Equity Based Data Collection for Youth Surveys &

Using an Equity Lens in Your Analysis and Review

December 14, 2022

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Who are we?

Nina Chanana, Chanana Consulting Marc B Goldstein, PhD., LLC Emily Melnick, Emily Melnick Consulting

- Questions
- Microphones
- Cameras
- Recording session
- Share
- Slides





Part I. Provide overview on equity in youth data collection

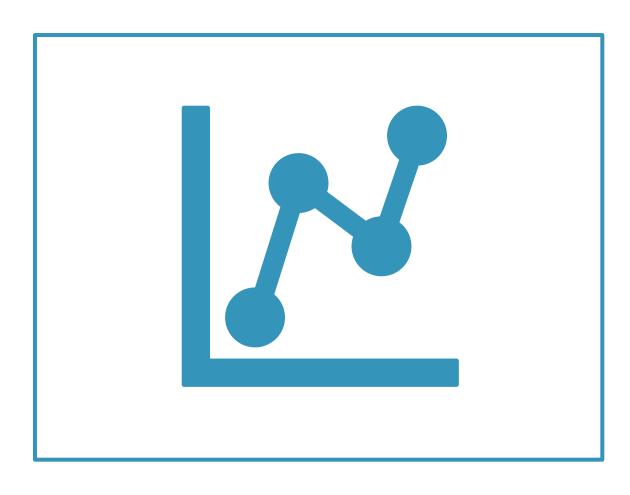
- Why is this important?
- Steps to achieve equity baseddata collection



Part 2. Provide rationale for collecting & analyzing data by subpopulations

- Overview of adolescent substance use data
- Why disaggregating data is important (examples):
 - Strategy and activity identification
 - Informing & targeting key stakeholders & decision-makers
 - Use in Disparity Impact
 Statements

POLLS I & 2 – Your survey experience



- 1. Which of the following types of surveys have you conducted/designed/analyzed (check all that apply)?
- Youth
- Community/Parent
- Program
- Other
- None
- 2. To what extent do you consider equity when conducting/designing/analyzing YOUTH surveys?
- Not at all
- Some
- A lot

Tips & Techniques to enhance equity-based data collection



Why is this important?

POLL 3 — Survey Sampling

Which of the following statements best describes the sampling frame of your most recent school survey?

- Everyone at school on the day(s) of the survey was asked to complete it
- All the students in certain grades, e.g., 8th, 10th, 12th were asked to complete it
- We chose a sample of academic classes at each grade level to survey
- We asked all the students in the classes where teachers agreed to let us use class time to conduct the survey
- Other
- Not applicable

Sample Frame



- Use whole school or school district if possible
 - Consider alternative schools and/or private schools
- TIPS: If sampling is only option, use classes that are not constituted by ability, e.g., honors English, basic math
- Consider a representative or statistically valid sample size

Active versus Passive Consent for Parents



- Active consent: Parents/guardians are informed in advance of the planned survey and have to provide written consent to allow their child to participate
- Passive consent: Parents/guardians are informed in advance of the planned survey and have to provide a signed statement if they do NOT want their child to participate.
 - Use passive consent if possible

Survey Medium & Method



Online/computer-based vs. paper-and-pencil

Computer- based

- Can be easier & less expensive
- Survey program (e.g. Survey Monkey)
- May create more issues regarding anonymity of individual responses
- Can school(s) accommodate all students at once if computer-based?
- TIP: Test link beforehand

Paper-based

- Budget for data entry
- Eliminates concerns around anonymity of responses

Video introduction

Create a short instructional videos using youth from your schools, coalition or community

- Uniform instructions
- Peer to peer messaging



POLL 4 – Internal or external?

Which student surveys do you use?

- We use an outside organization for our survey (e.g. YVC, Search, Pride, etc.)
- We collect data using our own survey
- Not applicable





Develop or use your own?

Pros

- More flexibility (updates, emerging trends)
- Possibly lower cost
- Translations (your own)

Cons

- Who will analyze the data/do you have software and reporting format template?
- Can you use these data to compare to other similar communities?
- Do you need or is it approved by your funder? Other agencies (e.g. BOE)?
- Do you have the resources you need such as translations, tested items, reports (outside agency)?

Use an outside agency/existing tool?

Pros

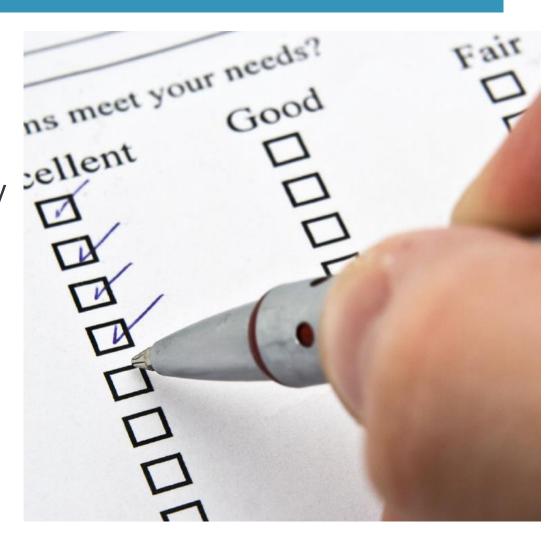
- Survey cleaning and analysis is done by company
- Survey report is generated
- Survey data is tested and validated
- Translations may be available

Cons

- Can you afford the cost?
- Does the company allow you to request additional analysis of the data?
- Does the cost include the raw data file? Or can you purchase it separately?
- Are you able to add supplemental questions to the survey?

Considerations

- How long to get data back?
- Do you have an evaluator or data-oriented person?
- What is included in the "package" with the survey vendor?
 - SEARCH-price per survey, raw data is available, print report
 - PRIDE-price per survey, report, no raw data, cannot ask for analysis after the fact
 - YVCS-one price regardless comes with full report, DFC ME table, PPT and Info brief, can ask for specific analysis after the fact for a fee.
- *School district buy-in?



Language considerations



- Is the LANGUAGE appropriate and inclusive?
 - Consider the level of receptive language will the youth understand the vocabulary and questions?
 - Consider current demographic terms
 - Ask 'experts' about appropriate language if unsure
- Is the survey available in appropriate languages?
 - Additional time, translation assistance



Equity considerations

- Does the survey include questions that allow you to look at appropriate subpopulations?
 - Gender identity, age, race & ethnicity + any others important in your community
 - Advantages of using standardized demographic questions



Youth feedback on survey content

- If you are developing a survey tool (or even a supplemental set of questions) get youth input
 - Helps to identify multiple issues:
 - Wording of questions, interpretation of a teen versus adult
 - Length of survey, ability to complete
 - Order of questions, ask priority questions earlier on

POLL 5 – Survey Approval by School Administration

- Select one of the following:
 - We have a formal documented process for survey approval
 - We have a process that changes year to year
 - We have an informal process that we use
 - None of the above

External influences on content and approval

- More and more there is a need for a formal process
- There is increased criticism and/or concern raised by school boards, superintendents, and parental groups regarding question content
 - Especially questions on gender identity, sexual orientation, suicidal ideation and attempts.
- Groups who are collecting surveys need to strategize how they present and justify the need for such questions

Protecting anonymity in data collection

- No personal identifiers (name, student ID number)
- Must have a secure way to collect paper-andpencil surveys
- Computer use: do <u>not</u> use school system-based data collection software; use school computers to access external platforms such as SurveyMonkey
- In Survey Monkey turn on 'Anonymous Responses'
 - Will not report IPs
 - https://help.surveymonkey.com/en/policy/areresponses-anonymous/



Protecting anonymity in data reporting

- Important to protect the identity of respondents when reporting data to others.
- FERPA guidelines on suppression of cell counts:
 - (1) If any cell contains \leq 5 individuals, the value is suppressed (including a total).
 - (2) If only one cell in a row or column has ≤ 5 members and is suppressed, the next highest value in that row or column is also suppressed. If there are multiple occurrences of this value, randomly suppress one (complementary suppression).
- FERPA guidelines on suppression of computed statistics (average, percent):
 - (1) Suppress a statistic if the count it is based on is five or less, **or** the numerator is < 6, **or** the denominator is < 20
- To avoid small cell sizes, try reducing the number of cross-tab variables.

Consider XYZ High School ...

Table A. Number of students by Grade and Race

Race\Grade	9 th	I O th	Hth	I 2 th	Total
White	112	112	113	113	450
Asian-American	8	7	8	7	30
African American	8	8	2	2	20
Total	128	127	123	122	500

Table B. Number of students by Grade and Race (with suppression)

Race\Grade	9 th	I O th	H th	I 2 th	Total
White	112	112	113	113	450
Asian-American	8	7	*(b)	*(b)	30
African American	8	8	*(a)	*(a)	20
Total	128	127	123	122	500

*Data suppressed to limit disclosure

a - Suppressed for value ≤ 5

b – complementary suppression

XYZ High School

Table C. Number of students by Grade

Grade	9 th	I O th	th	I2 th	Total
# of students	128	127	123	122	500

Table D. Number of students by Race

Race	Number
White	450
Asian American	30
African American	20
Total	500



Collection & Analysis of Data by Subpopulation

Is this how you're doing prevention??



Why is this important?

- Our job is to collect and interpret data that aids the development of intervention strategies that can maximize prevention efforts.
- We know that risk and protective factors can vary across different sectors of the community, and that "one size doesn't fit all."
- To maximize effectiveness, we need to ask questions that allow us to look at certain subpopulations; particularly subpopulations where there is research evidence of different levels of substance use.
- The next group of slides will briefly describe several subgroups where there is existing research evidence of differences.

Examples of subpopulations

Numerous subpopulations

- a. Race/Ethnicity
- b. Biological sex
- c. Gender identity
- d. Sexual Orientation
- e. Income
- f. Disabilities (learning/physical)
- g. Others Work hours; Sports participation; Adverse Childhood Experiences; family responsibilities/family engagement (inc. time spent with family)

Research on five subpopulations

- Five subpopulations where data exists suggesting differential risks and outcomes:
 - LGBTQ+ students
 - Race/Ethnicity/Biological sex
 - Student athletes
 - Student who work more than 20 hours a week during the school year
 - Students who have had more than one Adverse Childhood Experience (ACE)

Lesbian, Gay, Bisexual, Transgender, Queer & Others

Key Findings

Numerous studies, both locally and nationally, find evidence that LGBTQ+ students:

- (I) use substances at higher rates than heterosexual students¹⁻⁸.
- (2) report higher rates of suicidal ideation and attempts, depression, and related mental health issues⁹⁻¹⁰.
- (3) find their school climates less supportive 11-12.

Question Sources

SurveyMonkey¹³
Williams Institute¹⁴
Trevor Project¹⁵

Intervention Info

Beyond individual approaches ¹⁶, many environmental intervention strategies focus on building supports in the school and community for LGBTQ+ students ¹⁷⁻²⁰

Race, ethnicity, sex groups (Alcohol, cigarettes, marijuana, opioids & depressive episodes)

Key Findings

Data from the 2019 National Survey on Drug Use and Health (NSDUH)¹ finds differences between races, ethnic groups and sex for individuals aged 12-17.

- (I) Females have higher prevalence of alcohol use and major depressive episodes.
- (2) Hispanics have higher rates of use of alcohol, marijuana and opioids than non-Hispanics.
- (3) Blacks have a lower prevalence of use of alcohol and cigarettes and similar rates of use of marijuana and opioids as Whites.
- (4) American Indians & Native Alaskans have higher rates of marijuana use than other races.
- (5) Asians have lower rates of substance use than other races but rates of depression equivalent to Whites.
- (6) Individuals who identify with two or more races have higher rates of marijuana & opioid use and depression.

Question Sources

US Census¹

Intervention Info

General info²⁻⁴

African American⁵⁻⁷

Alaskan Native⁸

American Indian⁹⁻¹¹

Asian-American¹²

Girls¹³

Hawaiian & Pacific Islanders 14

Hispanic/Latino¹⁵⁻¹⁹

Student Athletes

Key Findings

Reviews and large scale studies¹⁻⁴ found:

- (I) The most consistent finding was that sports participation increases high school alcohol use.
- (2) Sports participation was associated with the reduced risk of use of non-cannabis related drugs.
- (3) The evidence regarding cannabis use was mixed, with 50% of the studies showing reduced marijuana use.

Question Sources Intervention

See table I of Kwan et al (2014)².

Intervention Info

King, Dowdall & Wagner⁵
www.cadca.org/resou rces/coalitions-action-winning-strategies-reach-student-athletes⁶

Students who work more than 20 hours per week

Key Findings

- (1) Students who work 20 or more hours per week during the school year are more likely to use substances than students who work fewer hours 1-6.
- (2) The negative effects of 20+ hours of work are strongest for White and Asian American students with the most highly educated parents, with much lesser impacts for Hispanic and African American students⁴.

Question Sources

Bachman et al (2013)⁶

Intervention Info

Documentation for employment of minors⁷

Discussions with parents?

Students who have had 2 or more Adverse Childhood Experience (ACES)

Key Findings

Adverse Childhood Experiences have been linked with adult health outcomes and risk behaviors¹⁻³. Recent work⁴⁻⁶ has linked ACEs to adolescent and young adult outcomes:

- Two or more ACEs increased the odds for adolescent suicide attempts, suicide ideation, alcohol, marijuana and other substance use.
- (2) Odds ratios for alcohol use were significantly lower for Black, Asian and Latinx students.
- (3) Female sex was associated with higher risks of cognitive difficulties, depression, and suicidal ideation and attempts.

Question Sources

Felitti et al (1998)⁷
Dube et al (2003)⁸
Eklund et al (2018)⁹

Intervention Info

SAMSHA (2014)¹⁰
Bartlett, J. D., & Smith, S. (2019)¹¹
Herrenkohl et al (2019)¹²
Roseby & Gascoigne (2021)¹³

Why do we want to unpack our data?

- Look at your data and determine if there are disparities among groups.
- Implement appropriate strategies or interventions based on these findings





How do you influence others?

- Do you have a good representation of different sectors?
- Are the subpopulations represented?
- Do you have the right folks at the table? If not, how do you get them there?

What are Disparity Impact Statements?

A DIS is a specific type of assessment that involves identifying disparities between two or more populations and making plans to address or eliminate the disparities

- Identify, contextualize, and address health disparities
- Develop a plan to reduce the gaps



Session Evaluation – Please take a couple of minutes to fill out the following survey.

https://www.surveymonkey.com/r/LYX2BCB





Resources

Anonymity in Data Reporting

- CSDE Data Suppression Guidelines: https://edsight.ct.gov/relatedreports/BDCRE%20Suppression%20Rules.pdf
- Survey Monkey settings for Anonymous Reponses: https://help.surveymonkey.com/en/policy/are-responses-anonymous/

Diversity, Equity and Inclusion

- National CLAS Standards A set of 15 action steps intended to advance health equity, improve quality, and help eliminate health care disparities
 - https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=2&lvlid=53
- Williams Institute: https://williamsinstitute.law.ucla.edu/
- Triangle Center, Inc: https://ctpridecenter.org/

Disparity Impact Statements: https://www.samhsa.gov/grants/grants-management/disparity-impact-statement

Strategic Prevention Framework: https://www.samhsa.gov/sites/default/files/20190620-samhsa-strategic-prevention-framework-guide.pdf

TTASC – Prevention Resources: https://preventiontrainingcenter.org/tools

Acronyms

ACES – Adverse Childhood Experiences

AD - Attribute Disclosure

CPES – Center for Evaluation, Prevention and Statistics (at UCONN Health)

DEI – Diversity, Equity & Inclusion

DIS – Disparity Impact Statement

DMHAS – CT's Department of Mental Health and Addiction Services. State agency for prevention & treatment of mental health and substance use.

FERPA – Family and Education Rights and Privacy Act

LGBTQ+ - Lesbian, Gay, Bi-sexual, Transgender, Queer+

LPC - Local Prevention Council, a state-funded, town-based group dedicated to substance use prevention.

NSDUH – National Survey on Drug Use and Health

SPF – Strategic Prevention Framework, the public health model used in community-based substance use prevention work.

TTASC- The Prevention Training and Technical Assistance Service Center

YRBSS – Youth Risk Behavior Surveillance System

LBGTQ+

- ¹Corliss, H. L., Rosario, M., Wypij, D., Wylie, S. A., Frazier, A. L., & Austin, S. B. (2010). Sexual orientation and drug use in a longitudinal cohort study of U.S. adolescents. *Addictive Behaviors*, *35*(5), 517–521.
- ²Eisenberg, M. E., & Wechsler, H. (2003). Substance use behaviors among college students with same-sex and opposite-sex experience: Results from a national study. *Addictive Behaviors*, *28*(5), 899–913.
- ³Fish, J. N., & Baams, L. (2018). Trends in alcohol-related disparities between heterosexual and sexual minority youth from 2007 to 2015: Findings from the youth risk behavior survey. *LGBT Health*, *5*(6):359–367.
- ⁴Goldbach, J. T., Tanner-Smith, E. E., Bagwell, M., & Dunlap, S. (2014). Minority stress and substance use in sexual minority adolescents: A meta-analysis. *Prevention Science*, *15*(3), 350-363.
- ⁵Institute of Medicine. 2011. *The Health of Lesbian, Gay, Bisexual, and Transgender People: Building a Foundation for Better Understanding.* Washington, DC: The National Academies Press.
- ⁶Marshal, M. P., Friedman, M. S., Stall, R., & Thompson, A. L. (2009). Individual trajectories of substance use in lesbian, gay and bisexual youth and heterosexual youth. *Addiction*, *104*(6), 974–981.
- ⁷Russell, S. T., Driscoll, A. K., & Truong, N. (2002). Adolescent same-sex romantic attractions and relationships: Implications for substance use and abuse. *American Journal of Public Health*, *92*(2), 198–202.
- ⁸Talley, A. E., Hughes T. L., Aranda, F., Birkett, M., & Marshal M. P. (2014). Exploring alcohol-use behaviors among heterosexual and sexual minority adolescents: intersections with sex, age, and race/ethnicity. *American Journal of Public Health*, 104(2), 295–303.

LBGTQ+ (continued)

- ⁹Russon, J., Washington, R., Machado, A., Smithee, L., & Dellinger, J. (2022). Suicide among LBGTQIA+ youth: A review of the treatment literature. *Aggression and Violent Behavior*, 64, 1-11.
- ¹⁰McDonald, K. (2018). Social support and mental health in LGBTQ adolescents: A review of the literature. *Issues in Mental Health Nursing*, 39(1), 16-29.
- ¹¹Ancheta, A. J., Bruzzese, J., & Hughes, T. L. (2021). The impact of positive school climate on suicidality and mental health among LGBTQ adolescents: A review of the literature. *The Journal of School Nursing*, *37*(2), 75-86.
- ¹²Denny, S., Lucassen, M. F., Stuart, J., Fleming, T., Bullen, P., Peiris-John, R., Rossen, F. V., & Utter, J. (2016). The association between supportive high school environments and depressive symptoms and suicidality among sexual minority students. *Journal of Clinical Child and Adolescent Psychology*, *45*(3), 248–261.
- ¹³Mereish, E. H., Gamarel, K. E., & Operio, D. (2018). Understanding and addressing alcohol and substance use in sexual and gender minority youth. In P. M. Monti, S. M. Colby, & T. O. Tevyaw (Eds.) *Brief interventions for adolescent alcohol and substance abuse* (305-327). New York: Guilford.
- ¹⁴Hatzenbuehler, M. L., Birkett, M. Van Wagenen, A., & Meyer, I. H. (2014). Protective school climates and reduced risk for suicide ideation in sexual minority youths. *American Journal of Public Health*, *104*(2) 279-286.

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LBGTQ+ (continued)

- ¹⁵Gower, A. L., Forster, M., Gloppen, K., Johnson, A. Z., Eisenberg, M. E., Connett, J. E, & Barowsky, I. W. (2018). School practices to foster LBGT-supportive climate: Associations with adolescent bullying involvement. *Prevention Science*, 19, 813-821.
- ¹⁶Eisenberg, M., Erickson, D. J., Gowers, A. L., Kne, L. Watson, R. J., Corliss, H. L., & Saewyc, E. M. (2020). Supportive community resources are associated with lower risk of substance use among lesbian, gay, bisexual and questioning adolescents in Minnesota. *Journal of Youth and Adolescence*, *49*, 836-848.
- ¹⁷Meadows, E. S., & Shain, J. D. (2021). Supporting gender and sexually diverse students in socially conservative communities. In M. Lytle and R. A. Sprott (Eds.) *Supporting gender identity and sexual orientation diversity in K-12 Schools*. Washington, DC: American Psychological Association.
- ¹⁸www.surveymonkey.com/curiosity/ask-survey-questions-sexual-orientation-gender-identity/
- ¹⁹williamsinstitute.law.ucla.edu/publications/geniuss-trans-pop-based-survey/
- ²⁰www.thetrevorproject.org/wp-content/uploads/2021/07/Measuring-Youth-Sexual-Orientation-and-Gender-Identity.pdf

Race, Ethnicity, Biological Sex

¹Center for Behavioral Health Statistics and Quality. (2020). Results from the 2019 National Survey on Drug Use and Health: Detailed tables. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data/

General

- ²Castro, F. Garvey, M., Kellison, J. G., & Marsiglia, F. F. (2013). Ethnic and minority populations. In B. McCrady and E. Epstein (Eds.). *Addictions: A comprehensive guidebook*, 2nd ed., (758-787). New York, NY: Oxford University Press.
- ³Kar, S. B. (Ed.). (1999). Substance abuse prevention: A multicultural perspective. Amityville, NY: Baywood.
- ⁴Zane, N., G. Bernal, and F. T. Leong (Eds). 2016. *Evidence-based psychological practice with ethnic minorities: Culturally informed research and clinical strategies.* Washington, DC: American Psychological Association.

Race, Ethnicity, Biological Sex (continued)

African American

- ⁵Corneille, M. A., Ashcraft, A. M., & Belgrave, F. Z. (2005). What's culture got to do with it? Prevention programs for African American adolescent girls. *Journal of Health Care for the Poor and Underserved*, *16*(4, Suppl. B), 38-47.
- ⁶Guthrie, B., & Low, L. K. (2000). A substance use prevention framework: Considering the social context for African American girls. *Public Health Nursing*, *17*(5), 363-373.
- ⁷Robinson, W. L., Harper, G. W., & Schoeny, M. E.(2003). Reducing substance use among African American adolescents: Effectiveness of school-based health centers. *Clinical Psychology: Science and Practice*, *10*(4), 491-504.

Alaskan Native

⁸Komro, K. A., D'Amico, E. J., Dickerson, D. L., Skinner, J., Johnson, C. L., Kominsky, T., & Etz, K. (2022). Culturally responsive opioid and other drug prevention for American Indian/Alaska native people: A comparison of reservation-and urban-based approaches. Prevention Science, June 24.

Race, Ethnicity, Biological Sex (continued)

American Indian

- ⁹Komro, K. A., D'Amico, E. J., Dickerson, D. L., Skinner, J., Johnson, C. L., Kominsky, T., & Etz, K. (2022). Culturally responsive opioid and other drug prevention for American Indian/Alaska native people: A comparison of reservation-and urban-based approaches. *Prevention Science*, June 24.
- ¹⁰Lowe, J., Liang, H., Henson, J., & Riggs, C. (2016). Preventing substance use among Native American early adolescents. *Journal of Community Psychology*, *44*(8) 997-1010.
- ¹¹Walsh, M. L., & Baldwin, J. (2015). American Indian substance abuse prevention efforts: A review of programs, 2003-2013. *American Indian and Alaska Native Mental Health Research*, 22(2), 41-68.

Asian-American

¹²Fang, L., Schinke, S. P., & Cole, K. C. (2010). Preventing substance use among early Asian-American adolescent girls: Initial evaluation of a web-based, mother-daughter program. *Journal of Adolescent Health*, *47*(5), 529-532.

Race, Ethnicity, Biological Sex (continued)

<u>Females</u>

¹³Gies, S., Cohen, M., Edberg, M., Bobnis, A., Spinney, E., & Berger, E. (2015). The Girls Circle: An evaluation of a structured support group program for girls. Final report. Prepared for the Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs. Bethesda, MD: Development Services Group See: http://www.onecirclefoundation.org/docs/Research-GC-DSG-2015.pdf

Hawaiian & Pacific Islanders

¹⁴Durand, Z., Cook, A., Konishi, M., & Nigg, C. (2016). Alcohol and substance use prevention programs for youth in Hawaii and Pacific Islands: A literature review. *Journal of Ethnicity in Substance Use*, *15*(3) 240-251.

Hispanic/Latino

- ¹⁵Chen, A., Gance-Cleveland, B., Kopak, A., Hass, S., & Gilmore, M. (2010). Engaging families to prevent substance use among Latino youth. *Journal for Specialists in Pediatric Nursing*, *15*(4), 324-328.
- ¹⁶Crunkiton, D., Paz, J. J., Boyle, D. P. (2005). Culturally competent intervention with families of Latino youth at risk for drug abuse. *Journal of Social work Practice in the Addictions*, *5*(1-2), 113-131.

Race, Ethnicity, Biological Sex (continued)

Hispanic/Latino

- ¹⁷Estrada, Y., Lee, T. K., Huang, S., Tapia, M. I., Velazquez, M., Pantin, H., et al. (2017). Parent-centered prevention of risky behaviors among Hispanic youths in Florida. *American Journal of Public Health*, 107(4), 607-613.
- ¹⁸Kulis, S., Marsiglia, F. F., Elek, E., Dustman, P., Wagstaff, D., & Hecht, M. L. (2005). Mexican/Mexican American adolescents and keepin' it REAL: An evidence-based substance use prevention program. *Children & Schools*, *27*(3), 133-145.
- ¹⁹Shetgiri, R., Kataoka, S., Lin, H., & Flores, G. (2011). A randomized, controlled trial of a school-based intervention to reduce violence and substance use in a predominantly Latino high school students. *Journal of the National Medical Association*, *103*(9-10), 932-940.

Student athletes

- ¹Diehl, K., Theil, A., Zipfel, S., Mayer, J., Litaker, D. G., & Schneider, S. (2011). How healthy is the behavior of young athletes? A systematic literature review and meta-analyses. *Journal of Sports Science and Medicine*, *11*, 201-220.
- ²Kwann, M., Bobko, S., Faulkner, G. Donnelly, P., & Cairney, J. (2014). Sports participation and alcohol and illicit drug use in adolescents and young adults: A systematic review of longitudinal studies. *Addictive Behaviors*, *39*, 497-506.
- ³Mays, D., DePadilla, K., Thompason, N. J., Kushner, H. I., & windle, M. (2010). Sports participation and problem alcohol use: A multi-wave national sample of adolescents. *American Journal of Preventive Medicine*, *38*, 491-498.
- ⁴Terry-McElrath, Y. M., O'Malley, P. M. (2011). Substance use and exercise participation among young adults: Parallel trajectories in a national cohort-sequential study. *Addiction*, *106*,1855-1865.
- ⁵King, K.A., Dowdall, M. P., & Wagner, D. I. (2010). Coaches' attitudes and involvement in alcohol prevention among high school athletes. *Journal of Community Health*, 35, 68-75.
- ⁶www.cadca.org/resources/coalitions-action-winning-strategies-reach-student-athletes. October 19, 2022. Describes the Substance Free Athletics initiative by the Lyme-Old Lyme Prevention Council (CT) to reach out to high school athletes, parents and coaches.

Students who work 20+ hours per week

- ¹Greenberger, E., & Steinberg, L. (1986). When teenagers work: The psychological and social costs of adolescent employment. New York: Basic Books.
- ²Mortimer, J. T. (2003). Working and growing up in America. Cambridge, MA: Harvard University Press.
- ³Bachman, J. G., Safron, D. J., Sy, S. R., & Schulenberg, J. E. (2003). Wishing to work: New perspectives on how adolescents' part-time work intensity is linked with educational disengagement, drug use, and other problem behaviors. *International Journal of Behavioral Development*, 27, 301-315.
- ⁴Bachman, J. G., Staff, J., O'Malley, P. M., Schulenberg, J. E., & Freedman-Doan, P. (2011). Twelfth-grade student work intensity linked to later educational attainment and substance use: New longitudinal evidence. *Developmental Psychology*, *47*(2), 344-363.
- ⁵Staff, J., Messersmith, E. E., & Schulenberg. J. E. (2009). Adolescents and the world of work. In R. Lerner & L. Steinberg (Eds.). *Handbook of Adolescent Psychology* (3rd ed. Pp. 270-313). New York: Wiley.
- ⁶Bachman, J. G., Staff, J., O'Malley, P. M., & Freedman-Doan, P. (2013). Adolescent work intensity, school performance, and substance use: Links vary by race/ethnicity and socioeconomic status. *Developmental Psychology*, *49*(11), 2125-2134.
- ⁷Employment of minors/Working Papers for Minors. Obtainable at: https://uwc.211ct.org/employment-of-minorsworking-papers-for-minors/

Adverse Childhood Experiences (ACEs)

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Adverse Childhood Experiences (ACEs) continued

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Adverse Childhood Experiences (ACEs) continued

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Sexual Orientation Survey Question

Sexual orientation is a person's emotional, romantic, and/or sexual attractions to another person There are many ways a person can describe their sexual orientation and many labels a person can use. Which of these options **best** describes your sexual orientation?

- O Straight or heterosexual
- O Gay or lesbian
- O Bisexual, pansexual, or queer
- O Asexual
- O I am not sure
- O I don't know what this question means
- O Decline to answer

From *Measuring Youth Sexual Orientation and Gender Identity*. Downloaded from: www.thetrevorproject.org/research-briefs/measuring-youth-sexual-orientation-and-gender-identity/

Gender Identity Survey Items

What sex were you assigned at birth? (the sex showing on your original birth certificate)

- O Male
- O Female

What is your gender identity? Please select all that apply.

- O man
- O woman
- O trans male/trans man
- O trans female/trans woman
- O genderqueer/gender non-conforming
- O different identity (please state: ______

From *Measuring Youth Sexual Orientation and Gender Identity.* Downloaded from: www.thetrevorproject.org/research-briefs/measuring-youth-sexual-orientation-and-gender-identity/

Questions regarding Biological sex and Race

From US Census (*Questions planned for the 2020 Census and American Community Survey*, March 2018, U.S. Department of Commerce Economics and Statistics Administration)

What is your se	ex?			
□ Male □ Fe	emale			
What is your Race? (Mark one or more boxes)				
□ White □ B	lack or African American	□ American Indian or Alaska Native	□ Asiar	
□ Native Hawaiian or Other Pacific Islander □ Other (fill in)				

Questions regarding Ethnicity

From US Census (*Questions planned for the 2020 Census and American Community Survey*, March 2018, U.S. Department of Commerce Economics and Statistics Administration)

Hispanic Origin

Are you of Hispanic, Latino, or Spanish origin?

- □ No, not of Hispanic, Latino, or Spanish Origin
- □ Yes, Mexican, Mexican American, Chicano
- □ Yes, Puerto Rican
- □ Yes, Cuban
- □ Yes, another Hispanic, Latino, or Spanish origin, for example, Salvadorian, Dominican, Columbian, Guatemalan, etc.

Sample question on athletic participation

Have you participated in any of the following sports teams offered by your school during the past 12 months? (include in separate table a list of all interscholastic teams for boys and girls offered by the school during the past year)

O No
O Yes (if yes) How many teams? O 1
O 2 or more

Have you participated on any organized sports team offered by an organization outside of your school during the past 12 months? (for example, a town league, AAU, private sports club, etc.)

O No

O Yes (if yes) How many teams? O 1

O 2 or more

Sample question on work hours

From Bachman et al (2013)

On the average over the school year, how many hours per week do you work in a paid job?

O None, O 5 hours or less. O 6-10, O 11-15, O 16-20, O 21-25, O 26-30, O more than 30 hours

Appendix - Adverse Childhood Experiences¹ Emotiona² Did a parent or other adult in the household . . . Often or very often swear at you, insult you, or out you down? □ Yes Sometimes, often, or very often act in a way that made you feel you might be physically hurt? □ No □ Yes **Physical** Did a parent or other adult in the household . . . Often or very often push, hit, grab or slap or throw something at you? □ No □ Yes Often or very often hit you so hard that you had marks or were injured? □ Yes □ No Sexual Did an adult or person at least 5 years older ever . . . Touch or fondle you in a sexual way? □ No □ Yes Have you touch their body in a sexual way? □ Yes Attempt oral, anal, or vaginal intercourse with you? □ Yes □ No Actually have oral, anal, or vaginal intercourse with vou? □ No □ Yes Substance Abuse Did you live with anyone who was a problem drinker or alcoholic? □ Yes □ No Did you live with anyone who used street drugs? □ No □ Yes (Questions continue on next slide) ¹From Dube et al (2003). Preventive Medicine, 37, 268-277.

²Words in italics are types of adverse childhood experiences and are not included in the scale.

Appendix - Adverse Childhood Experiences¹

Substance Abuse	
Did you live with anyone who was a problem drinker or alcoholic? □ No □ Yes □ No □ Yes	
Mental Illness	
Was a household member depressed or mentally ill? □ No □ Yes □ No □ Yes	
Mother treated violently	
Was your mother (or stepmother) Sometimes, often, or very often pushed, grabbed, slapped, or had something thrown at her? Sometimes, often or very often, kicked, bitten, hit with a fist, or hit with something hard? Ever repeatedly hit over at least a few minutes? Ever threatened with or hurt by a knife or gun?	□ No □ Yes □ No □ Yes □ No □ Yes □ No □ Yes
Incarcerated household member	
Did a household member go to prison? □ No □ Yes	
Parental separation or divorce	
Were your parents ever separated or divorced? □ No □ Yes	