely to have moderate-to-high levels of life satisfaction and low levels of distress. The CSWI's distribution characteristics means its scores produce a relative rank order of individual students in terms of their complete mental health. Nonetheless, even more validation evidence is needed. As we illustrate in the next section, evaluating the CSWI's practical clinical value requires evidence that its rank order values discriminate among students on other quality of life and developmental indicators.

The DFM Response Matrix

While the CSWI offers a flexible indicator for the complete mental health of young people, it is essential to keep in mind that combining BMSLSS and SEDS scores into a single-point index involves data reduction. The 41 CSWI values represent 416 unique response patterns with some duplicated raw score values. Table 7 displays the raw score values, while Table 8 shows the corresponding standard score values for all 416 CSWI response patterns. When using

the CSWI for individual student clinical purposes, users should ascertain where the student's response falls on the two-dimensional CSWI conjoint response array (refer to the *Online Supplemental Material, Section 1: Obtaining the CSWI Total Point Index Score*). Because two students with the same CSWI total raw score may have distinct social-emotional or clinical profiles, users should not rely solely on the CSWI index but also consider its response array zone. This consideration is vital as it provides a more nuanced understanding of the student's wellness status (See *Online Supplemental Material, Section 6: Answering your CSWI Questions, Dual Factor Model Zonal Interpretation Implications*).

Concern about duplicative raw scores is tempered by observing the distribution of the students for all 416 BMSLSS/SEDS patterns. The cells in Table 9 show the number of students per 1000 in the CSWI response array. The upper left quadrant responses reflect the ideal positive mental health pattern: high life satisfaction and low psychological distress. Most students in the CSWI sample responded in this direction. Noteworthy is that 40% of the 416 BMSLSS/SEDS response patterns had less than 1@1000 students. Although CSWI scores in clinically different areas of the BMSLSS/SEDS array produce identical scores, their skewed distribution substantially limits their occurrence.

By including the BMSLSS and SEDS in the CHKS core module, we obtained a large enough sample to observe CSWI response patterns at a population level. Additionally, we could examine students' responses in the 416 CSWI response patterns on other indicators of interest. Table 10 gives an example of this; it shows the percentage of students who responded *yes*, showing that they had experienced chronic sadness in the past year. Looking at Table 10, we see that 85% of students with moderate BMSLSS (e.g., raw score = 10) and high SEDS (e.g., raw score = 11) response patterns reported chronic sadness. In comparison, only 13% of students

with the high BMSLSS (e.g., raw score = 20) and moderate SEDS (e.g., raw score = 3) response pattern did so. Cells with shaded values have percentages at/below the sample average of 34%. Blank cells show low endorsement rates (less than 1@1000 students). For tables showing comparable CSWI cell-level percentages for past-year suicidal ideation, school belonging, and optimism, refer to the *Online Supplemental Material, Section 4: Evaluating and Interpreting CSWI Responses*. Also reported in the *Online Supplemental Material* are CSWI responses for age, gender, and ethnic identification to aid in evaluating students' response patterns. The *Online Supplemental Material* also has interpretation guidance for the CSWI as a point index and links student response patterns to other mental health indicators.

CSWI Applications

With only 10 items conjointly normed with more than 600,000 students, the CSWI provides a standard index applicable for gauging complete mental health among populations, small groups, and individual students, as well as research study samples. It is an open-access tool adaptable for population-focused surveillance, schoolwide universal wellness screening, individual student social-emotional assessments, and progress monitoring. To circumnavigate some of the known practical barriers to schools' adoption of universal screening, the CSWI offers companion resources for screening implementation, including guidance for administration, scoring, interpretation, and follow-up intervention decision-making. Below, we provide details for each of these uses. Refer to the *Online Supplement Material, Section 5: Assessment and Counseling Resources for Tier 2 and 3 Services* for detailed application information.

Population Health Surveillance

The state of California uses the CSWI as a population-based indicator of the complete mental health of young people. California began working on creating measures of positive

mental wellness in adolescents even before the COVID-19 pandemic. However, the pandemic hastened the effort to co-validate the BMSLSS and SEDS measures, as there was a need to compare the complete mental health of young people before and after the pandemic. When California districts and schools obtain [CHKS data reports](#), they receive details of their student populations' complete mental health. They can now use the CSWI as a baseline indicator for tracking complete mental health population trends. The CSWI provides a continuous point of reference to evaluate if complete mental health is improving or declining and to monitor trends across all student demographics. Other government agencies hosting public health surveillance surveys for school students may wish to incorporate the 10 CSWI items into their surveys.

School Universal Screening

The CSWI can be used as a school-adopted universal screening instrument meant to help the school gauge and communicate about the complete mental health of their students. Schools wishing to use the CSWI as a screening instrument must have participants add identifying information, such as student I.D. information. After administration, school leaders can use the CSWI details to share with guardians the complete mental health status of their children, thereby ensuring that the resources placed into universal screening begin to be seen as pertinent to all young people and their families rather than to a small subsection of the school population.

Of course, the CSWI can also help school teams decide which students could benefit from social, emotional, and behavioral support beyond that provided by the universal supports (Tier 1) installed by the school. Care teams would then examine results, ranking students by low to high levels of complete mental health. In addition to a global review of results to gauge whether the school's student services programs are meeting the students' emotional and behavioral health needs, the school care team members also reach out to students with CSWI

scores below a threshold decided by the team. This outreach allows for early contact with young people who may be experiencing symptoms of psychological distress, low life satisfaction, or both. Paper-and-pencil survey forms, sample survey administration options, related data collection, and scoring procedural guidance are in the *Online Supplemental Material, Section 6: Answering Your CSWI Questions*.

Individual Social-Emotional Assessment

The CSWI can be incorporated into assessment plans for students undergoing psychoeducational assessment to decide if they qualify for special education support. The CSWI could be administered as a brief social-emotional measure as part of an individualized social-emotional assessment. After scoring the CSWI, the school psychologist could decide whether more social-emotional assessment was necessary. In cases where the CSWI score is high, showing both low psychological distress and high life satisfaction, a school psychologist can refer to the evidence suggesting that the risk of mental health problems is low, and they can use their best professional judgment to decide whether more evaluation is necessary. The CSWI is also helpful for mental health intervention planning assessments, such as those essential for Educationally Related Mental Health Services (ERMHS) in California. For more resources related to Tier 2 and Tier 3 uses of the CSWI, refer to the *Online Supplemental Material, Section 6: How Does the CSWI Fit with Other Wellness Measures?*

Progress Monitoring

After matching young people to targeted (Tier 2) or intensive (Tier 3) supports, care teams can monitor student response to intervention by having assigned students periodically complete the 10-item CSWI. For instance, if the student receives counseling services as part of their treatment plan, the provider can regularly ask them to complete the CSWI. The care team

then tracks their CSWI responses to decide whether a positive trend exists. For students receiving support as part of an Individualized Education Program (IEP), the CSWI could be used to conceptualize social-emotional goals and monitor their progress toward achieving them. The *Online Supplemental Material* gives an example of using the CSWI four times a year to monitor individual students' progress (see *Supplemental Material, Section 1: Obtaining the CSWI Total Point Index Score, Table SRI.8 Example Tracking CSWI Responses Over One School Year*).

Research Applications

In addition to its school-based practice utility, the CSWI can be helpful to researchers. The CSWI can be used as a measured variable in data analyses and for evaluating the effectiveness of prevention and intervention programs. Researchers can increase sample comparability by including the CSWI's 10 items in their protocols and using a standard cut score (see *Online Supplement Material, Section 6: How does the CSWI contribute to the Dual Factor Model?*) to classify participants into DFM subgroups. This research convention would make evaluating classification stability easier when conducting cross-sample comparisons. This convention does not preclude using other measures but instead offers a way to assess the characteristics of smaller opportunity samples. For an illustration of this approach with the World Health Organization's Health Behavior in School-Aged Children Survey (Bersia et al., 2022) used in 50 countries worldwide, see *Online Supplemental Material, Section 6: Health Behavior in School-Aged Children Studies*.

Future Directions and Conclusion

The state of California has adopted the CSWI via the CHKS to monitor the complete mental health of young people living in the state and better understand their ongoing and emerging mental health needs. The CSWI is publicly available to any school that wishes to adopt

it for universal complete mental health screening or any practitioner's use for individual social-emotional assessment purposes. Its use is supported by substantial psychometric evidence and has high practical utility. Because the CSWI has been validated with an extensive sample of California youth, 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 psychological distress/life satisfaction response pattern.

Thoughtful communication about the CSWI could help educators overcome some of the barriers that are known to interfere with the adoption of universal screeners, especially those cultural barriers rooted in mental health stigma. In contrast to screening for specific disorders, such as depression, or specific risk behaviors, such as suicidal thoughts and behaviors, educators using the CSWI are looking for the building blocks of resilience. In the complete mental health paradigm, educators “flip the script” to communicate with invested community members, including caregivers, about their student's well-being and thriving, thereby potentially generating more enduring community support for the value of universal screening.

Authors Note

This article and the *Online Supplemental Material* are original jointly prepared works. We encourage the use of the CSWI for research and school and community mental health projects meant to support young people as they build fulfilling and meaningful lives. When using the CSWI for research, please adhere to proper human subject protocols, seek informed consent from the young people and their guardians, and honor their agency, dignity, and confidentiality. We are eager to hear about your experiences with the CSWI and any insights gained. Your feedback and suggestions are greatly appreciated.

Competing Interests

All authors declare that they have no conflicts of interest.

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Ethical Approval

The procedures employed in this study were reviewed and approved by the University of California Santa Barbara Human Subjects Committee, which considered the principles for the protection of human subjects in research outlined in the Belmont Report of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and the protections provided in 45 CFR Part 46.

Consent to Participate

All guardians and student participants in this study provided informed consent following the procedures established by the California Department of Education over the past 25 years. A detailed description of the consent procedures can be found in the *Online Supplemental Information: Section 2, California Healthy Kids Survey Description, Survey Procedures Supplemental Information*.

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Table 1

California Student Wellness Index Items

Brief Multidimensional Life Satisfaction Scale (BMSLSS)

Introduction: Generally, how satisfied are you with your life?

I would describe my satisfaction with my FAMILY life as.

I would describe my satisfaction with my FRIENDSHIPS as.

I would describe my satisfaction with my SCHOOL EXPERIENCE as.

I would describe my satisfaction with MYSELF as.

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

Responses: 0 = Very Dissatisfied, 1 = Moderately Dissatisfied, 2 = Mildly Dissatisfied, 3 = Mildly Satisfied, 4 = Moderately Satisfied, 5 = Very Satisfied

Social Emotional Distress Scale (SEDS)

Introduction: In the past month:

It was hard for me to get excited about anything.

I felt sad and down.

I had a hard time relaxing.

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

I was easily irritated.

Responses: 0 = Not true of me, 1 = A little true of me, 2 = Pretty much true of me, 3 = Very true of me

Table 2

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

Total Sample Descriptive Information	N = 626,940	
	n	%
<i>Grade</i>		
6	19156	3.1
7	178736	28.6
8	28068	4.5
9	174949	28.0
10	34899	5.6
11	152010	25.3
12	23665	3.8
Other/Ungraded	14247	2.3
Declined to answer	1210	0.2
<i>Gender Identification</i>		
Male	307741	49.2
Female	292429	46.8
Nonbinary	13129	2.1
Another Identification	11563	1.9
Declined to answer	2078	0.3
<i>Ethnicity (could select more than 1)</i>		
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
<i>Living circumstances</i>		
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
<i>Parent Education</i>		
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

Note. This Table includes students who answered all five BMSLSS and 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.

Table 3

*Brief Multidimensional Student Life Satisfaction Scale (BMSLSS) One-Factor Model Fit**Statistics*

Sample	<i>N</i>	χ^2	<i>df</i>	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
Sample 1 Grade 6-8	14,053	415.567*	5	.970	.029	.076 [.071, .080]	0.83
Sample 1 Grade 9-10	13,255	355.932*	5	.973	.027	.073 [.067, .079]	0.83
Sample 1 Grade 11-12	11,892	327.353*	5	.972	.028	.074 [.068, .080]	0.82

Note. CFI = Comparative Fit Index, SRMR = Standardized Root Mean-Square Residual, RMSEA = Root Mean-Square Error of Approximation.

* $p < .001$.

Table 4

Social Emotional Distress Scale (SEDS) One-Factor Model Fit Statistics

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

Note. CFI = Comparative Fit Index, SRMR = Standardized Root Mean-Square Residual, RMSEA = Root Mean-Square Error of Approximation.

* $p < .001$.

Table 5

Brief Multidimensional Student Life Satisfaction Scale (BMSLSS) Invariance

Invariance Comparison (Sample 1)	χ^2	<i>df</i>	SRMR	RMSEA 90% [CI]	CFI	Model Comparison	$\Delta S-B\chi^2$	Δdf	ΔCFI
<i>Across Grade</i>									
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
<i>Across Gender</i>									
Model 1: configural invariance	1122.511*	10	.025	.076 [.073, .080]	.973				
Model 2: metric invariance	1201.503*	14	.028	.067 [.064, .069]	.972	2 vs. 1	58.79*	4	-.001
Model 3: scalar invariance	1881.696*	31	.034	.068 [.065, .070]	.961	3 vs. 2	672.97*	8	-.008
Model 3a: partial invariance (free 1 parameter, myself)	1753.146*	29	.033	.068 [.065, .070]	.963	3a vs. 2	445.97*	6	-.008

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

* $p < .001$.

Table 6

Social Emotional Distress Scale Invariance

Invariance Comparison (Sample 1)	χ^2	<i>df</i>	SRMR	RMSEA 90% [CI]	CFI	Model Comparison	$\Delta S-B\chi^2$	Δdf	ΔCFI
<i>Across Grade</i>									
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
<i>Across Gender</i>									
Model 1: configural invariance	249.371*	10	.009	.035 [.032, .038]	.992				
Model 2: metric invariance	721.617*	14	.038	.051 [.049, .054]	.985	2 vs. 1	593.69*	4	-.007
Model 3: scalar invariance	1582.247*	18	.048	.067 [.065, .070]	.975	3 vs. 2	1052.77*	4	-.010
Model 3a: partial invariance (free 1 parameter, easily irritated)	1160.396*	29	.042	.055 [.052, .057]	.985	3a vs. 2	357.03*	6	.004

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

* $p < .001$.

Table 7

CSWI Raw Total Score Values for 416 BMSLSS/SEDS Response Patterns

		Not Like Me					A Little Like Me					Pretty Much Like Me					Very Much Like Me
	A SEDS	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	B SEDS	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
BMSLSS	25	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25
Very Satisfied	24	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24
	23	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23
	22	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22
Satisfied	21	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21
	20	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
	19	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19
	18	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18
	17	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
	16	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
Little Satisfied	15	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15
	14	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14
	13	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
	12	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
	11	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11
Little Dissatisfied	10	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
	9	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9
	8	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8
	7	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7
	6	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6
Dissatisfied	5	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5
	4	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4
	3	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3
	2	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
	1	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Very Dissatisfied	0	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

Note. Cell values are the CSWI raw total score for the 416 possible SEDS/BMSLSS response patterns. The **darker shaded cells** show the 16 BMSLSS/SEDS response patterns with an identical raw score of 25. A SEDS = original SEDS total raw score values. B SEDS = Reversed SEDS total raw score values used to derive the CSWI.

Table 8

CSWI Standard Score Values for 416 BMSLSS/SEDS Response Patterns

		A				B				C				D						
		SEDS	25th			50th			75th										SEDS	
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	N		
Very Satisfied	BMSLSS	25	122	120	118	117	115	113	111	109	108	106	104	102	100	98	97	95	81	
		24	120	118	117	115	113	111	109	108	106	104	102	100	98	97	95	93	42	
		23	118	117	115	113	111	109	108	106	104	102	100	98	97	95	93	91	54	
		22	117	115	113	111	109	108	106	104	102	100	98	97	95	93	91	89	64	
		75th	21	115	113	111	109	108	106	104	102	100	98	97	95	93	91	89	73	
Satisfied		20	113	111	109	108	106	104	102	100	98	97	95	93	91	89	88	86	129	
		50th	19	111	109	108	106	104	102	100	98	97	95	93	91	89	88	86	85	
			18	109	108	106	104	102	100	98	97	95	93	91	89	88	86	84	82	74
			17	108	106	104	102	100	98	97	95	93	91	89	88	86	84	82	80	66
			16	106	104	102	100	98	97	95	93	91	89	88	86	84	82	80	78	57
Little Satisfied	25th	15	104	102	100	98	97	95	93	91	89	88	86	84	82	80	78	77	59	
			14	102	100	98	97	95	93	91	89	88	86	84	82	80	78	77	75	42
			13	100	98	97	95	93	91	89	88	86	84	82	80	78	77	75	73	35
			12	98	97	95	93	91	89	88	86	84	82	80	78	77	75	73	71	30
			11	97	95	93	91	89	88	86	84	82	80	78	77	75	73	71	69	23
Little Dissatisfied		10	95	93	91	89	88	86	84	82	80	78	77	75	73	71	69	68	25	
		9	93	91	89	88	86	84	82	80	78	77	75	73	71	69	68	66	15	
		8	91	89	88	86	84	82	80	78	77	75	73	71	69	68	66	64	12	
		7	89	88	86	84	82	80	78	77	75	73	71	69	68	66	64	62	9	
		6	88	86	84	82	80	78	77	75	73	71	69	68	66	64	62	60	7	
Dissatisfied		5	86	84	82	80	78	77	75	73	71	69	68	66	64	62	60	59	7	
		4	84	82	80	78	77	75	73	71	69	68	66	64	62	60	59	57	3	
		3	82	80	78	77	75	73	71	69	68	66	64	62	60	59	57	55	2	
		2	80	78	77	75	73	71	69	68	66	64	62	60	59	57	55	53	1	
		1	78	77	75	73	71	69	68	66	64	62	60	59	57	55	53	51	1	
Very Dissatisfied	BMSLSS	0	77	75	73	71	69	68	66	64	62	60	59	57	55	53	51	49	4	
		<i>N</i>	199	86	90	87	76	79	59	53	49	45	45	29	27	23	17	36	1000	

Note. A = Not like me, B = A little like me, C = Pretty much like me, D = Very much like me. Cell values are standard score equivalents ($M = 100, SD = 15$) for the 416 SEDS/BMSLSS response patterns. The darker shaded cells show the standard score of 102 for the combined pattern of BMSLSS (raw score = 18) + SEDS (original not reversed, raw score = 4).

Table 9

Expected Number of Students per 1000 for 416 BMSLSS/SEDS Response Patterns

		A					B					C					D					
		SEDS	25th			50th			75th										SEDS			
	BMSLSS	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	<i>N</i>				
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							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	2	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	1	2	9			
		6											1	1	1	1	1	1	7			
Dissatisfied		5	1															1	7			
		4																1	3			
		3																1	2			
		2																	1			
		1																	1			
Very Dissatisfied		0	E														1	4				
	BMSLSS	<i>N</i>	199	86	90	87	76	79	59	53	49	45	45	29	27	23	17	36	1000			

Note. A = Not like me, B = A little like me, C = Pretty much like me, D = Very much like me. **E = 9 @ 1000** students answered zero to all 10 items (lowest life satisfaction and lowest distress, a counterintuitive pattern. For more information, see the *Online Supplemental Material, Section 3, CSAWI Sample Response Quality Checks*. Blank cells = less than 1:1000 students gave that BMSLSS/SEDS response pattern.

Table 10

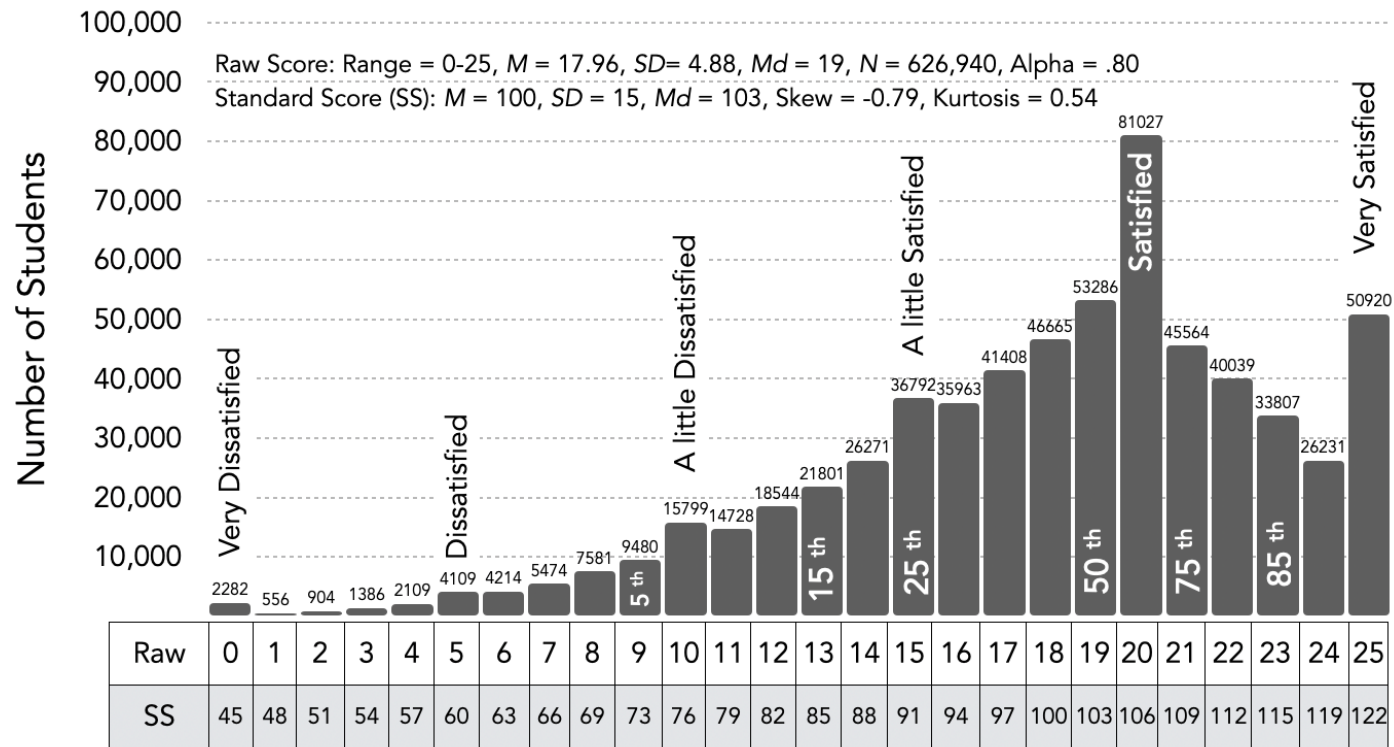
Percent of Students Reporting Past-Year Chronic Sadness for 416 BMSLSS/SEDS Response Patterns

		A					B					C					D				
		SEDS	25th			50th				75th									SEDS		
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	N			
Very Satisfied	BMSLSS	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	74	80	79	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	80	80	85	90	91	94	90	90	25		
		9	16	30	30	37	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		
		6											87	90	92	95	97	95	7		
Dissatisfied		5	12															92	7		
		4																94	3		
		3																96	2		
		2																	1		
		1																	1		
Very Dissatisfied	BMSLSS	0																81	4		
	N	199	86	90	87	76	79	59	53	49	45	45	29	27	17	17	36	1000			

Note. A = Not like me, B = A little like me, C = Pretty much like me, D = Very much like me. **Darker shaded cells ≤ 34%**, the average percentage of students responding yes to this question: *During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?* Blank cells = less than 1:1000 students gave that BMSLSS/SEDS response pattern.

Figure 1

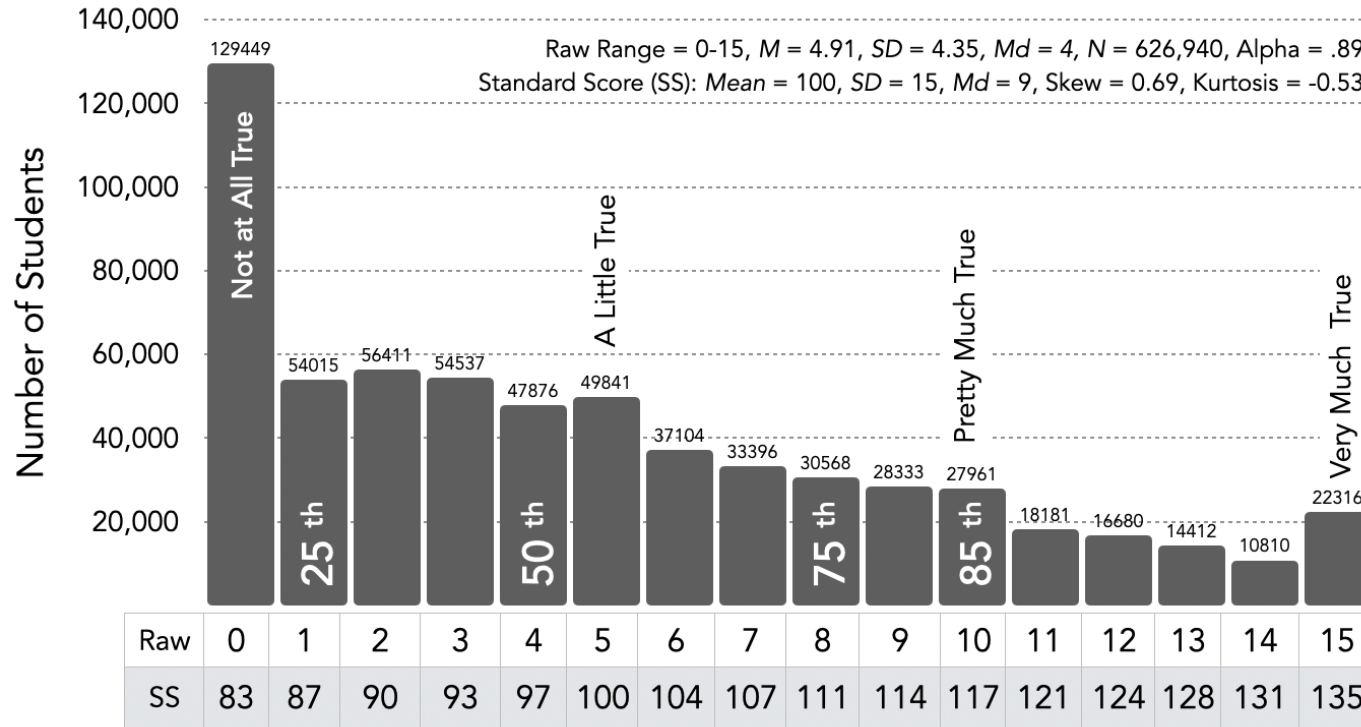
Brief Multidimensional Student Life Satisfaction Scale (BMSLSS) Raw/Standard Score Distribution



Note. SS = standard score ($M = 100$, $SD = 15$). Total scores of 18-20 are near the median of the distribution.

Figure 2

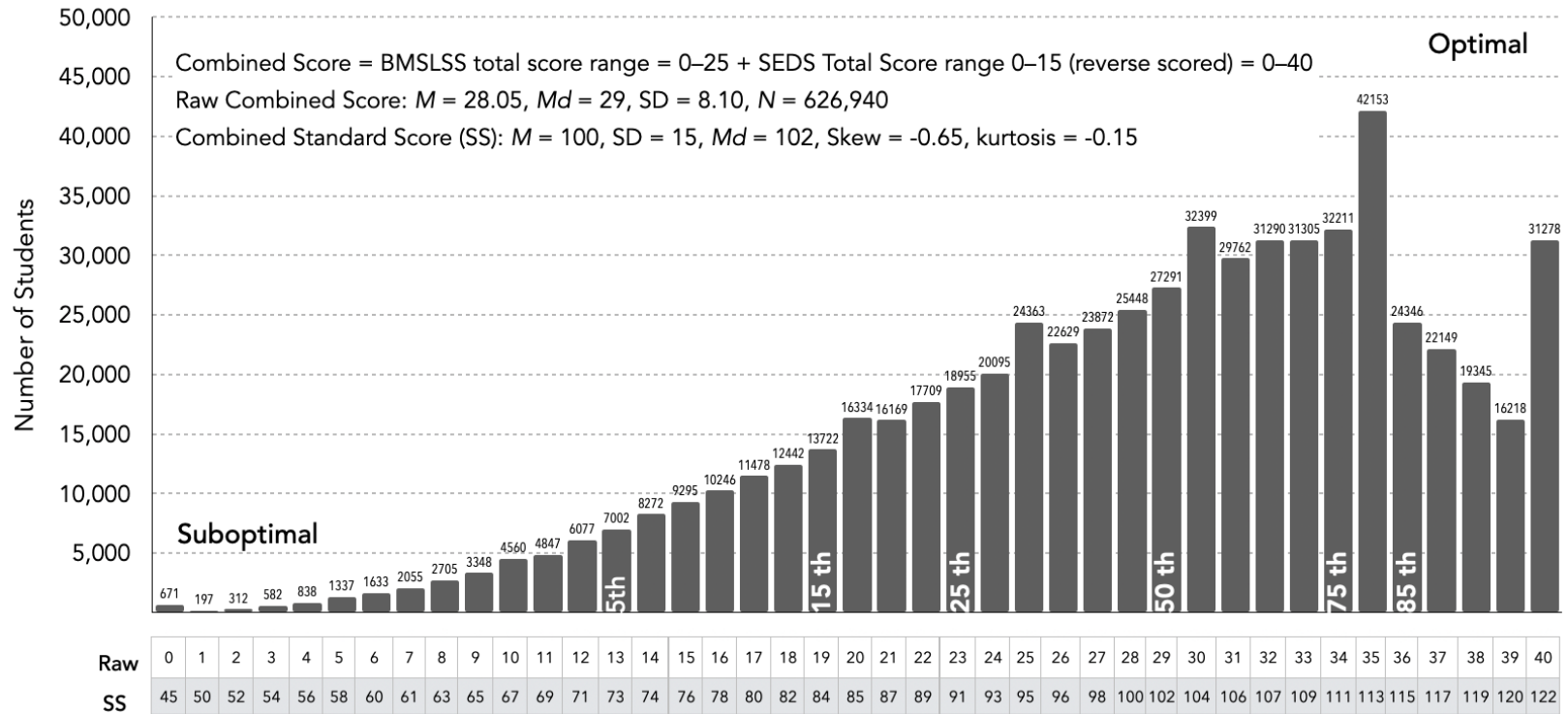
Social Emotional Distress Scale (SEDS) Raw/Standard Score Distribution



Note. SS = standard score ($M = 100$, $SD = 15$). A total score of 4 is near the median.

Figure 3

California Student Wellness Index (CSWI) Raw/Standard Score Distribution



Note. SS = standard score ($M = 100$, $SD = 15$). Scores of 28-30 are near the median.