

# Exploring Developmental Skills, Supports, & Challenges of Minnesota Youth

A new picture of what MN youth bring to families, schools, and communities



Analysis of the  
2013 & 2016  
Minnesota  
Student  
Survey

Including:  
Grades 5·8·9·11,  
Over 160,000 students  
each year from  
1174 public schools  
and 44 charter schools,  
309 school districts,  
and all 87 MN counties.

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## Minnesota Youth Development Research Group

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## Minnesota Youth Development Research Group

The Minnesota Youth Development Research Group has conducted research with the Minnesota Student Survey (MSS) over the past decade employing MSS data from 2001 to 2016. These studies have contributed to our knowledge base regarding out-of-school-time activities, risk factors, and noncognitive or social-emotional skills. The earlier reports were completed for the Applied Research Collaborative on Youth Development, Extension Service, University of Minnesota. More recent reports have been presented at the annual meetings of the American Educational Research Association and the National Council on Measurement in Education. Most of this work is available at the group website at <http://www.mnydr.org/>

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## KEY HIGHLIGHTS

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### *Developmental Skills*

- MN students report high levels of Commitment to Learning, with over 95% reporting positive levels (that being committed to learning is more like them than not).
- MN students report high levels of Positive Identity (78% are positive) and Social Competence (85% are positive).
- Some differences compared to state averages exist among students of different racial/ethnic backgrounds, but these are relatively small, no greater than 0.30 standard deviations.
- These differences are inconsistent with and much smaller than state racial achievement gaps (in some cases, 1.0 standard deviations or greater).

### *Developmental Supports*

- MN students report high levels of Empowerment (94% with positive levels).
- MN students report high levels of Family/Community Support (93% are positive) and Teacher/School Support (92% are positive).
- Some differences compared to state averages exist among students of different racial/ethnic backgrounds, including notable differences for Hmong students (reporting 0.45 standard deviations less Family/Community Support); whereas other differences are smaller.

### *Developmental Challenges*

- MN students report relatively modest levels of being Bullied. About 58% report being Bullied at least once in the last 30 days.
- MN students report modest levels of Bullying behaviors, with about 34% reporting some level of bullying in the last 30 days.
- About 35% of MN students report some level of serious Mental Distress.
- About 23% of MN students report some level of Family Violence.
- There are differences from state averages for students in some racial/ethnic groups, but these are relatively small. More than other groups, American Indian students report higher levels of being Bullied, engaging in Bullying behavior, Mental Distress (particularly notable at 0.41 standard deviations higher), and Family Violence.

### *Profiles of Developmental Skills, Supports, & Challenges*

- Much larger differences exist in developmental skills, supports, and challenges based on student characteristics than we see with race and ethnicity.
- Students with the following characteristics report much lower levels of developmental skills and support and higher challenges compared to those without the characteristic:
  - Gay, Lesbian, Bisexual students
  - Students who skipped school in the last 30 days
  - Students who were sent to the office for discipline in the last 30 days
  - Students who experienced trauma
- Students who participated in afterschool activities at least 3 days a week report somewhat higher developmental skills and supports.

Students in all racial and ethnic groups plan to graduate from high school (about 99%).

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## Positive Youth Development

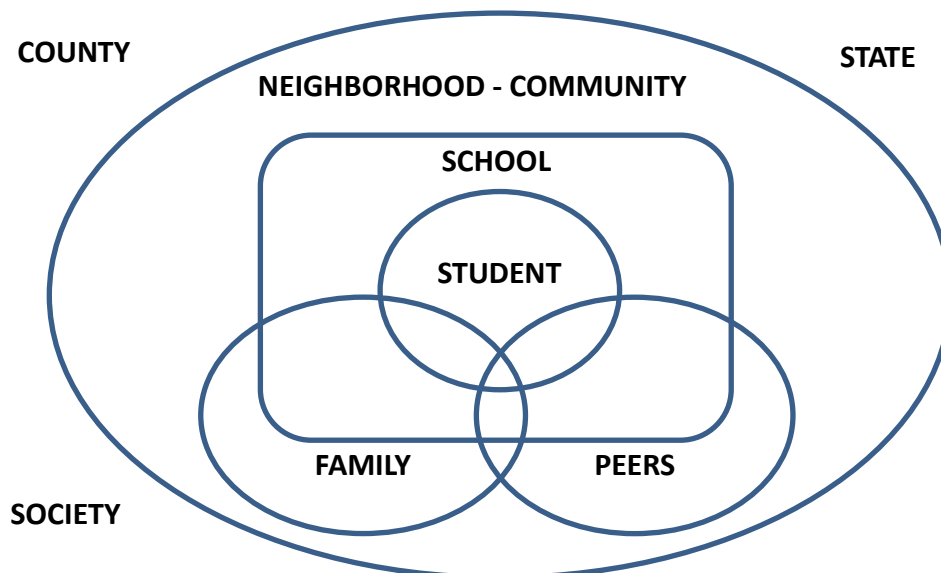
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There are perhaps six essential principles regarding positive youth development about which there is broad consensus (Benson, Scales, Hamilton, & Sesma, 2006), including:

1. youth have the inherent capacity for positive development;
2. positive development is enabled through nurturing relationships, contexts, and environments;
3. positive development is enhanced when youth participate in multiple meaningful relationships, contexts, and environments;
4. all youth benefit from these opportunities, the benefits of which generalize across gender, race, ethnicity, and family income;
5. community is a critical delivery system for positive youth development; and
6. youth themselves are major actors in their own development, serving as a central resource for creating the kinds of relationships, contexts, environments (ecologies), and communities that facilitate optimal development.

The developmental contexts from an ecological perspective where youth are located interact with the inherent capacity of youth to grow and thrive; their developmental strengths, skills, competencies, values and dispositions; and two related aspects of developmental success, the reduction of high-risk behaviors and the promotion of healthy well-being or thriving (Benson, et al., 2006). The work in this area is exploring many aspects of context, all of which might influence positive youth development, including success in school and beyond – providing useful information for strong policy development and prevention and intervention programming.

More generally, the field of youth development has welcomed the positive psychology movement – embracing a positive vision of youth potential (Damon, 2004) and recognizing the dynamic relations between youth and multiple levels of the ecologies of human development, including self, family, peers, school, community, and broader cultures (Bronfenbrenner, 1979; Lerner, 2002).



*Figure 1.* One possible illustration of the ecologies of youth development.

The concept of developmental assets comes from a line of research guided by the work of Peter Benson (1990, 2002, 2006) and others at Search Institute. They created a theory-based framework of developmental assets linking features of ecologies (external assets) and personal skills and capacities (internal assets), guided by evidence that these assets form developmental building blocks that enhance thriving and prevent high-risk behaviors.

This report applies the positive youth development framework and identifies relevant challenges facing youth by extracting information from the MSS. With this information, we are able to develop community-based profiles, here, addressing differences due to grade, race, and ethnicity, as well as several other school-based characteristics and contexts in which youth find themselves.

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### **The Minnesota Student Survey**

An interagency team from the MN Departments of Education, Health & Human Services, Public Safety, and Corrections designs the Minnesota Student Survey (MSS). It is used to monitor important trends and support planning efforts of the collaborating state agencies, as well as local public school districts and youth serving agencies and organizations.

Since 2013, the MSS is administered every three years to students in grades 5, 8, 9, and 11. All operating public school districts are invited to participate. The study design is correlational, thus no causal arguments can be made from these data.

The 2013 MSS underwent a relatively major revision, including more information on student background and demographics, and more information regarding school-based experiences and developmental skills, what some have called developmental assets or social-emotional skills. These items were the basis for proposing a new set of measures including developmental skills, supports, and challenges as perceived and reported by MN students.

A number of developmental skills and supports and contextual challenges youth face were identified in subsets of items from the MSS, based on close attention to the Developmental Asset Framework of Search Institute and the more general ecological model of youth development described below. Components of the Developmental Asset Profile (DAP, from Search Institute) were introduced in 2013 to the MSS.

<i><b>Developmental Skills</b></i>	<i><b>Developmental Supports</b></i>	<i><b>Developmental Challenges</b></i>
1. Commitment to Learning	1. Empowerment*	1. Bullied
2. Positive Identity*	2. Family/Community Support	2. Bullying
3. Social Competence*	3. Teacher/School Support	3. Mental Distress
		4. Family Violence

\*These measures are based on the DAP (Search Institute, 2017).

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## Interpretation of Developmental Skills, Supports, & Challenges from the MSS

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### *Developmental Skills*

These traditionally have been referred to as *internal* assets, those personal characteristics that are important in positive youth development, allowing youth to avoid risky behaviors and thrive. They are malleable and the ecological spheres of influence can help you develop these skills, further promoting positive healthy and successful development.

#### Commitment to Learning

caring about doing well in school, paying attention in class, going to class prepared, interested in learning, finding school learning useful, and being a student is an important part of who I am.

#### Positive Identity (may be more meaningfully titled: Positive Outlook)

having a sense of control of one's life, feeling good about self and future, dealing well with disappointment and life's challenges, and thinking about one's purpose in life.

#### Social Competence

saying no to dangerous/unhealthy things, building friendships, expressing feelings appropriately, planning ahead and making good choices, resisting bad influences, resolving conflicts without violence, accepting differences in others, and recognizing the needs and feelings of others.

### *Developmental Supports*

These traditionally have been referred to as *external* assets, that is, external sources of support that come from the ecological spheres of influence that youth traverse regularly, including family, peers, schools, and communities. These are clearly malleable and we can increase multiple sources of support to promote positive healthy and successful youth development. It is through multiple sources of support that youth can improve their developmental skills to their potential.

#### Empowerment

having a sense of safety at home, at school, and in the neighborhood; feeling valued and appreciated; being included in family roles; and having responsibilities

#### Family/Community Support

being able to talk with mothers (if available) and feeling cared for by parents, other adult relatives, friends, and other adults in the community.

#### Teacher/School Support

reporting that adults at school treat students fairly and listen to students; that school rules are fair; that teachers care about students and care about and are interested in you.

## *Developmental Challenges*

Youth face many developmental challenges, those personal and social conditions that interfere and limit the potential of youth to thrive. Youth who experience more developmental challenges engage in more risky behaviors and fail to develop the skills necessary to be resilient and successful. The negative effects of developmental challenges can be reduced through robust developmental skills and supports. However, we can and should work to reduce and eliminate developmental challenges directly.

### **Bullied**

student experiences as a victim of bullying, such as being harassed or bullied because of race, religion, gender, sexual orientation, disabilities, weight or physical appearance, by means of social media; being pushed around or hit, threatened, lied about, being the recipient of inappropriate jokes or comments, or being excluded from friends and activities. The focus here is on the prior 30 days of school from MSS administration (late-winter).

### **Bullying**

student experiences as a perpetrator of bullying, such as physical assault or fighting, threatening others, spreading rumors, making inappropriate jokes or comments, or excluding others from friends and activities. The focus here is on the prior 30 days of school from MSS administration (late-winter).

### **Mental Distress**

involves significant emotional, behavioral, and mental health problems, including having long-term mental health, behavioral, or emotional problems; having been treated for mental health, emotional, or behavioral problems; having considered or attempted suicide; or purposively hurting or injuring oneself.

### **Family Violence**

the presence of excessive alcohol use or drug use in the family, or verbal, physical, or sexual abuse from adults in the family.

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## Initial Reactions to Preliminary Results and Additional Resources

Through preliminary presentations of student profiles on these skills, supports, and challenges, and associated school-related information from the MSS, educators, school leaders, community leaders, and researchers see promise in the value of reporting on these measures at the state, district, and school levels. In addition, these measures and related information have been presented to members of the MSS Interagency Team with very positive responses and encouragement to pursue further investigations using the measures.

In concordance with the professional standards for test design and score use (AERA, APA, & NCME, 2014), a *Technical Report* is available that describes relevant methods of constructing each measure and the quality evidence gathered to defend score interpretation and use. This can be found at the group website, <http://www.mnydr.org/>

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## References

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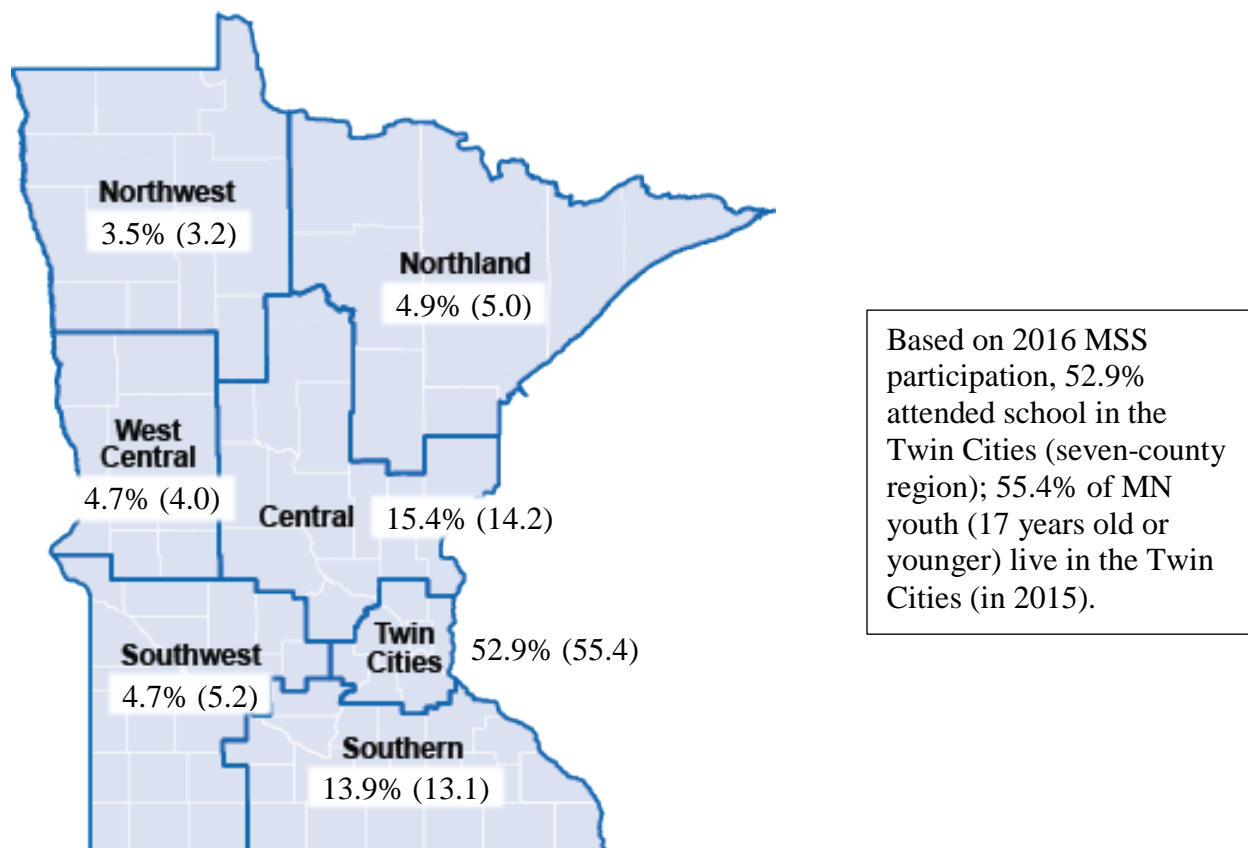
## MSS Participation

### MSS Participation Counts in 2013 and 2016

Grade		2013	2016	Total
5	n	39854	41865	81719
	%	24.6%	24.8%	
8	n	42841	44983	87824
	%	26.4%	26.7%	
9	n	42381	45309	87690
	%	26.2%	26.9%	
11	n	36958	36576	73534
	%	22.8%	21.7%	
Total		162,034	168,733	330,767

*Note:* One major participation change is that Minneapolis Public Schools did not participate in the 2013 MSS. In addition, several additional charter schools, as well as MPS, participated in 2016.

### Percent of Youth in the 2016 MSS by Region (State % of Youth by Region in parenthesis)



Source: <http://www.mncompass.org/>

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## Creating the Race/Ethnicity Categories Variable: RACEGROUPS

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The MSS database includes a set of questions about race and ethnicity. Students are allowed to select as many racial and ethnic groups as they wish. The database includes two race/ethnic variables that combines this information, whereby students are placed in a single category.

[RACE] designates students who identify with a single race and places all multiracial identifications into a group called *Multiple Races*. If students did not select a race (perhaps only an ethnicity), they are designated as *No Answer*.

[RACEETHNIC] uses the [RACE] variable and pulls all students who identify as Hispanic into a separate group, leaving each racial group as “non-Hispanic.”

To create an identification system that emphasizes ethnic membership, we recoded the [RACEETHNIC] variable so that it recognizes *Latino* (Hispanic) membership over all others, followed by *Somali* membership, *Hmong* membership, and finally *American Indian* membership. The *American Indian* identification was important to prioritize over multiracial, as nearly three-fourths of all *American Indian* students identify as multiracial. In the 2013-2016 data, the MSS original variable [RACEETHNIC] identifies 5065 students as *American Indian Non-Hispanic*, whereas our variable [RACEGROUPS] identifies 16823 students as *American Indian* and not any of the three ethnic groups. SPSS code used to revise race/ethnic group assignment is available in the *Technical Report*.

### ***Special Notes on Racial/Ethnic Identification:***

In 2016, 32% of Latino students did not select a race; racial identity among many Latino youth is redundant with their ethnic identity. As described above, 76% of American Indian youth identify as multiracial or multiethnic. About 23% of Asian youth are multiracial; 30% of Black youth are multiracial; 9% of White youth are multiracial.

Because of the complexity of race/ethnic identification with youth (who are themselves developing their own racial/ethnic identities), we provide two summaries. The first is the duplicated counts – the number of students selecting each race and ethnicity. The second is the unduplicated counts based on our [RACEGROUPS] variable described above. These are the racial/ethnic categories that will be used in the remaining graphical displays and tables.

Regarding multiracial and multiethnic youth, here is what we find:

- In 2013, of those students that selected an ethnicity, 0.8% (less than 1%) reported multiple ethnicities. In 2016, 1% reported multiple ethnicities.
- In 2013, of those students that selected a race, 6.6% reported two races and 1% reported three or four (7.6% in all). In 2016, 7.5% reported two races and 0.9% reported three or four (8.4% in all).

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## Racial and Ethnic Identification by Students

### *Racial and Ethnic Membership based on Student Identification (duplicated counts)*

	<b>2013 Count</b>	<b>2013 %</b>	<b>2016 Count</b>	<b>2016 %</b>
Missing	2727	1.7%	2140	1.3%
American Indian Alaskan	9491	5.9%	10686	6.3%
Asian	11255	6.9%	13255	7.9%
Native Hawaiian Pac Isl	1695	1.0%	2081	1.2%
Black	14536	9.0%	17719	10.5%
White	130551	80.6%	132967	78.8%
Latino	11818	7.3%	15942	9.4%
Somali	2024	1.2%	3619	2.1%
Hmong	4253	2.6%	4815	2.9%

### *Racial and Ethnic Membership based on the Revised Variable [Racegroups]*

	<b>2013 Count</b>	<b>2013 %</b>	<b>2016 Count</b>	<b>2016 %</b>
Missing	2727	1.7%	2140	1.3%
American Indian	8161	5.0%	8662	5.1%
Asian Pacific Island	5151	3.2%	5910	3.5%
Black	7788	4.8%	8806	5.2%
White	115487	71.3%	113313	67.2%
Multiple Races	4776	2.9%	5761	3.4%
Latino	11818	7.3%	15942	9.4%
Somali	1968	1.2%	3555	2.1%
Hmong	4158	2.6%	4644	2.8%
<b>Total</b>	<b>162034</b>		<b>168733</b>	

*Note:* Recall that one major change in the participants is that Minneapolis Public Schools did not participate in 2013, but did so in 2016.

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## Attending to Variability

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Individuals differ. To introduce each measure, we present the variability in distributions of each measure for each grade level for students that participated in the MSS in 2016.

From a practical perspective, in education, we often focus on the average test score or the percent meeting standards (proficient). Many accountability systems are driven by data summarized in these ways. Unfortunately, these summary statistics ignore the fact that there exists a lot of variability around the mean score – that the percent proficient reduces the wide range of achievement into two categories (proficient or not).

Consider the role of a teacher or an after-school program educator. They are not working only with students who are at the average. Lumping youth into the two categories of proficient or not proficient does not help them plan activities that will meet the needs of their students.

The challenge we face is in the great variability of achievement, educational backgrounds and experiences, ways of knowing and ways of doing. It is by addressing the variability that we begin to have an equity approach to our work – identifying and meeting the needs of all students.

To support these goals, we begin with displays of the variability in developmental skills, supports, and challenges. We note the location of the mean of each grade level for reference. We also note the location of the score point of 10. A score of 10 demarcates the transition from negative perceptions to positive perceptions or from less of a skill/support to more of the skill/support.

### *Score Interpretation*

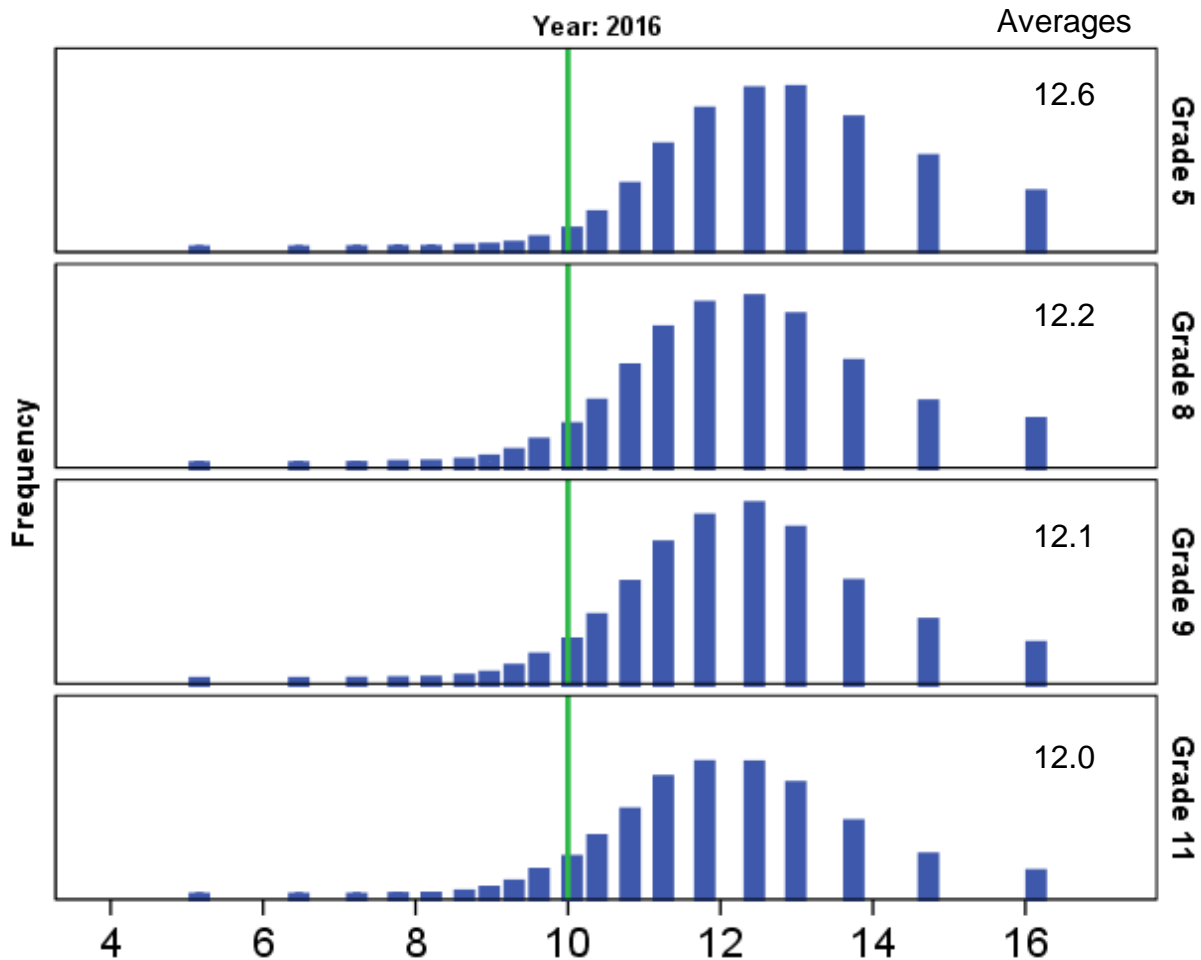
To support score interpretation, we adopted a criterion-referenced scaling system. Each scale is set with a common reference score of 10, the score that designates the mid-point of the score scale – the *neutral* or *moderate* level of a developmental skill, support, or challenge.

Not at all like me	Neutral	Very much like me
Not true for me	Midpoint	Very true for me
-----5-----	-----10-----	-----15-----

For example, a score of 10 on the Commitment to Learning scale indicates a *neutral* level of CtL, neither committed nor uncommitted to learning. In Bullying, a score of 10 indicates a level of Bullying about once a week on average (which is rarely observed; although in the case of the developmental challenges, any level above “none” or the lowest possible score is a cause for concern). Scores typically range from about 5 to 15. Some measures are naturally more variable – as youth are more variable on some skills, supports, or challenges.

More information about scaling and scoring each measure is provided in the *Technical Report*.

## Commitment to Learning



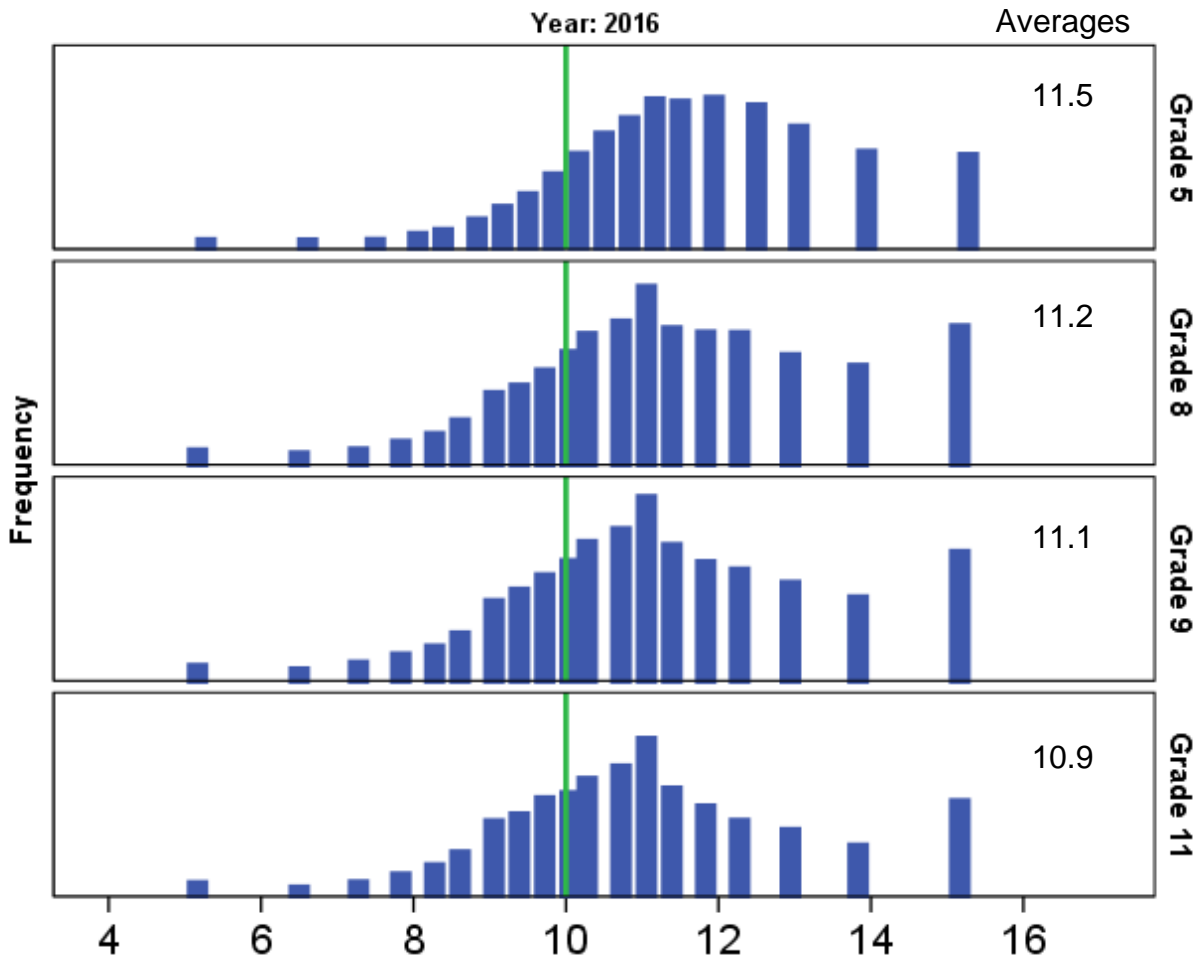
### What is Commitment to Learning?

CtL is a developmental skill that is an important part of school success and positive youth development. It provides information about the extent to which students care about doing well in school, pay attention in class, go to class prepared, are interested in learning, and find school learning useful. Students that are committed to learning agree that being a student is an important part of who they are.

### CtL Highlights:

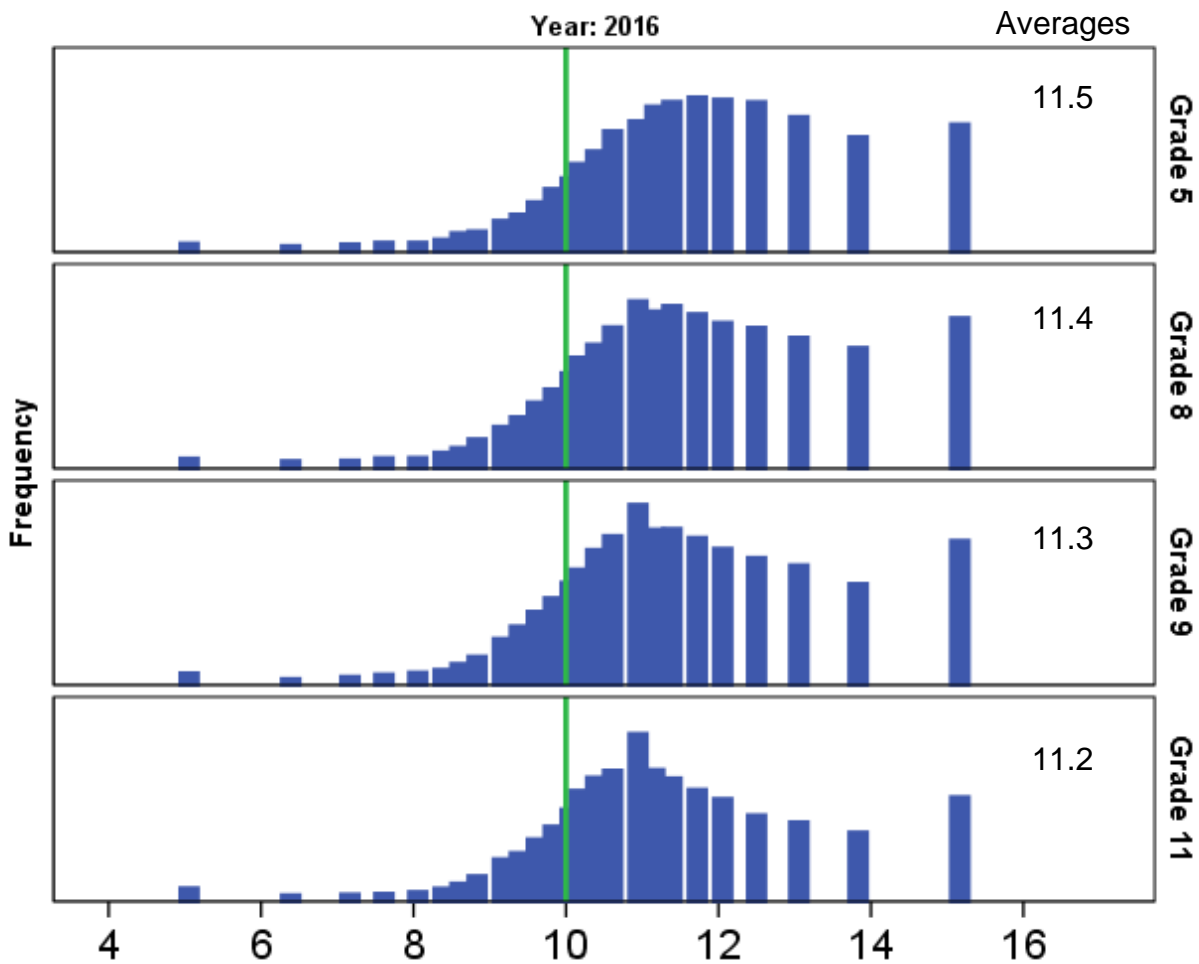
- ✓ MN students go to school committed to learning.
- ✓ Nearly all MN youth (95.6%) report positive levels of CtL.
- ✓ The high levels of CtL are consistent across grade levels.
- ✓ The statewide average remained consistent from 2013 (12.2) to 2016 (12.2).
- ✓ There is a slight decline in CtL from grade 5 to 11 – with room for improvement across all grades.

**Positive Identity**



<b>What is Positive Identity?</b>	<b>PI Highlights:</b>
<p>PI is a developmental skill and an important part of positive youth development. It provides information about the extent to which youth report a sense of control of their life, feel good about themselves and their future, deal well with disappointment and life’s challenges, and think about their purpose in life. It may be more meaningfully interpreted as a measure of <i>positive outlook</i> and hope.</p>	<ul style="list-style-type: none"> <li>✓ MN students generally report a high level of positive identity, in that they are positive in their outlook and hopeful.</li> <li>✓ The majority of youth (78%) report positive levels of PI.</li> <li>✓ The statewide average remained consistent from 2013 (11.2) to 2016 (11.2).</li> <li>✓ There is a slight decline in PI from grade 5 to 11 – with room for improvement across all grades.</li> </ul>

**Social Competence**



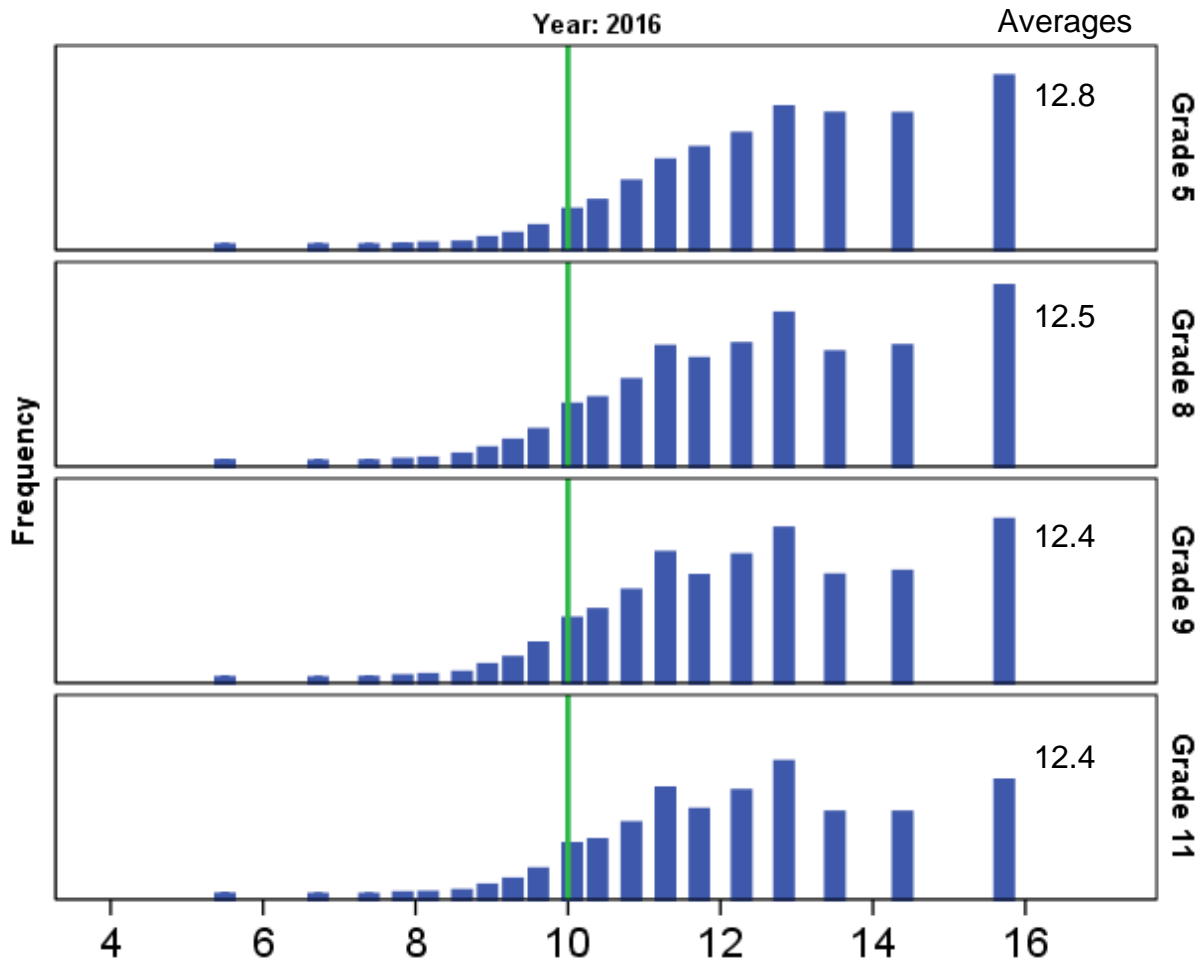
**What is Social Competence?**

SC is a developmental skill and an important part of school success and positive youth development. It provides information about the extent to which youth say no to dangerous/unhealthy things, build friendships, express feelings appropriately, plan ahead, make good choices, resist bad influences, resolve conflicts without violence, accept differences in others, and recognize the needs and feelings of others.

**SC Highlights:**

- ✓ MN students generally report a high level of SC, in that they are positive in their outlook and hopeful.
- ✓ The majority of youth (85%) report positive levels of SC.
- ✓ The statewide average remained consistent from 2013 (11.4) to 2016 (11.4).
- ✓ There is a slight decline in SC from grade 5 to 11 – with room for improvement across all grades.

## Empowerment



### What is Empowerment?

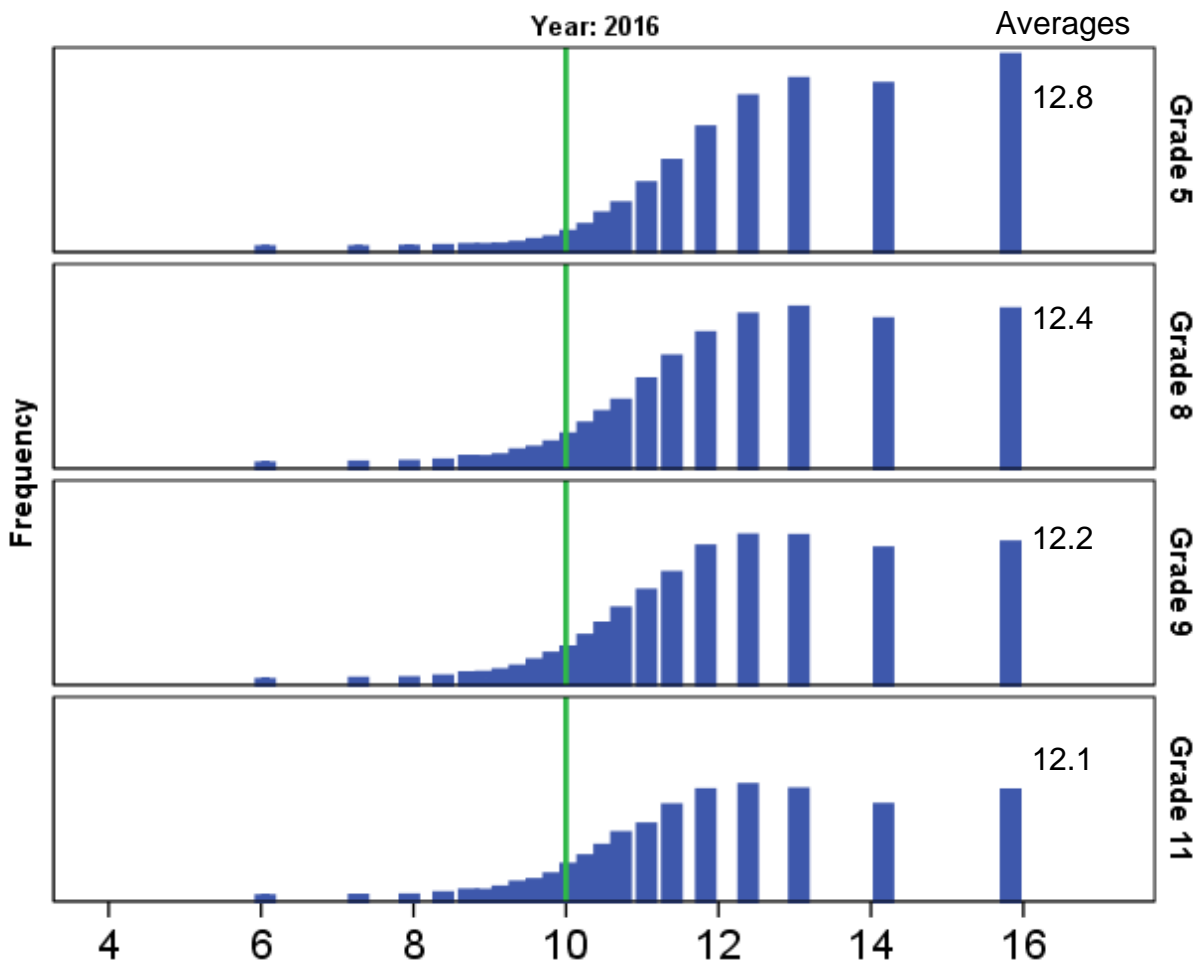
Empowerment is a developmental support and an important part of school success and positive youth development. It provides information about the extent to which youth report a sense of safety at home, at school, and in the neighborhood; feel valued and appreciated; are included in family roles; and have responsibilities – the extent to which youth feel empowered.

### Empowerment Highlights:

- ✓ MN students generally report a high level of Empowerment, in that they are given external support and feel safe.
- ✓ Nearly all MN youth (94%) report positive levels of Empowerment.
- ✓ The statewide average remained consistent from 2013 (12.5) to 2016 (12.5).
- ✓ There is a slight decline in Empowerment from grade 5 to 11 – with room for improvement across all grades.

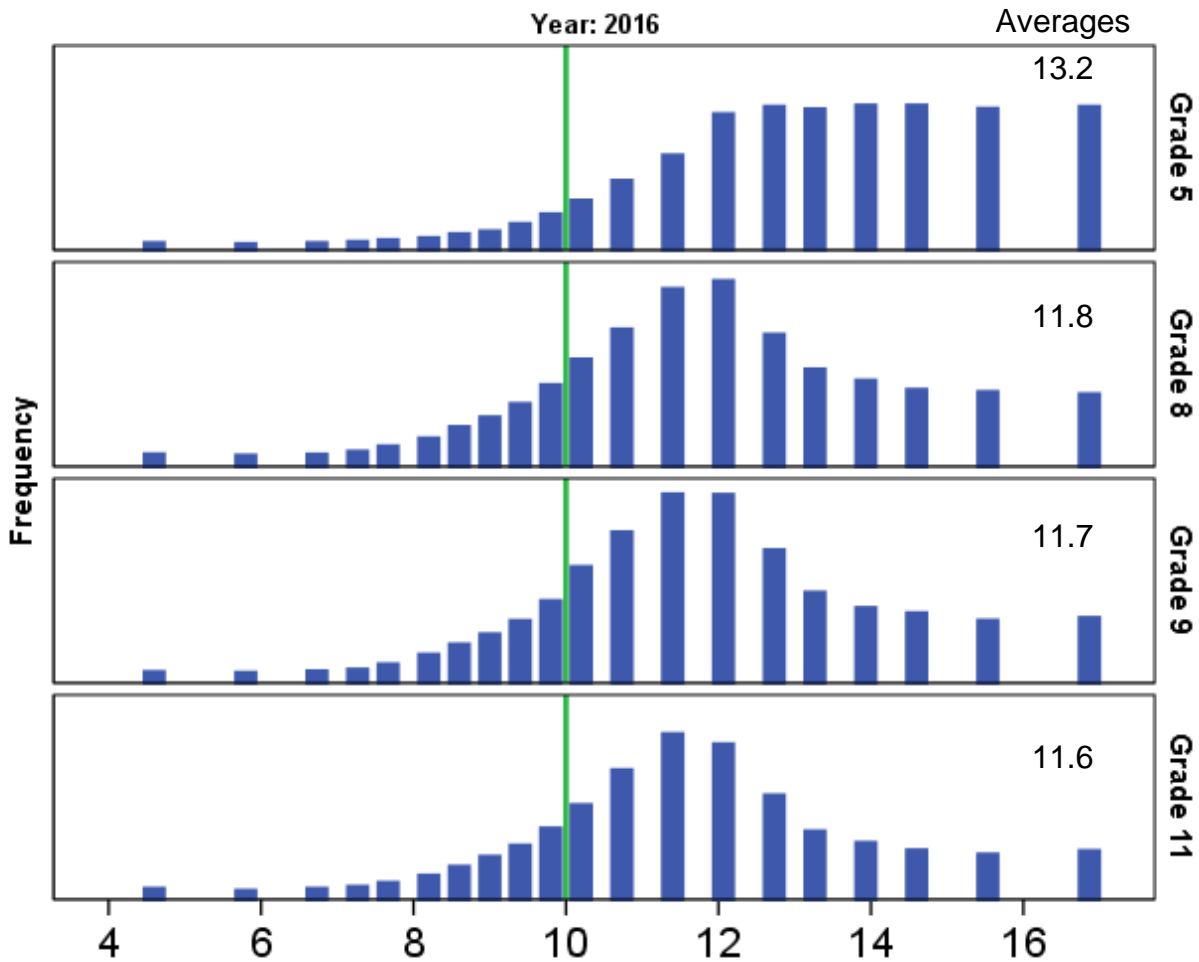


**Family/Community Support**



<p><b>What is Family/Community Support?</b></p> <p>FCS is a developmental support and an important part of school success and positive youth development. It provides information about the extent to which youth are able to talk with their mothers (if available), and feel cared for by parents, other adult relatives, friends, and other adults in the community.</p>	<p><b>FCS Highlights:</b></p> <ul style="list-style-type: none"> <li>✓ MN students generally report a high level of FCS, feeling cared for by family, friends, and community members.</li> <li>✓ The vast majority of youth (93.4%) report positive levels of FCS.</li> <li>✓ The statewide average increased slightly from 2013 (12.2) to 2016 (12.4).</li> <li>✓ There is a slight decline in FCS from grade 5 to 11 – with room for improvement across all grades.</li> </ul>
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**Teacher/School Support**



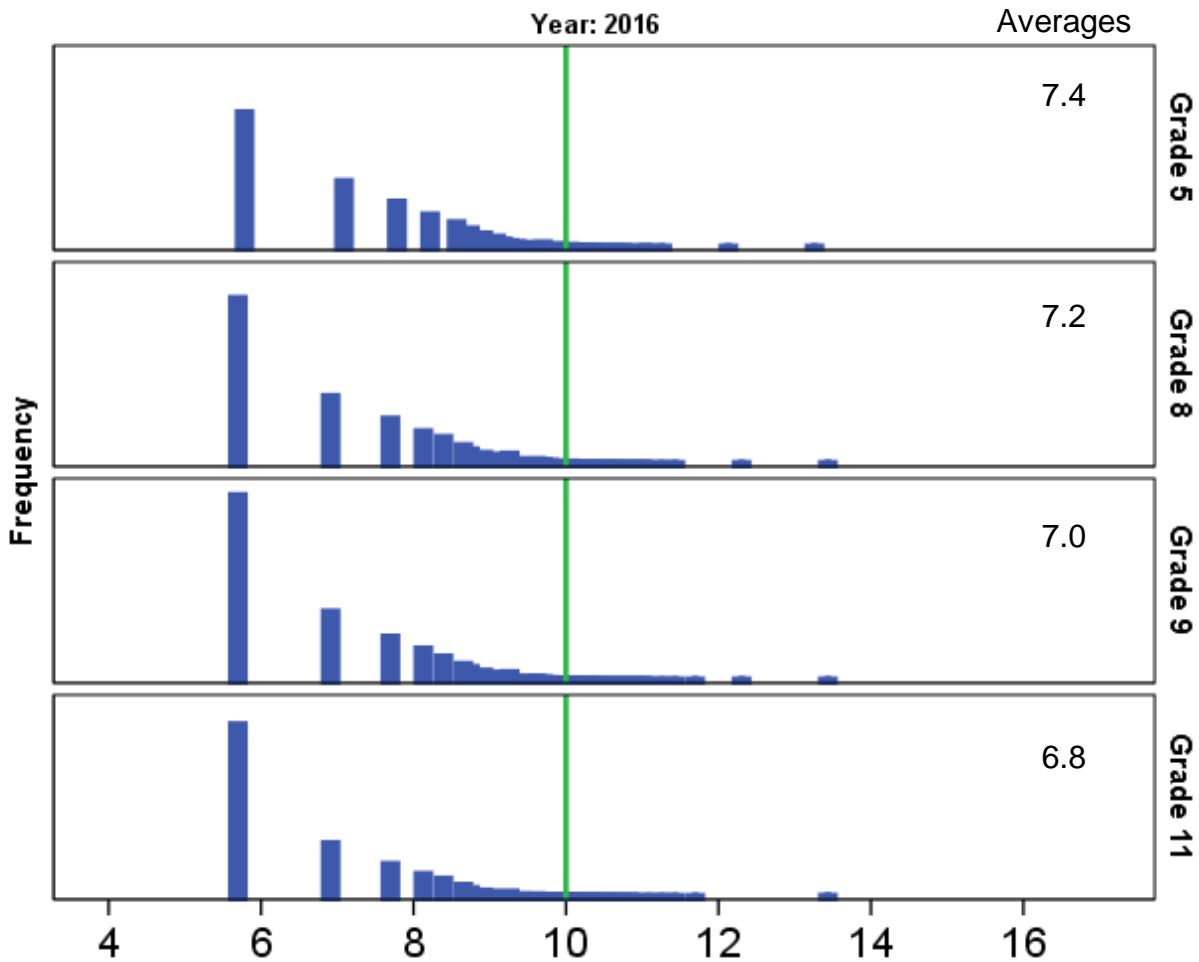
**What is Teacher/School Support?**

TSS is a developmental support and an important part of school success and positive youth development. It provides information about the extent to which youth report that adults at school treat students fairly and listen to students; that school rules are fair; that teachers care about students generally, and care about and are interested in them individually.

**TSS Highlights:**

- ✓ MN students generally report a high level of TSS, feeling cared for by teachers and their school.
- ✓ The majority of youth (82%) report positive levels of TSS.
- ✓ The statewide average remained consistent from 2013 (12.0) to 2016 (12.1).
- ✓ There is a significant decline in TSS from grade 5 to 8 – with room for improvement across all grades.

**Being Bullied (Victimized)**



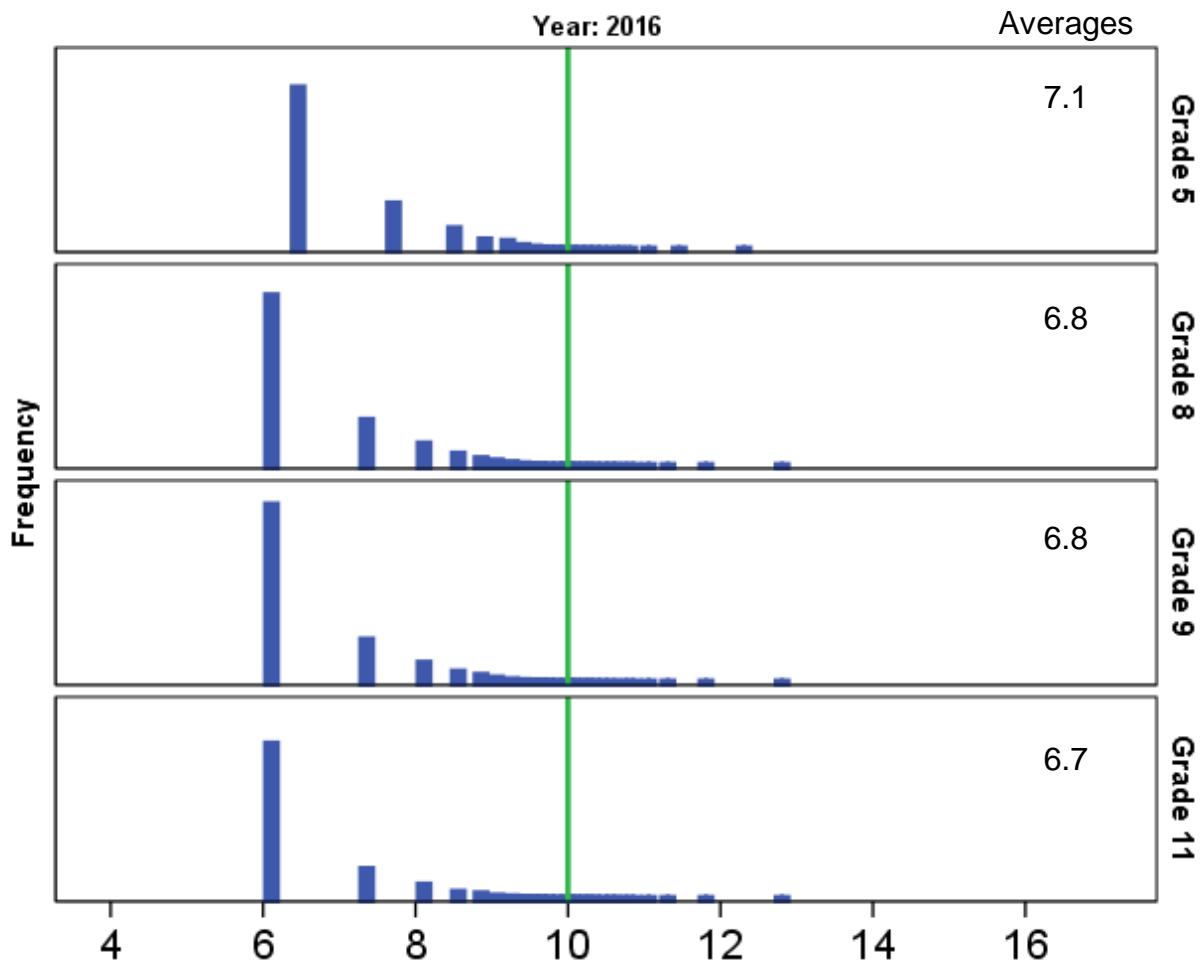
**What is Being Bullied?**

Being bullied is a developmental challenge and interferes with school success and positive youth development. It provides information about the extent to which youth report being harassed or bullied because of race, religion, gender, sexual orientation, disabilities, weight or physical appearance, by means of social media; being pushed around or hit, threatened, lied about, being the recipient of inappropriate jokes or comments, or being excluded from friends and activities. This includes incidents in the most recent 30 days of school.

**Bullied Highlights:**

- ✓ MN students report low levels of being bullied in the most recent 30 days.
  - ✓ The majority of youth (58%) report at least one Bullied incident.
  - ✓ Less than 1% report severe levels of Bullied (scores of 10 or greater).
  - ✓ The statewide average remained consistent from 2013 (7.1) to 2016 (7.1).
  - ✓ There is a slight decline in Bullied from grade 5 to 11 – with room for improvement across all grades.
- A score of 10 indicates a level of being bullied about once a week.

## Bullying (Perpetrator)



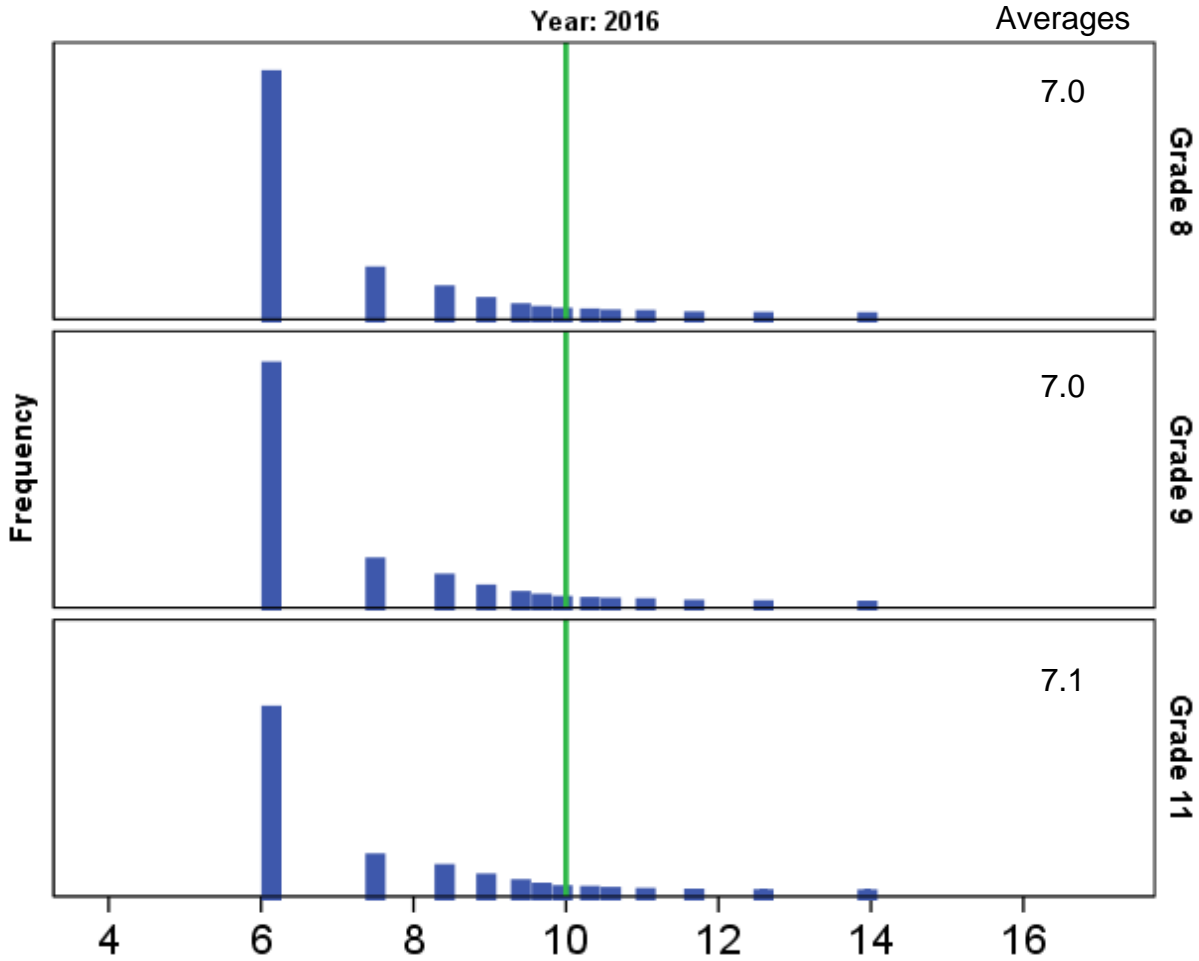
### What is Bullying?

Bullying is a developmental challenge and interferes with school success and positive youth development. It provides information about the extent to which youth report engaging in bullying behavior as a perpetrator, such as physical assault or fighting, threatening others, spreading rumors, making inappropriate jokes or comments, or excluding others from friends and activities. This includes incidents in the most recent 30 days of school.

### Bullying Highlights:

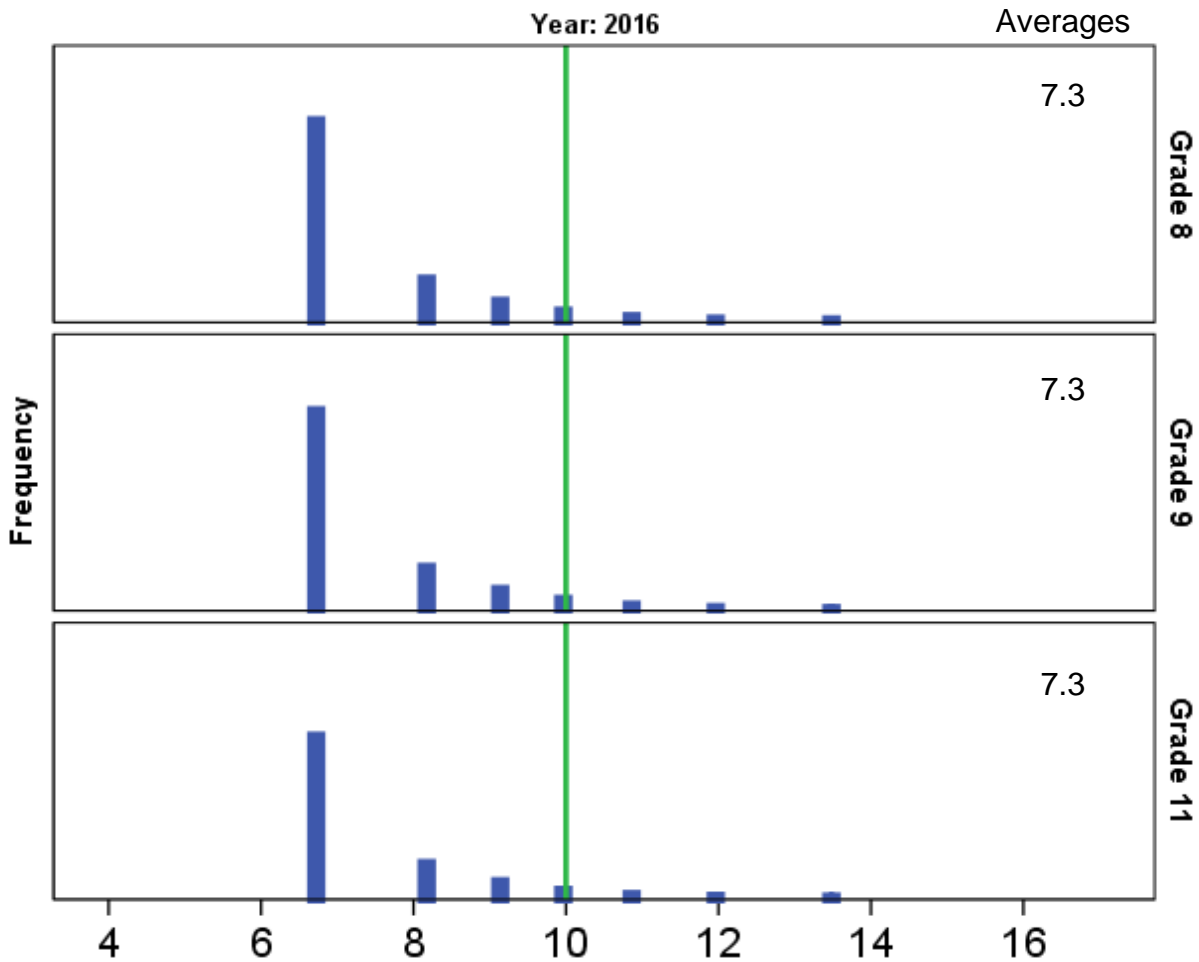
- ✓ MN students report low levels of Bullying in the most recent 30 days.
  - ✓ The majority of youth (66%) report no recent Bullying behavior.
  - ✓ Less than half of 1% report severe levels of Bullying (scores of 10 or greater).
  - ✓ The statewide average remained consistent from 2013 (6.9) to 2016 (6.9).
  - ✓ There is a slight decline in Bullying from grade 5 to 11 – with room for improvement across all grades.
- A score of 10 indicates a level of bullying about once a week.

**Mental Distress**



<b>What is Mental Distress?</b>	<b>MD Highlights:</b>
<p>MD is a developmental challenge and interferes with school success and positive youth development. It provides information about the extent to which youth report serious emotional, behavioral, and mental health problems, including long-term mental health, behavioral, or emotional problems; treatment for mental health, emotional, or behavioral problems; considered or attempted suicide; or purposely hurt or injured oneself.</p>	<ul style="list-style-type: none"> <li>✓ MN students report low levels of MD.</li> <li>✓ The majority of youth (65%) report no serious MD.</li> <li>✓ About 4% of youth report high levels of serious MD (scores of 10 or greater).</li> <li>✓ The statewide average remained consistent from 2013 (6.9) to 2016 (7.0).</li> <li>✓ Levels of serious MD remain consistent from grade 8 to 11.</li> </ul> <ul style="list-style-type: none"> <li>• Any value greater than the lowest possible score is problematic.</li> </ul>

**Family Violence**



**What is Family Violence?**

FV is a developmental challenge and interferes with school success and positive youth development. It provides information about the extent to which youth report the presence of excessive alcohol use or drug use in the family, or verbal, physical, or sexual abuse from adults in the family.

**FV Highlights:**

- ✓ MN students report low levels of FV.
  - ✓ The majority of youth (73%) report no FV.
  - ✓ About 2% of youth report high levels of FV (scores of 10 or greater).
  - ✓ The statewide average remained consistent from 2013 (7.4) to 2016 (7.3).
  - ✓ Levels of FV remain consistent from grade 8 to 11.
- Any value greater than the lowest possible score is problematic

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## Examining Disparities

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Disparities in academic achievement have been the target for a great deal of attention, effort, and intervention, going by many names: achievement gaps, opportunity gaps, achievement debt, and others. These disparities are recognized by some as indicators of inequity in educational opportunities as a reflection of inequities in many other public policy arenas, including health, housing and segregation, economic development and employment, transportation, and others.

Achievement disparities based on race/ethnicity are particularly unconscionable, as they are also consistent with socioeconomic status and segregation. We commonly hear the argument that academic achievement should not be determined by one's skin color or zip code.

A standard method to report achievement disparities is through the use of a common metric, which puts tests of different measures (e.g., math or reading) on a common metric for comparison purposes. This common metric is typically a standardized mean difference (the difference between groups in number of standard deviations).

### *Do we observe disparities in Developmental Skills and Supports that are similar to those we see in academic achievement?*

To put this in perspective, we first review MN achievement disparities (achievement gaps). MN data were reviewed from 2015 NAEP results in grade 4 Reading and grade 8 Mathematics.

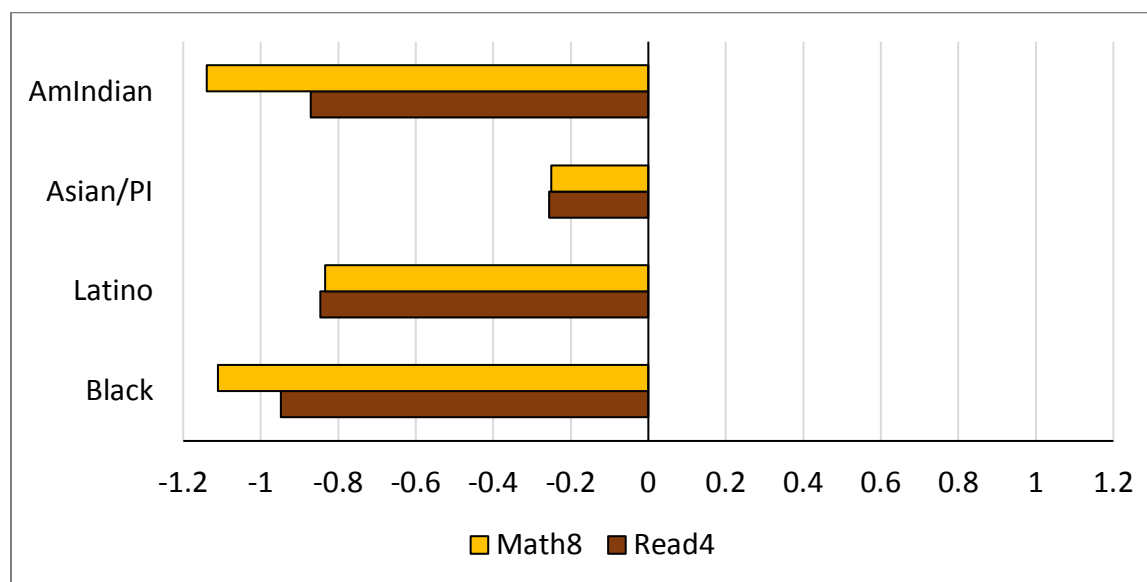


Figure 2. Academic achievement disparities on MN 2015 NAEP results for grade 4 Reading and grade 8 Mathematics, compared to White students.

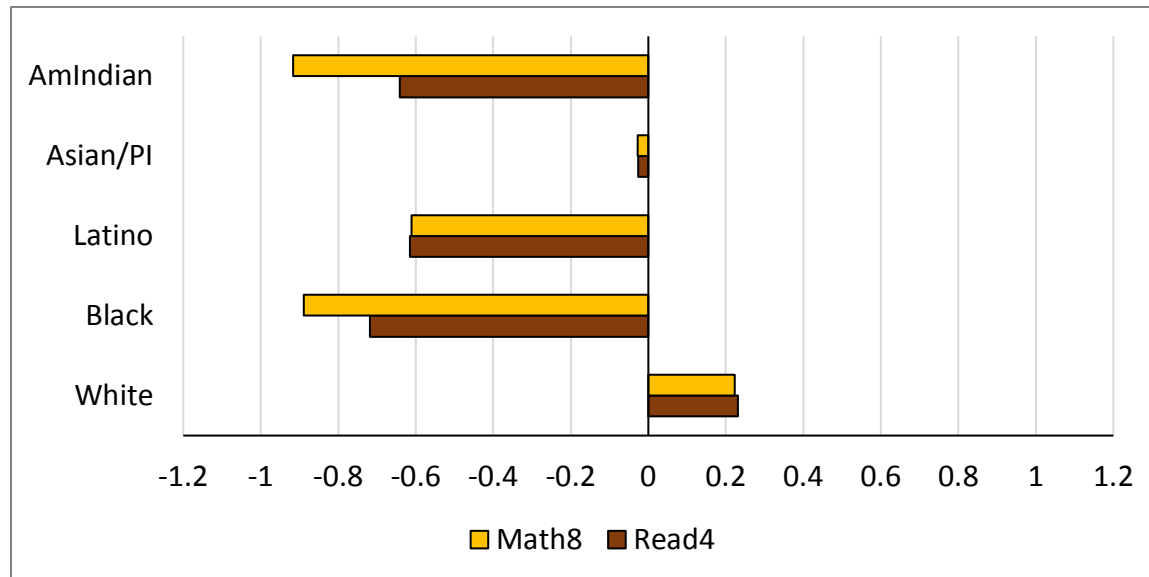
**Interpretation:** Compared to White students, achievement disparities (gaps) are over 1 standard deviation in mathematics for American Indian students (-1.14) and Black students (-1.11) with slightly smaller disparities in reading (-0.87 and -0.95), and over 0.8 standard deviations for Latino students in both subjects. These are among the largest racial/ethnic gaps in the nation.

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## A Slight Modification for Comparing Disparities

Some may argue that comparing American Indian students and students of color to White students, as the reference standard, leads to inappropriate interpretations, as there is no basis for thinking of White students as the standard bearers (further perpetuating the status quo).

To balance the presentation of disparities in Developmental Skills, Supports, and Challenges, we use the total state average as the reference point and display all racial/ethnic disparities from this common point. If we were to do so with the 2015 NAEP results, we see the following picture:



*Figure 3.* Academic achievement disparities on MN 2015 NAEP results for grade 4 Reading and grade 8 Mathematics, compared to state average.

In Figure 3, we see the same differences as in Figure 2, but shifted to the right of 0, which is fixed at the state average instead of the average of White students. The difference between Black and White students on grade 8 mathematics is -1.11 ( $-0.89 - 0.22$ ) in Figure 3, as in Figure 2.

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## Examining Disparities in Developmental Skills, Supports, and Challenges

Disparities are defined in the next charts as group differences from the State Average. Each bar represents the number of SD difference between youth in each group compared to state average.

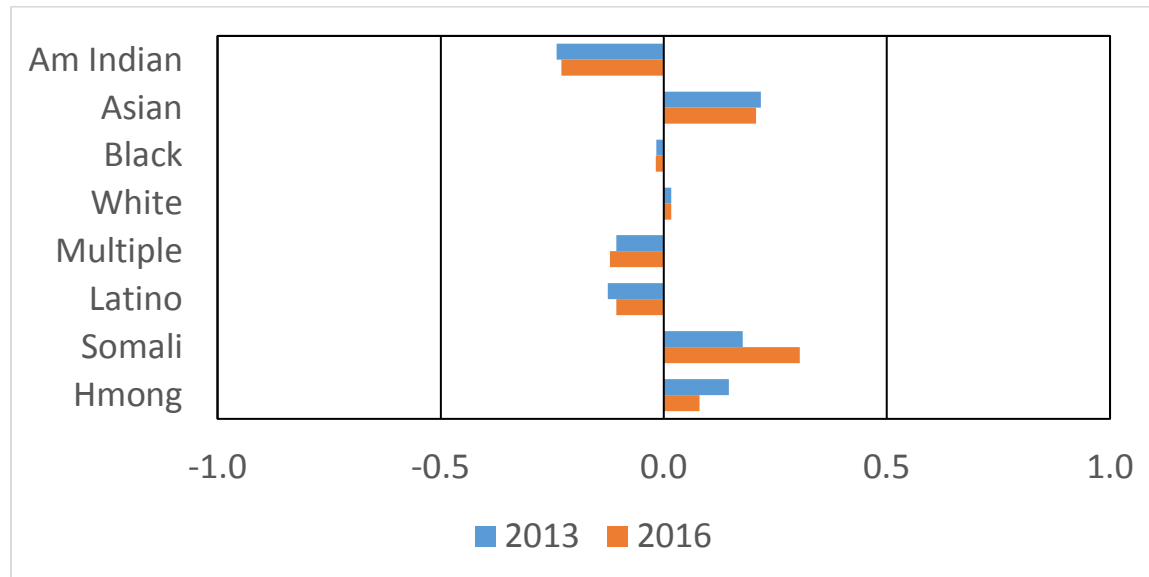
We generally interpret the differences as

- 0.2 or less = very small
- 0.2 to 0.4 = small
- 0.4 to 0.6 = moderate
- 0.6 or more = large

➔ Disparities in Developmental Skills, Supports, and Challenges are much smaller than those we see in academic achievement.



## Commitment to Learning Racial/Ethnic Disparities



*Means (M), Standard Deviations (SD), Counts (N), and Standardized Mean Differences (d) by group*

		CtL Commitment to Learning			
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>d</i>
Missing Race	2013	12.18	1.57	2131	
	2016	12.23	1.61	1798	
American Indian	2013	11.83	1.50	7726	-0.24
	2016	11.89	1.53	8449	-0.23
Asian Pacific Isl	2013	12.52	1.56	4855	0.22
	2016	12.57	1.60	5776	0.21
Black	2013	12.17	1.54	7071	-0.02
	2016	12.22	1.58	8405	-0.02
White	2013	12.22	1.51	111537	0.02
	2016	12.27	1.55	111493	0.02
Multiple Races	2013	12.03	1.49	4557	-0.11
	2016	12.06	1.54	5644	-0.12
Latino	2013	12.00	1.52	11149	-0.13
	2016	12.08	1.55	15499	-0.11
Somali	2013	12.46	1.85	1754	0.18
	2016	12.72	1.78	3266	0.30
Hmong	2013	12.42	1.48	3960	0.15
	2016	12.37	1.47	4537	0.08
Total	2013	12.19	1.53	154740	
	2016	12.24	1.56	164867	

### CtL Disparities

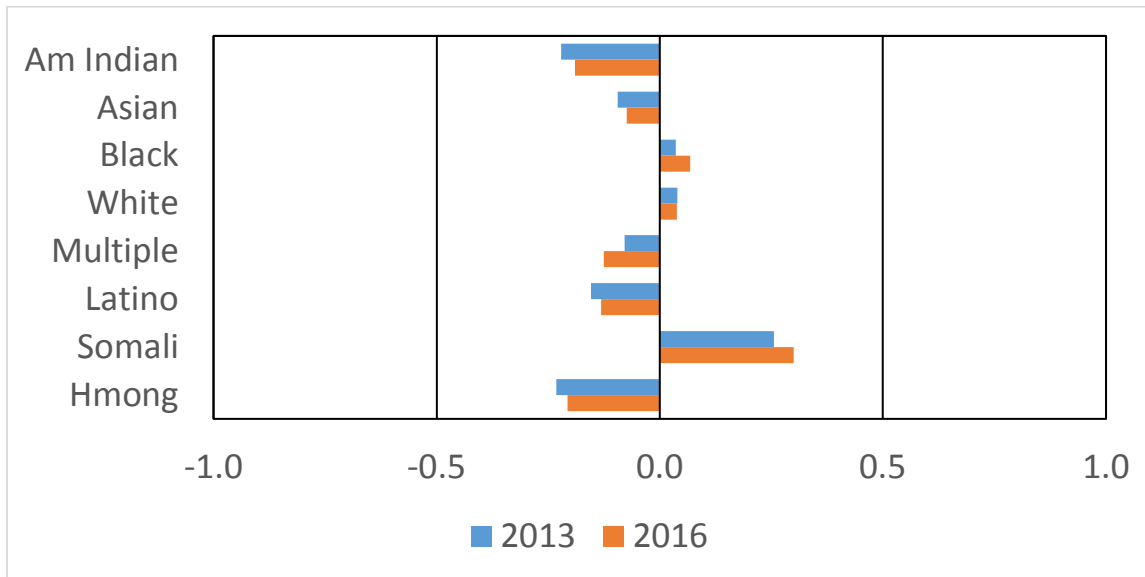
Statewide levels of *CtL* are quite high. Nearly 96% of all youth report positive *CtL*.

In 2016, American Indian students reported slightly lower *CtL* (-0.23 SD lower). Somali students reported slightly higher *CtL* (0.30 SD higher), as did Asian students (0.21 SD higher).

**There are no noteworthy differences for students in other racial/ethnic groups.**

The chart to the left contains the means for each group and the standardized mean differences (*d*) used to create the graph above.

## Positive Identity Racial/Ethnic Disparities



*Means (M), Standard Deviations (SD), Counts (N), and Standardized Mean Differences (d) by group*

		PI Positive Identity			
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>d</i>
Missing Race	2013	11.08	1.90	1675	
	2016	11.12	1.80	1475	
American Indian	2013	10.76	1.86	7185	-0.22
	2016	10.84	1.90	8007	-0.19
Asian Pacific Isl	2013	10.99	1.77	4416	-0.09
	2016	11.06	1.78	5362	-0.07
Black	2013	11.22	1.91	5991	0.04
	2016	11.32	1.91	7283	0.07
White	2013	11.23	1.79	105830	0.04
	2016	11.26	1.84	107015	0.04
Multiple Races	2013	11.01	1.81	4209	-0.08
	2016	10.96	1.83	5275	-0.13
Latino	2013	10.88	1.82	10164	-0.15
	2016	10.95	1.86	14242	-0.13
Somali	2013	11.62	2.29	1496	0.26
	2016	11.75	2.18	2742	0.30
Hmong	2013	10.74	1.59	3561	-0.23
	2016	10.81	1.64	4225	-0.21
Total	2013	11.16	1.81	144527	
	2016	11.19	1.85	155626	

## PI Disparities

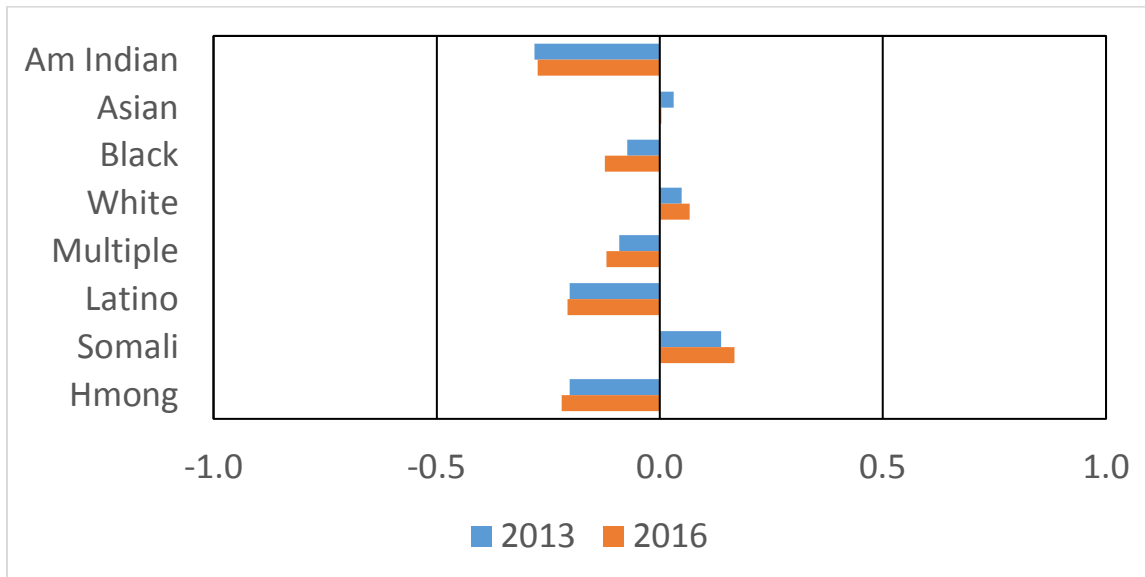
Statewide levels of *PI* are high. About 78% of all youth report positive levels of *PI*.

In 2016, Hmong students reported slightly lower *PI* (-0.21 SD). Somali students reported slightly higher *PI* (0.30 SD).

**There are no noteworthy differences for students in other racial/ethnic groups.**

The chart to the left contains the means for each group and the standardized mean differences (*d*) used to create the graph above.

## Social Competence Racial/Ethnic Disparities



*Means (M), Standard Deviations (SD), Counts (N), and Standardized Mean Differences (d) by group*

		SC Social Competence			
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>d</i>
Missing Race	2013	11.40	1.82	1648	
	2016	11.35	1.66	1456	
American Indian	2013	10.94	1.70	7020	-0.28
	2016	10.94	1.61	7974	-0.27
Asian Pacific Isl	2013	11.47	1.64	4337	0.03
	2016	11.40	1.61	5330	0.00
Black	2013	11.30	1.79	5756	-0.07
	2016	11.19	1.69	7227	-0.12
White	2013	11.50	1.67	104554	0.05
	2016	11.50	1.63	106746	0.07
Multiple Races	2013	11.27	1.62	4127	-0.09
	2016	11.19	1.55	5240	-0.12
Latino	2013	11.08	1.67	9864	-0.20
	2016	11.05	1.60	14153	-0.21
Somali	2013	11.65	2.21	1446	0.14
	2016	11.66	2.04	2696	0.17
Hmong	2013	11.08	1.48	3508	-0.20
	2016	11.03	1.41	4210	-0.22
Total	2013	11.42	1.69	142260	
	2016	11.39	1.64	155032	

### SC Disparities

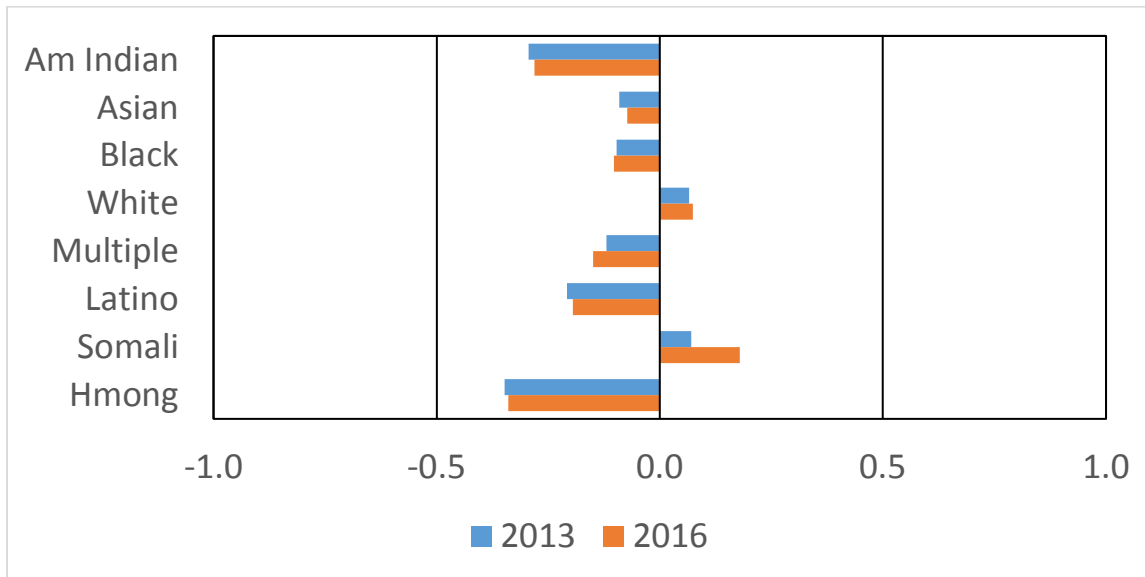
Statewide levels of *SC* are high. About 85% of all youth report positive levels of *SC*.

In 2016, American Indian, Latino, and Hmong students reported slightly lower *SC* (from -0.21 to -0.27 *SD*).

**There are no noteworthy differences for students in other racial/ethnic groups.**

The chart to the left contains the means for each group and the standardized mean differences (*d*) used to create the graph above.

## Empowerment Racial/Ethnic Disparities



*Means (M), Standard Deviations (SD), Counts (N), and Standardized Mean Differences (d) by group*

		EM Empowerment			
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>d</i>
Missing Race	2013	12.31	1.92	1697	
	2016	12.37	1.91	1521	
American Indian	2013	11.91	1.86	7133	-0.29
	2016	11.98	1.91	8006	-0.28
Asian Pacific Isl	2013	12.29	1.85	4424	-0.09
	2016	12.37	1.87	5380	-0.07
Black	2013	12.28	1.90	5910	-0.10
	2016	12.31	1.92	7297	-0.10
White	2013	12.59	1.87	106106	0.07
	2016	12.65	1.90	107639	0.07
Multiple Races	2013	12.24	1.88	4207	-0.12
	2016	12.23	1.88	5291	-0.15
Latino	2013	12.07	1.87	10051	-0.21
	2016	12.14	1.88	14315	-0.19
Somali	2013	12.60	2.09	1463	0.07
	2016	12.86	2.08	2729	0.18
Hmong	2013	11.81	1.64	3512	-0.35
	2016	11.86	1.68	4212	-0.34
Total	2013	12.46	1.88	144503	
	2016	12.51	1.91	156390	

## Em Disparities

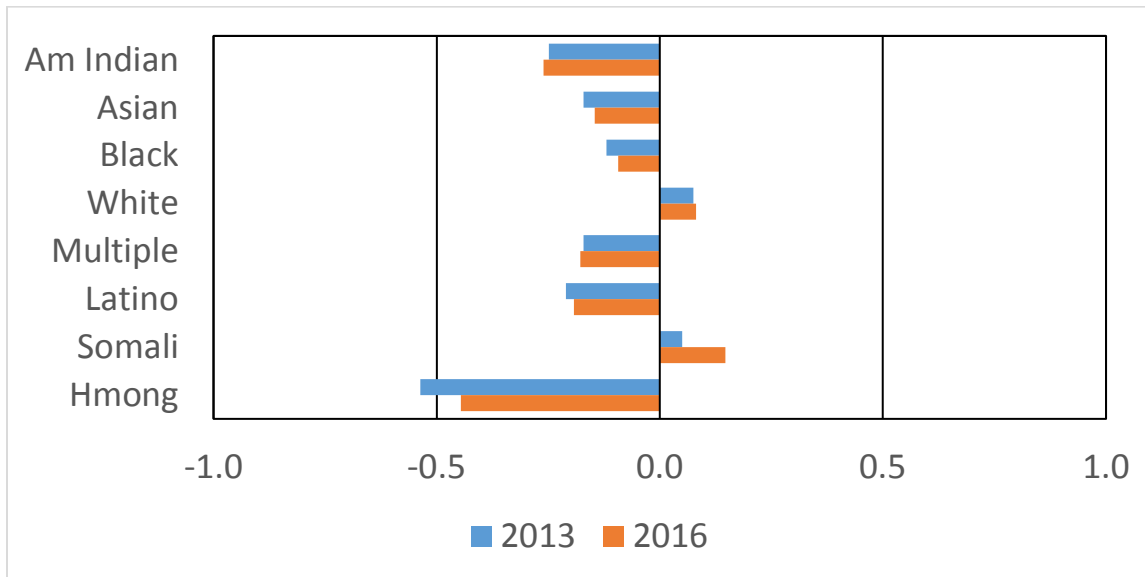
Statewide levels of *Empowerment* are very high. About 94% of all youth report positive levels of *Em*.

In 2016, American Indian students and Hmong students reported slightly lower *Em* (-0.28 and -0.34 SD respectively).

**There are no noteworthy differences for students in other racial/ethnic groups.**

The chart to the left contains the means for each group and the standardized mean differences (*d*) used to create the graph above.

## Family/Community Support Racial/Ethnic Disparities



*Means (M), Standard Deviations (SD), Counts (N), and Standardized Mean Differences (d) by group*

		FCS Family/Community Support			
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>d</i>
Missing Race	2013	12.25	1.87	1998	
	2016	12.44	1.93	1695	
American Indian	2013	11.78	1.79	7490	-0.25
	2016	11.90	1.83	8207	-0.26
Asian Pacific Isl	2013	11.92	1.80	4645	-0.17
	2016	12.11	1.85	5507	-0.15
Black	2013	12.01	1.88	6467	-0.12
	2016	12.21	1.96	7727	-0.09
White	2013	12.37	1.78	109391	0.08
	2016	12.54	1.85	109548	0.08
Multiple Races	2013	11.92	1.75	4384	-0.17
	2016	12.06	1.80	5429	-0.18
Latino	2013	11.85	1.79	10642	-0.21
	2016	12.03	1.87	14782	-0.19
Somali	2013	12.32	2.10	1614	0.05
	2016	12.66	2.12	2962	0.15
Hmong	2013	11.26	1.52	3712	-0.54
	2016	11.55	1.63	4288	-0.45
Total	2013	12.23	1.81	150343	
	2016	12.39	1.87	160145	

### FCS Disparities

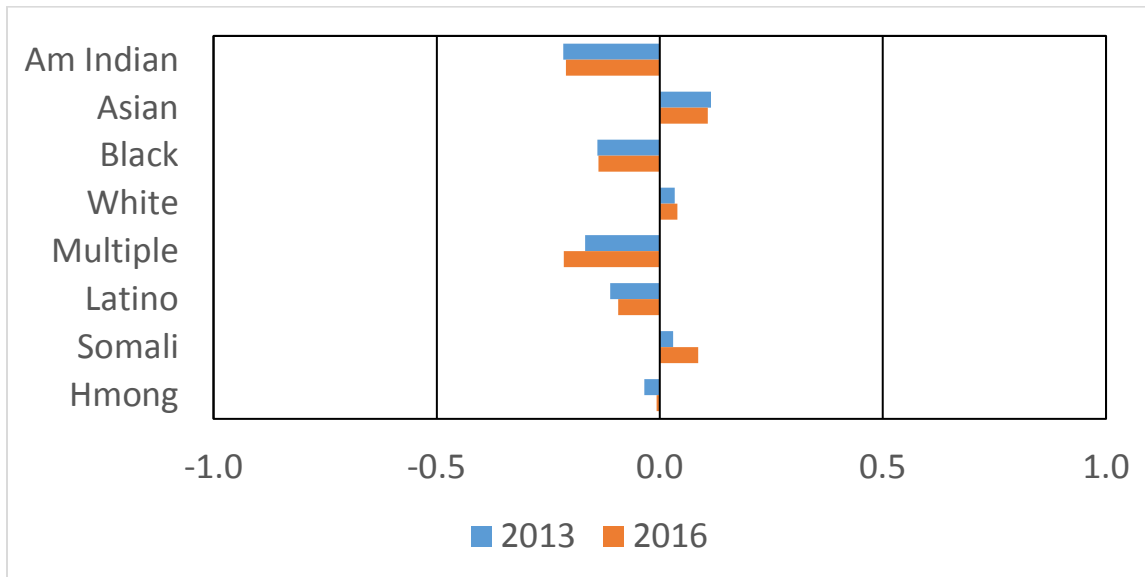
Statewide levels of *FCS* are very high. About 93% of all youth report positive levels of *FCS*.

In 2016, Hmong students reported notably less *FCS* (0.45 SDs). American Indian students reported slightly lower *FCS* (-0.26 SD).

**There are no noteworthy differences for students in other racial/ethnic groups.**

The chart to the left contains the means for each group and the standardized mean differences (*d*) used to create the graph above.

## Teacher/School Support Racial/Ethnic Disparities



*Means (M), Standard Deviations (SD), Counts (N), and Standardized Mean Differences (d) by group*

		TSS Teacher/School Support			
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>d</i>
Missing Race	2013	12.25	2.50	1797	
	2016	12.30	2.59	1624	
American Indian	2013	11.53	2.39	6999	-0.22
	2016	11.60	2.38	8109	-0.21
Asian Pacific Isl	2013	12.29	2.27	4381	0.11
	2016	12.34	2.26	5447	0.11
Black	2013	11.70	2.47	5838	-0.14
	2016	11.77	2.42	7597	-0.14
White	2013	12.10	2.28	103772	0.03
	2016	12.18	2.30	108615	0.04
Multiple Races	2013	11.64	2.33	4093	-0.17
	2016	11.59	2.31	5380	-0.22
Latino	2013	11.77	2.34	9863	-0.11
	2016	11.87	2.34	14599	-0.09
Somali	2013	12.09	2.74	1465	0.03
	2016	12.28	2.66	2885	0.09
Hmong	2013	11.95	2.10	3473	-0.03
	2016	12.07	2.08	4256	-0.01
Total	2013	12.02	2.31	141681	
	2016	12.09	2.32	158512	

### TSS Disparities

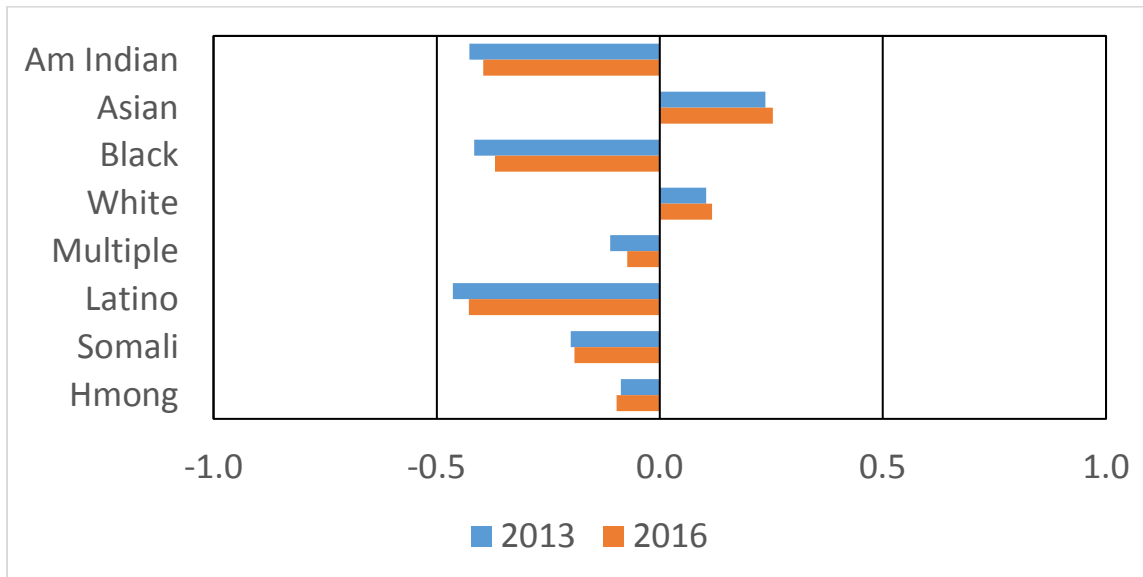
Statewide levels of *TSS* are high. About 82% of all youth report positive levels of *TSS*.

In 2016, American Indian students reported slightly lower *TSS* (-0.21 *SD*), as did multi-racial students (-0.22 *SD*).

**There are no noteworthy differences for students in other racial/ethnic groups.**

The chart to the left contains the means for each group and the standardized mean differences (*d*) used to create the graph above.

## Self-Reported Grades Racial/Ethnic Disparities



*Means (M), Standard Deviations (SD), Counts (N), and Standardized Mean Differences (d) by group*

		School Grades			
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>d</i>
Missing Race	2013	3.00	1.00	2073	
	2016	3.12	0.95	1693	
American Indian	2013	2.74	1.06	7453	-0.43
	2016	2.81	1.07	8248	-0.40
Asian Pacific Isl	2013	3.36	0.84	4671	0.24
	2016	3.41	0.84	5558	0.25
Black	2013	2.75	0.99	6784	-0.42
	2016	2.83	1.02	8138	-0.37
White	2013	3.23	0.87	108362	0.10
	2016	3.29	0.86	108849	0.12
Multiple Races	2013	3.03	1.00	4343	-0.11
	2016	3.11	0.98	5460	-0.07
Latino	2013	2.71	1.04	10659	-0.46
	2016	2.78	1.04	15071	-0.43
Somali	2013	2.95	1.00	1741	-0.20
	2016	3.00	0.95	3186	-0.19
Hmong	2013	3.06	0.86	3733	-0.09
	2016	3.09	0.94	4305	-0.10
Total	2013	3.14	0.93	149819	
	2016	3.18	0.93	160508	

## School Grades Disparities

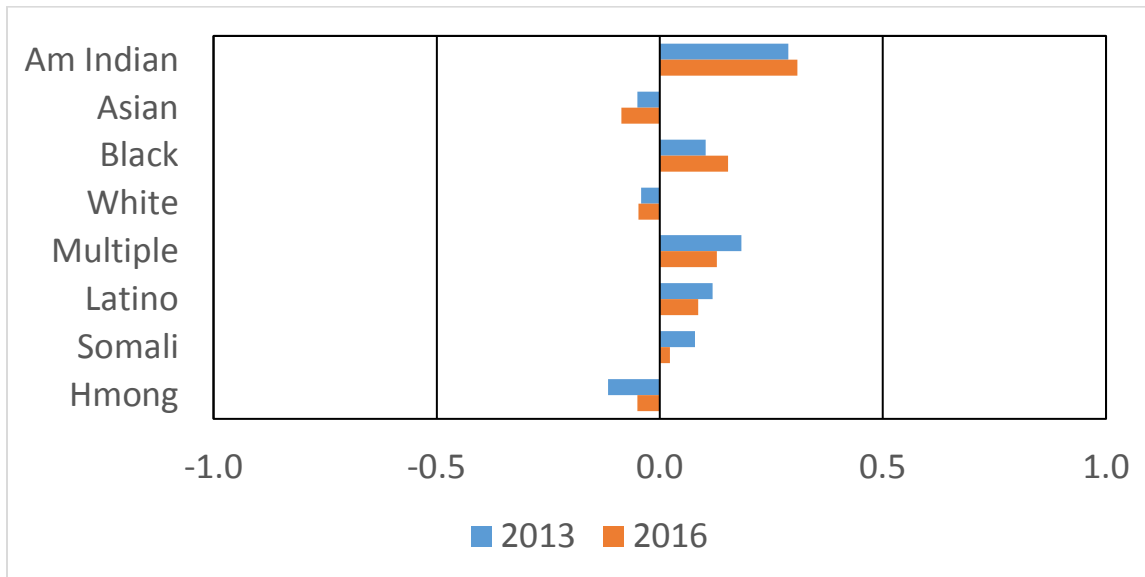
Statewide average *School Grades* are about 3.2 on the 4-point scale.

In 2016, some groups of students of color reported notably lower *Grades*, including Latino (-0.43 SD) American Indian (-0.40 SD), and Black (-0.37 SD) students. Asian students reported slightly higher *Grades* (0.25 SD).

**There are no noteworthy differences for students in other racial/ethnic groups.**

The chart to the left contains the means for each group and the standardized mean differences (*d*) used to create the graph above.

## Bullied (Victimized) Racial/Ethnic Disparities



*Means (M), Standard Deviations (SD), Counts (N), and Standardized Mean Differences (d) by group*

		BD Bullied			
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>d</i>
Missing Race	2013	7.25	1.36	2053	
	2016	7.14	1.39	1629	
American Indian	2013	7.52	1.40	7531	0.29
	2016	7.51	1.45	8330	0.31
Asian Pacific Isl	2013	7.07	1.31	4796	-0.05
	2016	6.97	1.35	5656	-0.09
Black	2013	7.28	1.37	6802	0.10
	2016	7.30	1.43	8132	0.15
White	2013	7.09	1.30	110283	-0.04
	2016	7.03	1.34	110418	-0.05
Multiple Races	2013	7.38	1.37	4487	0.18
	2016	7.27	1.41	5572	0.13
Latino	2013	7.30	1.36	10932	0.12
	2016	7.21	1.39	15157	0.09
Somali	2013	7.25	1.42	1689	0.08
	2016	7.12	1.49	3127	0.02
Hmong	2013	6.99	1.29	3780	-0.12
	2016	7.02	1.38	4396	-0.05
Total	2013	7.14	1.32	152353	
	2016	7.09	1.37	162417	

## Bullied Disparities

Any level of being *Bullied* is unacceptable. About 58% of students report being *Bullied* at some level.

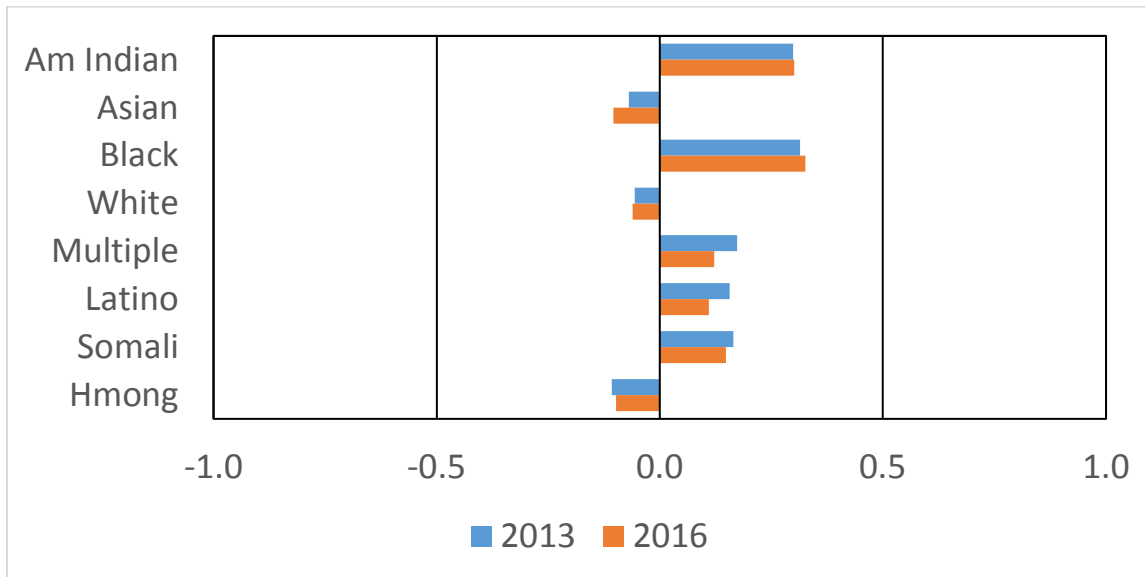
In 2016, American Indian students reported slightly higher levels of being *Bullied* (0.31 SD).

**There are no noteworthy differences for students in other racial/ethnic groups.**

The chart to the left contains the means for each group and the standardized mean differences (*d*) used to create the graph above.



## Bullying (Perpetrator) Racial/Ethnic Disparities



*Means (M), Standard Deviations (SD), Counts (N), and Standardized Mean Differences (d) by group*

		BLY Bully			
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>d</i>
Missing Race	2013	6.91	1.02	1940	
	2016	6.97	1.04	1622	
American Indian	2013	7.17	1.17	7152	0.30
	2016	7.17	1.16	7937	0.30
Asian Pacific Isl	2013	6.79	1.00	4437	-0.07
	2016	6.75	.97	5353	-0.10
Black	2013	7.18	1.19	5929	0.31
	2016	7.19	1.21	7114	0.33
White	2013	6.80	0.99	106080	-0.06
	2016	6.79	0.99	107054	-0.06
Multiple Races	2013	7.04	1.14	4158	0.17
	2016	6.98	1.11	5228	0.12
Latino	2013	7.02	1.13	10094	0.16
	2016	6.97	1.10	14144	0.11
Somali	2013	7.03	1.22	1503	0.17
	2016	7.01	1.18	2679	0.15
Hmong	2013	6.75	0.98	3438	-0.11
	2016	6.75	0.98	4096	-0.10
Total	2013	6.86	1.03	144731	
	2016	6.86	1.03	155227	

## Bullying Disparities

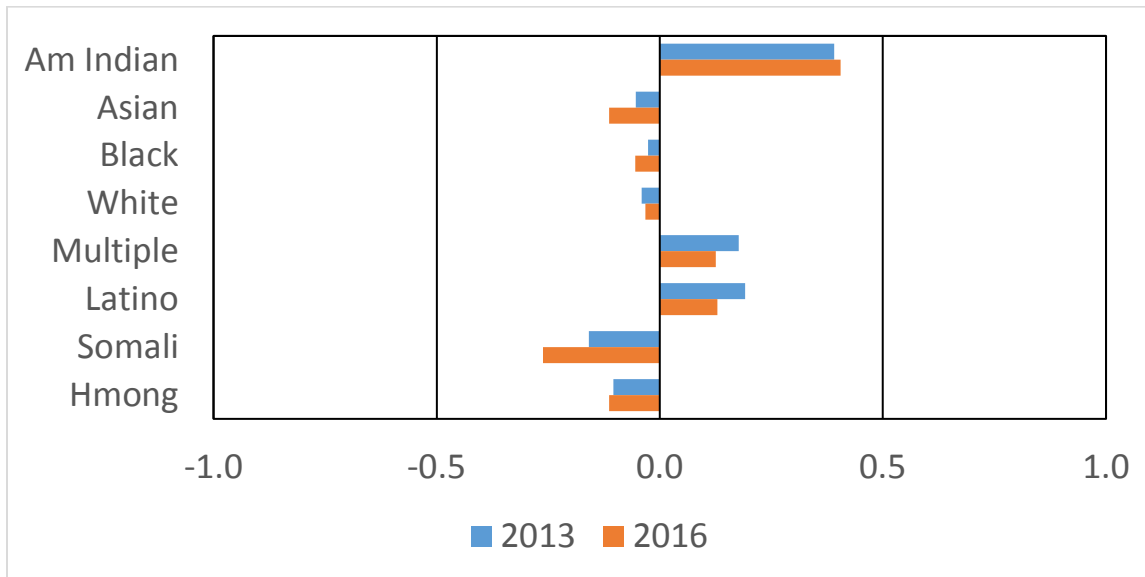
*Bullying* is unacceptable. About 34% of students report to engage in *Bullying* behavior at some level.

In 2016, Black and American Indian students reported slightly higher levels of *Bullying* (0.33 and 0.30 SD respectively). They also tend to be *Bullied* more often.

**There are no noteworthy differences for students in other racial/ethnic groups.**

The chart to the left contains the means for each group and the standardized mean differences (*d*) used to create the graph above.

## Mental Distress Racial/Ethnic Disparities



*Means (M), Standard Deviations (SD), Counts (N), and Standardized Mean Differences (d) by group*

		MD Mental Distress			
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>d</i>
Missing Race	2013	6.96	1.28	914	
	2016	7.06	1.40	619	
American Indian	2013	7.40	1.57	5130	0.39
	2016	7.60	1.65	5585	0.41
Asian Pacific Isl	2013	6.84	1.20	3291	-0.05
	2016	6.88	1.22	4053	-0.11
Black	2013	6.87	1.18	4218	-0.03
	2016	6.96	1.24	4893	-0.06
White	2013	6.85	1.24	82940	-0.04
	2016	7.00	1.35	82268	-0.03
Multiple Races	2013	7.13	1.41	3312	0.18
	2016	7.21	1.48	4149	0.12
Latino	2013	7.15	1.43	7686	0.19
	2016	7.22	1.48	10720	0.13
Somali	2013	6.70	1.14	1010	-0.16
	2016	6.68	1.12	1798	-0.26
Hmong	2013	6.77	1.09	2697	-0.10
	2016	6.88	1.18	3096	-0.11
Total	2013	6.90	1.28	111198	
	2016	7.04	1.38	117181	

### MD Disparities

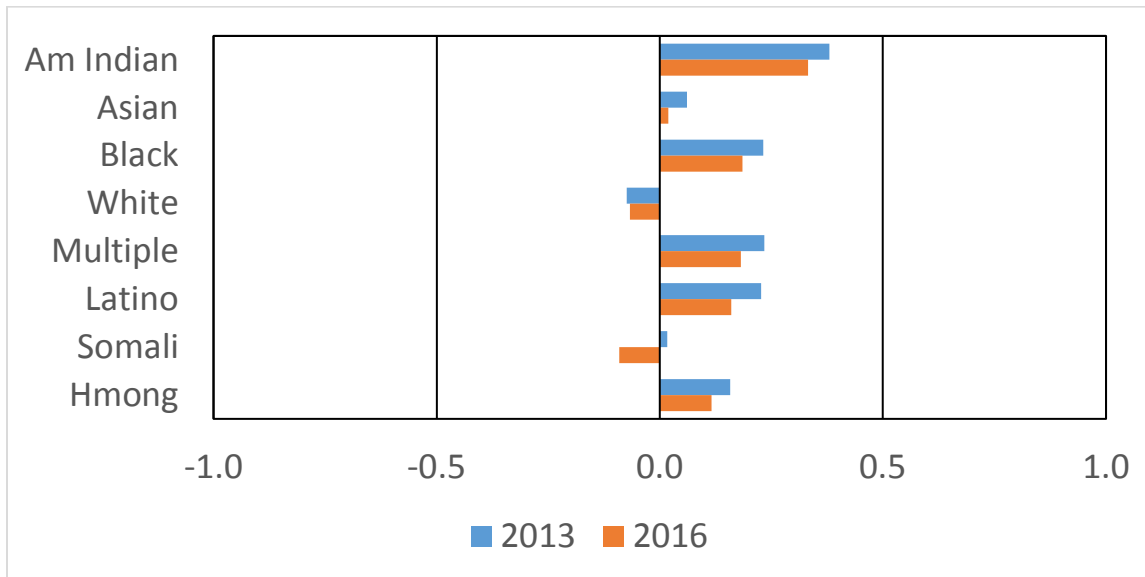
Any level of *MD* is unacceptable; this is an indicator of severe *MD*. About 35% of students report severe *MD* at some level.

In 2016, American Indian students reported notably higher *MD* (0.41 *SD*). Somali students reported slightly lower *MD* (-0.26 *SD*).

**There are no noteworthy differences for students in other racial/ethnic groups.**

The chart to the left contains the means for each group and the standardized mean differences (*d*) used to create the graph above.

## Family Violence Racial/Ethnic Disparities



*Means (M), Standard Deviations (SD), Counts (N), and Standardized Mean Differences (d) by group*

		FV Family Violence			
		<i>M</i>	<i>SD</i>	<i>N</i>	<i>d</i>
Missing Race	2013	7.39	1.18	937	
	2016	7.38	1.20	676	
American Indian	2013	7.78	1.40	5111	0.38
	2016	7.68	1.32	5560	0.33
Asian Pacific Isl	2013	7.42	1.14	3303	0.06
	2016	7.34	1.05	4065	0.02
Black	2013	7.62	1.30	4169	0.23
	2016	7.52	1.20	4826	0.19
White	2013	7.27	1.04	83038	-0.07
	2016	7.25	1.00	82508	-0.07
Multiple Races	2013	7.62	1.30	3309	0.23
	2016	7.52	1.22	4158	0.18
Latino	2013	7.61	1.31	7659	0.23
	2016	7.50	1.23	10688	0.16
Somali	2013	7.37	1.34	1010	0.02
	2016	7.23	1.10	1794	-0.09
Hmong	2013	7.53	1.19	2698	0.16
	2016	7.45	1.12	3089	0.12
Total	2013	7.36	1.12	111234	
	2016	7.32	1.08	117364	

### FV Disparities

Any level of *FV* is unacceptable; this is an indicator of severe *FV*. About 27% of students report severe *FV* at some level.

In 2016, American Indian students reported slightly higher levels of *FV* (0.33 SD).

**There are no noteworthy differences for students in other racial/ethnic groups.**

The chart to the left contains the means for each group and the standardized mean differences (*d*) used to create the graph above.

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## **Profiles of Developmental Skills, Supports, & Challenges**

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Developmental profiles provide system-level indicators of the impact of our (adults in families, communities, schools, and youth-serving organizations and agencies) work with youth – whether such work and these outcomes are intentional or not.

From developmental and ecological perspectives, we can consider the interplay of skills, supports, and challenges as reported by students with various characteristics.

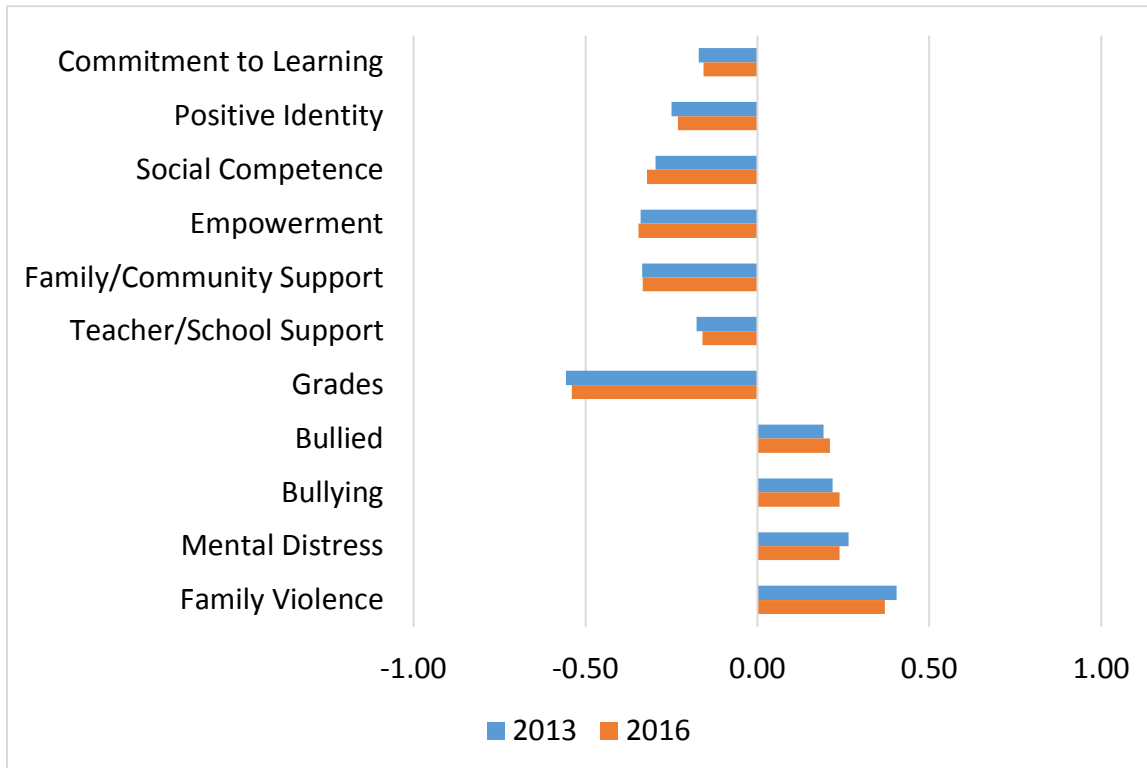
These characteristics include:

- Free/Reduced Price Lunch
- Special Education
- Gay/Lesbian/Bisexual
- Moved at least once since the Beginning of the Year
- Skipped School at least once in last 30 Days
- Sent of Office for Discipline at least once in last 30 Days
- Traumatic Experience
- Participated in Afterschool Activities at least 3 Days per Week

Throughout these profiles, we see differences from those students with each characteristic compared to those without, many much larger than the disparities based on Race/Ethnicity.

Such profiles should inform our work with youth, in ways that acknowledge the unique strengths and weaknesses of students with different characteristics. In this way, we can begin to tailor our approaches, be intentional, and support the unique needs and preferences of all students.

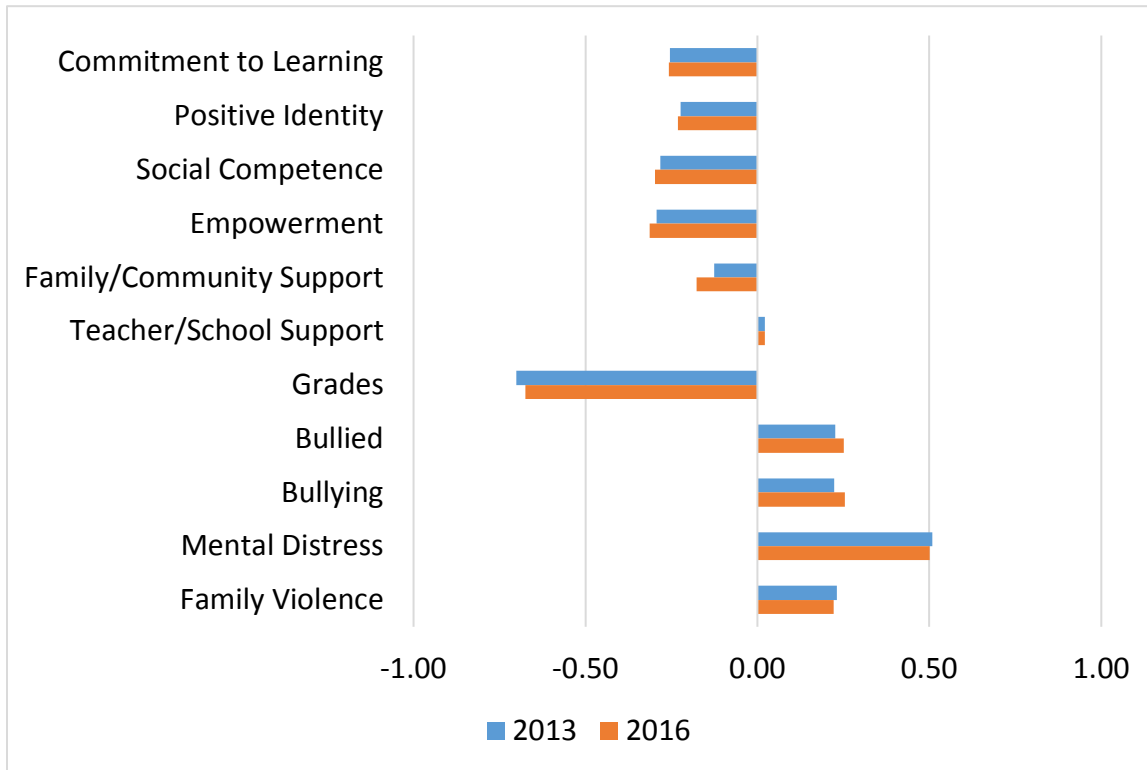
**Profiles of Developmental Skills, Supports, & Challenges**  
**Students who Receive Free/Reduced Price Lunch [27.3% in 2013 / 29% in 2016]**



This Developmental Profile, as system-level indicators of our efforts with youth, displays:

- ➔ Students who receive FRPL (29% in 2016) report lower skills and supports and higher challenges, compared to students who do not receive FRPL.
- ➔ They also report to have lower school grades (a half grade point lower).

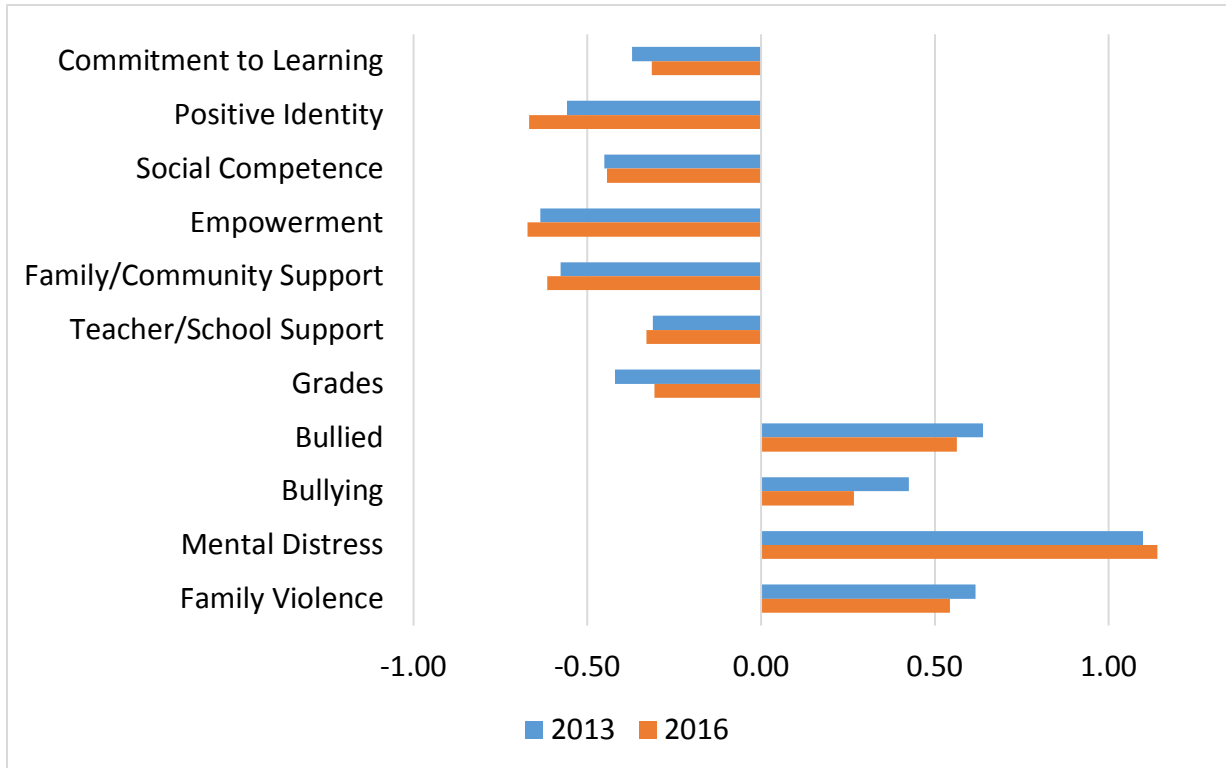
**Profiles of Developmental Skills, Supports, & Challenges**  
**Students who Receive Special Education Services, with IEPs [10.2% / 10.8%]**



This Developmental Profile, as system-level indicators of our efforts with youth, displays:

- ➔ Students who receive special education services (with IEPs, 10.8% in 2016) report lower skills and supports, with the exception of Teacher/School Support (where there is no difference), compared to students in general education.
- ➔ Students in special education report higher levels of challenges, particularly Mental Distress.
- ➔ Students in special education also report much lower grades (well over a half grade point lower).

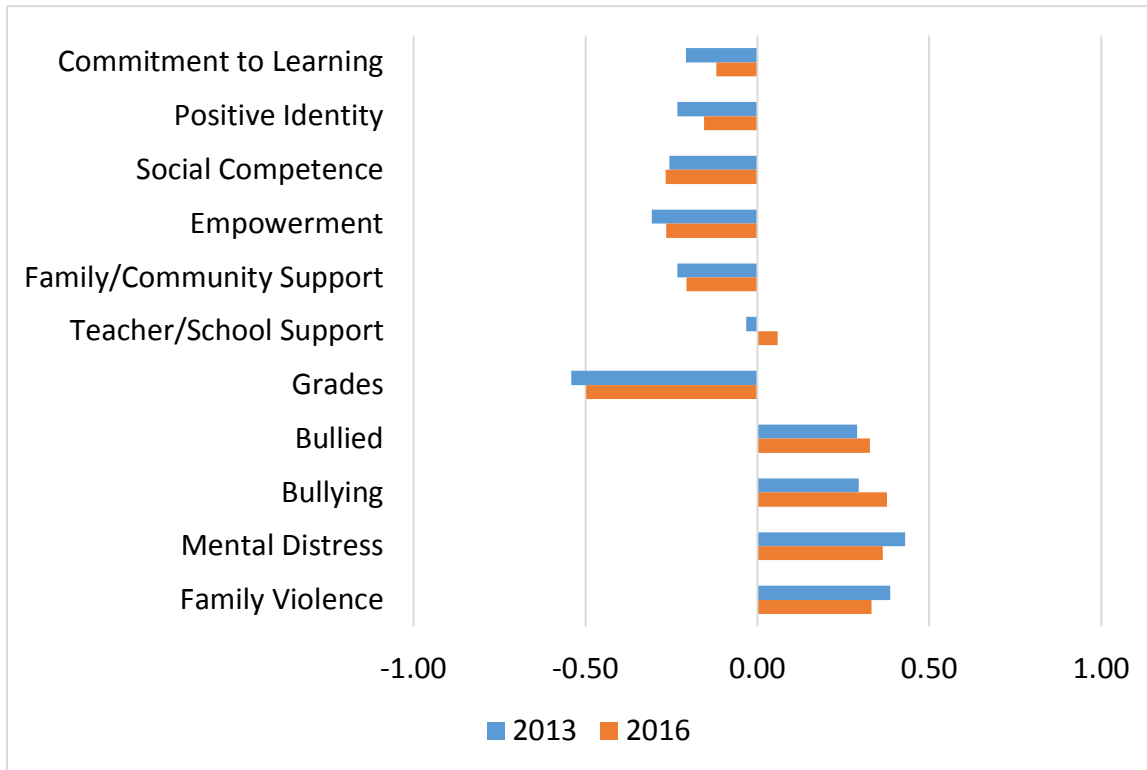
**Profiles of Developmental Skills, Supports, & Challenges**  
**Students who Identify as Gay/Lesbian/Bisexual or Questioning [6.4% / 10.3%]**  
**Includes Students in Grades 9 and 11**



This Developmental Profile, as system-level indicators of our efforts with youth, displays:

- ➔ Students who identify as GLB (10.3% in 2016) report much lower skills and supports and much higher challenges, compared to students who identify as heterosexual.
- ➔ It is important to note the magnitude of disparities in Mental Distress. Students identifying as GLB report over one standard deviation more Mental Distress – a particularly substantial difference.

**Profiles of Developmental Skills, Supports, & Challenges**  
**Students who Moved at Least Once since Beginning of Year [6.9% / 7.7%]**

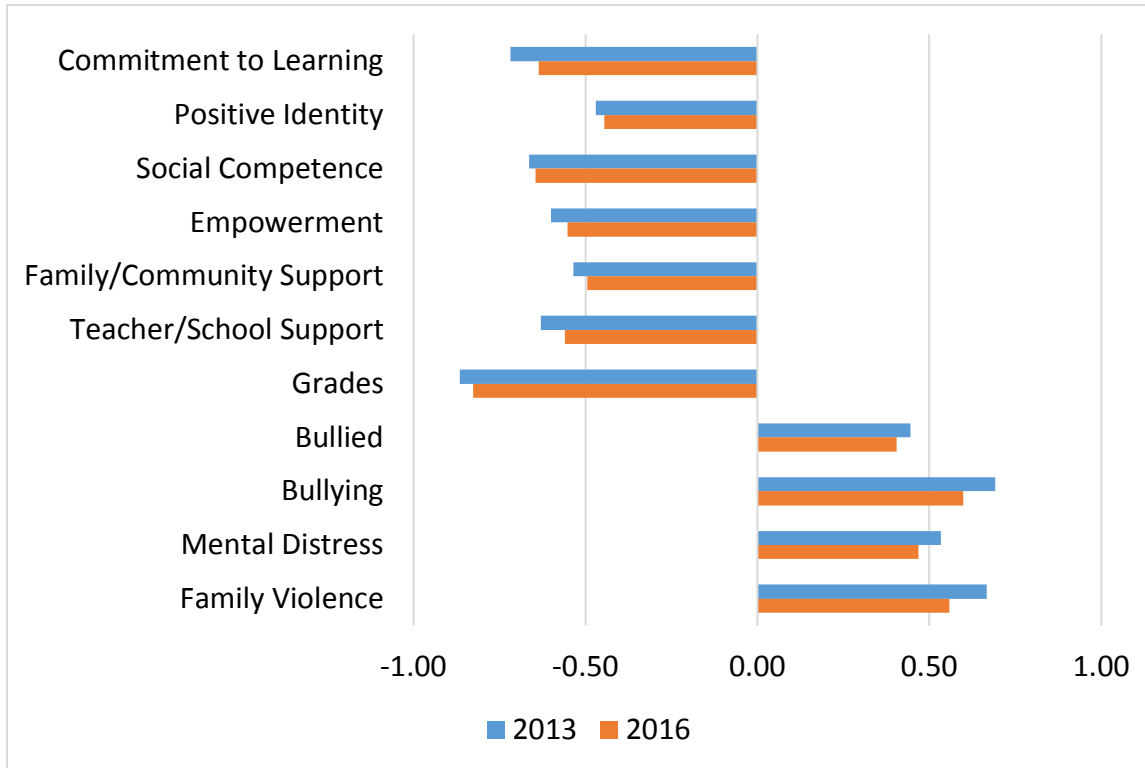


This Developmental Profile, as system-level indicators of our efforts with youth, displays:

- ➔ Students who moved since the beginning of the school year (7.7% in 2016) report lower skills and supports, with the exception of Teacher/School Support (with no difference), compared to students who have not moved.
- ➔ Students who moved report higher levels of challenges and lower grades (half a grade point lower).



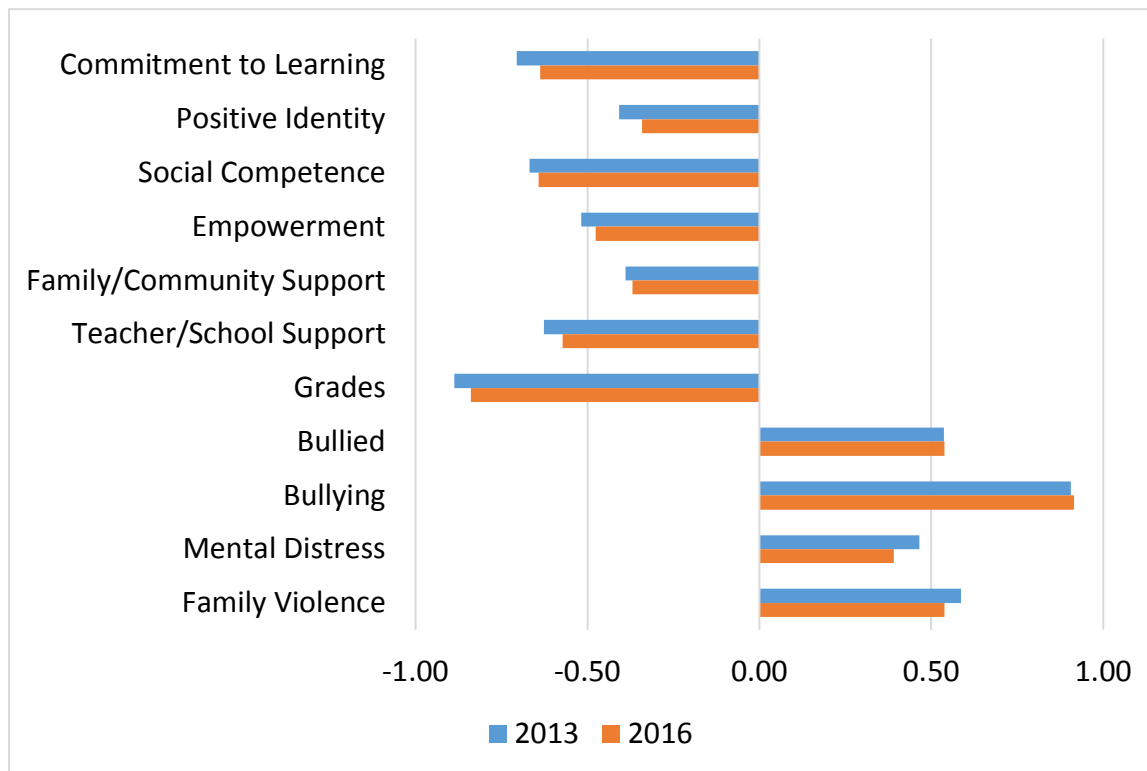
**Profiles of Developmental Skills, Supports, & Challenges**  
**Students who Skipped School at Least Once in Last 30 Days [9.2% / 10.2%]**  
**Includes Students in Grades 8, 9, 11**



This Developmental Profile, as system-level indicators of our efforts with youth, displays:

- ➔ Students who skipped school at least once in the last 30 days (10.2% in 2016) report much lower skills and support, as well as lower grades (approaching a full grade point lower), compared to students who have not skipped school.
- ➔ Students who skipped school report much higher levels of challenges.

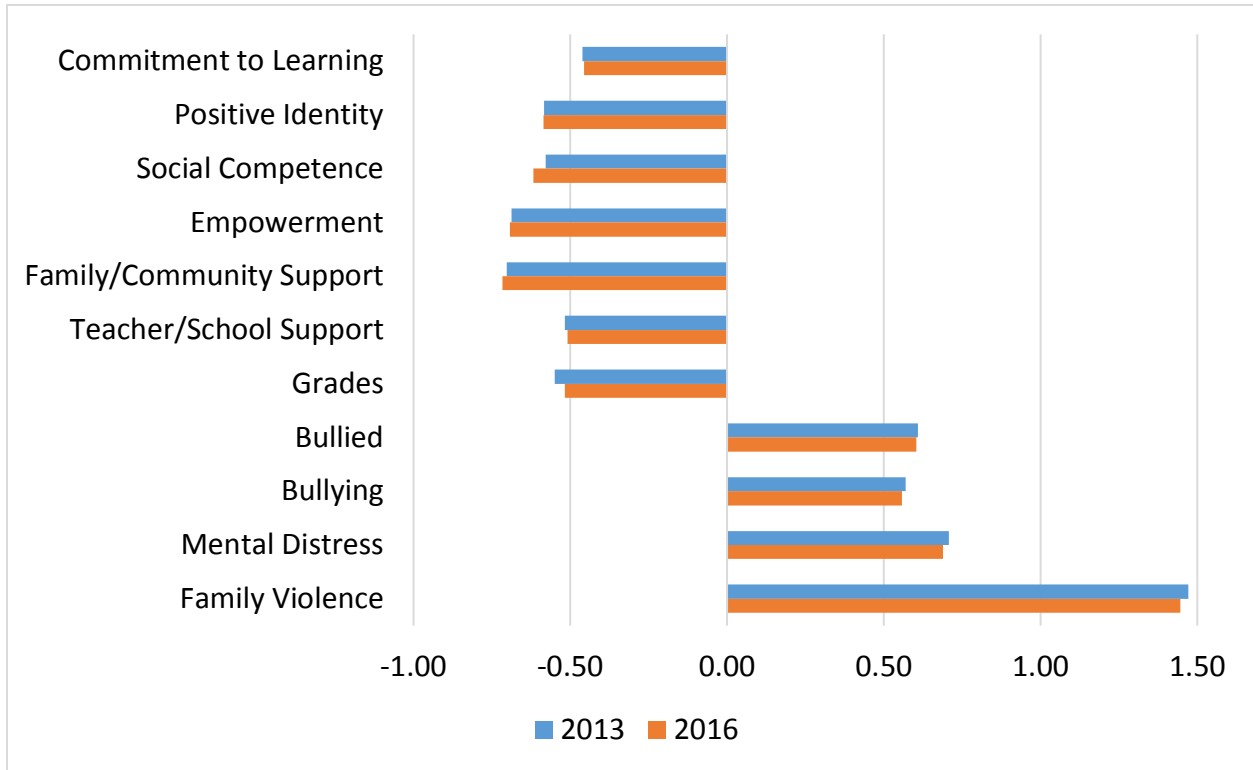
**Profiles of Developmental Skills, Supports, & Challenges**  
**Students Sent to the Office for Discipline at Least Once in the Last 30 Days [9.9% / 9.1%]**



This Developmental Profile, as system-level indicators of our efforts with youth, displays:

- ➔ Students who were sent to the office for discipline at least once in the last 30 days (9.1% in 2016) report much lower skills and supports, and much lower grades (nearly a full grade point lower), compared to students who were not sent to the office for discipline.
- ➔ Students who were sent to the office for discipline report much higher challenges, particularly engaging in Bullying behavior (nearly one standard deviation higher), which likely includes the reasons why many students are sent to the office for discipline.

**Profiles of Developmental Skills, Supports, & Challenges**  
**Students who Report at least One Traumatic Experience [37% / 38%]**  
**Includes Students in Grades 8, 9, 11**



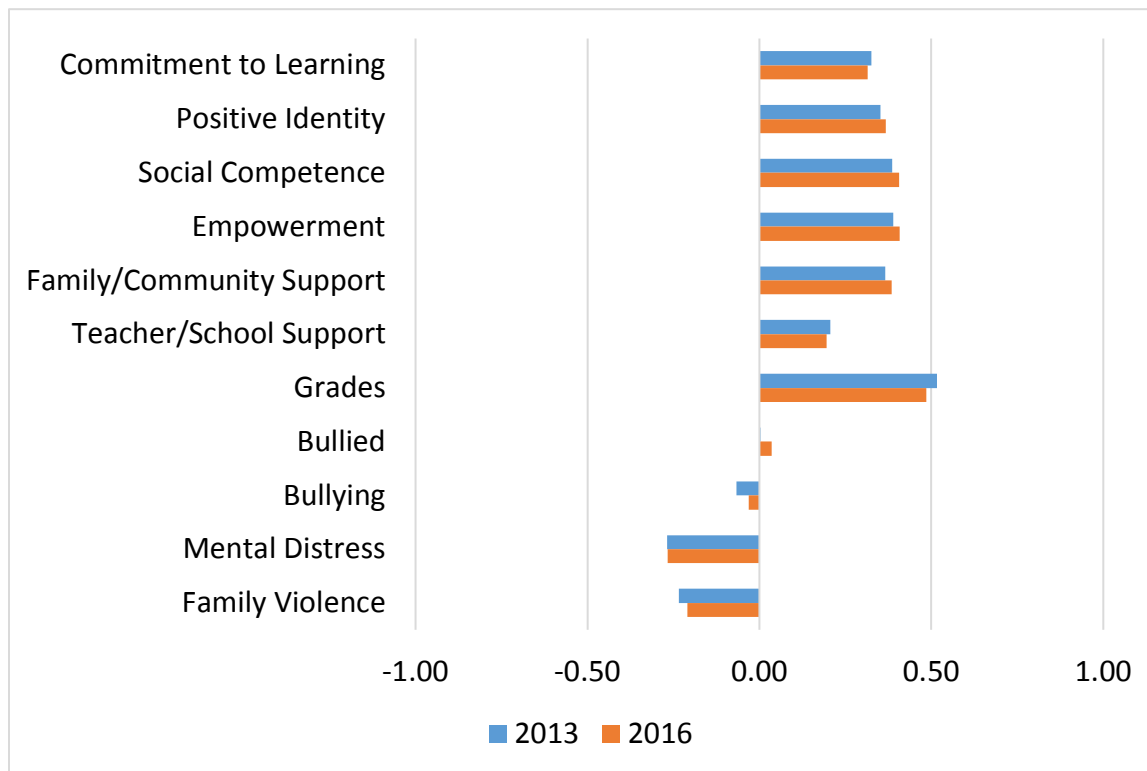
This Developmental Profile, as system-level indicators of our efforts with youth, displays:

- ➔ Students who report at least one traumatic experience (38% in 2016) report lower skills and supports and grades, compared to students who did not report traumatic experiences.
- ➔ Students who report traumatic experiences report much higher levels of challenges, particularly Family Violence (extraordinarily higher, nearly 1.5 standard deviations higher), which is consistent with their reporting traumatic experiences (most traumatic experiences are family-based).

Traumatic experiences include:

- homeless with or without family members
- parent currently or previously in jail
- live with alcohol abuser
- live with drug abuser
- live with verbally abusive parent/adult
- live with physically abusive parent/adult
- parent/adult domestic abuse
- non-family sexual abuse
- family sexual abuse

**Profiles of Developmental Skills, Supports, & Challenges**  
**Students who Participate in Afterschool Activity at least 3 days per week (59.7% / 63.4%)**



This Developmental Profile, as system-level indicators of our efforts with youth, displays:

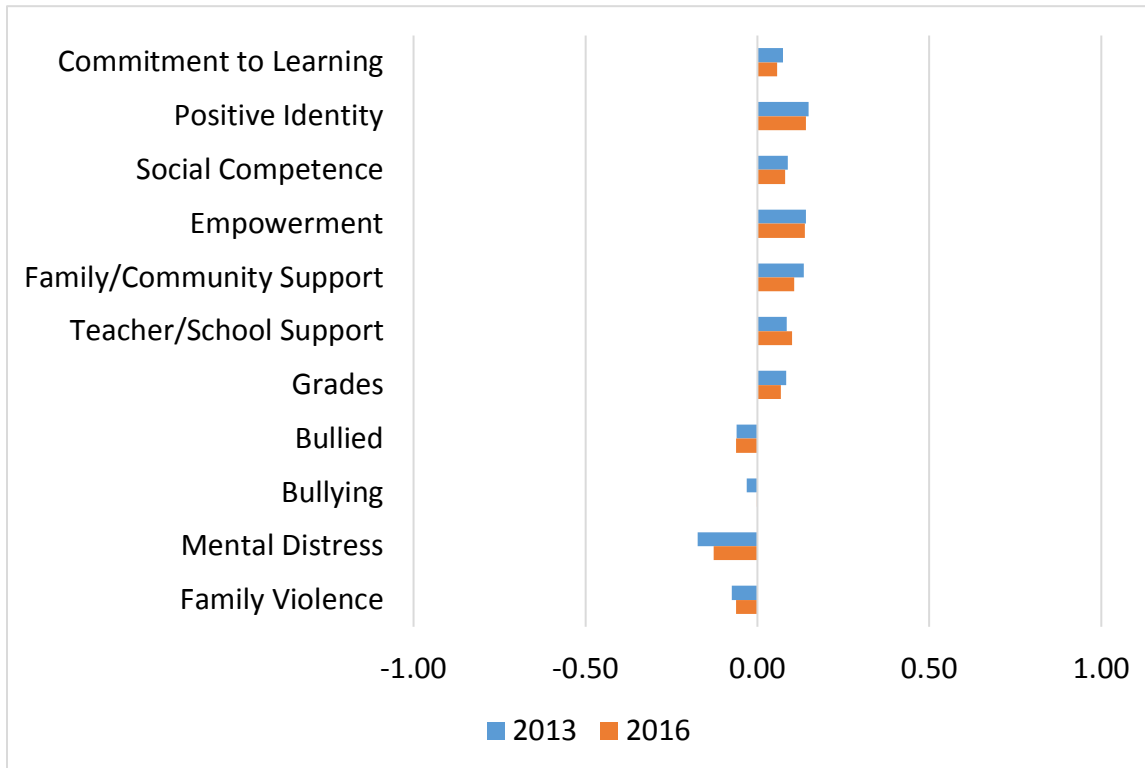
- ➔ Students who participate in afterschool activities at least three days per week (63.4% in 2016) report higher skills, supports, and grades (about a half grade point higher), compared to students who do not participate in afterschool activities at this level.
- ➔ Students who participate at least three days per week report lower levels of Mental Distress and Family Violence.

Afterschool activities include:

- School sports and/or community sports
- School activities or clubs (e.g., drama, music, chess, science)
- Tutoring programs
- Leadership activities (e.g., student government, youth councils or committees)
- Artistic lessons (e.g., music, dance)
- Physical activity lessons (e.g., tennis, karate)
- Other community clubs (e.g., 4-H, Scouts, Y-clubs, community ed)
- Religious activities

*Note:* This includes students who participate in one or more activities at least 3 days per week.

**An Arbitrary Factor**  
**Eighth Grade Students who currently have a PE Class [79% / 80%]**



This Developmental Profile, as system-level indicators of our efforts with youth, displays:

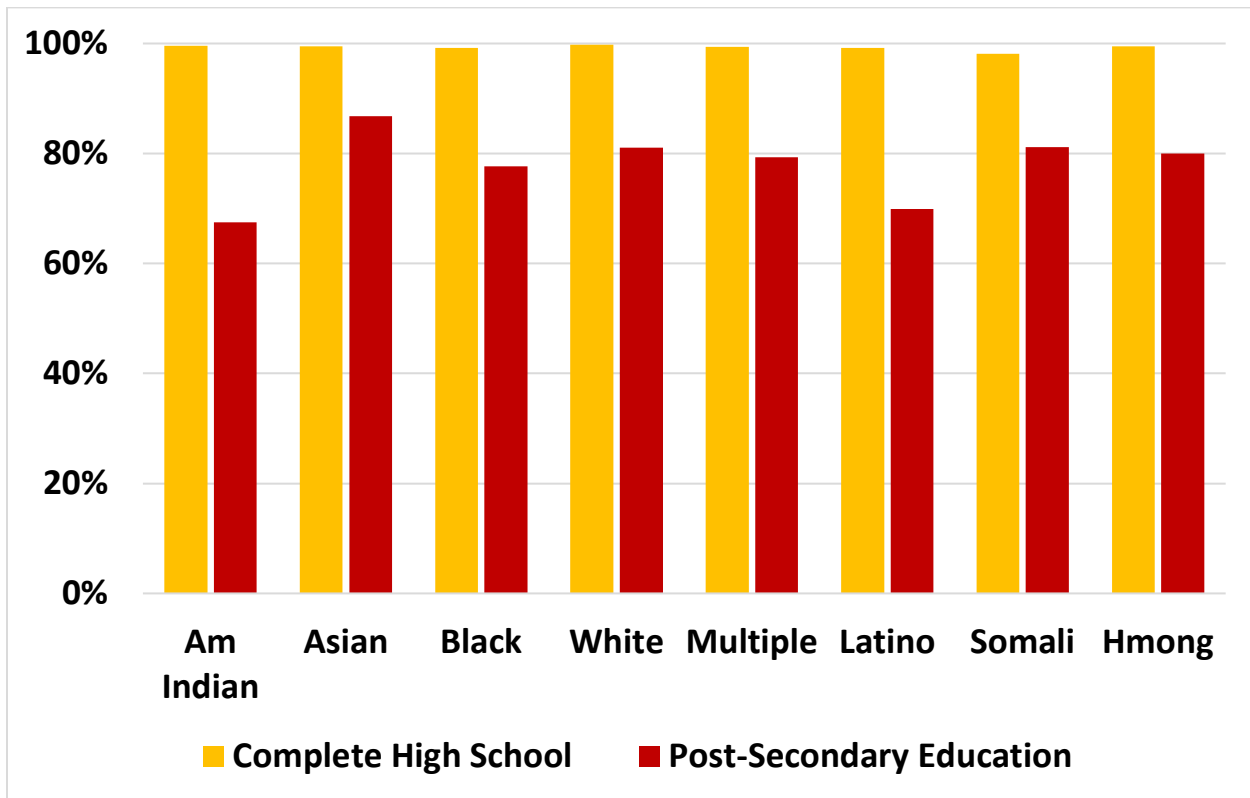
- ➔ Students who report to be currently enrolled in a physical education class (80%) report no differences in skills, supports, grades, or challenges, compared to students who are not in a PE class.

In grade 8, nearly all youth take a PE class during the year; students do not have much control over this condition. Aside from this factor, there are no others in the MSS that are potentially arbitrary or random, and not associated with developmental skills, supports, or challenges.

We note that when considering a relatively arbitrary factor, there are no discernable patterns in disparities in developmental skills, supports, and challenges.

That is exactly what we see the in the profile above. Whether students are currently enrolled in a Physical Education class results in no differences in developmental skills, supports, and challenges, compared to students not enrolled in PE, as expected.

**Post High-School Plans  
Includes Students in Grades 8, 9, 11**



Among youth in grades 8, 9, and 11, nearly all (99% or more) plan to complete high school, with the exception of Somali youth (98% plan to complete high school). MN youth plan to complete high school. Youth do not plan to drop out of high school.

The goals of MN youth regarding high school completion are much higher than the goals we have set for our youth ourselves:

- Minnesota’s goal for high school graduation is to reach 90% by 2020, with all student groups at 85% or better. There are many schools achieving these levels, but the average rate remains below 85% for every group except White students (at 87%).  
[Source <http://education.state.mn.us/MDE/about/news/press/MDE060216>]

In addition, early 80% of most youth groups plan to attend post-secondary education (2 or 4-year colleges or universities); closer to 70% of American Indian and Latino youth report post-secondary education plans.

Using SLEDS data, the Minnesota Office of Higher Education estimates that for the class of 2014, college enrollment rates included 44% of American Indian students, 70% of Asian students, 60% of Black students, 51% of Latino students, 72% of White students.

[Source <https://www.ohe.state.mn.us/mPg.cfm?pageID=753>]

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## APPENDIX

### Technical Description of Methods

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#### *Effect Sizes*

To facilitate comparison of differences in NAEP scores and the Developmental Skills, Supports, and Challenges, standardized mean differences (Cohen's  $d$ ) are estimated for each measure and each comparison. This is done by taking the mean difference between each group and a reference group (e.g., the state average or the average of students without a specific characteristic) and dividing that difference by the population standard deviation (state SD). This puts each difference in a common metric, in terms of standard deviations of difference in mean scores. For example, an effect size ( $d$ ) of 0.50 indicates a half SD difference in scores; an effect size ( $d$ ) of 1.20 indicates a score difference between the groups of 1.20 SDs.

$$\text{Effect size: } d = \frac{(\bar{X}_1 - \bar{X}_R)}{SD_{MN}}$$

All effect sizes are based on the statewide SD for the given measure (as estimated under the Rasch scale). This allows us to compare differences across measures and groups.

We generally interpret the differences ( $d$ ) as

- 0.2 or less = very small
- 0.2 to 0.4 = small
- 0.4 to 0.6 = moderate
- 0.6 or more = large

As noted earlier, we typically find achievement disparities (gaps) as large as 1.0 standard deviation between White and Black students. Such differences begin in the preschool years and persist through higher education. These are substantial differences.

More information on the measures and technical information regarding scoring and scaling of each measure can be found in the Technical Report, available at <http://www.mnydr.org>

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