

Protective factors are characteristics, relationships, or behaviors that contribute to overall adolescent health through helping youth guard against risk behaviors and participate in healthy ones. Particular youth assets contribute to protective factors and have been associated with successful transitions into young adulthood.<sup>1</sup> The Search Institute identified 40 developmental assets for youth aged 12-18 that support positive youth development, ranging from participation in creative activities to supportive relationships with non-parent adults.<sup>2</sup>

To gauge which protective factors middle school youth in Cuyahoga County have, the local Youth Risk Behavior Survey includes questions about assets including **academic achievement, feeling valued by the community, and having parents who talk with them about school.** This data brief describes these three assets and their relation health-promoting and risk behaviors among 7th and 8th grade students in Cuyahoga County.

### IMPORTANT ASSETS TO ASSESS PROTECTIVE FACTORS IN YOUTH

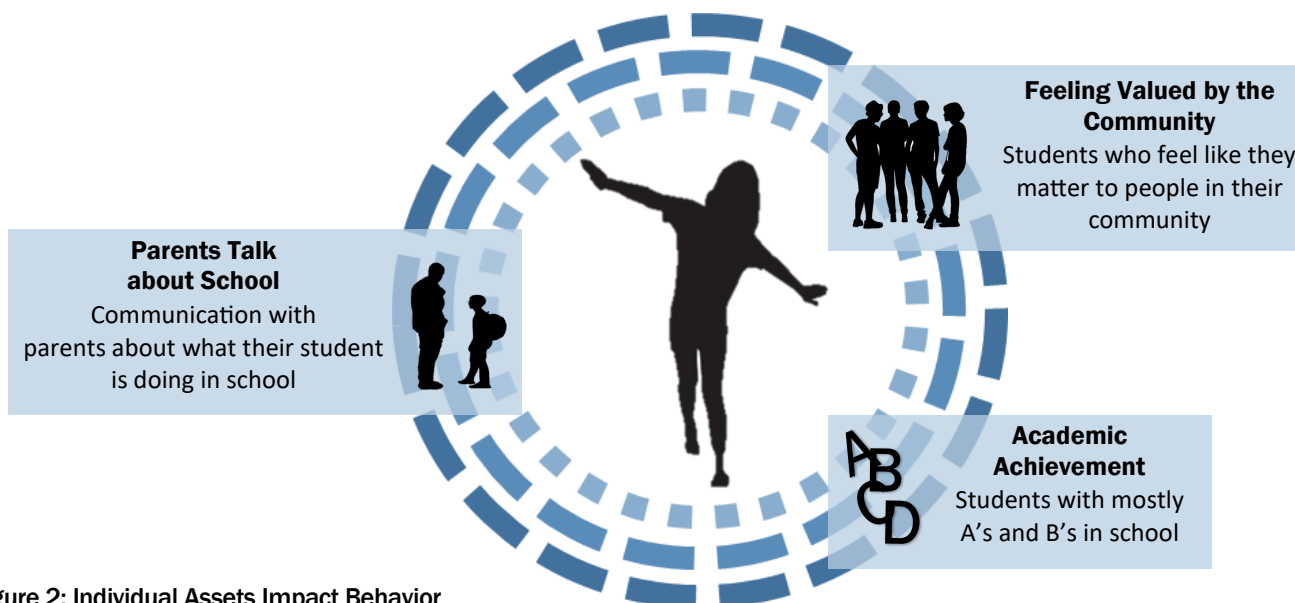


Figure 2: Individual Assets Impact Behavior

**Students with assets are:**

- 3x less likely to report feeling sad for 2 weeks in a row**
- 1.5x more likely to get ≥8 hrs of sleep on an average school night**
- 2x less likely to smoke cigarettes<sup>a</sup> and to have ever had sex**

According to the 2018 YRBS results, 26.9% of middle school students had one of these assets, 37.4% had two, 27.4% had all three assets, and 8.3% reported having none. The three assets significantly contributed to protecting youth from engaging in risk behaviors and supporting their engagement in health-promoting ones (see Fig. 2).

Of particular interest is the relationship between these assets and depressive symptoms and suicidal ideation among middle school students in Cuyahoga County due to the significant increase since 2016. Students who feel valued by their community were three times less likely to report feeling sad for two weeks or more or having made a suicide plan.

Odds ratios based on logistic regression controlling for race, gender, grade level, and other assets. Significant at the p<0.05 level

As individual assets contribute to the likelihood of engagement in particular behaviors, a comparison of low (0-1 of the 3 assets) versus high assets (2-3 of the 3 assets) adds insight into their protective nature (see Fig. 3). Compared to students with high assets, significantly **more students with low assets engage in risk behaviors** such as smoking cigarettes and seriously considering suicide.

Furthermore, **students with high assets are significantly more likely to report health promoting behaviors** such as eating fruit and getting enough sleep.

Figure 3: Comparison of Low and High Asset Groups

Health Behaviors	Low Assets (0-1) (CI)	High Assets (2-3) (CI)
Smoked cigarettes <sup>a</sup>	4.3% (3.6% - 5.2%)	1.3% (1.0% - 1.7%)
Seriously considered suicide <sup>b</sup>	24.1% (22.3% - 25.9%)	9.1% (8.3% - 10.0%)
Ate fruit at least 2x/day <sup>c</sup>	44.5% (42.4% - 46.6%)	56.0% (54.3% - 57.5%)
≥8 hrs of sleep (on an avg. school night)	34.1% (32.4% - 36.0%)	53.0% (51.0% - 54.9%)

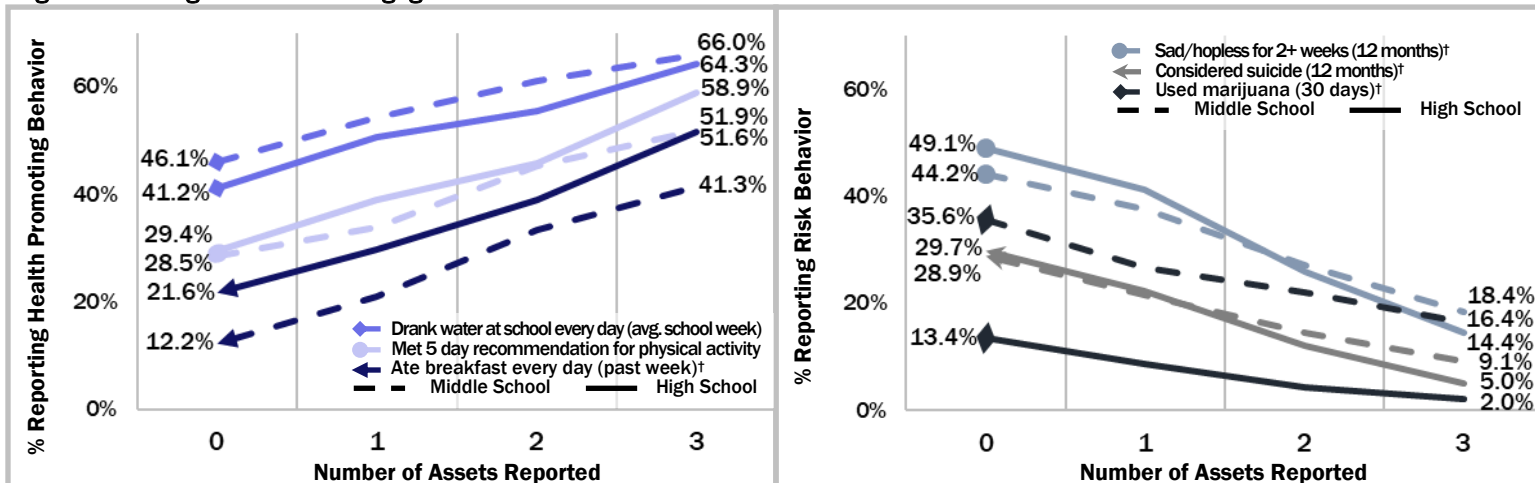
<sup>a</sup> During the 30 days before taking the survey.

<sup>c</sup> During the day before taking the survey.

<sup>b</sup> During the 12 months before taking the survey.

In addition to the dramatic differences between high and low asset groups, health-promoting and risk behaviors change significantly with the presence of each additional asset (see Fig. 4). **As the number of assets rises, engagement in health-promoting behaviors increases significantly** (21.6% of middle school youth with none of the 3 assets reported eating breakfast everyday compared to 51.6% of those with all 3 assets). **For risk behaviors, engagement in behavior declines with each additional asset** (nearly 50% of middle school youth with none of the 3 assets reported depressive symptoms, compared to 14.4% of their peers with all 3 assets). The figure shows that these patterns are consistent with findings for high school students from the 2017 survey.<sup>‡</sup>

**Figure 4: Change in Behavior Engagement with Additional Assets**

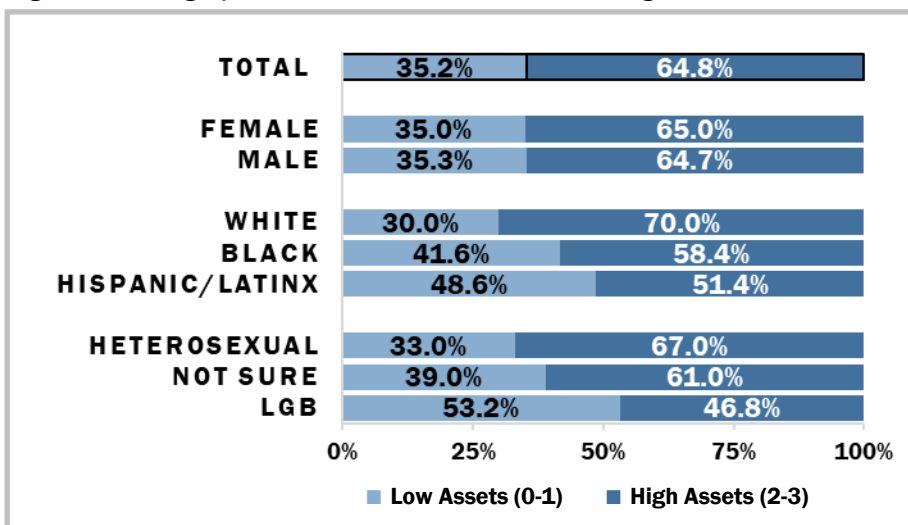


<sup>‡</sup> Data on Cuyahoga County high school youth provided by 2017 YRBS data.

<sup>†</sup> Time designation references engagement in behavior in noted months/days before taking the survey. For example, used marijuana in the 30 days before taking the survey.

The number of protective factors present differs significantly between populations. Overall, the majority of middle school youth in Cuyahoga County reported having a high number of assets (2-3 assets, 64.8%). When comparing demographic groups (see Fig. 5), minority youth including Lesbian, Gay and Bisexual (LGB), Hispanic/Latinx, and Black students were more likely to have low assets (<2) than White, heterosexual youth and the total population.

**Figure 5. Demographic Breakdown between Low and High Assets**



Specifically, **Hispanic/Latinx and Black students were significantly more likely to report low assets than White students** (48.6% of Hispanic students and 41.6% of Black students reported having low assets, compared to 30% of White students). In addition, **LGB youth were significantly more likely to report having low assets than their heterosexual peers** (53.2% vs. 33.0%). There were no significant differences for low or high assets between grade levels (7th and 8th) and male and female students. The pattern seen in Figure 5 was also seen among Cuyahoga County high school students.<sup>‡</sup>

**Methods:** The Prevention Research Center for Healthy Neighborhoods (PRCHN) regularly uses a two-stage cluster sample design that mimics the sampling method of the Centers for Disease Control and Prevention (CDC) and its National Youth Risk Behavior Survey (YRBS). In 2018, 96 of 105 middle schools (91.4%) and 12,897 of 14,560 students (88.6%) participated in the survey. An overall response rate of 81.0% (91.4 x 88.6%) allowed the data to be weighted to all 7th and 8th grade students in Cuyahoga County. Analysis was conducted using SPSS statistical software survey procedures to account for the sampling design.

**Contributors:** The information in this report was obtained from the 2018 Cuyahoga County Youth Risk Behavior Survey project. This survey was modeled after the CDC state-based system of health surveys administered at the middle school level every other year by each state department of health. This data brief was prepared by the PRCHN and authored by: Jude Fahoum, BA; Jean Frank, MPH; Audrey Kinsella, MPH, Catherine Osborn, MA; and Erika Trapl, Ph.D. For more information, contact Jean Frank (jean.frank@case.edu).

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**Full data modules from the YRBS are available online:**  
<http://www.prchn.org/YRBSResults.aspx>

<sup>‡</sup>Oman RF, Vesely SK, Aspy CB, Tolma EL. Prospective Associations Among Assets and Successful Transition to Early Adulthood. Am J Public Health. 2015; 105(1): e51-e56.

<sup>‡</sup>The Search Institute. 40 Developmental Assets for Adolescents (ages 12-18). Retrieved from: <https://www.search-institute.org/our-research/developmental-assets/developmental-assets-framework/>.

