

Research Reader 2018



This document summarizes research that has been conducted based on, or about, the California Department of Education's suite of three *California School Climate, Health, and Learning Surveys* (Cal-SCHLS) for students (the California Healthy Kids Survey), school staff, and parents. Studies are categorized into four sections:

- Articles and reports about students and schools
- Factsheets
- Research conducted outside of the United States
- Psychometric studies of the instruments

Within California, the CalSCHLS system is the largest effort in the nation to engage local schools/communities statewide in a data driven improvement process to: (1) identify the strengths and needs of students and schools; and (2) improve school climate and programmatic efforts to address the identified needs and promote academic achievement, positive development, and well-being for all youth. The survey is currently administered by over 70% of school districts to over 1.2 million students over a two-year period. Survey items have also been administered in West Virginia, Louisiana, and New Mexico and research studies across the nation and internationally, including a National Evaluation of the federal Safe Schools/Healthy Students Program.

The California Healthy Kids Survey (CHKS) was highlighted as a model in a white paper released by the US Department of Education, [*Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act*](#).

The surveys have been widely used in research because of the large size and value of the system's database, and because they are pioneering, psychometrically-robust efforts to assess school climate, resilience-promoting protective factors, and student social-emotional learning and health. Research has consistently supported its theoretical framework linking the school environment to student engagement and to positive academic and health outcomes. Most of the research falls into five areas:

- The characteristics of specific population groups and school types;
- How health, safety, and educational factors are related;
- How school developmental supports and other school climate factors are related to academic achievement;
- How risk and protective factors are related; and
- The effects of specific programmatic efforts.

Subgroup analyses of CHKS data can be conducted based on a wide range of demographic characteristics — e.g., age, gender, race/ethnicity, socio-economic status, living situation (e.g., family configuration, foster care, homeless), military connectedness, English language proficiency — as well as by migrant and afterschool program participation.

The surveys were developed by WestEd under contract from the California Department of Education beginning in 1997.

Variables Assessed

School Climate

- Student, teacher, and parental engagement in learning
- Academic mindset, expectations, and rigor
- School safety (social-emotional & physical), violence, victimization (bullying)
- Discipline and order; clarity of rules and expectations
- Student connectedness to school (belonging), engagement, and motivation
- Positive interpersonal relationships among and between students, staff, and parents.
- Opportunities for meaningful participation, decision-making, and engagement in the school.
- Substance use on campus
- Respect for diversity
- School supports for staff and parents; staff professional development needs
- Physical environment
- Practices, policies, programs, and services related to student performance, behavior, and health.

Social-Emotional Learning/Health and Resiliency Factors

Developmental Supports / Resilience-promoting Protective Factors

- Caring Relationships Scales (school, home, community, peers)
- High Expectations Scales (school, home, community, peers)
- Opportunities for Meaningful Participation (school, home, community)

Self-Awareness and Self-Efficacy

- Self-Efficacy Scale
- Self-Awareness Scale

Self-Management

- Persistence Scale
- Inventory of Student Motivation
- Emotional Regulation Scale
- Behavioral Self-Control Scale
- Goals and Aspirations Scale

Relationship Skills and Supports

- Positive Peer Relationships Scale
- Cooperation and Communication Scale

Social Awareness

- Empathy Scale
- Respect for Diversity Scale

Responsible Decision Making

- Problem Solving Scale

Risk Factors

- Substance Use
- Depression risk, suicide contemplate, and emotional health
- Physical health
- Gang involvement
- Relationship violence and cyber bullying

CHKS Research by Topics

Academic Performance

Benbenishty et al. 2016, 2018; Berkowitz et al. 2017; CalS3 factsheets 1-5; CHKS factsheets 2, 3, 8, 9, 13, 14; Hanson et al. 2003, 2004, 2005, 2011; Jennings 2003; Juvonen 2010; O'Malley et al. 2015; Vought et al. 2013; Wormington et al. 2012, 2016.

Alcohol and Drug Use

DePedro et al. 2017; Ferguson & Xie 2012; Gilreath et al. 2013, 2014; Kim & McCarthy 2006; Lewis & Ferguson 2014; Shekhtmeyster et al. 2011; Shih et al. 2010; Sullivan et al. 2015; Wong et al. 2004; Wormington et al. 2016).

Alternative Education

Austin et al. 2008; Ruiz de Velasco et al. 2008

Attendance, School (Absenteeism, Truancy)

Baams et al. 2017; CHKS factsheets 4, 6, 10, 11; Ferguson & Xie 20013; Yang et al. 2013

Bullying and Harassment

Baams et al. 2017; CHKS factsheets 4, 10; Day et al. 2016; Felix et al. 2009; Felix & You 2010; Fullchange & Furlong 2016; Gilreath et al. 2013b; Hirschtritt et al. 2015; Juvonen 2010; Lenzi et al. 2015; Lewis et al. 2017; O'Brennan & Furlong 2010; O'Shaughnessy et al. 2004; Russell et al. 2011, 2012, 2015; Wormington et al. 2016; You et al. 2008. *See also Safety & Violence.*

Dating Violence

Loeb et al. 2014

Foster Youth

Benbenishty et al. 2018; CHKS factsheet 6; Davidson-Arad & Navaro-Bittin 2015; Lynch 2007; O'Malley et al 2015

Gang Membership

Estrada et al. 2013, 2014, 2017; Ferguson 7 Xie 2012; Lenzi et al. 2015

Homeless Youth

Ferguson & Xie 2012; Lewis & Ferguson 2014; O'Malley et al. 2015

Military-connected Students

Cederbaum et al. 2013; DePedro et al. 2015; Estrada et al. 2017; Gilreath, T.D., et al. 2013, 2013b; Sullivan et al 2015.

Physical Health

Amaral et al. 2011; Anon et al. 2014; California Dept of Health Services 2004 (Asthma); Davis et al. 2006, 2007 (Asthma); Davis & Carpenter 2009 (Nutrition/Obesity); Grier & Davis 2013 (Nutrition/Obesity); Madsen et al. 2011; Stone et al. 2013; Yang et al. 2014

Pregnancy

McDonnell et al. 2007

Protective Factors

Anon et al. 2014; Depedro et al, 20015, 2016, 2017; Estrada et al. 2013; Ferguson & Xie 2012; Hanson et al. 2008; Lenzi et al. 2015c; Madsen et al. 2011; O'Malley et al. 2015; Stone et al. 2013; Whitaker et al. 2016; Yang et al. 2014.

Racial/ethnic group differences

Anon et al. 2014; CHKS Factsheets 8, 9, 13, 14; CSCS Factsheets 1, 2; DePedro et al. 2016; Gandara 2011; Hanson & Trinidad 2003; Hanson et al. 2011; Kim & McCarthy 2006; Le et al. 2009; McCarthy et al. 2003; Shih et al. 2010; Yang et al. 2014; Voight 2013; Wong et al. 2004; Yang et al. 2013)

Relationships

Guhn et al. 2012, Hanson et al. 2004, 2011; Jennings 2003; Le et al. 2009; Stone et al. 2013; Whitaker et al. 2016; Worthington et al. 2012, 2016

Resilience and Youth Development

Benard & Slade 2009; CalS3 factsheets 1, 2; Castro-Olivo et al. 2013; Eisman et al. 2017; Estrada 2010; Davidson-Arad & Navaro-Bittin 2015; DePedro et al. 2017; Guhn et al. 2012; Hirschtritt et al. 2015; Jennings 2003; Le et al. 2009; Lenzi et al. 2015b, 2015c; Madsen et al. 2011; Oberle et al. 2014; Sharkey et al. 2008; You et al. 2008; Zheng et al. 2003

Risk Behaviors (General)

Dowdy et al. 2013; Estrada et al. 2013; Hanson et al. 2004, 2005; Sullivan et al. 2015; Yang et al. 2014

Safety & Violence, School

Benbenishty et al. 2016; Berkowitz et al. 2015; Castro-Olivo et al. 2013; Estrada et al. 2013, 2017; Furlong et al. 2001; Gilreath et al. 2013b. See also Bullying & Harassment.

School Climate

Benbenishty et al. 2016; Berkowitz et al. 2017; CalS3 factsheets 1-6; CSCS factsheets 1-2; Hanson, Austin & Lee Bayha 2004; DePedro et al. 2015; Hanson, Austin & Zheng 2011; O'Malley et al. 2015; Stone et al. 2013; Voight, Austin & Hanson 2013; Ward & Gersten 2013; Whitaker et al. 2016)

School-based Health Centers

Anon et al. 2014; Amaral et al. 2011; Lewis et al. 2017; Stone et al. 2013

Socio-economic Differences

Berkowitz et al. 2017; Oberle et al. 2014

Sexual Orientation and Gender Identity

Day et al. 2016; DePedro et al. 2017; Perez et al. 2017; Russell et al. 2011, 2012, 2015; Whitaker et al. 2016.

Social-emotional Learning and Mental Health

Amaral et al. 2011; Anon et al. 2014; Cederbaum et al. 2013; CHKS factsheets 11, 12; DePedro et al. 2015; Dowdy et al. 2013; Fullchange & Furlong 2016; Furlong et al. 2009; Hirschtritt et al. 2015; Lenzi et al. 2015b; Perez et al. 2017; Rhee et al. 2001; You et al. 2008; Whitaker et al. 2016

Student Engagement and School Connectedness

Day et al. 2016; DePedro et al. 2016, 2017; Jennings 2003; Oberle et al. 2009; O'Brennan & Furlong 2010; Sharkey et al. 2008; Smith et al. 2010; Wormington et al. 2012, 2016; Yang et al. 2014; You et al. 2008; CalS3 Factsheet #5)

Tobacco & E-cigarette Use

Bostean et al. 2015; CHKS factsheets 2, 5; Kim & McCarthy 2006; McCarthy et al. 2003; Wong et al. 2004; Yang et al. 2018)

I. CHKS RESEARCH

Amaral, G., et al. (2011). Mental health characteristics and health-seeking behaviors of adolescent school-based health center users and nonusers. *Journal of School Health, 81, 138-145.*

Using the CHKS a survey was conducted among 4640 studies in grades 9 and 11 to compare the mental health risk profile and health utilization behaviors of adolescent school-based health center (SBHC) users and nonusers. Controlling for demographic variables and general health status, students who reported feelings of sadness, trouble sleeping, suicide ideation, alcohol or marijuana use, the recent loss of a close friend or relationships, or other difficult life event were significantly more likely to seek SBHC services than their peers. These findings suggest that SBHCs are able to attract students with the most serious mental health concerns and can play an important role in meeting needs that might otherwise go unmet.

Anon, Y., Ong, S., & Whitaker, K. (2014). School-based mental health prevention for Asian American adolescents: Risk behaviors, protective factors, and service use. *Asian American Journal of Psychology, 5(2), 134-144.*

This study drew on epidemiological data from the California Healthy Kids Survey administered in a large urban school district to evaluate the implementation of a school-based mental health (SBMH) prevention initiative at 15 high schools. The purpose of this research was to measure the prevalence of student risk factors and protective factors by race and ethnicity and assess the engagement of Asian youth in prevention services. Results indicated statistically significant racial and ethnic group differences in the prevalence of risk factors (self-reported depressive symptoms, substance use, externalizing behavior at school, failing grades, truancy, and discrimination by school adults and peers), and protective factors (school, home, and peer assets). Controlling for gender, family structure, risk behaviors, protective factors, and school composition, Black (OR = 2.31, $p < .001$), Latino (OR = 1.36, $p < .05$), and multiracial (OR = 1.42, $p < .01$) students had significantly higher odds of using their SBMH program than Asian students. Among Asian ethnic subgroups, Cambodian youth (OR = .62, $p < .01$), were the only group that had lower odds of accessing school-based services than their Chinese peers. Findings suggest that, to reach underserved Asian American adolescents, prevention programs must address cultural and contextual influences on adolescent help seeking when program outreach and enrollment strategies are being developed. Additional research in the field of prevention science is needed to understand the mechanisms driving patterns of prevention service use by race and ethnicity.

Armstrong, K., Bush, H., & Jones, J. (2010). Television and video game viewing and its association with substance use by Kentucky elementary school students, 2006. *Public Health Reports 125(3), 433-440.*

We sought to determine if the number of hours elementary school students viewed television (TV) and video games is associated with substance use. We distributed the California Healthy Kids Survey Elementary School Questionnaire to elementary schools in Kentucky in 2006. A total of 4,691 students, primarily fourth and fifth graders, completed the survey. The students provided responses to questions on topics such as drug use, alcohol use, TV and video game viewing time, and their home life. We analyzed the survey using Chi-square tests and logistic regression. Approximately one-third of respondents indicated substance use, which was defined as alcohol use, illegal drug use, smoking/tobacco use, or sniffing solvents. Significantly more children (28% of those watching ≥ 3 hours of TV/video games compared with 20% of those watching greater than zero but ≤ 2 hours of TV/video games) reported alcohol use ($p < 0.05$). Similar results were seen for sniffing solvents, with 9% of those watching ≥ 3 hours of TV/video games reporting they sniffed solvents compared with 4% who watched TV/video games for greater than zero but ≤ 2 hours ($p < 0.05$). The results of the logistic regression indicated that the odds of drinking alcohol (odds ratio [OR] = 1.48, 95% confidence

interval [CI] 1.23, 1.79) and sniffing solvents (OR=1.97, 95% CI 1.42, 2.75) were significantly higher for those watching ≥ 3 hours of TV/video games compared with those who watched TV/video games for greater than zero but ≤ 2 hours. The hours of TV and video games viewed were associated with alcohol use and sniffing solvents for our sample. However, limitations exist due to the inability to separate TV viewing from video game viewing.

Baams, L., Talmage, C., & Russell, S. (2017). Economic costs of bias-based bullying. *School Psychology Quarterly* 32(3), 422-433.

Because many school districts receive funding based on student attendance, absenteeism results in a high cost for the public education system. This study shows the direct links between bias-based bullying, school absenteeism because of feeling unsafe at school, and loss of funds for school districts in California. Data from the 2011–2013 California Healthy Kids Survey and the California Department of Education were utilized. Results indicate that annually, California school districts lose an estimated \$276 million of unallocated funds because of student absences resulting from feeling unsafe at school. Experiences of bias-based bullying were significantly associated with student absenteeism, and the combination of these experiences resulted in a loss of funds to school districts. For example, the absence of students who experienced bullying based on their race or ethnicity resulted in a projected loss of \$78 million in unallocated funds. These data indicate that in addition to fostering student safety and well-being, schools have the societal obligation and economic responsibility to prevent bias-based bullying and related absenteeism.

Benbenishty, R., et al. (2016). Testing the causal links between school climate, school violence, and school academic performance: A cross-lagged panel autoregressive model. *Educational Researcher*, 45(3), 197-206.

The present study explores the causal link between school climate, school violence, and a school's general academic performance over time using a school-level, cross-lagged panel autoregressive modeling design. We hypothesized that reductions in school violence and climate improvement would lead to schools' overall improved academic performance. School-level secondary analysis of the California Healthy Kids Survey was conducted at three points in time. Findings offer credible evidence that a school's overall improvement in academic performance is a central causal factor in reducing violence and enhancing a school's climate. In the discussion, we suggest that when strong efforts to improve academics are taken, schools may tend to include issues of climate and victimization as part of those academic reform efforts.

Benbenishty, R., Siegel, Al, and Astor, R. (2018). School-related experiences of adolescent in foster care: A comparison with their high-school peers. *American Journal of Orthopsychiatry* 88(3), 261-268.

Although adolescents in foster care are known to be more at risk for school-related academic challenges, there is a paucity of research on their school-related experiences, such as victimization and relationships with teachers, compared with their same-age peers not in care. The aim of this article is to compare foster-care adolescents and their schoolmates on data that was drawn from the statewide representative California Healthy Kids survey and includes 165,815 nonfoster youth and 706 foster youth in 9th and 11th grades. Findings indicate a consistent pattern: After controlling for age, gender and race, adolescents in foster care have lower (self-reported) academic achievements and experiences that are more negative in school compared with their peers. However, hierarchical regression equations indicate that after controlling for background and school experiences, there were no significant differences in academic achievements between foster care youth and their high school peers. This finding may reflect that in-school experiences are responsible for many of the more negative academic outcomes experienced by foster youth.

Benard, B., & Slade, S. (2009). Listening to students. In M. Furlong, R. Gilman, and Heubner, S., eds. *Moving from resilience research to youth development practice and school connectedness*. Chapter 26.

A process is described for improving schools by moving them from a deficit perspective to a position of resilience-promotion using youth development as a practice in which students become partners. This approach involves facilitated discussions with students about their school and how it can be improved, making optimal use of strengths-based survey data from the California Healthy Kids Survey grounded in resilience theory and research. The paper highlights how the resiliency framework is effective in interactions with all students and not only those deemed by some to be “at-risk.” The underlying theme is that everyone harbors resilience and is able to learn and develop the skills and understandings associated with resilience theory. When this approach is taken, everyone benefits—the individual, the school setting, and the community.

Berkowitz, R., De Pedro, K.T., & Gilreath, T. (2015) A Latent Class Analysis of Victimization Among Middle and High School Students in California. *Journal of School Violence, 14*(3), 316-333.

School victimization is associated with negative social-emotional outcomes and risky behaviors. Most studies have provided definitions and measures of victimization, depicting a limited characterization of victimization in schools. More nuanced analyses of school victimization are needed to assess the heterogeneous pattern of victimization in schools. The current study, using data from the California Healthy Kids Survey, explored distinct victimization configurations in a diverse sample of 418,483 middle and high school students in California, utilizing latent class analyses to account for type and frequency of victimization. The results uncover four classes of victimization, including frequent verbal, physical, and sexual victimization; occasional verbal and physical victimization; verbal and sexual victimization; and no victimization. Older age was associated with a lower likelihood of frequent verbal, sexual, and physical victimization and African American youth were more likely to be classified in this class. Females were more likely to be in the verbal and sexual victimization class than males.

Berkowitz, R., et al. (2017). A research synthesis of the associations between socioeconomic background, inequality, school climate, and academic achievement. *Review of Educational Research, 87*(2), 425-469.

Educational researchers and practitioners assert that supportive school and classroom climates can positively influence the academic outcomes of students, thus potentially reducing academic achievement gaps between students and schools of different socioeconomic status (SES) backgrounds. Nonetheless, scientific evidence establishing directional links and mechanisms between SES, school climate, and academic performance is inconclusive. This comprehensive review of studies dating back to the year 2000 examined whether a positive climate can successfully disrupt the associations between low SES and poor academic achievement. Positive climate was found to mitigate the negative contribution of weak SES background on academic achievement; however, most studies do not provide a basis for deducing a directional influence and causal relations. Additional research is encouraged to establish the nature of impact positive climate has on academic achievement and a multifaceted body of knowledge regarding the multilevel climate dimensions related to academic achievement.

Bostean, G., Trinidad, D., & McCarthy, W. (2015). E-cigarette use among never-smoking California Students. *American Journal of Public Health, 105*(12), 2423-2425.

We determined the extent to which adolescents who have never used tobacco try e-cigarettes. Data on the prevalence and correlates of e-cigarette use among 482,179 California middle and high school students are from the 2013–2014 California Healthy Kids Survey. Overall, 24.4% had ever used e-cigarettes (13.4% have never used tobacco and 11.0% have used tobacco), and 12.9% were current e-

cigarette users (5.9% have never used tobacco). Among those who have never used tobacco, males and older students were more likely to use e-cigarettes than females and younger students. Hispanics (odds ratio [OR] = 1.60; confidence interval [CI] = 1.53, 1.67) and those of other races (OR= 1.24; CI = 1.19, 1.29) were more likely than Whites to have ever used e-cigarettes, but only among those who had never used smokeless tobacco and never smoked a whole cigarette. E-cigarette use is very prevalent among California students who have never smoked tobacco, especially among Hispanic and other race students, males, and older students.

California Department of Health Services. (2004). Asthma in schools: Results from the California Healthy Kids Survey. *California Asthma Facts*, 2(3), October 2004.

Asthma is the most prevalent chronic disease among children. Results from the California Healthy Kids Survey (CHKS) indicate that nearly one in five students have asthma. Asthma prevalence rates were highest among Black students. Also, one-third of students experienced one or more asthma-like symptoms during the last year.

Castro-Olivo, S.M., et al. (2013). A comprehensive model for promoting resiliency and preventing violence in schools. *Contemporary School Psychology* 17(1), 23-34.

Implementing violence prevention programs has become a priority for schools; however, most programs used for this purpose are limited in the skills they teach. In this study, two different resiliency building/violence prevention models were evaluated to assess their effectiveness at preventing violent and maladaptive behaviors in youth. Data from the California Healthy Kids Survey (CHKS) was used to compare a narrow versus a comprehensive/ecological approach for resiliency building. Structural equation modeling was employed to test the preventive impact of both resiliency building approaches. The results showed that the comprehensive/ ecological approach is much stronger than the traditional narrow approach for preventing violent and maladaptive behaviors. Implications for program development and implementation are discussed.

Cederbaum, J.A., Gilreath, T.D., Benbenishty, R., Astor, R.A., & Pineda, D., De Pedro, K.T., Esqueda, M.C., & Atuel, H.R. (2013). Wellbeing and suicidal ideation of public middle/high school students by military-connectedness. *Journal of Adolescent Health*, pp. 1-6

To better understand the influence of parental military connectedness and parental deployment on adolescent mental health, data from the 2011 California Healthy Kids Survey examined feeling sad/hopeless, suicidal ideation, well-being, and depressive symptoms by military connectedness in a subsample ($n = 14,299$) of 7th-, 9th-, and 11th-grade California adolescents. Cross-classification tables and multiple logistic regression analyses were used.

More than 13% of the sample had a parent or sibling in the military. Those with military connections were more likely to report depressive symptoms and suicidal ideation. Controlling for grade, gender, and race/ethnicity, reporting any familial deployment compared to no deployments was associated with increasing odds of experiencing sadness/hopelessness, depressive symptoms, and suicidal ideation.

Findings emphasize the increased risk of mental health issues among youth with parents (and siblings) in the military. Although deployment-related mental health stressors are less likely during peace, during times of war there is a need for increased screening in primary care and school settings. Systematic referral systems and collaboration with community-based mental health centers will bolster screening and services.

Davis, Adam; Kreutzer, R., Lipsett, M., King, G., & Shaikh, N. (2006). Asthma prevalence in Hispanic and Asian American ethnic subgroups: Results from the California Healthy Kids Survey. *Pediatrics*, 118, 363–370.

Davis, Adam, et al. (2007). An association between asthma and BMI in adolescents: Results from the California Healthy Kids Survey. *Journal of Asthma*, 44(1), 873-879.

The relationship between asthma prevalence and BMI is examined in a cross-sectional survey of 471,969 adolescents. The size of the survey allowed us to investigate this relationship with much greater resolution than previously possible. Both lifetime and current asthma prevalence increased monotonically with increasing BMI, starting with individuals as low as the 45th to 55th percentiles of BMI. The pattern was similar between males and females and among six racial/ethnic groups. The results suggest that weight reduction even among persons not classified as overweight or obese may be an important component of asthma management.

Davis, B., & Carpenter, C. (2009). Proximity of fast-food restaurants to schools and adolescent obesity. *American Journal of Public Health*, 99(3), 505-510.

Exposure to poor-quality food environments has important effects on adolescent eating patterns and overweight. Policy interventions limiting the proximity of fast-food restaurants to schools could help reduce adolescent obesity. This study examined the relationship between fast-food restaurants near schools and obesity among middle and high school students in California using geocoded data (obtained from the California Healthy Kids Survey) on over 500,000 youths and multivariate regression models to estimate associations between adolescent obesity and proximity of fast-food restaurants to schools. Students with fast-food restaurants near (within one half mile of) their schools (1) consumed fewer servings of fruits and vegetables, (2) consumed more servings of soda, and (3) were more likely to be overweight (odds ratio [OR] = 1.06; 95% confidence interval [CI] = 1.02, 1.10) or obese (OR=1.07; 95% CI = 1.02, 1.12) than were youths whose schools were not near fast-food restaurants, after we controlled for student- and school-level characteristics. The result was unique to eating at fast-food restaurants (compared with other nearby establishments) and was not observed for another risky behavior (smoking). The study shows, despite these limitations, that exposure to poor-quality food environments has important effects on adolescent eating patterns and overweight. Policy interventions limiting the proximity of fast-food restaurants to schools could help reduce adolescent obesity.

Davidson-Arad, B., & Navaro-Bitton, I. (2015). Resilience among adolescents in foster care. *Children and Youth Services Review*, 59, 63-70.

The study compares the levels and predictors of resilience of maltreated adolescents in foster care with those of maltreated adolescents in residential and community care. Resilience was measured by the resilience subscale (RYDM) of the California Healthy Kids Survey, which defines the concept in terms of the existences of internal and external resources that enable healthy development. All three groups of youngsters reported relatively high resilience (2 on a scale ranging from 0 to 3), of all three types: internal, external, and general. The predictors of resilience tested in the study were type of placement, age, gender, acceptance and rejection by mother and father, and autonomy and control by mother and father. Only three variables contributed to the youngsters' resilience, all of them positively: being a girl, being older, and acceptance by the father. The study has two practical implications. One is that the adolescents' sense of themselves as resilient and possessing resources can be used in interventions aimed at helping them to overcome difficulties stemming from their maltreatment. The other is that the key role of parental acceptance, especially paternal acceptance, in the youngsters' resilience can be used in the work with both the biological and foster parents of maltreated youngsters.

Day, J. K., Snapp, S. D., & Russell, S. T. (2016, August 29). Supportive, not punitive, practices reduce homophobic bullying and improve school connectedness. *Psychology of Sexual Orientation and Gender Diversity*. Advance online publication. Download: <http://dx.doi.org/10.1037/sgd0000195>.

Homophobic bullying is a pervasive issue in U.S. schools. Broadly, two distinct approaches to address bullying include punitive versus supportive practices. Few studies have considered these approaches in the context of school connectedness in relation to homophobic bullying. Drawing from theories of social support and control, we argue that supportive practices should reduce homophobic bullying and promote school connectedness. Further, although punitive practices may deter homophobic bullying, they also compromise school connectedness, except perhaps among students who have been bullied. Supportive practices could be especially important for promoting school connectedness for students who experience homophobic bullying. Using teacher (n = 62,448) and student (n = 337,945) data from 745 high schools that participated in the California School Climate Survey and the California Healthy Kids Survey, our study examines the association between teacher reports of punitive versus supportive practices, and student experiences of homophobic bullying and school connectedness. We also interrogate differential effects of punitive and supportive practices on school connectedness for students who have and have not experienced homophobic bullying. Results indicate that supportive, but not punitive, practices are associated with less homophobic bullying and higher school connectedness. Supportive practices also serve as a protective factor for students who have experienced homophobic bullying. Additionally, students in schools with less supportive practices, and who have not experienced homophobic bullying, report low levels of school connectedness comparable with students who have been bullied. Implications for school policy related to supporting students at risk for being bullied and school disconnectedness are discussed.

DePedro, K.T., et al. (2015). School climate, deployment, and mental health among students in military-connected schools. *Youth & Society*, 1-23.

Research has found that when compared with civilian students, military-connected students in the United States have more negative mental health outcomes, stemming from the stress of military life events (i.e., deployment). To date, studies on military-connected youth have not examined the role of protective factors within the school environment, such as school climate, in the mental health and well-being of military-connected adolescents. Given this gap in the research on military adolescents, this study draws from a large sample of military and non-military secondary adolescents in military-connected schools (N = 14,943) and examines associations between school climate, military connection, deployment, and mental health. Findings show that multiple components of school climate are associated with a lower likelihood of depressive symptoms and suicidal ideation and increased likelihood of well-being among students in military-connected schools, after controlling for student demographics, military connection, and deployments. The authors conclude with a discussion of school climate interventions for military-connected youth.

DePedro, K.T., Gilreath, T., & Berkowitz, R. (2016). A latent class analysis of school climate among middle and high school students in California public schools. *Children and Youth Services Review*, 63, 10-15.

Research has shown that a positive school climate plays a protective role in the social, emotional, and academic development of adolescent youth. Researchers have utilized variable centered measures to assess school climate, which is limited in capturing heterogeneous patterns of school climate. In addition, few studies have systematically explored the role of race and gender in perceived school climate. This study utilizes a latent class approach to assess whether there are discrete classes of school climate in a diverse statewide sample of middle and high school youth. Drawing from the 2009–2011 California Healthy Kids Survey, this study identified four latent classes of school climate: Some caring, connectedness, and safe; negative climate; high caring, participation, and safe; and positive climate. The findings indicated that race and grade level significantly predicted school

climate class membership. Black students were three times more likely to be members of the negative school climate class, when compared to White students. Gender did not significantly predict school climate class membership. The results of this study provide school climate researchers and educators with a nuanced picture of school climate patterns among middle and high school students.

DePedro, K.T., Esqueda, M., and Gilreath, T. (2017). School protective factors and substance use among lesbian, gay, and bisexual adolescents in California public schools. *LGBT Health, 4*(3). Published online.

The majority of studies examining substance use among lesbian, gay, and bisexual (LGB) youth have focused on a wide array of risk factors (e.g., victimization). Few studies have explored the protective role of schools. This study aims to fill this gap in the literature and inform programs aimed at reducing substance use among LGB youth. More specifically, this study explores the extent to which school connectedness and support from teachers and other adults at school are associated with substance use among LGB youth in school and within the past 30 days.

A secondary analysis of the 2013–2015 California Healthy Kids Survey (CHKS) was conducted to examine associations between school protective factors (i.e., school connectedness and adult support) and substance use among LGB youth, above and beyond a key risk factor, school victimization. The study outcomes were past 30-day and in-school use of cigarettes, alcohol, marijuana, inhalants, prescription pain medication, and other illegal drugs.

Overall, school connectedness and school adult support were associated with lower odds of substance use. For example, higher levels of school connectedness were associated with 22% decreased odds of past 30-day inhalant use (adjusted odds ratio [AOR] = 0.78; 95% confidence interval [CI] = 0.72–0.86), and 25% decreased odds of past 30-day prescription pain medication use (AOR = 0.75; 95% CI = 0.69–0.82). Higher levels of adult support in school were also associated with 17% decreased odds of marijuana use on school property in the past 30 days (AOR = 0.83; 95% CI = 0.77–0.91).

The results indicate a need for substance use prevention programs that integrate school connectedness and adult support in school.

Dowdy, Erin; Furlong, M., & Sharkey, J. (2013). Using surveillance of mental health to increase understanding of youth involvement in high risk behaviors: A value added analysis. *Journal of Emotional and Behavioral Disorders, 21*(1), 33–44.

This study examines the utility of adding a mental health screener to current surveillance techniques for enhanced identification of at-risk youth and to increase awareness of the complexity of their needs. In 2009, 3,331 students in 8th, 10th and 12th grades in a large, central California school district were co-administered a mental health survey and items from the California Healthy Kids Survey. Stepwise logistic regression examined the added predictive association of elevated mental health risk (EMHR) to risk behaviors after entering student responses to an item assessing chronic sadness.

Both chronic sadness and EMHR were significantly associated with increased risk of suicide ideation, cigarette use, alcohol use, binge drinking, marijuana use, physical fighting, being threatened or injured with a weapon, and skipping school. Chronic sadness was significantly associated with all eight risk behaviors for both females and males. After accounting for the variance attributable to chronic sadness, the change in variance explained by EMHR was significant for all eight risk behaviors. The combination of chronic sadness and EMHR increased precision of identifying youth engaging in risk behaviors.

This study found that youth who reported both chronic sadness and EMHR had the highest rates of risk behaviors. A balanced approach to youth surveillance that includes additional mental health content could provide additional directions for intervention and provide a more comprehensive understanding of youth risk behaviors.

Eisman et al. (2016). Psychological empowerment among urban youth: measurement model and associations with youth outcomes. *American Journal of Community Psychology* 58(3-4), 410-421.

Empowerment-based strategies have become widely used method to address health inequities and promote social change. Few researchers, however, have tested theoretical models of empowerment, including multidimensional, higher-order models. We test empirically a multidimensional, higher-order model of psychological empowerment (PE), guided by Zimmerman's (1995) conceptual framework including three components of PE: intrapersonal, interactional and behavioral. We also investigate if PE is associated with positive and negative outcomes among youth. Aggressive behavior was measured by items from the California Healthy Kids Survey. The sample included 367 middle school youth aged 11–16 ($M = 12.71$; $SD = 0.91$); 60% female, 32% ($n = 117$) white youth, 46% ($n = 170$) African-American youth, and 22% ($n = 80$) identifying as mixed race, Asian-American, Latino, Native American or other ethnic/racial group; schools reported 61–75% free/reduced lunch students. Our results indicated that each of the latent factors for the three PE components demonstrate a good fit with the data. Our results also indicated that these components loaded on to a higher-order PE factor ($\chi^2 = 32.68$, $df = 22$, $p = 0.07$; RMSEA: 0.04, 95% CI: 0.00, 0.06; CFI: 0.99). We found that the second order PE factor was negatively associated with aggressive behavior and positively associated with prosocial engagement. Our results suggest that empowerment-focused programs would benefit from incorporating components addressing how youth think about themselves in relation to their social contexts (intrapersonal), understanding social and material resources needed to achieve specific goals (interactional) and actions taken to influence outcomes (behavioral). Our results also suggest that integrating the three components and promoting PE may help increase likelihood of positive behaviors (e.g., prosocial involvement); we did not find an association between PE and aggressive behavior. Implications and future directions for empowerment research are discussed.

Estrada, Jose, et al. (2013). Gang membership of California middle school students: Behaviors and attitudes as mediators of school violence. *Health Education Research* 28(4), 626-639.

Empirical evidence examining how risk and protective behaviors may possibly mediate the association between gang membership and school violence is limited. This study utilizes a statewide representative sample of 152 023 Latino, Black and White seventh graders from California to examine a theoretical model of how school risk (e.g. truancy, school substance use and risky peer approval) and protective (e.g. connectedness, support and safety) behaviors and attitudes mediate the effects of gang membership on school violence behaviors. The dataset was collected in the 2005–2006 and 2006–2007 academic school years using the ongoing large-scale California HealthyKids Survey conducted by WestEd for the State of California. Approximately 9.5% of the sample considered themselves to be a member of a gang. The findings indicate that school risk behaviors and attitudes mediate the association between gang membership and school violence behaviors. Although the direct negative association between gang membership and school violence perpetration is weak, the positive indirect effect mediated by school risks behaviors and attitudes is strong. This indicates that when gang members engage in school risk behaviors, they are much more likely to be school violence perpetrators. Implications for further research, theory and practice for both gang and school violence researchers are discussed.

Estrada, Jose, et al. (2014). A statewide study of gang membership in California secondary schools. *Youth & Society*, 1-17.

To date, there is a paucity of empirical evidence that examines gang membership in schools. Using statewide data of 7th-, 9th-, and 11thgrade students from California, this study focuses on the prevalence of gang membership by county, region, ethnicity, and grade level. Bivariate and multivariate logistic regression analyses were employed with gang membership as the outcome of interest. Approximately 8.4% of the student sample reported that they consider themselves to be a

member of a gang. Regional-level rates of gang membership across six geographical areas are all in a relatively narrow range and gang members are fairly evenly distributed across California schools. The findings imply that schools are a good place to focus on gang prevention and intervention, and educators need to be aware of the possible gang activity in their schools to provide the appropriate resources, programs, and support for these students.

Estrada, Jose, et al. (2017). Associations between school violence, military connection, and gang membership in California secondary schools. *American journal of Orthopsychiatry*, 87(4), 443-451.

Recent studies have found that military-connected students confront many challenges—such as secondary traumatization—that may stem from a parent’s deployment and frequent relocations. It is possible that multiple moves and deployments of family service members are associated with military-connected students’ gang membership and involvement with school violence behaviors. In this study, a total of 13,484 students completed the core and military modules of the California Healthy Kids Survey. Logistic regressions examined the odds of a student being a member of a gang given their grade, gender, race/ethnicity, school violence behaviors, military connectedness, changes in schools, and familial deployments. Results indicated that of the nearly 8% of students sampled who reported being in a gang, those with a parent or sibling currently serving in the military reported a higher prevalence rate of gang membership than students with no military connection. Students who reported being in fights or carrying weapons to school were at least twice more likely to be a gang member than students who reported not having been in fights or carrying weapons. Changing schools 4 or more times in a 5-year period and experiencing at least 1 familial deployment were also associated with an increased likelihood of gang membership. The findings of this study offer incentive to further explicate the gang and school violence experiences of military-connected students. This study supports schools in understanding the characteristics of the military-connected students and families they serve so they can implement appropriate interventions to curb gang and school violence behaviors.

Felix, Erika; Furlong, M., and Austin, G. (2009) A cluster analytic investigation of school violence victimization among diverse students. *Journal of Interpersonal Violence*, 24(10), 1673-1695. Download: <http://jiv.sagepub.com/cgi/content/abstract24/10/1673>.

Despite nationwide improvements in school safety, victimization at school continues and affects the well-being of a significant number of students. This study uses CHKS data to address the multiple victimization experiences of secondary students at school. The authors identify subgroups of students based on victimization experience; assess how perceptions of being targeted due to bias relate to cluster membership; and relate victimization to perceptions of school safety, depression, grades, truancy, and internal assets. Victimization rates are given across grade, gender, and ethnicity. Cluster analysis reveals five victimization subgroups: (1) nonvictims, (2) polyvictims, and victims who are predominantly (3) sexually harassed, (4) physically victimized, and (5) teased. Compared to nonvictims, students who are victimized report worse outcomes on measures of psychosocial adjustment, with polyvictims faring the worst. Victims are more likely to perceive that they are targeted due to their gender or perceived sexual orientation. Implications for research and practice are provided.

Felix, Erika, & You, S. (2011). Peer victimization within the ethnic context of high school. *Journal of Community Psychology* 39(7), 860-875.

Risk for peer victimization tends to vary by ethnicity, but most studies have examined this at the individual-level only, which fails to explore how the ethnic context of the school can affect this. Using a large sample of 9th and 11th grade students who participated in the California Healthy Kids Survey, we used hierarchical linear modeling to explore victimization risk by ethnicity within the ethnic context of the school. Models predicted total, physical, verbal and sexual harassment

victimization. At the individual level, the model included sex, ethnicity, and the percent of same ethnicity students at the school. At the school-level, the variables measured included diversity, overall perception of school safety, mean victimization level, and mean perception that they were targeted due to their race/ethnicity. Overall, we found support that the ethnic context matters when looking at victimization risk. Results showed that the individual-level variables had a stronger relationship to victimization risk, across subtypes, than the school-level variables. This supports the use of interventions targeted at students, such as much of the content of current violence prevention, conflict resolution, or other social-emotional prevention curriculum. At the individual-level, having more same-ethnicity peers in the school reduced victimization, providing group protection from prejudice and discrimination. Native Americans had the highest rates of victimization, and it is unlikely at many schools that they would have many same ethnicity peers to provide support and shift the balance of power at school. At the school-level, greater diversity decreased victimization. This is likely because, when school diversity includes equal group status, common goals, cooperation, and the support of adults in the school, this can create conditions where harassment and bullying due to race / ethnicity disappears. many same ethnicity peers to provide support and shift the balance of power at school. Mean victimization and school safety were also related to most victimization types. Results are reported by grade and victimization type.

Ferguson, Krisin, & Xie, B. (2012.) Adult support and substance use among homeless youths who attend high school. *Child & Youth Care Forum* 41(5), 727-445.

Despite high rates of substance use among homeless youths, little is known about the interaction of substance-use risk and protective factors. Further, limited research exists on substance use by school-attending homeless youths, as extant studies have relied on street- and shelter-based samples. The purpose of this study was to examine how risk and protective factors influence school-attending homeless youths' substance use as well as how protective influences can mediate and moderate the impact of risk factors on substance use. Empirical precedents on adolescent substance use and social capital theory were used to construct a theoretical model. Structural equation modeling was used to examine the relationships among risk and protective factors associated with substance use. The theoretical model was tested with a representative sample of 2,146 high-school-attending homeless youths from the 2007–2008 California Healthy Kids Survey dataset. Three hypotheses were tested to examine the direct effects of gang involvement, partner abuse, truancy and adult support on substance use as well as both the mediating and moderating effects of adult support. Greater substance use was associated with gang membership, partner abuse and truancy. Lower levels of substance use were associated with higher levels of adult support. Additionally, adult support acted as both a mediator and moderator between the hypothesized risk factors and substance use. Findings highlight the mediating and moderating effects of adult support on substance-use risk factors. Future longitudinal research is needed to illuminate the causal pathways between substance-use risk factors, adult support, and actual use.

Fullchange, A., & Furlong, M. (2016). An exploration of effects of bullying victimization from a complete mental health perspective. *Sage Open*, January-March, 2016: 1-12.

This study explored the effects of being bullied from a dual-factor lens, specifically examining the relation between victimization and constructs that contribute to social-emotional well-being. Prior to carrying out the main analyses, the factor structure of self-report items related to experiencing bullying and harassment from the California Healthy Kids Survey, which was administered to more than 14,000 high school students, was examined to establish that these items represent an overall factor: students' experience of victimization. This factor was then used as an independent variable in a series of planned comparisons with a dependent variable represented by constructs addressed by the Social Emotional Health Survey–Secondary: belief-in-self, emotional competence, belief-in-others, and engaged living. With increased frequency of victimization, suicidality increased and belief-in-others decreased. For other constructs, belief-in-self, engaged living, and depression, there were

significant differences found between individuals who had experienced frequencies of bullying as low as less than once a month and those who did not experience bullying at all but no further detrimental impacts were seen with even higher frequencies of victimization, indicating that being victimized at all is significantly worse than not being victimized for these variables. Implications and future directions for research are explored.

Gilreath, T.D., et al. (2013). Substance use among military-connected youth: The California Healthy Kids Survey. *Am J Prev Medicine*, 44(2):150-153

Young people in military-connected families may be exposed to deleterious stressors, related to family member deployment, that have been associated with externalizing behaviors such as substance use. Substance use predisposes youth to myriad health and social problems across the life span. This study examined the prevalence and correlates of lifetime and recent substance use in a normative sample of youth who were either connected or not connected to the military using data from a subsample of the 2011 California Healthy Kids Survey (N=14,149). Multivariate analysis conducted in 2012 revealed that an increase in the number of deployments was associated with a higher likelihood of lifetime and recent use, with the exception of lifetime smoking. These results indicate that experiences associated with deployment of a family member may increase the likelihood of substance use.

Gilreath, T.D., et al. (2013b). Prevalence and correlates of victimization and weapon carrying among military- and nonmilitary-connected youth in Southern California. *Preventive Medicine*.

The present analysis sought to explore the normative rates and correlates of school victimization and weapon carrying among military-connected and nonmilitary-connected youth in public schools in Southern California. Methods. Data are from a sub-sample of the 2011 California Healthy Kids Survey (N = 14,512). Items to assess victimization and weapon carrying were separated into three categories: physical acts (e.g., being pushed or shoved), nonphysical acts (e.g., having rumors spread about them) and weapon carrying. The bivariate results indicate that youth with a military-connected parent had higher rates of physical victimization (56.8%), nonphysical victimization (68.1%), and weapon carrying (14.4%) compared to those with siblings serving (55.2%, 65.2%, and 11.4%, respectively) and nonmilitary-connected (50.3%, 61.6%, and 8.9%, respectively) youth. Having a parent in the military increased the odds of weapon carrying by 29% (Odds Ratio = 1.29, 95% confidence interval = 1.02–1.65). Changing schools and a larger number of family member deployments in the past 10 years were associated with significant increases in the likelihood of victimization and weapon carrying. The results of this analysis warrant a focus on school supports for youth experiencing parental military service, multiple relocations and deployments of a family member.

Gilreath, T.D., et al. (2014). Substance use among adolescents in California: A latent class analysis. *Substance Use & Misuse*, 49, 116-123.

Data from the California Healthy Kids Survey of 7th, 9th, and 11th graders were used to identify latent classes/clusters of alcohol, tobacco, and marijuana use (N = 418,702). Analyses revealed four latent classes of substance use, which included nonusers (61.1%), alcohol experimenters (some recent alcohol use; 22.8%), mild polysubstance users (lifetime use of all substances with less than 3 days of recent use; 9.2%), and frequent polysubstance users (used all substances three or more. times in the past month; 6.9%). The results revealed that alcohol and marijuana use are salient to California adolescents. This information can be used to target and tailor school-based prevention efforts.

Grier, S., & Davis, B. (2013). Are All Proximity Effects Created Equal? Fast Food Near Schools and Body Weight Among Diverse Adolescents. *Journal of Public Policy & Marketing* 32(1), 116–128.

Prior research has demonstrated that the proximity of fast-food restaurants to schools is related to higher youth body weight and also suggests that this relationship may be stronger in urban areas. Research also suggests that some segments of youth may be more vulnerable to this relationship than others. Using data from the California Healthy Kids Survey, the authors investigate the relationship of fast-food proximity to middle and high schools and adolescent weight outcomes, with a focus on understanding intra-urban differences across groups defined by ethnicity and school income. Their results suggest that body weight associations with proximity to a fast-food restaurant from school are not equal for all youth. Black and Hispanic students at low-income and urban schools have higher associations between school–fast food distance and youth body weight, up to four times greater than general distance associations. The authors discuss their findings in light of the complexity of understanding the relationship between retail marketing proximity and weight-related associations among youth, as well as obesity disparities.

Griffiths, A., et al. (2012). The relations of adolescent student engagement with troubling and high-risk behaviors. In: Christenson, S. et al., eds. *Handbook of Research on Student Engagement*. New York: Springer.

Nearly one third of secondary school students report decreased engagement in school during their teen years. When considering the emotional or psychological aspects of engagement, which are routinely associated with high-risk behaviors, a student must somehow conclude that, at a minimum, at least one specific person at their school truly cares about him or her not only as a student, but as a person. This caring individual, be it a teacher, coach, administrator, or counselor, does not simply express respect, concern, and trust in the student as part of their job, but also the student comes to believe that this person sees intrinsic value in him or her as a human being. In this chapter we underscore the association between student engagement and high-risk behaviors in adolescence. Although all aspects of student engagement are important to the full development of youth, the salience of student engagement when considering troubling and high-risk behaviors in schools warrants educators' attention. We summarize research in this area, including the California Healthy Kids Survey, and provide an overview of system-level interventions and strategies to build bonding and connectedness, particularly for those students who engage in high-risk behaviors. We conclude that clear definitions and unified research in the area of student engagement can allow for continued advancements in understanding how to best engage students, specifically high-risk students, and yield positive academic and life outcomes for youth.

Guhn, M., et al. (2012). Well-being in middle childhood: An assets-based population-level research-to-action project. *Child Ind Research*.

This paper presents findings from a population-level, research-to-action partnership project on children's well-being during the middle childhood years. Relations between 4th graders' (N03,026) well-being (composite of satisfaction with life, optimism, self-concept, overall health, and depressive symptoms) and their social and contextual assets (adult connectedness, peer connectedness, school experiences, health habits, after-school program participation) were examined via a school district-wide administration of the Middle Years Development Instrument (MDI)—a self-report, population-based survey administered by teachers to children in their classrooms. Adult connectedness was measured using scales from the California Healthy Kids Survey. Findings corroborated the premise that children's well-being is associated with their social and contextual assets. Specifically, after controlling for socioeconomic status and language background, significant and positive relationships were found between children's well-being and the number of social and contextual assets reported, with each additional asset associated with a significantly higher level of well-being. In order to disseminate our findings to school and community stakeholder groups and to facilitate the translation

of research into action, we developed geographical maps that illustrate the relationship between the children's well-being composite and their social and contextual assets at the neighborhood-level. We conclude by addressing theoretical, methodological, and practical challenges of our research-to-action partnership, and by discussing the importance of collecting and disseminating population-level data on children's well-being in combination with data on developmentally-relevant social and contextual factors that are amenable to change by school and community programs and initiatives.

Hanson, T., Austin, G., and Lee-Bayha, J. (2004). *Ensuring that no child is left behind: How are student health risks & resilience related to the academic progress of schools?* WestEd: San Francisco. Download: calschls.org/site/assets/files/1036/ensuringnclb.pdf

California secondary schools made greater progress in raising standardized test scores over a one-year period when they had higher percentages of students who are less engaged in risky behaviors such as substance use and violence, who are more likely to eat nutritiously and exercise, and who report caring relationships and high expectations at school, as measured by the Healthy Kids Survey. These results suggest that addressing the health and developmental needs of youth is a critical component of a comprehensive strategy for meeting the accountability demands for improved academic performance. Efforts to improve schools should go beyond the current emphasis on standards and accountability measured by test scores. Policies and practices focusing exclusively on increasing test scores while ignoring the comprehensive health needs of students are almost certain to leave many children, and many schools, behind. Specifically:

- District and school leaders can take steps that may promote student achievement by increasing student access to moderate-to-vigorous physical activity in physical education classes, monitoring the nutritional content of food offered at school, and promoting greater awareness among students about their physical health and nutrition.
- Crime, violence, antisocial behavior, and other types of social disorganization on school campus can have adverse consequences for student learning and should be targeted with comprehensive prevention programs.
- School practices that provide students with supportive, caring connections to adults at the school who model and support healthy development, and that provide clear and consistent messages that students can and will succeed hold great promise for addressing the developmental needs of children and improving student learning.

Hanson, T., Zheng, C., Banks, D., and Rollinson, J. (2012). *Substance Abuse and Mental Health Services Administration. (2012). The impact of the Safe Schools/Healthy Students Initiative in California schools: A matched comparison group analysis.* Rockville, MD: Center for Mental Health Services. Download: calschls.org/site/assets/files/1036/impact_sshs_in_ca_083012.pdf

Since 1999, the Safe Schools/Healthy Students (SS/HS) Initiative has provided communities with funding to implement a comprehensive set of activities, curricula, programs, and services that focus on creating safe school environments, promoting healthy childhood development, and preventing youth violence and alcohol, tobacco, and other drug (ATOD) use. To date, however, little evidence has been disseminated regarding the effectiveness of the initiative in improving health-related behavior, protective factors, and student academic performance. Eleven 2002 SS/HS grantees sites in California (known as the California Consortium) collaborated on a cross-site evaluation of the SS/HS initiative in the state using common outcome data provided by the California Healthy Kids Survey.

Overall, the results suggest that student health-related behavior, protective factors, and academic performance improved more in SS/HS grantee schools than in similar schools that did not receive SS/HS funding among 5th graders and 7th graders. Among 9th graders and 11th graders, SS/HS funding status was not consistently related to changes in student well-being.

Examining which grantee practices may have been most effective in improving student well-being, in the three sites that exhibited the most consistent positive program effects, more students were exposed to SS/HS services, staff received professional development in more areas, and more partners participated in the initiative in the sites with the most consistent improvements in student well-being. It is possible that these differences in program activities may be responsible for the positive impacts in some sites.

An examination of the relationship between SS/HS program activities and changes in student well-being across SS/HS sites indicated that the characteristics of SS/HS programs assessed were generally inconsistently related to changes in student well-being – although the number of entities in the partnership was positively associated with changes in student well-being.

Hirschtritt, M., et al. (2015). Internal resilience, peer victimization, and suicidal ideation among adolescents. *International Journal of Adolescent Medicine and Health*, 27(4).

Our goal was to examine the association between peer victimization (PV) and suicidal ideation (SI), and the degree to which internal resilience moderates this association.

We examined the independent associations between PV frequency and type (verbal, cyber, physical, and relational), internal resilience, and the risk of SI within the last 12 months among 9th and 11th grade students participating in the California Healthy Kids Survey (CHKS) (n=42,594; 55.2% female; 72.2% non-white).

Odds ratios (OR) of SI associated with very low- (at least 1 PV type 1 time, but none more than 1 time), low- (at least 1 PV type 2–3 times, but none more than 2–3 times), and moderate/high- (at least 1 PV type 4 times or more) frequency PV compared with no PV were 1.30 (95% CI=1.15–1.45), 1.70 (95% CI=1.51–1.90) and 2.47 (95% CI=1.23–2.73), respectively. Any exposure to physical (OR=1.31; 95% CI=1.19–1.44), relational (OR=1.26; 95% CI=1.15–1.38), verbal (OR=1.38; 95% CI=1.27–1.50), or cyber (OR=1.26; 95% CI=1.15–1.39) PV was associated with increased odds of SI compared with no PV. Internal resilience was associated with lower odds of SI (OR=0.98, 95% CI=0.98–0.99), regardless of PV exposure. The slope between internal resilience and SI was significantly steeper for those subjects who experienced verbal PV (OR interaction=0.99; 95% CI=0.98–1.00).

Even infrequent PV was found to be associated with increased risk for SI. Internal resilience was associated with reduced SI, particularly for verbal forms of PV. Our results suggested that efforts to decrease SI among adolescents should be directed toward both preventing PV and strengthening internal resilience.

Jennings, G. (2003). An exploration of meaningful participation and caring relationships as contexts for school engagement. *The California School Psychologist*, 8, 43-52.

Most models of academic performance and school engagement have neglected the influence of social and emotional variables related to academic competence. Students are motivated to learn and develop because of a drive to satisfy three core needs: competence, autonomy, and relatedness. CHKS data reveal that students who experience meaningful participation in school have higher GPAs. The data also support a positive association between meaningful participation and the development of supportive relationships with peers and adults in school. Caring Peer Relationships, but not Caring Adult Relationships were correlated with GPA, a surprising finding but one that makes sense developmentally.

Kim, Jinsook, & McCarthy, W. (2006). School-level contextual influences on smoking and drinking among Asian and Pacific Islander adolescents. *Drug and Alcohol Dependence* 84, 56-68.

In this study, the researchers seek to identify school contextual predictors of tobacco and alcohol use patterns (smoking only, drinking only, and both) among Asian and Pacific Islander (API) adolescents

in California public schools and ethnic variation in determinants of substance use. The data included a sample of 26,692 Asian and 3518 Pacific Islander (PI) adolescents from the 2000-2001 California Healthy Kids Survey. School-level information (n=836 schools) was from the California Basic Educational Data System and the 2000 census. Multilevel multinomial logistic regression was used to assess the association of school contexts with substance use patterns, controlling for individual-level factors. Pacific Islanders showed much higher prevalence of smoking and drinking than Asians, and the prevalence varied by school. School contexts were independently associated with API adolescents' substance use beyond the individual-level characteristics. The associations between school factors and outcomes also varied by ethnic group. Latino majority schools and schools with a high Asian immigrant concentration in the surrounding neighborhood had a lower risk of substance use among Asians but only to a modest degree among PIs. This study confirmed the importance of distinguishing Asians and PIs and the need for more attention to school contextual factors in adolescent substance use research.

Le, T., Lai, M., & Wallen, J. (2009). Multiculturalism and subjective happiness as mediated by cultural and relational variables. *Cultural Diversity and Ethnic Minority Psychology, 15*(3), 303-313.

A diverse ethnic context and an increasing immigrant youth population will soon become the reality across the entire U.S. demographic landscape. Research has suggested that a multicultural context positively influences ethnic minority and immigrant youth by fostering ethnic identity and psychosocial development. However, it is unknown whether and how perceived multiculturalism can affect positive youth outcomes such as life satisfaction and subjective happiness. This study explored perceived school multiculturalism among 338 ethnic minority and immigrant youth. Adult and peer relationship support variables were assessed by scales from the California Healthy Kids Survey. The analysis found a positive relation between perceived school multiculturalism and subjective happiness with full mediation by ethnocultural empathy for African Americans, Asians, males, and females. Although school multiculturalism was also predictive of ethnocultural empathy for Hispanics, ethnocultural empathy in turn, was not significantly predictive of subjective happiness. Taken together, these results suggest that one way to facilitate psychological growth and flourishing among ethnic minority youth is to encourage multiculturalism in school settings.

Lenzi, M. et al. (2015). Adolescent gang involvement: The role of individual, family, peer, and school factors in a multilevel perspective. *Aggressive Behavior, 41*, 386-397.

Youth gang involvement is a serious public health challenge as adolescents involved in gangs are more likely than others to engage in violence and aggression. To better understand gang involvement, we examined the role of protective (empathy and parental support) and risk (peer deviance and lack of safety at school) factors, as well as their interactions, in predicting adolescent gang affiliation. The study involved a sample of 26,232 students (53.4% females; mean age.14.62, SD.1.69) participating in the California Healthy Kids Survey (CHKS), a survey investigating a wide range of youth health and risk behaviors administered in all California schools every 2 years. Using hierarchical linear modeling (HLM), findings indicated that high levels of empathy and parental support were associated with a lower likelihood of affiliating with a gang. Associating with deviant peers and perceiving the school as unsafe were positively correlated with gang membership. At the school level, lack of safety and type of school (special education, vocational, or alternative school vs. comprehensive schools) were associated with greater probability of gang membership. Empathy mitigated the association between deviant peers and gang membership.

Lenzi, M., et al. (2015b). The quantity and variety across domains of psychological and social assets associated with school victimization. *Psychology of Violence, 5*(4), 411-421.

Studies on protective factors for school victimization are rare and usually focus on specific assets. The current study examined the association between quantity and variety of domains of

developmental assets and school victimization in adolescence. Data were drawn from the California Healthy Kids Survey (CHKS; N = 11,790 high school students attending 17 schools). The Social and Emotional Health Survey–Secondary (SEHS-S) was administered as part of a federally funded school climate initiative in the spring of 2013. A mixed-effects modeling approach tested associations between configurations of assets and school victimization. Adolescents reporting a higher quantity of assets in multiple domains had a lower likelihood of experiencing physical and relational victimization and fear of being victimized in school compared to youth having zero assets. Results supported the importance of considering the quantity of psychological and social assets and also the variety of assets across multiple domains. Interventions promoting multiple protective factors in multiple areas of youths' lives may have the highest likelihood of impacting adolescent well-being.

Lenzi, M. et al. (2015c). The configuration protective model: Factors associated with adolescent behavioral and emotional problems. *Journal of Applied Developmental Psychology* 38, 49-59.

The current study examined the association between quantity, variety, and configuration of developmental assets with risk behaviors (tobacco and alcohol use) and developing emotional problems (depressive feelings and suicidal thoughts). A sample of 12,040 high school students completed the California Healthy Kids Survey investigating youth health and risk behaviors, and developmental assets. Independent one-step logistic regression analyses showed that adolescents reporting a higher quantity of assets, and possessing them in multiple domains, tended to have a lower likelihood of experiencing behavioral and emotional problems. The negative association between developmental assets and negative outcomes was more consistent when quantity and variety were taken into account simultaneously, thus supporting the configuration protective model. A sufficient amount of strengths, in an adequate number of different domains, seems to provide the strongest protection against negative developmental outcomes. The research and clinical implications of findings are discussed.

Lewis, C., et al. (2017). High school students' experiences of bullying and victimization and the association with School Health Center use. *Journal of School Health*, 85(5), 318-326.

Bullying and victimization are ongoing concerns in schools. School health centers (SHCs) are well situated to support affected students because they provide crisis intervention, mental health care, and broader interventions to improve school climate. This study examined the association between urban adolescents' experiences of school-based bullying and victimization and their use of SHCs.

Data was analyzed from 2063 high school students in 5 Northern California school districts using the 2009-2010 California Healthy Kids Survey. Chi-square tests and multivariate logistic regression were used to measure associations.

Students who were bullied or victimized at school had significantly higher odds of using the SHCs compared with students who were not, and were also significantly more likely to report confidentiality concerns. The magnitude of associations was largest for Asian/Pacific Islander students, though this was likely due to greater statistical power. African American students reported victimization experiences at approximately the same rate as their peers, but were significantly less likely to indicate they experienced bullying.

Findings suggest that SHCs may be an important place to address bullying and victimization at school, but confidentiality concerns are barriers that may be more common among bullied and victimized youth.

Lewis, M., & Ferguson, K. (2014). Predicting methamphetamine use of homeless youths attending high school: Comparison of decision making and logistic regression classification algorithms. *Journal of the Society for Social Work and Research*, 5(2), 211-231.

Methamphetamine use among homeless youths is an increasing problem. School officials and social work practitioners are presented with a classification problem in determining which youth are or are not using methamphetamines. The purpose of this study is to adopt a machine-learning approach to address this type of classification problem and to compare 2 models (decision rules and logistic regression) for classifying cases into methamphetamine users and nonusers. The selection of predictors in our models was guided by the risk and resilience framework. Logistic regression and decision rules analyses are used to test the models with a subset of data for 2,146 homeless youth who attend high school that was obtained from the 2007–08 California Healthy Kids Survey dataset. Results of logistic regression suggest methamphetamine use is associated with cigarette and marijuana use, having consumed alcohol, and being truant more than once per week. Results of decision rules analysis suggest a youth's being classified as a methamphetamine user depends on whether the youth has tried marijuana at least once and whether the youth has been truant more than once per week. Moreover, classification as a methamphetamine user also depends on whether a youth has tried marijuana at least once, has not been truant more than once per week, and has tried cigarettes at least once. The logistic regression and decision rules models produce similar—but not identical—results. Our findings highlight the utility of decision rules models as a complement to logistic regression when classification is the goal of a study. Such models can be used to guide social work practice decisions in making informed predictions about client outcomes.

Lob, A., Deardorff, J., & Lahiff, M. (2014.) High expectations across multiple domains, peer norms, and physical dating violence among California adolescents. *Journal of Interpersonal Violence*, 29(11), 2035-2053.

The purpose of this study is, first, to assess whether high expectation messages (from school, home, and community), and peer norms, were associated with physical dating violence victimization (PDV) among a representative sample of California middle and high school students, and second, to assess whether these associations differed by gender and grade level and/or were mediated by self-efficacy. Data from 7th-, 9th-, and 11th-grade respondents of the 2008-2010 California Healthy Kids Survey (CHKS) were analyzed ($N = 85,198$). CHKS is an anonymous, school-based cross-sectional survey. Logistic regression was used to calculate adjusted odds ratios (ORs) and 95% confidence intervals (CIs) for expectations in each domain (school, community, and home), peers norms, and their cumulative effects on physical dating violence victimization. We examined interactions for expectations and for peer norms by gender and grade level, and tested the mediation effect of self-efficacy. Ten percent of students reported experiencing physical dating violence victimization in the past year. Students who reported high overall expectations (in multiple domains) had significantly lower odds of experiencing dating violence ($OR = 0.24$, $CI = [0.20, 0.28]$) compared with those who reported very low expectations. This association held across all expectation domains and peer norms when tested in separate models and also when tested together in a single model. High expectations in the home domain and peer norms showed the lowest odds. Associations between high expectations and dating violence were similar across gender and grade levels. Self-efficacy partially mediated the associations between high expectations and dating violence. Suggestions for future research are presented.

Lynch, C. J. (2007). *Exploring the implementation of a life skills training program for adolescents in the Texas foster care system*. Ph.D. dissertation, The University of Texas at Austin, United States -- Texas. Retrieved March 21, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3277554).

The purpose of this exploratory study was to gain an increased understanding of an independent living skills training program's impact on resilience, social support, and life skills for foster care

youth participants. This study used a qualitative case study methodology and involved a non-random, purposive sample of 16 ethnically diverse youths and 9 state-level, independent living staff members. Youth participants were recruited through one of several state-contracted agencies that provided life skills training to foster care youths. Data were collected through multiple sources and were analyzed using descriptive statistics, comparisons of means, and content analysis. Scores on standardized measures of resilience, social support, and life skills, and youths' descriptions of these same constructs were also compared. The resilience measures were derived from the Healthy Kids Survey's Resilience and Youth Development Module. The change in scores on the standardized measure of social support was statistically significant ($p=.006$; $p<.05$), while overall scores on measures of resilience and life skills were not. In individual interviews, youths described negative experiences in foster care, but also several positive factors, which seemed somewhat congruent with their relatively high scores on standardized measures. Findings from this study highlighted the strengths of foster care youth and have implications for future use of strengths-based theories and frameworks, and for gender-specific life skills training. Findings also indicate important implications for teaching life skills to youths in foster care and policies related to independent living services.

Madsen, K., Hicks, K., & Thompson, H. (2011). Physical activity and positive youth development: Impact of a school-based program. *Journal of School Health*, 81(8), 462-470.
Download: www.ncbi.nlm.nih.gov/pmc/articles/PMC3147147/

Protective factors associated with positive youth development predict health and education outcomes. We sought to explore trends in these protective factors and in physical activity among low-income students, and to determine the impact of a school-based youth development program on these trends. Quasi-experimental time series design including data from 158 low-income schools from 2001 to 2007. 94 schools had exposure to a school-based program promoting physical activity and youth development through structured play; 64 schools served as controls. Primary outcomes were 5th grade student scores ($n=13,109$) on a California statewide survey for physical activity (1–6 scale) and measures of protective factors including: problem solving skills, meaningful participation in school, and caring adults (1–4 scales). Predictors were time (year) and school's number of years of exposure to the program. Overall, significant annual declines were seen in protective factors, including students' report of feeling safe (-0.03 , 95% CI $[-0.03, -0.01]$), caring adults at school (-0.03 $[-0.05, -0.02]$), and problem solving skills (-0.03 $[-0.04, -0.02]$). Cumulative declines over 6 years were equivalent to a drop of 1 school-level SD. Each additional year of exposure to the program predicted greater meaningful participation (0.02 $[0.001, 0.5]$), problem solving skills (0.03 $[0.0001, 0.06]$), and increased physical activity (0.06 $[0.01, 0.10]$); exposure throughout elementary school (6 years) increased scores by 1 school-level SD. Low-income students report a significant decline in protective factors since 2001. School partnerships with youth development programs promoting physical activity may ameliorate declines in emotional wellbeing and increase physical activity.

Oberle, E., Schonert-Reichl, K., & Zumbo, B. (2011). Life satisfaction in early adolescence: Personal, neighborhood, school, family, and peer influences. *Journal of Youth and Adolescence* 40(4), 990-901.

Drawing from an ecological assets framework as well as research and theory on positive youth development, this study examined the relationship of early adolescents' satisfaction with life to trait optimism and assets representing the social contexts in which early adolescents spend most of their time. Self-reports of satisfaction with life, optimism, and ecological assets in the school (school connectedness), neighborhood (perceived neighborhood support, as measured by a scale from the California Healthy Kids Survey), family (perceived parental support), and peer group (positive peer relationships) were assessed in a sample of 1,402 4th to 7th graders (47% female) from 25 public elementary schools. Multilevel modeling (MLM) was conducted to analyze the variability in life satisfaction both at the individual and the school level. As hypothesized, adding optimism and the dimensions representing the ecology of early adolescence to the model significantly reduced the

variability in life satisfaction at both levels of analysis. Both personal (optimism) and all of the ecological assets significantly and positively predicted early adolescents' life satisfaction. The results suggest the theoretical and practical utility of an assets approach for understanding life satisfaction in early adolescence.

Oberle, E., et al. (2014). The role of supportive adults in promoting positive development in middle childhood: A population-based study. *Canadian Journal of School Psychology, 29(4), 296-316.*

The goal of this research was to examine the role of supportive adults to emotional well-being in a population of Grade 4 students attending public schools in Vancouver, Canada. Reflecting the ecology of middle childhood, we examined the extent to which perceived family, school, and neighborhood support relate to young people's self-reported emotional well-being (N = 3,026; 48% female; M_{age} = 9.75). Furthermore, we investigated the hierarchy of importance among those support factors in predicting students' well-being. The family, school, and neighborhood support scales and school connectedness scales were from the California Healthy Kids Survey. As expected, adult support in all three ecological contexts was positively related to emotional well-being. School support emerged as the most important adult support factor, followed by home and neighborhood support. All three support factors emerged as stronger predictors than socioeconomic status (SES) in our study. We discuss our findings in relation to the empirical field of relationship research in middle childhood, and how our findings can inform educational practice.

O'Malley, M. et al. (2015). School climate, family structure, and academic achievement: A study of moderation effects. *School Psychology Quarterly, 30(1), 142-157.*

School climate has been lauded for its relationship to a host of desirable academic, behavioral, and social-emotional outcomes for youth. The present study tested the hypothesis that school climate counteracts youths' home-school risk by examining the moderating effects of students' school climate perceptions on the relationship between family structure (i.e., two-parent, one-parent, foster-care, and homeless households), and academic performance (i.e., self-reported [grade point average] GPA). The present sample consisted of 902 California public high schools, including responses from over 490,000 students in Grades 9 and 11. Results indicated that, regardless of family structure, students with more positive school climate perceptions self-reported higher GPAs. Youths with two-parent, one-parent, and homeless family structures displayed stepwise, linear improvements in self-reported GPA as perceptions of climate improved. Foster-care students' positive school climate perceptions had a weaker effect on their self-reported GPA compared with students living in other family structures. A unique curvilinear trend was found for homeless students, as the relationship between their school climate perceptions and self-reported GPA was stronger at lower levels. Overall, the moderation effect of positive school climate perceptions on self-reported GPA was strongest for homeless youth and youth from one-parent homes, suggesting that school climate has a protective effect for students living in these family structures. A protective effect was not found for youth in foster-care. Implications for research and practice are discussed.

O'Brennan, Lindsey M., & Furlong, M.J. (2010). Relations between students' perceptions of school connectedness and peer victimization. *Journal of School Violence, 9(4), p. 375.*

This study examines the relations between student's perceptions of *school connectedness* and their self-reported rates of victimization (physical, verbal, and relational), as well as perceived reasons for peer victimization (ethnicity, sexuality). Data come from 8th-, 10th-, and 12th-grade students who completed the California Healthy Kids Survey as part of an evaluation of a Safe School/Healthy Students project (N = 1,253). Multivariate analyses indicate that the main effects of both *school connectedness* and grade level are significant. Follow-up univariate ANOVAs reveal that *school connectedness* is significantly related to students' experiences of all forms of victimization and

perceived reasons for victimization, whereas grade level is only related to the form of victimization experienced.

Consistent with previous research, the effect sizes for physical ($d = .29$) and relational ($d = .28$) victimization were both small; however, the effect size for verbal victimization was moderate ($d = .39$), which suggests that students' perceptions of their interpersonal connections at school were most strongly associated with their experiences of direct verbal teasing and mocking.

10th graders experience more physical victimization than 11th graders, and less connectedness than 8th and 12th. May be because schools tend to welcome incoming students but may overlook mid-grade levels.

Based on the current findings, it appears students' bullying experiences are intertwined with their overall feelings of belongingness and safety in their school environment. Given this relation, schools may want to utilize whole-school prevention programs that establish school-wide rules and expectations related to student behavior and promote positive behavioral expectations, thereby altering the social norms regarding bullying behavior, such as Positive Behavior Supports (Sugai & Horner 2006) and Second Step (Committee for Children 1997) and promote interpersonal connectedness within the school system.

Furthermore: "Given the moderate relation between connectedness and victimization found in this study, school-based mental health professionals may want to use the SCS [School Climate Scale] as a screener for student involvement in at-risk behaviors and social-emotional functioning." (p. 388)

Perez-Brumer, A., et al. (2017), Prevalence and correlates of suicidal ideation among transgender youth in California; Findings from a representative, population-based sample of high school students. *Journal of the American Academy of Child and Adolescent Psychiatry* 56(9), 739-746.

No representative population-based studies of youth in the United States exist on gender identity-related disparities in suicidal ideation or on factors that underlie this disparity. To address this, this study examined gender identity-related disparities in the prevalence of suicidal ideation; evaluated whether established psychosocial factors explained these disparities; and identified correlates of suicidal ideation among all youth and stratified by gender identity. Data were derived from the 2013 to 2015 California Healthy Kids Survey (CHKS; $N = 621,189$) and a weighted subsample representative of the Californian student population (Biennial Statewide California Student Survey [CSS], $N = 28,856$). Prevalence of past 12-month self-reported suicidal ideation was nearly twice as high for transgender compared with non-transgender youth (33.73% versus 18.85%; $\chi^2 = 35.48$, $p < .001$). In fully adjusted models within the representative sample, transgender youth had 2.99 higher odds (95% CI 2.25–3.98) of reporting past-year suicidal ideation compared with non-transgender youth. Among transgender youth, only depressive symptoms (adjusted odds ratio 5.44, 95% CI 1.81–16.38) and victimization (adjusted odds ratio 2.66, 95% CI 1.26–5.65) remained significantly associated with higher odds of suicidal ideation in fully adjusted models. In multiple mediation analyses, depression attenuated the association between gender identity and suicidal ideation by 17.95% and victimization by 14.71%. This study uses the first representative population-based sample of youth in the United States that includes a measurement of gender identity to report on gender identity-related disparities in suicidal ideation and to identify potential mechanisms underlying this disparity in a representative sample.

Ruiz de Velasco, Jorge, Greg Austin, Don Dixon, Joseph Johnson, Milbrey McLaughlin, & Lynne Perez. (2008). *Alternative education options: A descriptive study of California continuation high schools*. A brief prepared by the California Alternative Education Research Project conducted by WestEd, the John W. Garner Center for Youth and their Communities at Stanford University, and the National Center for Urban School Transformation. Download:

www.researchgate.net/profile/Greg_Austin2/publication/237300801_Alternative_Education_Opti

[ons A Descriptive Study of California Continuation High Schools/links/5411cb290cf2fa878ad38ebf.pdf](https://www.wested.org/links/5411cb290cf2fa878ad38ebf.pdf)

Continuation high schools are a cornerstone of the state's dropout prevention strategy. This study summarizes the results of a series of investigations into the characteristics and effectiveness of these schools. It draws on survey results and state administrative data reviewed by staff at WestEd and detailed in a supporting technical report (Austin & Dixon, *et al.*, 2008). Additionally, it draws on results from field research undertaken during the winter and spring of 2007 in 9 southern, central, and northern California counties. Within these counties, researchers visited 26 school districts and 40 schools (including 3 sending schools and 37 continuation high schools) that differed in focus, student outcomes, size, and metropolitan status. Researchers also interviewed individuals associated with county and community youth-serving agencies, such as juvenile justice, mental health, child protective services, and foster care. The results indicate that these schools of last resort may be the last schools ever attended by large numbers of California students because they are not getting the academic and support services they need to succeed.

Russell, Stephen, et al. (2011). Lesbian, gay, bisexual, and transgender adolescent school victimization: Implications for young adult health and adjustment. *Journal of School Health* 81(5), 223-230.

A 10-item retrospective scale, derived from the Healthy Kids Survey, assessed school victimization due to actual or perceived LGBT identify between the ages of 13 and 19 years. Multiple regression was to test the association between LGBT school victimization and young adult depression, suicidal ideation, life satisfaction, self-esteem, and social integration, while controlling for background characteristics among 245 LGBT young adults between the ages of 21 and 25 years. LGBT-related school victimization was strongly linked to young adult mental health and risk for STDs and HIV; there was no strong association with substance use or abuse. Elevated levels of depression and suicidal ideation among males can be explained by their high rates of LGBT school victimization.

Russell, Stephen, et al. (2012b). Adolescent health and harassment based on discriminator bias. *American Journal of Public Health* 201(3), 493-495.

Analyzing data from the CHKS and the Dane County (Wisconsin) Youth Assessment, more than one-third of those harassed report biased-based school harassment. Both studies show that bias-based harassment is more strongly associated with compromised health than general harassment. Research on harassment among youths rarely examines the underlying cause. Attention to bias or prejudice in harassment and bullying should be incorporated into programs and policies for young people.

Russell, S.T., et al. (2015). Are school policies focused on sexual orientation and gender identity associated with less bullying? Teachers' perspectives, *Journal of School Psychology* (2015), Download: <http://dx.doi.org/10.1016/j.jsp.2015.10.005>

Bullying is common in U.S. schools and is linked to emotional, behavioral, and academic risk for school-aged students. School policies and practices focused on sexual orientation and gender identity (SOGI) have been designed to reduce bullying and show promising results. Most studies have drawn from students' reports: We examined teachers' reports of bullying problems in their schools along with their assessments of school safety, combined with principals' reports of SOGI-focused policies and practices. Merging two independent sources of data from over 3000 teachers (California School Climate Survey) and nearly 100 school principals (School Health Profiles) at the school level, we used multi-level models to understand bullying problems in schools. Our results show that SOGI-focused policies reported by principals do not have a strong independent association with teachers' reports of bullying problems in their schools. However, in schools with more SOGI-focused policies, the association between teachers' assessments of school safety and bullying problems is stronger. Recent developments in education law and policy in the United States and their relevance for student well-being are discussed.

Sharkey, Jill; You, S., & Schnoebelen, K. (2008). Relations among school assets, individual resilience, and student engagement for youth grouped by level of family functioning. *Psychology in the Schools* 45(5), 402-418.

There has been recent interest in exploring factors related to student engagement due to increasing recognition that it is crucial to engage students for high levels of academic performance and to avoid negative outcomes such as delinquency, substance use, dropout, and teen pregnancy. For school-based intervention efforts, it is important that studies investigate relationships between factors influencing student engagement to understand whether school-based assets have an impact on engagement above and beyond the important influence of family and individual factors.

Unfortunately, such research has been limited by a lack of valid instrumentation. After examining the psychometrics of the California Healthy Kids Survey Resilience Youth Development Module, the researchers used this risk and resilience instrument with a randomly selected sample of 10,000 diverse 7th-, 9th-, and 11th-grade students to test a model of relations between school assets, individual resilience, and student engagement for students grouped by level of family assets. Although youth in the low family asset group reported lower student engagement, multigroup structural equation modeling revealed, contrary to hypothesis, that school assets did not have a differential relation for low family asset youth compared to their high family asset peers. School assets were associated with student engagement for all groups, even accounting for individual resilience. Thus school assets are not merely protective factors, but also important assets, or promotive factors. This result is meaningful in showing the importance of school assets for all students, not just those who are at risk. This is consistent with research showing that student perceptions of caring teacher relationships are related to psychological feelings of engagement for students from diverse backgrounds. Although direct relations between school assets and Internal Resilience factors were significant for all groups, they were stronger for the Family Risk group than the Family Strength group. This suggests that school assets may have more of an impact on internal resilience for youth with low family assets.

Shekhtmeyster, Z., Sharkey, J., & You, S. (2011). The influence of multiple ecological assets on substance use patterns of diverse adolescents. *School Psychology Review* 40(3), 386-404.

Analyzing data collected by the California Healthy Kids Survey from a random sample of 7,642 students in 9th and 11th grades, it was determined that for males, perceived school support was related to significantly lower odds of being polyusers. For females, family and peer factors largely accounted for influences on substance use.

Shih, R., et al. (2010). Racial/ethnic differences in adolescent substance use: Mediation by individual, family, and school factors. *Journal of Studies on Alcohol and Drugs*, 71(4):640-651.

This study examined racial/ethnic differences in alcohol, cigarette, and marijuana use among a diverse sample of approximately 5,500 seventh and eighth graders. We also evaluated the extent to which individual, family, and school factors mediated racial/ethnic disparities in use. Students (49% male) from 16 participating middle schools in southern California reported on lifetime and past-month substance use, individual factors (expectancies and resistance self-efficacy), family factors (familism, parental respect, and adult and older sibling use), and school factors (school-grade use and perceived peer use). Lifetime and past-month frequency of alcohol, cigarette, and marijuana use were assessed using well-established measures from the California Healthy Kids Survey and Project ALERT. We used generalized estimating equations to examine the odds of consumption for each racial/ethnic group adjusting for sex, grade, and family structure. Path analysis models tested mediation of racial/ethnic differences through individual, family, and school factors. After adjusting for sex, grade, and family structure, Hispanics reported higher and Asians reported lower lifetime and past-month substance use, compared with non-Hispanic Caucasians. Rates of substance use did not differ between non-Hispanic African Americans and Caucasians. Several individual factors mediated the relationship between Hispanic ethnicity and substance use, including negative expectancies and

resistance self-efficacy. Higher use among Hispanics was generally not explained by family or school factors. By contrast, several factors mediated the relationship between Asian race and lower alcohol use, including individual, family (parental respect, adult and older sibling use), and school (perceived peer use, school-grade use) factors. Results highlight the importance of targeting specific individual, family, and school factors in tailored intervention efforts to reduce substance use among young minority adolescents.

Smith, Douglas, et al. (2010). Promoting school engagement: Attitudes toward school among American and Japanese youth. *Journal of School Violence* 9, 392-406.

Students from the United States and Japan were surveyed using items from the Healthy Kids Survey Core Module and other assessments with regard to their levels of satisfaction with school and factors that might facilitate or impede school satisfaction. Results indicated that females and younger students from both countries expressed greater satisfaction with school, with overall satisfaction declining in a linear fashion according to the age in the Japanese sample. For both samples, a positive school climate featuring positive peer relationships high levels of nurturance and support, and opportunities for autonomy predicted school satisfaction.

Stone, S., et al. (2013). The relationship between use of school-based health centers and student-reported school assets. *Journal of Adolescent Health*, 53, 526-532.

Purpose: To examine the relationship between student-reported, school-based health center utilization and two outcomes: (1) caring relationships with program staff; and (2) school assets (presence of caring adults, high behavioral expectations, and opportunities for meaningful participation) using a school districtwide student survey. These relationships were also explored across schools. Methods: Using student-reported data from a customized version of the California Healthy Kids Survey from the San Francisco Unified School District (n = 7,314 students in 15 schools), propensity scoring methods were used to adjust for potential bias in the observed relationship between student utilization of services and outcomes of interest. Results: Estimates generally pointed to positive relationships between service utilization and outcome domains, particularly among students using services 10 times. Exploratory analyses indicate that these relationships differ across schools. Conclusions: Use of school-based health centers appears to positively relate to student-reported caring relationships with health center staff and school assets. Future research is needed to confirm the robustness of these observed relationships.

Sullivan, K., et al. (2015). Substance abuse and other adverse outcomes for military-connected youth in California. Results from a large-scale normative population survey. *JAMA Pediatrics* 169(10), 922-928.

Military families and military-connected youth exhibit significant strengths; however, a sizeable proportion of these families appear to be struggling in the face of war-related stressors. Understanding the consequences of war is critical as a public health concern and because additional resources may be needed to support military families. The study's purpose was to determine whether rates of adverse outcomes are higher for military-connected adolescents during war compared with nonmilitary peers.

This study is a secondary data analysis of a large, normative, and geographically comprehensive administrative data set (2013 California Healthy Kids Survey) to determine whether military-connected youth are at risk for adverse outcomes, including substance use, experiencing violence and harassment, and weapon carrying, during wartime. These outcomes are of particular concern because they affect socioemotional adjustment and academic success. Data were collected in March and April 2013 and participants included 54 679 military-connected and 634 034 nonmilitary connected secondary school students from public civilian schools in every county and almost all school districts in California.

Multivariable logistic regression models indicated that military-connected youth had greater odds of substance use, experience of physical violence and nonphysical harassment, and weapon carrying. For

example, military-connected youth had 73% greater odds of recent other drug use (eg, cocaine and lysergic acid diethylamide; odds ratio [OR], 1.73; 95%CI, 1.66-1.80) and twice the odds of bringing a gun to school (OR, 2.20; 95%CI, 2.10-2.30) compared with nonmilitary-connected peers. Their odds of being threatened with a weapon or being in a fight were also significantly higher than their civilian counterparts (OR, 1.87; 95%CI, 1.80-1.95 and OR, 1.67; 95%CI, 1.62-1.71, respectively).

Most military-connected youth demonstrate resilience. However, results suggest that during wartime, military-connected youth are at increased risk for adverse outcomes. Further, when compared with data from 2011, the rates of these negative outcomes appear to be increasing. These findings suggest a need to identify and intervene with military-connected adolescents and reflect a larger concern regarding the well-being of military families during wartime.

Toomey, R., McGuire, J., & Russell, S. (2012). Heteronormativity, school climates, and perceived safety for gender nonconforming peers. *Journal of Adolescence* 35(1), 187-196.

Students' perceptions of their school climates are associated with psychosocial and academic adjustment. The present study examined the role of school strategies to promote safety in predicting students' perceptions of safety for gender nonconforming peers among 1415 students in 28 high schools, using questions from the California Healthy Kids Survey. Using multilevel modeling techniques, we examined student- and school-level effects on students' perceptions of safety for gender nonconforming peers. We found that older students, [bisexual](#) youth, Latino youth, and youth who experienced school violence perceived their gender nonconforming male peers to be less safe. Similarly, we found that older students and students who experienced school violence and harassment due to gender nonconformity perceived their gender nonconforming female peers to be less safe. At the school-level, we found that when schools included [lesbian](#), gay, bisexual, [transgender](#), and queer (LGBTQ) issues in the curriculum and had a Gay-Straight Alliance, students perceived their schools as safer for gender nonconforming male peers.

Yang, F., et al. (2013). Psychosocial correlates of cigarette smoking among Asian American and Pacific Islander adolescents. *Addictive Behaviors* 38, 1890-1893.

Despite the growing body of research in adolescent cigarette smoking, there is a lack of research on Asian American and Pacific Islander (AAPI) adolescents. This study examined the prevalence and psychosocial correlates of the past 30-day cigarette smoking in Asian American (AA) and Pacific Islander (PI) adolescents by utilizing a multi-systemic theory—the problem behavior theory. Using the 2006–07 High School Questionnaire of California Healthy Kids Survey, variables such as cigarette smoking, individual characteristics and external influences were assessed. Chi-square tests and generalized estimating equations were used in the analyses. PIs had higher past 30-day cigarette smoking rates than AAs. In the whole AAPI population, significant correlates of cigarette smoking included: positive and negative attitudes toward cigarettes, perceived harm of cigarettes, perceived prevalence of peer cigarette smoking, friend disapproval of cigarette use, previous drug use, truancy, and academic performance. Interaction results showed that truancy increased the odds of cigarette use for AAs only. The study found differential prevalence and correlate of cigarette smoking in addition to common psychosocial correlates in AAs and PIs. It sheds light on the importance of studying AAs and PIs separately and further exploring other potential variables that contribute to the prevalence discrepancy.

Yang, F., Tan, K-A, & Cheng, W. (2014). The effects of connectedness on health-promoting and health-compromising behaviors in adolescents: Evidence from a statewide survey. *Journal of Primary Prevention*, 34, 33-46.

Using a social ecological perspective, we examined the effects of connectedness in multiple domains on health-promoting and health-compromising behaviors among Asian American (AA), Pacific Islander (PI), and Caucasian/White American (WA) adolescents in California using data from the California Healthy Kids Survey. After adjusting for age, gender, and socioeconomic status, the

following consistent results emerged across the three ethnic groups: (a) community connectedness increased the odds of physical activity; (b) internal, family, and school connectedness decreased, whereas friend connectedness increased, the odds of substance use; and (c) internal and family connectedness decreased the odds of violent behavior. We also found specific ethnic variations pertaining to the effects of connectedness. Friend connectedness increased the odds of violent behavior for AAs and WAs, but not for PIs. Meanwhile, community connectedness increased the odds of substance use and violent behavior for AAs and PIs, but decreased the odds of these behaviors for WAs. Findings for healthy dietary behavior were inconsistent across ethnic groups and connectedness domains. Our overall findings suggest that the effects of connectedness were more salient for health-compromising behaviors than for health-promoting behaviors. Health prevention and intervention efforts in adolescents could target the role of their connectedness to their multiple social domains.

You, Sukkung, et al. (2008). Relations among school connectedness, hope, life satisfaction, and bully victimization. *Psychology in the Schools* 45(4), 446-460.

This study investigates the role of school connectedness in mediating the relation between students' sense of hope and life satisfaction for three groups: Bullied Victims, Peer Victims, and Nonvictims. Students in grades 5 to 12 ($N=866$) completed the California Bully/Victim Scale, the School Connectedness Scale from the California Healthy Kids Survey, Children's Hope Scale, and Students' Life Satisfaction Scale. The CHKS scale had a Cronbach's alpha coefficient for the current sample of 0.82.

Multigroup latent mean analysis revealed significant group mean differences in hope, school connectedness, and life satisfaction, supporting our bullying classification. Multigroup structural model analysis showed differential patterns between hope, school connectedness, and life satisfaction. Specifically, school connectedness partially mediated the relation between hope and life satisfaction for the Nonvictims only. The effect of hope on school connectedness was stronger for the Bullied Victims than the Nonvictims, and the effect of hope on life satisfaction was stronger for the Peer Victims and Bullied Victims than the Nonvictims group. It appears that students who are victimized at school experience less hope and lower levels of connectedness to school, both of which are associated with lower life satisfaction.

Considering these results in light of prior research, it appears that simply encouraging school connectedness may not be adequate to promote healthy outcomes for students who have been victimized by their peers in the school setting. The cumulative effects of being purposefully and chronically victimized by a peer and repeated failed efforts to assertively deflect these unjust attacks may make the goal of stopping the bullying seem too elusive to pursue. This, in turn, may adversely affect a victim's beliefs that he or she can deter future attacks. As more failure is experienced, hope may diminish. This could make it more difficult for the bullied child to trust peers, thereby making the formation and maintenance of peer connections more challenging.

Nickerson and associates (2006) suggested that targeted interventions for bullied students should focus on building meaningful social support networks. Efforts to rebuild social connections may be helpful. Such an approach suggests that in addition to implementing traditional social skills training for bullied children, an enhanced approach to the prevention of school bullying may draw on principles of positive psychology. Bullying prevention programs do not have a strong record of success generalization (Rigby, 2004). Perhaps intervention effectiveness can be enhanced by using strategies that seek to enhance both cognitive pathways (e.g., hope, life satisfaction) and social contexts (e.g., school connectedness) in an effort to disrupt the bullying cycle by reducing the vulnerability of the victim to chronic attacks.

A practical implication of this study is that school psychologists should attend to the cognitive processes experienced by bullied students. The results of this study suggest that bullied youth lose access to the potentially reinforcing effects of positive social connections at school, could potentially benefit from efforts to resituate them into more nurturing and caring social contexts (e.g., Nickerson

& Nagle, 2004; Nickerson et al., 2006), and thereby work to rebuild their positive social connections at school, as a way to simultaneously boost their hope.

Voight, Adam (2013). *The Racial School Climate Gap*. Paper prepared for the Region IX Equity Assistance Center. San Francisco: WestEd. Download: www.wested.org/resources/the-racial-school-climate-gap/

This document summarizes several recent research studies, conducted by the staff of WestEd's Health and Human Development Program, that examine the connections between student race/ethnicity, achievement, and school climate. The collective findings support the notion that, just as there is a racial achievement gap, there is a racial school-climate gap in California schools.

Voight, A., Austin, G., & Hanson, T. (2013). *A climate for success: How school climate distinguishes California schools that are beating the odds academically*. San Francisco, CA: California Comprehensive Center, WestEd. Download: www.wested.org/resources/a-climate-for-academic-success-how-school-climate-distinguishes-schools-that-are-beating-the-achievement-odds-report-summary/

Some schools perform much better than others academically. Understanding why holds a key for school improvement. To better understand the factors associated with school academic success, we conducted an innovative analysis that demonstrated that a positive school climate was a distinguishing characteristic of California secondary schools that “beat the odds” (BTO) and consistently performed better on the state’s standardized tests than *would be predicted* based on the characteristics of their students. The more positive the school climate, the greater the probability of beating the odds. Moreover, school climate was more strongly associated with beating the odds than a school’s level of personnel resources.

Ward, B., & Gersten, R. (2013). A randomized evaluation of the safe and civil schools model for positive behavioral interventions and supports at elementary schools in a large urban school district. *School Psychology Review*, 42(3), 317-333.

In this article, we report the results from a randomized evaluation of the Safe and Civil Schools (SCS) model for school-wide positive behavioral interventions and supports. Thirty-two elementary schools in a large urban school district were randomly assigned to an initial training cohort or a wait-list control group. Outcome measures were derived from the California Healthy kids Survey and its companion staff survey. Results suggested that SCS training positively affected school policies and student behavior. Surveys administered after the commencement of SCS training found large improvements in staff perceptions of school behavior policies and student behavior at schools receiving SCS training that were not observed at wait-list schools. Similarly, we observed reductions in student suspensions at schools implementing SCS that were not observed at control schools. The observed improvements persisted through the second year of trainings, and once the wait-list control schools commenced SCS training, they experienced similar improvements in school policies and student behavior.

Whitaker, K., Shapiro, V., & Shields, J. (2016). School-based protective factors related to suicide for lesbian, gay, and bisexual adolescents. *Journal of Adolescent Health*, 58(1), 63-68.

Research indicates that lesbian, gay, and bisexual (LGB) adolescents are three times more likely to consider suicide than their heterosexual peers. Although research has identified risk factors for suicide among this population, little is known about school-level protective factors among this population, which may buffer the impact of risk.

This study aims to understand whether school-based protective factors (e.g., school safety, relationships with caring adults at school, school connectedness) are associated with decreased suicidal ideation for LGB adolescents.

Logistic regression analyses were conducted on the data generated by the San Francisco Unified School District's 2011 California Healthy Kids Survey to examine the influence protective factors related to suicidal ideation for LGB adolescents (n=356).

Results indicated that higher levels of school connectedness predicted less suicidal ideation (OR = 0.59, $P = .005$). This study contributes to our understanding of predictors of suicidal ideation in ways that could inform the development of school-based preventative interventions related to suicide for LGB adolescents.

Wong, M., Klingle, R., & Price, R. (2004). Alcohol, tobacco, and other drug use among Asian American and Pacific Islander adolescents in California and Hawaii. *Addictive Behaviors* 29(1), 127-141.

As an aggregate group, the lowest rates of alcohol, tobacco, and other drug (ATOD) use are often reported for Asian Americans/Pacific Islanders (AAPIs), compared to other groups. However, the low rates are often based upon samples with small representations of AAPIs, or represented by only one or two AAPI groups. Consequently, reliable data on the rates of ATOD use among specific AAPI subgroups are severely lacking. Using data from school surveys collected from 9th grade students in California and 10th grade students in Hawaii, we compared the ATOD rates of Whites, Chinese, Filipino, Japanese, and Pacific Islander/Native Hawaiian adolescents. We found considerable variation in ATOD rates among subgroups of AAPIs, variation that was consistent across surveys. Chinese reported the lowest ATOD rates; Whites, Pacific Islanders, and Native Hawaiians reported among the highest. We found similar variation in need for alcohol and other drug treatment for these groups. Implications of these findings and recommendations for future research are discussed.

Wormington, S., Anderson, K., & Corpus, J. (2012). The role of academic motivation in high school students' current and lifetime alcohol consumption: Adopting a self-determination theory perspective. *Journal of Studies on Alcohol and Drugs*, 72, 965-974.

The current study investigated the relationship between different types of academic motives—specifically, intrinsic motivation, introjected regulation, and external regulation—and high school students' current and lifetime alcohol consumption. One thousand sixty-seven high school students completed measures of academic motivation, other school-related factors, and lifetime and current alcohol consumption. To measure student engagement, school relatedness and teacher support scales from the California Healthy Kids Survey were used. Using structural equation modeling, different types of motivation and school-related factors were differentially related to student drinking. Specifically, intrinsic motivation was negatively related to lifetime and current alcohol consumption. External regulation, on the other hand, was positively associated with current drinking. Grade point average was the only school-related factor related to student alcohol use. These findings suggest that motivation is an important construct to consider in predicting students' alcohol use, even when other more commonly studied educational variables are considered. In addition, it supports the adoption of a motivation framework that considers different types of motivation in understanding the relationship between academic motivation and alcohol use. Suggestions for incorporating the self-determination model of motivation into studies of alcohol and substance use, as well as potential impacts on intervention efforts, are discussed. In particular, it may be important to foster only certain types of motivation, rather than all types of academically-focused motives, in efforts to deter alcohol use.

Wormington, S., Corpus, J., & Anderson, K. (2012). A person-centered investigation of academic motivation and its correlates in high school. *Learning & Individual Differences*, 22, 429-438.

This study used a person-centered approach to identify naturally occurring combinations of intrinsic motivation and controlled forms of extrinsic motivation (i.e., introjected and external regulation) and their correlates in an academic context. Teacher support and school relatedness were measured by scales from the California Healthy Kids Survey. 1061 high school students completed measures of

academic motivation, performance, and school-related correlates. Cluster analysis revealed four motivational profiles characterized by comparably high levels of all types of motivation (high quantity), high intrinsic motivation relative to introjected and external regulation (good quality), low intrinsic motivation and introjected regulation relative to external regulation (poor quality), and very low intrinsic motivation and introjected regulation relative to external regulation (low quantity with poor quality). Students in the high quantity and good quality profiles reported the strongest academic performance and greatest overall extracurricular participation, with students in different motivational profiles likely to participate in different types of activities. Students in the high quantity profile, moreover, perceived the most teacher support and school relatedness. These findings suggest that controlled forms of extrinsic motivation may not be associated with maladaptive outcomes at the high school level when coupled with high levels of intrinsic motivation.

Wormington, S., et al. (2016). Peer victimization and adolescent adjustment: Does school belonging matter? *Journal School Violence*, 15(1), 1-21.

Recent research highlights the role of peer victimization in students' adjustment across a variety of domains. In the current study, we tested for direct effects from peer victimization to adolescents' academic behavior and alcohol use, as well as indirect effects through school belonging. Adolescents from two large samples self-reported on the California healthy kids Survey. Two-group structural equation models revealed 9a0 direct and indirect paths from peer victimization to academic functioning; 9b0 indirect, but not direct, effects through school belonging for lifetime drinking; and 9c0 direct and indirect effects from peer victimization to current drinking. Findings implicate school belonging as a mediator between peer victimization and important outcomes in adolescence.

II. FACTSHEETS

These factsheets summarize results of analyses conducted on CHKS and CSCS data. Their preparation was made possible wholly or in part through funding by the California Department of Education. Funding to prepare the Safe and Supportive Schools (S3) Factsheets was provided to CDE by the US Department of Education.

California Healthy Kids Survey Factsheets

Download at calschls.org/resources/factsheets/

1. Hanson, T.L. and Austin, G.A. (2002). *Health risks, resilience, and the Academic Performance Index.*

Ensuring that students are safe, drug-free, healthy, and resilient is central to improving academic performance. Many adolescents are coming to school with a variety of health-related problems that make successful learning difficult, if not impossible. Moreover, research is increasingly demonstrating that promoting assets and resilience among students is associated with both improvements in academic achievement and reductions in health risk. An analysis of data from the *California Healthy Kids Survey* (CHKS) indicates a significant relationship across secondary schools between *Academic Performance Index* (API) scores and three-quarters of the health-related indicators examined. The analysis covered substance use, violence, nutrition, exercise, and environmental assets. This factsheet summarizes the results for four key variables: eating breakfast on the day of the survey; using alcohol, tobacco, or marijuana at school; school safety; and external assets (resilience). The results suggest that schools where students are low in health risk factors and high in protective factors have higher levels of academic achievement than other schools.

2. Hanson, T.L., & Zheng, H. (2003). *Student tobacco use and TUPE competitive grant funding.*

Analysis of CHKS data between 1998 and 2003 shows that tobacco use among 11th graders declined markedly in all California schools over this period. However, smoking declined more among schools that received grant funding under the Tobacco Use Prevention Education (TUPE) program compared to schools that did not. Specifically, 4 of the 6 smoking measures declined significantly more in TUPE-funded schools than in schools without these extra funds. These measures were Lifetime smoking, lifetime regular smoking, current smoking, and daily smoking. In addition, TUPE grantees showed significantly greater improvements in 2 of 5 tobacco use precursors (likelihood of smoking in the future and overestimation of peer smoking prevalence). Finally, TUPE schools showed improvements in smoking cessation relative to non-TUPE schools, although this difference was not quite statistically significant at conventional levels ($p=.09$).

3. Hanson, T.L. and Austin, G.A. (2003). *Are student health risks and low resilience assets an impediment to the academic progress of schools?*

This factsheet summarizes findings from a longer report, Hanson, T.L., Austin, G.A. & Lee-Bayha, J. (2004). *Ensuring that no child is left behind: How are student health risks & resilience related to the academic progress of schools.* San Francisco, CA: WestEd. The analysis of the relationship between academic performance and student well-being presented in Factsheet #1 was extended by examining how student health risk and resilience, as measured by the CHKS, are related to the *academic progress* of schools by investigating how these factors are related to subsequent *changes* in academic performance. The analyses suggest that health risk and low levels of resilience assets do impede the progress of schools in raising test scores. California secondary schools made greater progress in raising standardized test scores over a one-year period when they had higher percentages of students who are less engaged in risky behaviors such as substance use and violence, who are more likely to eat nutritiously and exercise, and who report caring relationships and high expectations at school. These results suggest that addressing the health and developmental needs of youth is a critical

component of a comprehensive strategy for meeting the accountability demands for improved academic performance. Efforts to improve schools should go beyond the current emphasis on standards and accountability measured by test scores. Policies and practices focusing exclusively on increasing test scores while ignoring the comprehensive health needs of students are almost certain to leave many children, and many schools, behind. Specifically:

- District and school leaders can take steps that may promote student achievement by increasing student access to moderate-to-vigorous physical activity in physical education classes, monitoring the nutritional content of food offered at school, and promoting greater awareness among students about their physical health and nutrition.
- Crime, violence, antisocial behavior, and other types of social disorganization on school campus can have adverse consequences for student learning and should be targeted with comprehensive prevention programs.
- School practices that provide students with supportive, caring connections to adults at the school who model and support healthy development, and that provide clear and consistent messages that students can and will succeed hold great promise for addressing the developmental needs of children and improving student learning.

4. Heck, K., Russell, S., O’Shaughnessy, M., Laub, C., Calhoun, C., and Austin, G. (2005.) *Bias-related harassment among California students.*

CHKS data were collected during the 2001-02 school year from 237,544 students in grades 7, 9 and 11 in 1,208 California schools throughout the state. The data from all three grades were combined for the analyses. The results indicate that victims of bias-related harassment (BRH) are more likely than other students to smoke cigarettes, drink alcohol, and use illicit drugs. BRH victims are more likely to report feeling sadness and hopelessness; lower grades, school attendance, and connectedness to adults and peers; and higher levels of victimization such as having property stolen or being threatened with a weapon at school as well as experiencing relationship violence. They were also more likely to carry a weapon to school. Victims of harassment based on sexual orientation (actual or perceived) or disability reported particularly high levels of these negative behaviors, feelings, and experiences.

5. Austin, G., McCarthy, W., Slade, S., and Bailey, J. (2007.) *Links between smoking and substance use, violence, and school problems.*

Students who engage in one form of risk-taking behavior generally engage in other types of as well. An analysis of 2003-2005 CHKS data over 560,000 students indicates that current smokers are significantly more likely than nonsmokers to engage in alcohol and other drug (AOD) use, be involved in violence and gang membership, and experience school-related problems and disengagement. To a lesser extent, current smokers are also more likely than nonsmokers to be victims of violence and harassment, feel unsafe at school, and experience incapacitating sadness and loneliness. These results suggest that efforts to reduce student smoking will be more successful if embedded in approaches that address a broad range of risk behaviors and problems. Cigarette smoking as a marker for other problem behavior is especially true among 7th graders, suggesting that early onset smokers are particularly in need of a broad range of prevention services. There were smaller group differences among 11th graders than 7th, possibly because many early smokers are no longer in school by the 11th grade.

6. Austin, Greg, Jones, G., and Annon, K. (2007.) *Substance use and other problems among youth in foster care.*

Of secondary students that took the CHKS in 2005/06, 3.5% (5,122 9th and 4,240 11th) lived in another relative's home (not their parents), and 0.5% (769 9th and 563 11th) lived in "foster home, group home, or awaiting placement." Compared to Parent Home Youth, the Foster Care Youth reported much higher rates of substance abuse, poor school attendance and grades, and more violence-related behaviors, as well as more harassment and depression risk. They also were more likely to be low in

caring adult relationships and total environmental assets. Relative Home Youth tended to fall in the mid-range. The group differences were greater in 9th grade than 11th, and they increased with level of substance use involvement. The results underscore the need to direct greater attention, services, and developmental supports to youth in foster care.

7. Austin, G., Dixon, D., and Bailey, J. (2007.) *Risk behaviors and problems among youth in nontraditional schools.*

This analysis examined risk-taking behavior among students that attend Nontraditional Schools (NTS) such as Continuation and Community Day Schools, compared to the peers in regular 11th grade. The sample consisted of 25,600 NTS students and 182,000 11th graders who completed the CHKS in the 2004 through 2006. It finds generally higher rates of substance use among Nontraditional School students and concludes that “there is much more to be done to create the intimate, nurturing atmosphere that nontraditional schools need to ensure these high-risk youth are reconnected with school and graduate.”

8. Austin, G., Hanson, T., Bono, G., & Cheng, Z. (2007.) *The achievement gap, school well-being, and learning supports.*

How does academic performance and school well-being vary by the racial/ethnic composition of schools? School well-being refers to a school having a developmentally positive learning climate characterized by environmental supports, safety, and school attachment, as measured by student-reported data collected in 2004-06 by the California Healthy Kids Survey (CHKS). Both academic performance and school well-being varied consistently and persistently across schools by racial/ethnic groupings. They were lowest in schools with large proportions of African American and Hispanic students, as well as in low-income schools, which have high enrollments of both groups. Controlling for SES and other school demographic characteristics reduced these racial/ethnic group differences but they still remained between these schools and those serving predominantly White students. This suggests that school-climate factors related to student well-being may also play a role in the gap and that one strategy to close it is to enhance learning supports that foster caring adult relationships, high expectations, meaningful participation, safety, and connectedness in schools serving large proportions of low-income African American and Hispanic students.

9. *Racial/Ethnic Differences in School Performance, Engagement, Safety, and Supports*

Describes how 17 school-based CHKS indicators covering these areas differed significantly across eight racial/ethnic groups of secondary students. Overall, White and Asian students reported the most positive outcomes, and African American and Latino students had the least positive outcomes in regard to school performance, engagement, and safety. Latinos were the lowest of all groups in school developmental supports; African-Americans, in school connectedness and safety. The results demonstrate that underlying the Achievement Gap, there are also gaps in school engagement, safety, and supports that need to be addressed.

10. *Harassment Among California Students, 2006-08*

Updates Factsheet #4 in providing current and expanded data on bullying among California secondary students, 2006-08. The data suggest the state has made little if no progress in reducing harassment, especially for race/ethnicity. Thirty-seven percent of secondary students self-report being harassed at least once. Victims of harassment are more likely to not feel safe at, and connected to, school; to have higher truancy; and to experience lower developmental (resilience) supports at school, and they report higher rates of fighting and weapons possession at school, as well as risk of depression. Students who reported bias-related harassment, particularly for disability and sexual orientation, have poorer well-being than students who were only harassed for other reasons.

11. *Students Who Report Chronic Sadness, 2006-08.*

The characteristics of 7th and 9th graders are examined who reported chronic sadness/hopelessness on the 2006–2008 California Healthy Kids Survey (CHKS). Three in ten secondary students report that, in the previous 12 months, they felt so sad or hopeless almost every day for two weeks or more that they stopped doing some usual activities, an indicator of student mental health needs. Seventh and 9th graders who experience such chronic sadness, compared to their peers who do not, are at elevated risk of a wide range of educational, health, social, and emotional problems, including lower school attendance, performance, and connectedness. They also report lower levels of the developmental supports in their schools and communities that have been shown to mitigate these problems

12. *Students Who Contemplated Suicide, 2009-10.*

The characteristics are examined of 9th and 11th grade students who responded “yes” to the question, "During the past 12 months did you ever seriously consider attempting suicide?" on the 2009-2010 California Healthy Kids Survey (CHKS). Student responses to the CHKS suicide contemplation question are compared with responses to other CHKS items related to student behaviors.

13. *Racial/ethnic Differences in Student Achievement, Engagement, Supports, and Safety: Are they Greater Within Schools or Between Schools in California?*

Summarizes the results of a report that quantifies the extent to which observed racial/ethnic gaps in achievement and in school engagement, safety, and student developmental supports occurs *within* and/or *between* secondary schools. If most of the gap is due to within-school differences, practices designed to ensure equity in resources, supports, and experiences among all students in a school are likely to be the most effective in ameliorating the gap. If most of the gap is due to between-school differences, then practices aimed at either reducing racial/ethnic segregation or targeting low performing schools serving high proportions of students of color are likely to have the most benefit. The results confirm that important gaps exist on academic achievement test scores and on CHKS indicators of school-related well-being between White and non-White students, although less for Asians than for other groups. Overall, non-Whites feel less connected, safe, and supported at school, and they are more likely to have been harassed for their race/ethnicity. In the majority of cases, with notable exceptions for Asians, *these racial/ethnic gaps are greater within-schools than between-schools*. African American, Latino, and Asian students feel less safe, engaged, and supported than their White peers *in the same school*. These results highlight the important contribution to the achievement gap of racial/ethnic group inequity within a school and suggest that practices designed to ensure equal access to academic resources, opportunities, and learning supports and promotion of common experiences may be effective in ameliorating the gap.

14. *Racial and Ethnic Group Differences in Responses on the CHKS Closing the Achievement Gap Module (CTAG).*

The race- and ethnic-group differences are summarized in responses on the 10-item CHKS supplementary Closing the Achievement Gap (CTAG) Module as reported by over 200,000 students in 7th, 9th, and 11th grades in 142 districts and 769 schools during the 2008-10 school years. The results reveal moderate variation across groups, with particularly large group differences in high school and in regard to issues of respect and racial/ethnic tension. Non-Asian minorities reported lower outcomes than Whites and Asians. Analysis of several items asking about instructional support revealed an exception to this pattern: Whites reported *less* instructional support from teachers and adults at school than that reported by other racial/ethnic groups.

California Safe and Supportive Schools (CalS3) Factsheets

Download at californiaS3.wested.org/tools

1. *Teacher Support: High Expectations and Caring Relationships*

High levels of teacher support are a critical component of positive school climate change. This S3 factsheet focuses on two important aspects of how teachers can support student well-being and resilience—high expectations and caring relationships.

2. *Opportunities for Meaningful Participation in School*

Student interest, engagement, and motivation are fostered by providing students with opportunities to participate in meaningful, personally relevant activities in school. This factsheet addresses how these opportunities are related to student well-being and school climate improvement.

3. *School Climate and Academic Performance Across California High Schools*

School climate, as measured by the School Climate Index, is strongly related to state Academic Performance Index (API) scores. As SCI scores increase—as high schools became safer, more supportive, and more engaging—API scores increase as well.

4. *Are School-level Supports for Teachers and Teacher Collegiality Related to Other School Climate Characteristics and Student Academic Performance?*

An analysis of California School Climate Survey data from school staff shows that supportive working conditions for teachers and teacher relationships with each other are related to school climate and student academic performance. The results suggest that providing teachers opportunities to engage in healthy, productive collegial relationships supports a positive school climate, improves conditions for learning for students, and improves student academic achievement.

5. *School Connectedness and Academic Achievement in California High Schools*

The CHKS School Connectedness Scale is an important differentiator between low-performing and high-performing high schools and has value as an indicator of school quality. School connectedness appears to have increased in California in the second half of the last decade, but it still declines markedly after elementary school and a substantial majority of high school students are not highly connected to their schools, with the lowest rates of both connectedness and test scores in low-income schools.

California School Staff Survey Factsheets

Download at calschls.org/resources/factsheets/

1. *How School Climate Perceptions Vary by the Race and Ethnicity of Staff*

White and, to some extent, Asian/Pacific Islander staff members were more likely than other staff in 2008-10 to report that their schools provide a positive, supportive, and safe learning environment for students; and that the students that they serve come to school ready to learn. Conversely, African American staff are less likely than others to report that the school provides a positive learning and working environment, that it is safe and supportive for students, that relations among staff are collegial, and that students come to school ready to learn. Latino/Hispanic staff generally report levels of school climate that are in the mid-range between the reports of Whites and Asian/Pacific Islanders and those of African Americans.

2. *School Climate Perceptions of Staff in Schools with Different Racial/Ethnic Compositions.*

An analysis of 2008-10 CSCS data based on the predominant racial/ethnic composition of school student enrollment showed that staff in Predominantly Asian and White schools consistently reported markedly more positive results on school climate indicators than staff in Predominantly African

American schools, who reported the most negative results, or in Latino schools, who fell in the middle. There were only very small differences between Predominantly and Plurality Latino schools. This report is a companion to the analyses of 2004-06 California Healthy Kids Survey (CHKS) data, summarized in [CHKS Factsheet #8](#) which showed that student reports of both academic performance and school well-being indicators varied consistently across schools based on their predominant racial/ethnic enrollment. [Download the full survey report.](#)

III. INTERNATIONAL RESEARCH

Because it pioneered theoretically-based, psychometrically sound assessment of resilience factors, the HKS/RYDM has been used in research across the globe, including:

- Australia (Hazel 2006; Russo & Bonn 2007)
- China (Wang, Zhang, & Xy 2007)
- Jamaica (Hope Enterprises 2001)
- South Africa (Johnson & Sazarus 2008)
- Turkey (Gizir & Aydin 2009)

Gizir, Cem Ali, & Aydin, G. (2009). Protective factors contributing to the academic resilience of students living in poverty in Turkey. *Professional School Counseling, October 1, 2009.*

An examination of the factors that promote academic resilience among impoverished 8th-grade students in Turkey, using the RYDM, revealed that home high expectations, school caring relationships and high expectations, and peer caring relationships were the prominent external protective factors that predicted academic resilience. Internal protective factors were having positive self-perceptions about one's academic abilities, high educational aspirations, empathic understanding, an internal locus of control, and hope for the future. The findings indicate that school counselors may assist poor students by promoting caring relationships between peers, creating a positive school climate, and providing adequate emotional support for students. In addition, they should provide individual and group counseling to improve their coping, problem solving, and academic skills as well as self-regulatory processes. Although impoverished schools likely offer the poorest quality teaching, the role of protective factors in the school environment appears crucial for the development of academic resilience.

Hazel, Trevor. (2006). *MindMatters: Evaluation of a professional development program and school-level implementation.* Hunter Institute of Mental Health, Australia.

Hope Enterprises (2001). *What protects teenagers from risk behaviours? Applying a resiliency approach to adolescent reproductive health in Jamaica.* Jamaica: Hope Enterprises Ltd, and the Rural Family Support Organization.

Johnson, Bridget, & Sazarus, S. (2008). The role of schools in building the resilience of youth faced with adversity. *Journal of Psychology in Africa, 18(1), 19-30. Special Issue: Positive psychology in African.*

This study explored factors related to risk, resilience and health amongst South African teenagers. Grade nine students (N = 472; males = 210, females = 262, age range = 12 to 18 years) at seven schools in the Western Cape participated in the study. The California Healthy Kids Survey, which includes risk and resilience modules, was utilized. Focus group interviews were also conducted with the students to determine their needs and support at school. Questionnaires relating to the health promoting schools framework were administered to teachers. Quantitative and qualitative research methodologies were employed. The results indicated that the students were engaged in a variety of risk behaviors that threatened their well-being and that their external and internal assets were limited. A multi-faceted approach to reducing risk and enhancing resilience, involving family, peer, school and community support within a health promoting schools framework, is advocated.

Karatas, Zeynep, & Cakar, F.S. (2011). Self-esteem and hopelessness, and resilience: An exploratory study of adolescents in Turkey. *International Education Studies, 4(4), 84-91.*

Using the Healthy Kids Survey Resilience and Youth Development Module, among other instruments, a study was conducted among 223 high school students in Turkey. The findings showed that self-esteem and hopelessness is a significant predictor of resilience in adolescents. There was a

positive relationships between self-esteem and resilience, but there was a negative relationship between hopelessness and resilience.

Lam, S. et al. (2012). Understanding student engagement with a contextual model. In: S.L. Christenson et al. (eds.), *Handbook of Research on Student Engagement*. Pp. 403-419.

In the present study, student engagement was conceptualized as a metaconstruct with affective, behavioral, and cognitive dimensions. As the indicators in each of the three dimensions were unpacked from facilitators and outcomes, we were able to investigate how student engagement was associated with its antecedents and outcomes in a sample of Chinese junior secondary school students (N = 822). The results supported a contextual model for understanding student engagement. They revealed that students were engaged in school when they felt that their teachers adopted motivating instructional practices and they had social-emotional support from their teachers, parents, and peers. Their engagement was high when they had high self-efficacy, endorsed learning goals, and effort attribution. Most importantly, when students were engaged in schools, they experienced positive emotions frequently and their teachers rated them high on academic performance and conduct. The findings have implications for interventions for the enhancement of student engagement in school.

Russo, Rebecca, & Bomn, P. (2007). Primary school teachers' ability to recognize resilience in their students. *The Australian Educational Researcher*, 34(1), 17-32.

This study investigated teachers' knowledge of, and capacity to identify resilience, in 92 primary school children in Far North Queensland. It was found that although teachers' knowledge of resilience was apparently strong, and they reported a significant level of confidence in their ability to assist children in building resilience, their capacity to identify levels of resilience in their students was lacking based on data from students using the California Healthy Kids Survey. The paper concludes with suggestions for future research.

Wang, J-J, Zhang, H-B, & Xy, J. (2007). Relationship between resilience and social support of primary school students in Hefei. *Chinese Mental Health Journal* 21(3), 162-164.

Objective: To determine the relationship between resilience and social support among primary school students. Over two thousand primary school students from grade 3 to 5 were surveyed with questionnaires of Social Support Questionnaire and the Student Resilience Survey revised from the California Healthy Kids Survey in Hefei. Results are reported in three areas. First, the average scores of resilience of students in Hefei were 49.0 ± 8.8 , Girls got higher scores (50.1 ± 8.6) than boys on resilience (47.9 ± 8.8 , $t = 5.11$, $P < 0.01$). The scores of resilience of students in grade 5 were higher (49.0 ± 8.8) than grade 3 and 4 (47.9 ± 8.7 , 47.9 ± 8.7 , $F = 21.39$, $P < 0.01$). There was different on resilience among schools. Second, social support had positive association with psychological resilience ($r = 0.49$, $P < 0.01$). Third, by unconditional multivariate logistic regression model, related factors for student resilience in grade 3 were ranked as follows: peer support, school support, relative support. Student resilience in grade 4 was associated with peer support, parent support, relative support, school support. Related factors for student resilience in grade 5 were ranked as follows: parent support, peer support, school support, and relative support. It is concluded that social support in daily life has positive correlation with resilience of primary students.

IV. PSYCHOMETRIC STUDIES

Since the CHKS was introduced in 1999, it has provided one of the few and richest sources in the nation for conducting psychometric research on strength-based assessment, resilience, and school connectedness and climate. Its scales assessing environmental developmental supports (assets or protective factors) and school connectedness have consistently been found to be robust and reliable for use among secondary students. The psychometric research has also supported its theoretical framework linking the school environment to student engagement and health-risk behaviors. This research guides improvements in the survey instruments.

CalSCHLS Surveys (General)

Hanson, T., & Voight, A. (2014). *The appropriateness of a California student and staff survey for measuring middle school climate* (REL 2014–039). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory West. Download from <http://ies.ed.gov/ncee/edlabs>, or relwest.wested.org/resources/51.

The student and teacher surveys of the California School Climate, Health, and Learning Survey each measure six school climate domains reliably and validly. For the student survey, the domains are safety and connectedness, caring relationships with adults, meaningful participation, substance use at school, bullying and discrimination, and delinquency. For the teacher survey, the domains are support and safety, caring staff–student relationships, staff–peer relationships, student health and engagement, student delinquency, and resource provision. The study found that school-level scores from the teacher survey were more stable than those from the student survey. All of the school-level domain measures were associated in expected ways with school-level student academic performance and suspensions. Survey results can help educators identify school climate needs, target supports and reforms, and monitor progress in climate improvement efforts.

California Healthy Kids Survey

General

Bauhoff, S. (2011). Systematic self-report bias in health data: Impact on estimating cross-sectional and treatment effects. *Health Services and Outcomes Research Methodology*, 11(1-2), 44-53.

This paper examines the effect of systematic self-report bias, the non-random deviation between the self-reported and true values of the same measure. This bias may be constant or variable, and can mislead empirical analyses based on descriptive statistics, program evaluation and instrumental variables estimation. I illustrate these issues with data on self-reported and measured overweight/obesity status, and BMI, height and weight z-scores of public school students in California from 2004 to 2006. The self-reported data come from the California Healthy Kids Survey. I find that the prevalence of overweight/obesity is 2.4–7.6% points lower in self-reported data relative to measured data in the cross-section. A school nutrition policy changed the bias differentially in the treatment and control groups so that program evaluations could find spurious positive or null impacts of the intervention. Potential channels for this effect include improved information and stigma.

Bernaards, C., Berlin, T., & Schafer, J. (2007). Robustness of a multivariate normal approximation for imputation of incomplete binary data. *Statistics in Medicine*, 26(6), 1368-1382.

Multiple imputation has become easier to perform with the advent of several software packages that provide imputations under a multivariate normal model, but imputation of missing binary data remains an important practical problem. Here, we explore three alternative methods for converting a multivariate normal imputed value into a binary imputed value: (1) simple rounding of the imputed value to the nearer of 0 or 1, (2) a Bernoulli draw based on a 'coin flip' where an imputed value between 0 and 1 is treated as the probability of drawing a 1, and (3) an adaptive rounding scheme where the cut-off value for determining whether to round to 0 or 1 is based on a normal approximation to the binomial distribution, making use of the marginal proportions of 0's and 1's on the variable. We perform simulation studies on a data set of 206 802 respondents to the California Healthy Kids Survey, where the fully observed data on 198 262 individuals defines the population, from which we repeatedly draw samples with missing data, impute, calculate statistics and confidence intervals, and compare bias and coverage against the true values. Frequently, we found satisfactory bias and coverage properties, suggesting that approaches such as these that are based on statistical approximations are preferable in applied research to either avoiding settings where missing data occur or relying on complete-case analyses. Considering both the occurrence and extent of deficits in coverage, we found that adaptive rounding provided the best performance.

Hanson, T. (2011, December). *Measurement Analysis of CHKS Core and School Climate Modules items*. Paper prepared for the California Safe and Supportive Schools Project. San Francisco: WestEd. Download californiaS3.wested.org/tools/assessment-and-data. Or contact thanson@wested.org.

A series of factor analyses using selected items from the Core module of the California Healthy Kids Survey (CHKS) and its supplementary School Climate Module (SCM) were conducted to determine the measurement structure of a selected subset of items included on the 2010-11 student surveys. The results of the analyses suggest that the items analyzed can be used to represent eight summary measures of school climate and student risk behavior. Each of the summary measures exhibits good internal consistency reliability, and each measure appears to represent a distinct dimension. The factor analyses also identified a latent factor for *racial/ethnic tension* (SCM), but this two-item measure exhibited too low a reliability to be recommended for future use.

This is the first analyses of School Climate Module data. Eleven of the sixteen items included on the module appear to measure a *positive learning environment* factor. A summative scale comprised of these eleven items has good psychometric qualities, with the highest internal consistency reliability of any other scale. A notable difference from recent analytic work with these items is that a distinct underlying factor for *harassment/bullying* was not detected. The items measuring harassment and bullying at school appear to measure the same underlying factor as the items asking about victimization in general.

It is concluded that these summary measures can be used as the basis for concise, short, user-friendly reports for schools and school districts. Reducing the data presented to a small number of summary measures will likely make the reports more accessible and useful for practitioners.

School Climate Index

Hanson, T. (2012, July). Construction of California's School Climate Index (S3) for High Schools Participating in the Safe and Supportive Schools Program. Paper prepared for the California Safe and Supportive Schools Project. San Francisco: WestEd. Download: calschls.org/site/assets/files/1036/sci_methodology071712b.pdf

States that have been awarded Safe and Supportive Schools (S3) grants by the U.S. Department of Education are required to provide each participating school with a school safety score. California's school safety score is called the School Climate Index (SCI) and is based on California Healthy Kids Survey Data. The SCI was designed to facilitate school-to-school comparisons to identify schools most in need of programmatic interventions aimed at improving school climate. The SCI provides a state normed, school-level description of several factors that are known to influence learning success in schools.

School Connectedness Scale

Furlong, M., O'Brennan, L., & You, S. (2011). Psychometric properties of the Add Health School Connectedness Scale for 18 socio-cultural groups. *Psychology in the Schools, 48*(10), 986-997.

The School Connectedness Scale (SCS), originally derived from the National Longitudinal Study of Adolescent Health (Add Health), has been widely used in psychological and public health research, but has undergone limited psychometric analysis. The responses of 500,800 junior and senior high school students who completed the biennial California Healthy Kids Survey, which includes the SCS, were used in this study. The core psychometric properties of the SCS (reliability, concurrent validity, and latent structure) were very robust. The results showed that across 18 socio-cultural groups the SCS has acceptable reliability and concurrent validity. A series of multiple group analyses confirmed configural, metric, and scalar equivalence across groups. The findings lend confidence to the use of the 5-item SCS as a one-factor scale by researchers and practitioners working with diverse groups of students. It is appropriate to compare the effects of the SCS across these groups. The SCS appears to be a valid and reliable measurement instrument; however, further research is needed to examine its underlying latent construct.

Although the results of this study support the core psychometric properties of the SCS and its use across diverse socio-cultural groups, this analysis did not resolve the more fundamental conceptual issues raised by Libbey (2004) in her review of the terminology used for school connectedness related constructs. The SCS purports to measure student perceptions of adult caring relationships at school, however, based on face validity only one of the five items refers to specifically to adults (teachers). Conversely, the CHKS' School Support Scale (caring relationships and high expectations), which was used in the present study for concurrent validation purposes, also appears to have strong face validity given that it directly asks students about caring adults at their school. What is particularly salient when using the SSS in this analysis is that its prompting statement asks students to specifically consider their perceptions of their relationships with adults at school, which follows directly from the school connectedness definition (CDC, 2009).

In addition, the SCS-SSS correlation was significant but different enough that it can be concluded that these two scales do not measure the same exact construct. Consequentially, researchers may want to further examine the relations among scales that claim to measure aspects of school connectedness and school bonding because the nature of the construct being measured by these scales is not fully resolved. In the meantime, when conducting school connectedness related studies, researchers should carefully consider which trait is the most critical to the conceptual model being tested. If caring adult relationships is what is being tested, then using the SCS in combination with the SSS or similar measures might be considered.

The findings from the current study also have implications for school-based health practitioners working with diverse populations. Given the SCS' robust psychometric properties coupled with its relations with reduced at-risk behavior, it is an assessment tool that may have applications when used as part of comprehensive school health screenings and/or student well-being benchmarking assessments. For instance, school-based mental health professionals could administer the 5-item SCS multiple times a year to students as an efficient proxy measure for school climate. Such types of data may assist in implementing school-wide prevention and intervention strategies, as well as provide feedback to teachers and school staff about progress being made to sustain campus conditions that are conducive to learning. In sum, the current study provides evidence to support the use of the SCS as a reliable and valid measurement tool for both researchers and practitioners alike.

Waters, S., & Cross, D. (2010). Measuring students' connectedness to school, teachers, and family: Validation of three scales. *School Psychology Quarterly* 25(3), 164-177.

This article describes the measurement properties of three composite scales of adolescent connectedness, adapted from the ADD Health study and the CHKS. These composite scales are created by either summing or taking the mean of all individual items, measured on an ordinal scale. This approach fails to account for the ordinal, non-normal nature of the data. The use of these shorter scales appear to be somewhat valid and reliable measures to determine the importance of teacher and family connectedness in improving health, academic and social outcomes for young people. Students' connectedness to school however requires further exploration as to the true factor structure of this composite score. Confirmatory factor analysis techniques in *lisrel* appear superior to exploratory factor analysis conducted using data analytic packages such as SPSS given their sensitivity to dealing with ordinal, skewed data

Resilience/Youth Development Scales

Constantine, N.A., Benard, B., & Diaz, M. (1999). Measuring Protective Factors and Resilience Traits in Youth: The Healthy Kids Resilience Assessment. Paper presented at the Seventh Annual Meeting of the Society for Prevention Research, New Orleans, LA. Download <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.524.3690&rep=rep1&type=pdf>

Constantine, N.A. and Benard, B. (2001). California Healthy Kids Survey Resilience Assessment Module: Technical Report. Berkeley, CA: Public Health Institute. Download <http://crahd.phi.org/projects/hkratech.pdf>

Furlong, M., Ritchey, K., & O'Brennan, L. (2009). Developing norms for the California Resilience Youth Development Module: Internal assets and school resources subscales. *The California School Psychologist*. 14, 99-114.

Resilience and other positive psychological constructs are gaining attention among school psychologists. Theoretically, external assets (e.g., support from caring adults, participation in meaningful activities) help to meet youths' basic developmental needs, which, in turn, promote the growth of internal assets (e.g., ability to problem solve, empathize with others). Despite this knowledge, existing measures of resilience-building assets are underutilized. With the aim of facilitating broader access to and use of one strengths-based assessment tool, the current article attempts to further examine and increase the applicability of the Resilience Youth Development Module (RYDM) of the California Healthy Kids Survey (CHKS) for practicing school psychologists. The authors provide normative data on the internal assets and school-focused external resources subscales of the RYDM, while examining grade, ethnicity, and gender patterns. Although prior research has examined the general psychometric properties of the RYDM (Hanson & Kim, 2007), using their derived factor structure the current paper examined the applicability of this scale for

practitioner use with individual students. The sample for this study came from CHKS data collected during the 2006-2007 and 2007-2008 school years from across schools in 50 of 58 California counties. The final sample included 141,004 students (55% female, 45% male) in grades 7 (34%), 9 (34%), and 11 (32%).

The results show moderate to high internal consistency reliabilities (alpha coefficients) for each of the RYDM subscales for both males (range .75–.93) and females (range .69–.91). As would be expected, the Total Internal Assets and the School Support scores, both of which have the most items, had the highest alpha coefficients. The variation of RYDM scores attributable to grade and ethnicity were small, less than 1%; there was more variance attributable to gender (2.3%), but the reliabilities of the scores were moderate to high for both males and females. Most of the variation in scores was related to individual differences across students. The results support school psychologists using the RYDM as part of social-emotional assessments with individual students. Other applications could include being used as a pretest-posttest evaluation of a discrete service, a school benchmarking assessment of students' flourishing administered periodically throughout the year, or as part of a multitasking assessment coordinated with other more detailed resilience scales such as ClassMaps

The RYDM was developed as a population-based survey but because the RYDM is based in sound research and theory and is widely used throughout California schools, it offers school psychologists a viable, cost-effective measure with which to assess factors associated with youth resilience, a critical component of strength-based assessment. Given the resource constraints of California's current economic climate, expanding psychological assessment to include positive experiences and characteristics may not be considered a top priority. Fortunately, California already collects such information as part of the biennial CHKS survey, with the RYDM element including items that assess internal assets (personal strengths) and external resources (developmental supports and opportunities).

Hanson, T., & Kim, J-O. (2007). *Measuring the psychometric properties of the California Healthy Kids Resilience and Youth Development Module*. Regional Educational Laboratory West, Report REL 2007-No. 034. WestEd: San Francisco. Download https://data.calschls.org/resources/REL_RYDM2007034.pdf

Using HKS data processed for school districts by WestEd's Health and Human Development Program, staff in the Regional Educational Laboratory West analyzed the module's psychometric properties. This report describes the results of this analysis, provides recommendations on the proper use of the instrument, and suggests modifications to the module.

For the secondary school module, the results are consistent with the instrument's current use as an epidemiological tool and with its conceptual foundation. It provides comprehensive and balanced coverage of eight environmental resilience assets and four internal resilience assets; its subscales exhibit good internal consistency and are associated with student risk factors in expected ways. And, if certain items are dropped, the module also demonstrates measurement equivalence across racial/ethnic groups, males and females, and grades.

The secondary school RYDM scales exhibit low test-retest reliability, however, which suggests that the module is not well suited for examining student-level changes over time. The instrument was not designed to examine individual differences across students and should not be used this way. Moreover, two of the six internal assets that the secondary school module was designed to measure—cooperation and goals/aspirations—could not be assessed validly. Several measures would benefit if additional items were included in derived scales to increase domain coverage.

The elementary school module was designed to assess seven environmental resilience assets and three internal resilience assets, but it can reliably assess only two environmental assets and one internal asset. Most of the scales measured by the elementary school instrument have poor psychometric properties. The elementary school instrument should thus be modified considerably to make it suitable for research.

Rhee, Sabrina; Furlong, Michael; Turner, Joseph, & Harari, Itamar. (2001). Integrating strength-based perspectives in psychoeducational evaluations. *The California School Psychologist*, 6, pp. 5-17.

Until recently, children's social/interpersonal strengths have not been systematically examined and there have been few standardized measures specifically designed to assess strengths. This article discusses the importance of a strength-based perspective by school psychologists when assessing students. A review of the literature is provided that focuses on positive youth development, resilience, and coping. These principles are emphasized by demonstrating the utility of two strength-based instruments: The Behavioral Emotional Rating Scale (BERS) and the California Healthy Kids Survey (CHKS) in school psychology research and practice. Recommendations are made for school psychologists on how to incorporate a strength-based perspective in assessment, consultation, collaboration, intervention and program evaluation.

Both the BERS and the CHKS measure individual strengths, yet each brings a unique perspective through their respective conceptualization, operationalization, and measurement of these constructs. Generally, both have strong psychometric properties and have been created for use within the school and research settings. School psychologists need to take active participation in wellness promotion and look more broadly at strength-based issues.

Sharkey, Jill; You, S., & Schnoebelen, K. (2008). Relations among school assets, individual resilience, and student engagement for youth grouped by level of family functioning. *Psychology in the Schools* 45(5), 402-418.

There has been recent interest in exploring factors related to student engagement due to increasing recognition that it is crucial to engage students for high levels of academic performance and to avoid negative outcomes such as delinquency, substance use, dropout, and teen pregnancy. Given this, research needs to investigate whether school-based assets promote student engagement beyond individual and family influences. Unfortunately, such research has been limited by a lack of valid instrumentation. The only large-scale school-based survey that has systematically included a resilience measure is the California Healthy Kids Survey, which includes a Resilience and Youth Development Module (RYDM). It is ideal for examining relations among various social supports, individual resilience, and student engagement in the most diverse population of students in the United States. Based on a theoretical model, it provides reliable measures of external (environmental) assets in the school as well as the community, home, and peer group, internal assets linked to resilience, and school connectedness, using a scale derived from the Add Health survey. After examining the psychometrics of the RYDM, the researchers used this risk and resilience instrument with a randomly selected sample of 10,000 diverse 7th-, 9th-, and 11th-grade students to test a model of relations between school assets, individual resilience, and student engagement for students grouped by level of family assets. School assets were associated with student engagement for all groups, even accounting for individual resilience. Direct effects were significant. An empirical validation found the RYDM a psychometrically sound, parsimonious measure of internal resilience. Factor analyses using a sample of a diverse group of adolescents suggest that a three-factor structure (Self-concept, Interpersonal Skills, Goals and Aspirations) best fits the internal resilience.

Sun, Jing, & Stewart, D. (2007). Development of population-based resilience measures in the primary school setting. *Health Education*, 107(6), 575.

The purpose of this paper is to report on progress in formulating instruments to measure children's *resilience* and associated protective factors in family, primary school and community contexts. A total of 2,794 students, 1,558 parents/caregivers, and 465 staff were surveyed in October 2003. A cross-sectional research method was used for the data collection. Three surveys (student survey, parent/caregiver survey, and staff survey) were developed and modified to measure student *resilience* and associated protective factors. In total, 34 of the total 47 items in the student survey were from California Healthy Kids Survey (2004), while the remaining 13 items were developed from

Perceptions of Peer Support Scale. The items from the California Healthy Kids Survey were modified to make them more accessible to Australian primary school students. Exploratory factor analysis with Oblimin rotation and confirmatory factor analysis were used to analyze the reliability and validity of the scales of the three surveys.

The surveys in this paper find good construct validity and internal consistency for the social support scale of parent/caregiver survey, which had been modified from previous studies. Confirmatory factor analysis indicated a goodness of fit for the following scales: student *resilience* scale of the student survey; the school organization and climate scale and family functioning scale of the parent/caregiver survey; and the health-promoting school scale and social capital scale of the staff survey. The paper specifies aspects of the *resilience* concept within a holistic or socio-ecological setting. Measures of validity and reliability indicate that these instruments have the sensitivity to elucidate the complexity of both the *resilience* concept and the intricacy of working within the multi-layered world of the school environment. This paper provides health educators and researchers with reliable and valid *resilience* measures, which can be used as guidelines in implementing evaluation programs for the health-promoting school project and the prevention of mental health problems in children.

Waaktaar, T. & Torgersen, S. (2010). How resilient are resilience scales? The Big Five scales outperform resilience scales in predicting adjustment in adolescents. *Scandinavian Journal of Psychology*, 51, 157–163.

This study's aim was to determine whether resilience scales could predict adjustment over and above that predicted by the five-factor model (FFM). A sample of 1,345 adolescents completed paper-and-pencil scales on FFM personality (Hierarchical Personality Inventory for Children), resilience (Ego-Resiliency Scale [ER89] by Block & Kremen, the Resilience Scale [RS] by Wagnild & Young) and adaptive behaviors (California Healthy Kids Survey, UCLA Loneliness Scale and three measures of school adaptation). The results showed that the FFM scales accounted for the highest proportion of variance in disturbance. For adaptation, the resilience scales contributed as much as the FFM. In no case did the resilience scales outperform the FFM by increasing the explained variance. The results challenge the validity of the resilience concept as an indicator of human adaptation and avoidance of disturbance, although the concept may have heuristic value in combining favorable aspects of a person's personality endowment.

Social Emotional Health Module

(Note: The SEHM is also available as an independent Social Emotional Health Survey)

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.

This study reports on the preliminary development of the Positive Experiences at School Scale (PEASS), which was developed to measure a new construct, student covitality—conceptualized as the synergistic experience of well-being that results from the interactions of multiple school-grounded positive traits in youth. The PEASS is a brief, self-report, developmentally-appropriate assessment with subscales measuring four school-anchored positive-psychological traits that are linked with youth well-being and school engagement: gratitude, zest, optimism, and persistence. The composite score of the four PEASS subscales was hypothesized to represent student covitality. Construct validity was examined using confirmatory factor analyses, invariance analysis, and latent means analysis. Factor analysis results supported four first-order PEASS subscales; in addition, multigroup invariance testing showed that a measurement model including the secondorder covitality latent trait was a

good fit for both males, RMSEA=.040, 90 % CI [.033, .046], and females, RMSEA=.053, 90 % CI [.047, .059], providing support for student covitality as a parsimonious construct representing youths' global positive experiences at school. Additional concurrent validity analyses were conducted by examining the association between student covitality and other behavioral and psychological variables (i.e., feelings of school safety, bullying experiences, and responses to a school-anchored Prosocial Behavior scale and the Psychological Sense of School Membership scale). Implications for theory, practice, and future research are discussed.

You, S., et al. (2014). Further validation of the Social and Emotional Health Survey for high school students. *Applied Research in Quality of Life*, 9, 997–1015.

The Social Emotional Health Survey (SEHS) was developed with the aim of assessing core cognitive dispositions associated with adolescents' positive psychosocial development. Using a new sample, the present study sought to extend previous SEHS research by co-administering it with the Behavioral Emotional Screening System (BESS). The sample included 2,240 students in Grades 9-12 from two comprehensive high schools located in a major west coast USA city. A majority of the students were of Latino/a heritage (72 %) and had experienced disadvantaged economic circumstances (80 % at school 1 and 68 % at school 2). Confirmatory factor analyses supported the original SEHS factor structure composed of the first-order constructs of belief-in-self, belief-in-others, emotional competence, and engaged living, which parsimoniously mapped on to a second-order "covitality" factor. Complete factorial invariance was found across four groups formed by crossing gender (male, female) and age (ages 13–15, ages 16–18). Latent means analysis found several small to moderate effects size differences, primarily for the belief-in-self and belief-in-others first-order latent traits. A SEM analysis found that the SEHS measurement model, including covitality was a significant negative predictor of psychological distress as measured by the BESS and was positively associated with students' end-of-semester grade point average. The discussion focuses on implications for conceptualizing the core psychological components of adolescents' positive quality of life and how schools can use the SEHS as part of a whole-school procedure to screen for students' complete mental health.

You, S., et al. (2015). Validation of the Social and Emotional Health Survey for five sociocultural groups: Multigroup invariance and latent mean analyses. *Psychology in the Schools*, 52(4), 349-362.

Social-emotional health influences youth developmental trajectories and there is growing interest among educators to measure the social-emotional health of the students they serve. This study replicated the psychometric characteristics of the Social Emotional Health Survey (SEHS) with a diverse sample of high school students (Grades 9–12; N = 14,171), and determined whether the factor structure was invariant across sociocultural and gender groups. A confirmatory factor analysis (CFA) tested the fit of the previously known factor structure, and then structural equation modeling was used to test invariance across sociocultural and gender groups through multigroup CFAs. Results supported the SEHS measurement model, with full invariance of the SEHS higherorder structure for all five sociocultural groups. There were no moderate effect size or higher group differences on the overall index for sociocultural or gender groups, which lends support to the eventual development of common norms and universal interpretation guidelines.

Military Connected Schools Module

Gilreath, T.D., Estrada, J., et al. (2014). Development and use of the California Health Kids Survey Military Module to support students in military-connected schools. *Child & Schools, Advance Access, February 10, 2014, 1-7.*

This article describes the development and use of the California Healthy Kids Survey Military Module to provide data about military-connected (MC) students and potential differential educational experiences of military versus nonmilitary youths and their families. Three military modules were developed and pilot tested and are now available for use statewide. These modules elicited information from students, parents, and school staff. Inquiries focused on issues relevant to MC students and explored their behavioral health risks, perceptions of school climate and resources, and mobility and deployment experiences. The process of creating these modules incorporated feedback from each of the targeted populations and a review of what is currently known about schools that serve military families. Results of this large-scale epidemiological study provide impetus for further research to elucidate experiences of MC youths. The project identifies and provides an empirical base to drive decision making on appropriate supports for military students. Results are used to identify needs and resources and assist the districts and principals in understanding the characteristics of the students and families they serve to increase optimal programming implementation.

Staff School Climate Survey

Hanson, T. (2011, December). *Measurement of School Climate, Health, and Learning Survey for Staff. Paper prepared for the California Safe and Supportive Schools Project. San Francisco: WestEd. Download:*
https://data.calschls.org/resources/CSCS_MeasurementAnalysis.pdf

A series of factor analyses using items from the staff survey used in the California School Climate, Health, and Learning Survey System (Cal-SCHLS) was conducted to determine the measurement structure of items included on the 2010-11 staff surveys. The analysis included the items in Section 1, intended for all staff in schools, and the items in Section 2, targeted to staff with responsibilities for services or instruction related to health, prevention, discipline, counseling, and/or safety. The results of the analyses suggest that the items analyzed can be used to represent eight summary measures of school climate, student risk behavior, and health/prevention resources.

You, Sukkyung, O'Malley, M., & Furlong, M. (Under review). *Brief California School Climate Survey: Dimensionality and measurement invariance across teachers and administrators. Submitted to Educational and Psychological Measurement.*

This study used school climate data collected from teachers and administrators working in public elementary, middle, and high schools throughout California. A brief 15-item version of the California School Climate Scale (B-CSCS) was evaluated and further analyses examined the invariance of the scale across teachers and administrators. Confirmatory factor analyses indicated that school climate could be measured as a multidimensional construct. Support was found for a higher order measurement model in which general school climate is a second-order latent factor that influences organizational and relational supports in schools. Results from a series of multiple group analyses indicated that the higher order measurement model exhibits measurement invariance of factor loadings across both teachers and administrators. Additional analyses revealed that administrators hold more positive perceptions of school climate than teachers, with this difference increasing from elementary through high school.

The B-CSCS is an efficient measure of essential dimensions of school climate. As such, it may be a useful tool for use in ongoing data gathering and progress monitoring toward the goal of achieving and maintaining positive school climates. By providing support for the measurement of school

climate more frequently than annually or biennially, the B-CSCS provides an opportunity for regular feedback to school leaders for integration into discussions and ongoing school-level reform efforts.

Parent School Climate Survey

Hanson, T. (2012, September). *Measurement of School Climate, Health, and Learning Survey for Parents*. Paper prepared for the California Safe and Supportive Schools Project. San Francisco: WestEd. Download: data.calschls.org/resources/CSPS_MeasurementAnalysis.pdf

This series of factor analyses using items from the parent California School Climate, Health, and Learning Surveys (Cal-SCHLS) during the first year it was administered, assessed parent perceptions regarding several school climate dimensions, including parental involvement, student supports, the discipline and safety environment, and perceptions of learning-related student behaviors. The results suggest that the items analyzed represent only two distinct dimensions: (1) school organizational supports (20 items) and (2) perceptions of learning-related behavior (8 items). These two global measures exhibit very high internal consistency reliability ($\alpha > 0.90$). When smaller groups of items were used to identify more fine-grained measures—such as parental involvement, cultural sensitivity, or clarity and equity of discipline policies—the resulting scales were too strongly correlated with each other to support the presence of empirically distinct measures. Because it is unclear how useful the two global measures identified from the Cal-SCHLS parent survey will be with regards to targeting areas of school climate in need of improvement, it is recommended that both scale score- and item-specific results be presented in summary reports and that psychometric study of this survey continue.