

# Hearing our Students: Developmental Skills, Supports & Challenges in PFSS Schools

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**Educational Psychology** 

## http://www.edmeasurement.net/PFSS2020.pdf

# Minnesota Youth Development Research Group http://www.mnydrg.com

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- All 87 MN Counties
- 1,329 schools in 309 school districts
  - 162,034 students (84% of Districts) in 2013
  - 168,733 students (85% of Districts) in 2016
  - 170,128 students (81% of Districts) in 2019
- 57 Charter schools
- Approximately 64% of students in grades 5, 8, 9, 11

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### Minnesota Student Survey – Statewide

Grade	2013	2016	2019	Total
5	572	930	1189	2691
8	795	1044	1184	3023
9	786	1117	998	2901
11	649	698	879	2226
Total	2802	3789	4250	10841

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### **Minnesota Student Survey – PFSS Participation**

	2013	2016	2019	Total
SAUK RAPIDS-RICE	751	754	1177	2682
ST. CLOUD	2051	1924	1940	5915
SARTELL-ST. STEPHEN		1111	1133	2244
Total	2802	3789	4250	10841

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### **Minnesota Student Survey – PFSS Participation**

	Frequency	2013 %	2016 %	2019 %
Missing Race	156	0.9%	1.0%	2.1%
American Indian	441	5.2%	4.2%	3.1%
Asian Pacific Islander	323	3.2%	2.6%	3.2%
Black	609	5.0%	4.8%	6.8%
White	7354	70.9%	66.8%	66.8%
Multiple Races	375	3.6%	3.6%	3.2%
Latino	536	5.1%	5.3%	4.5%
Somali	1023	5.8%	11.3%	10.1%
Hmong	24	0.3%	0.4%	0.0%
Total	10841	0.9%	1.0%	2.1%
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**Race & Ethnicity** 



# **Our Process**



- Using a positive youth development framework and ecological models of development, we identified questions related to research-based constructs
- Confirmatory factor analysis was employed to test model-data fit
- Items were calibrated using the Rasch family of measurement models

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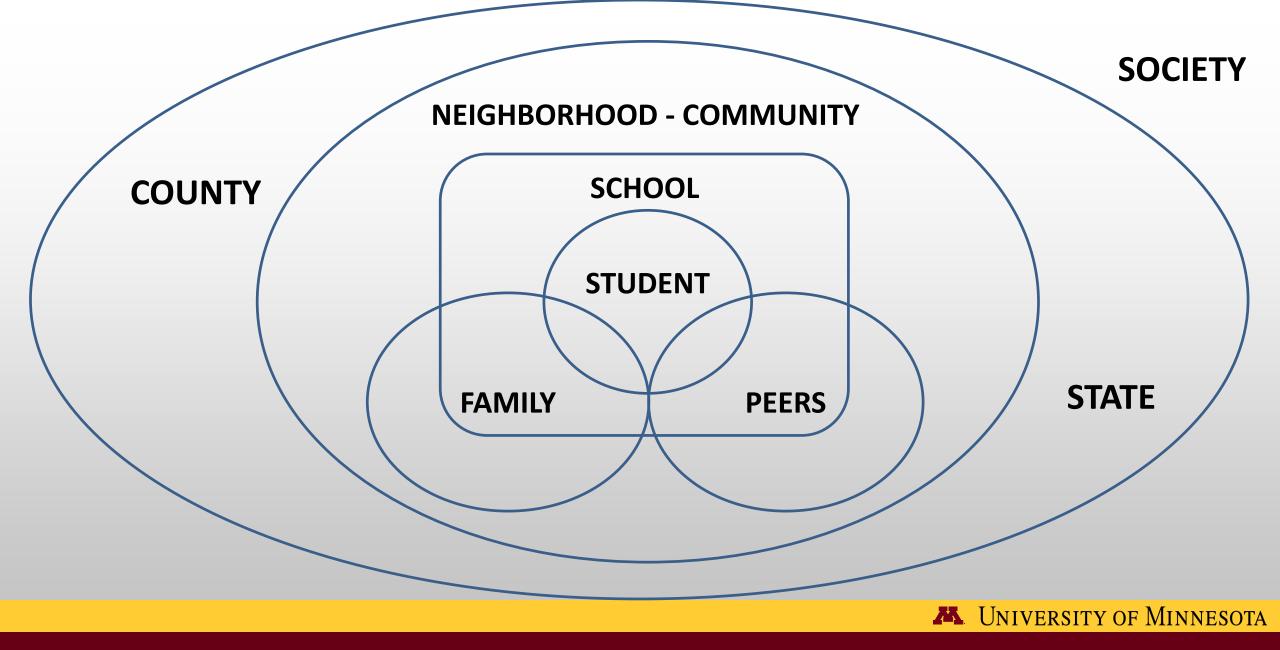
# **Our Current Efforts**



Achieving educational equity and positive youth development requires us to explore context, to identify the many ways youth develop, to acknowledge and support youth where they are and what they bring with them. This will be relevant to

- ✓ success in school
- $\checkmark$  success in families and communities
- ✓ positive youth programming
- ✓ equitable policy development

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### **Ecology of Youth Development**

- Youth have an inherent capacity for positive development
- that is enabled and enhanced through multiple meaningful relationships, contexts, and environments
- where community is a critical delivery system
- and youth are major actors in their own development

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## **Positive Youth Development**

- Learning is a social activity
- Cognitive development and identity development co-occur:
  - $\checkmark$  They are intertwined
  - $\checkmark$  We cannot be successful with one if we ignore the other
- The evidence regarding the importance of SEL is substantial, acknowledge by
  - ✓ National Research Council
  - ✓ National Academy of Medicine
  - ✓ Aspen Institute
  - ✓ Minnesota Department of Education

## A Role for Social & Emotional Learning

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Skills	Supports	Challenges
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
* <b>DAP</b>		4. Family Violence
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## **Developmental Measures in MSS**

# **Examining Differences**



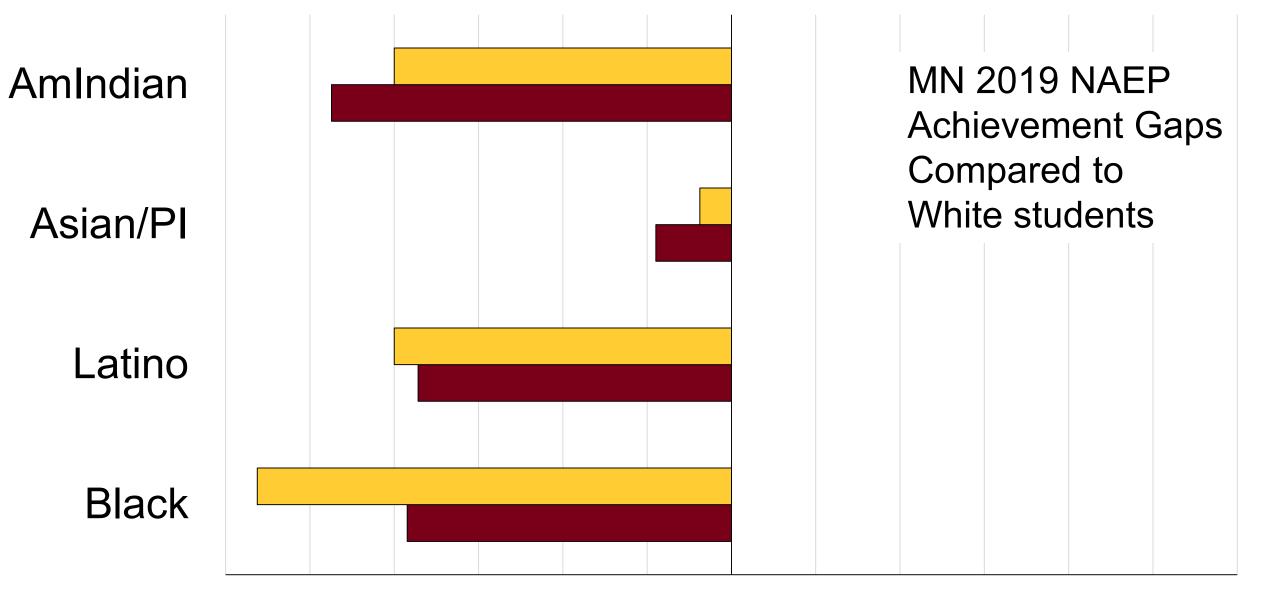
# **Moving toward Equity**

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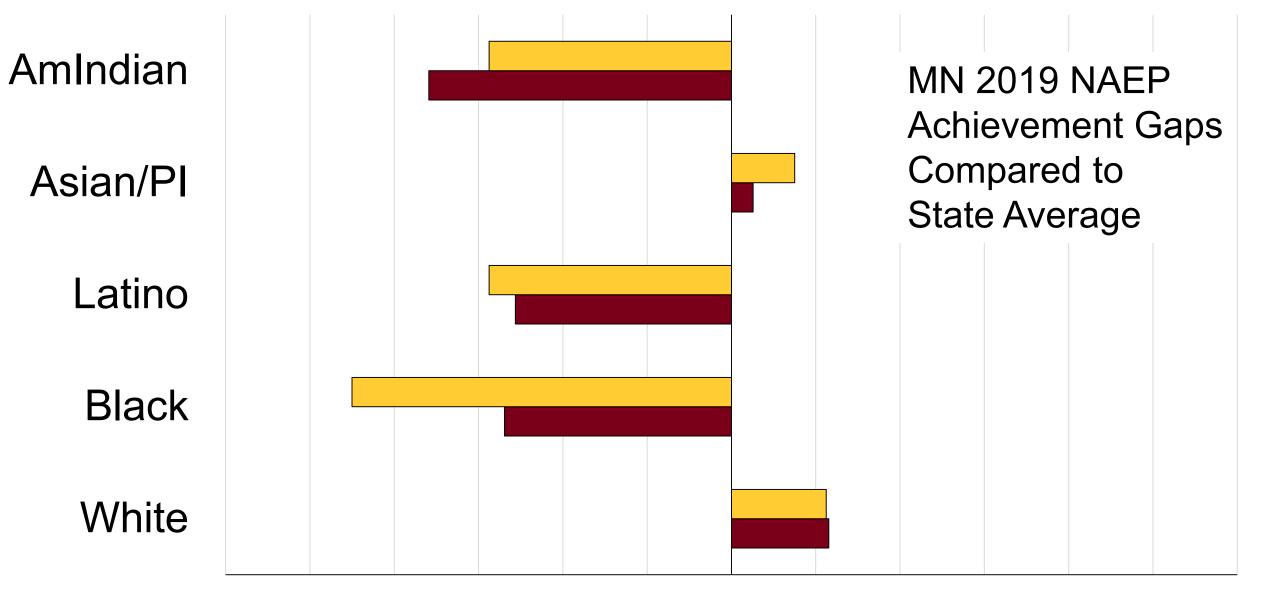
- We use a common effect size the difference between groups in standard deviations
- To put these in perspective, we can examine these effects in achievement (*achievement gaps*).
- MN data were reviewed for 2019 NAEP results in Reading and Mathematics.
- We see much larger Differences in achievement than we do with Developmental Skills & Supports.

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#### **Differences in Achievement v. Developmental Skills**



-1.2 -1 -0.8 -0.6 -0.4 -0.2 0 0.2 0.4 0.6 0.8 1 1.2 Math8 Read4

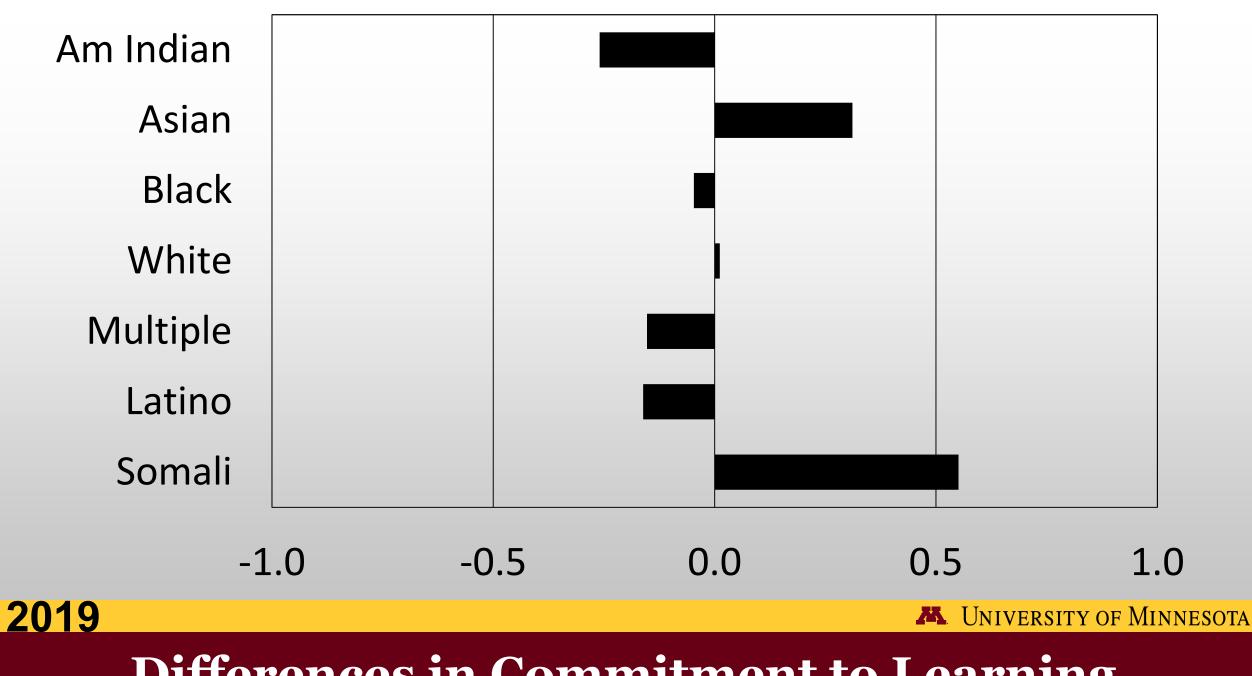


-1.2 -1 -0.8 -0.6 -0.4 -0.2 0 0.2 0.4 0.6 0.8 1 1.2 Math8 Read4

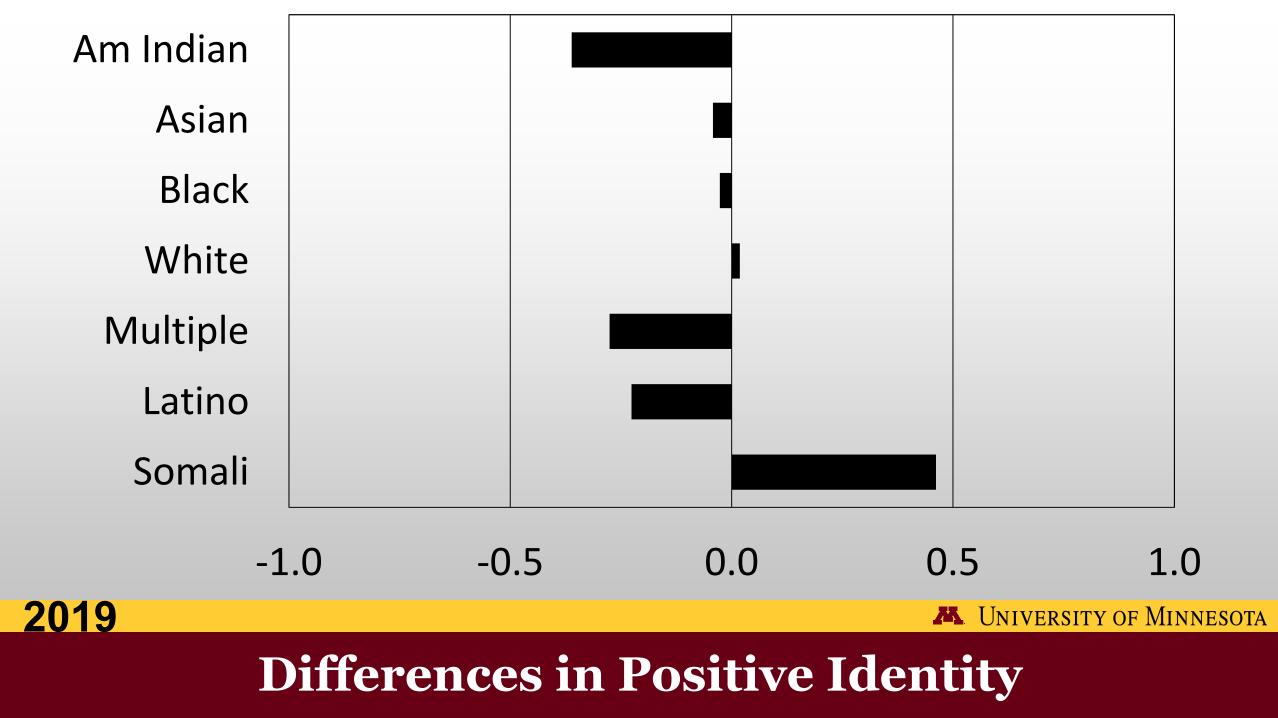
- Differences are defined in the next few slides as group differences from the PFSS Average
- Each bar represents the number of *SD difference* between youth in each group v. PFSS Average.

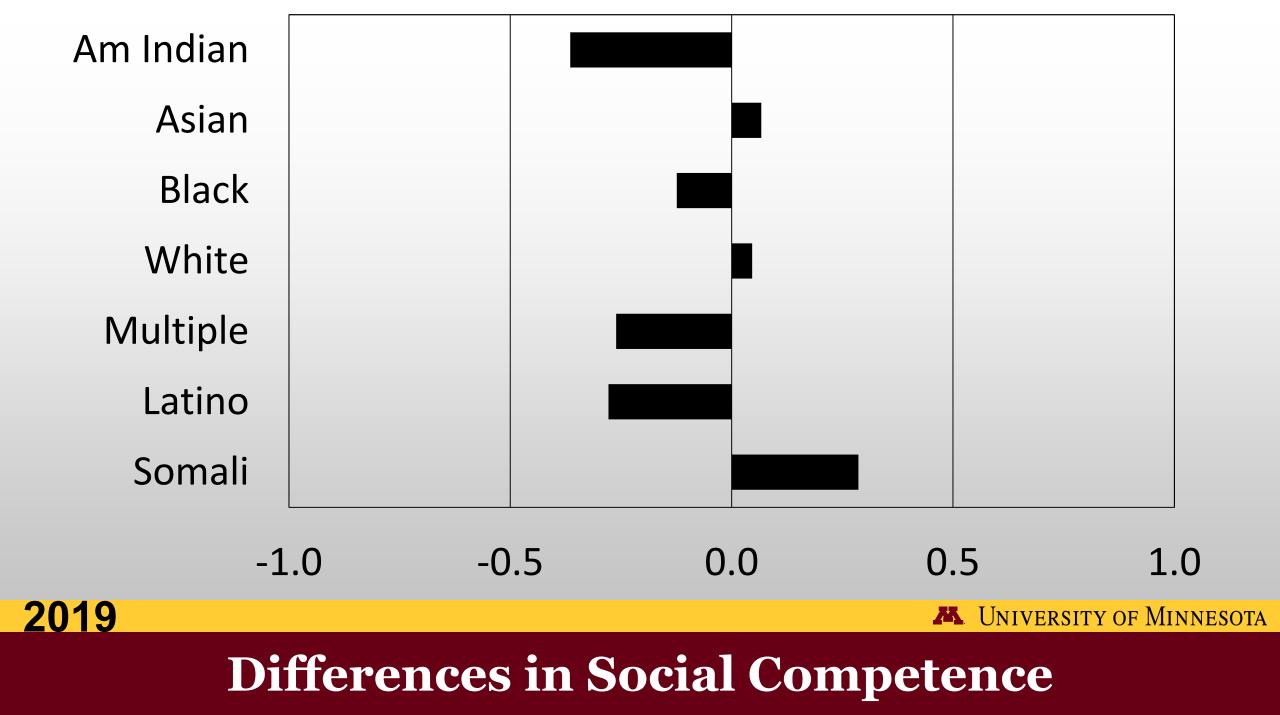
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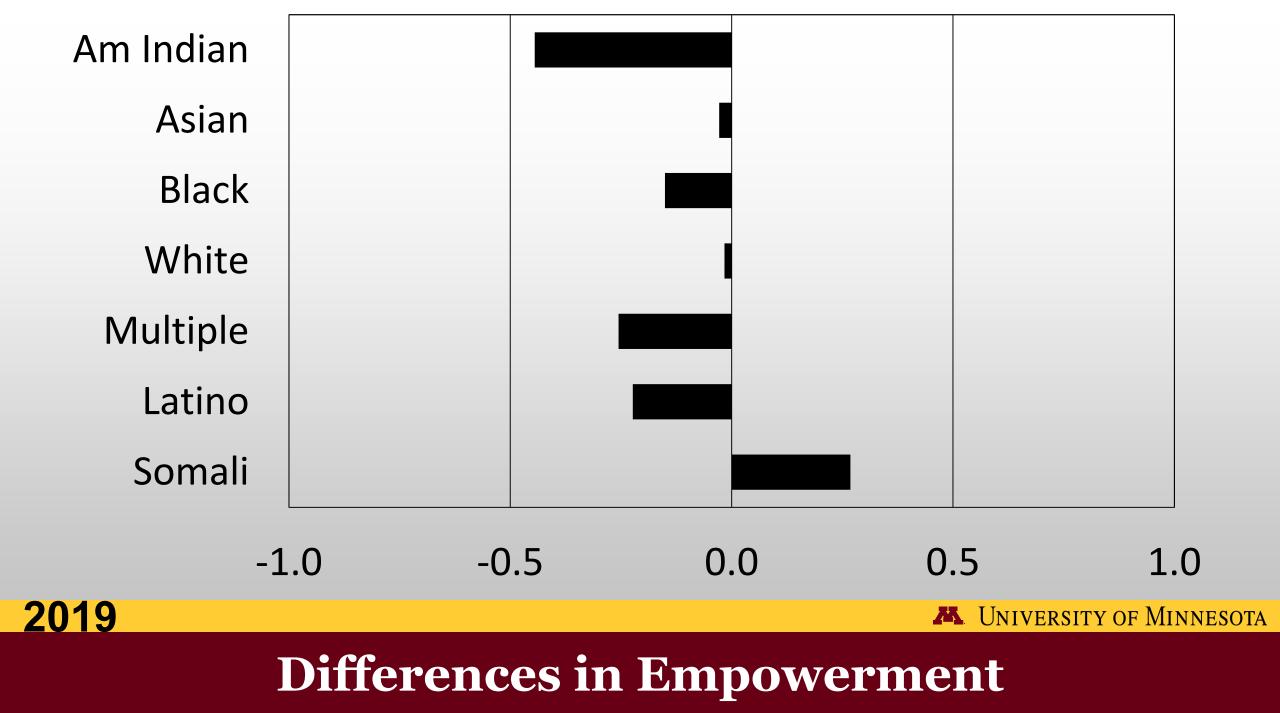
### **Evaluating Differences**

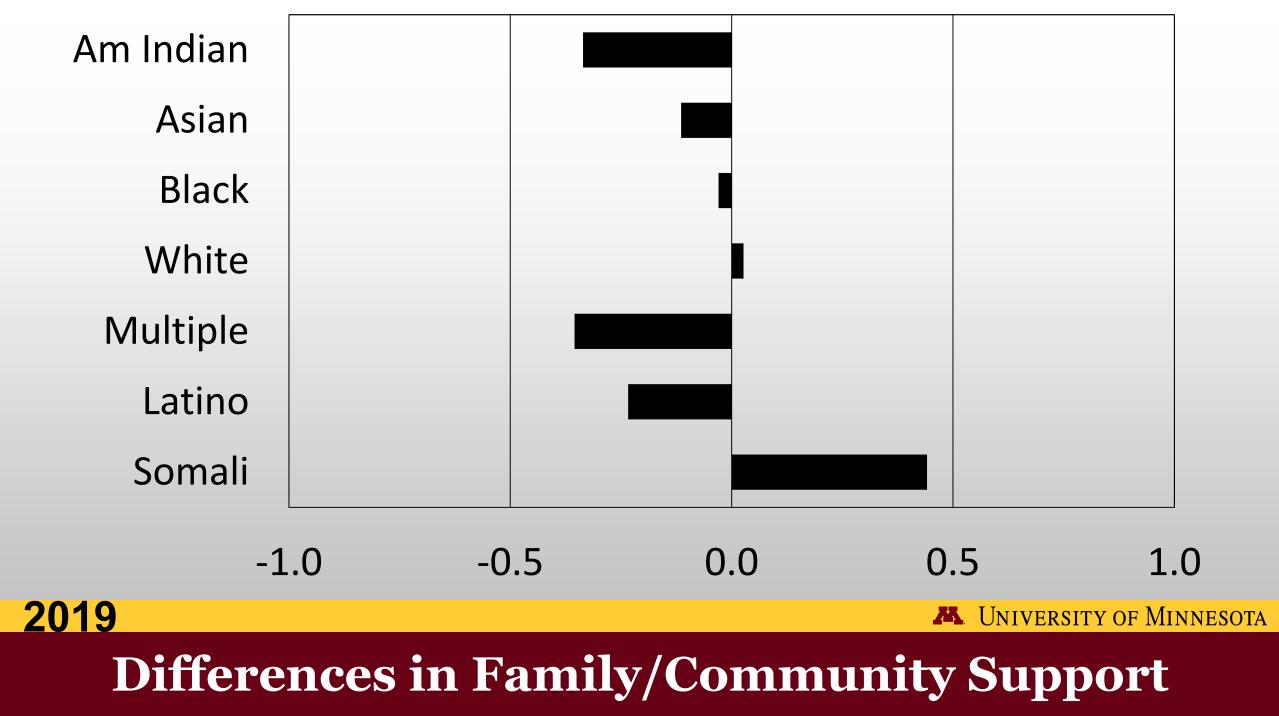


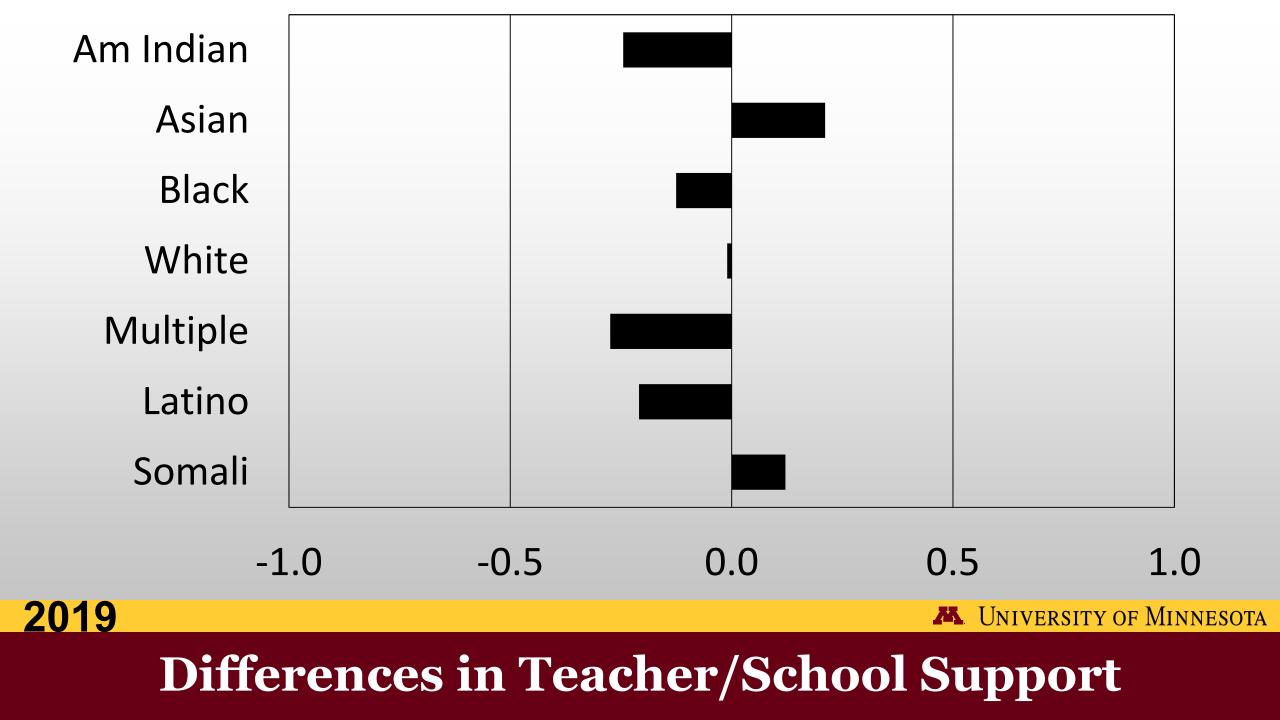
**Differences in Commitment to Learning** 

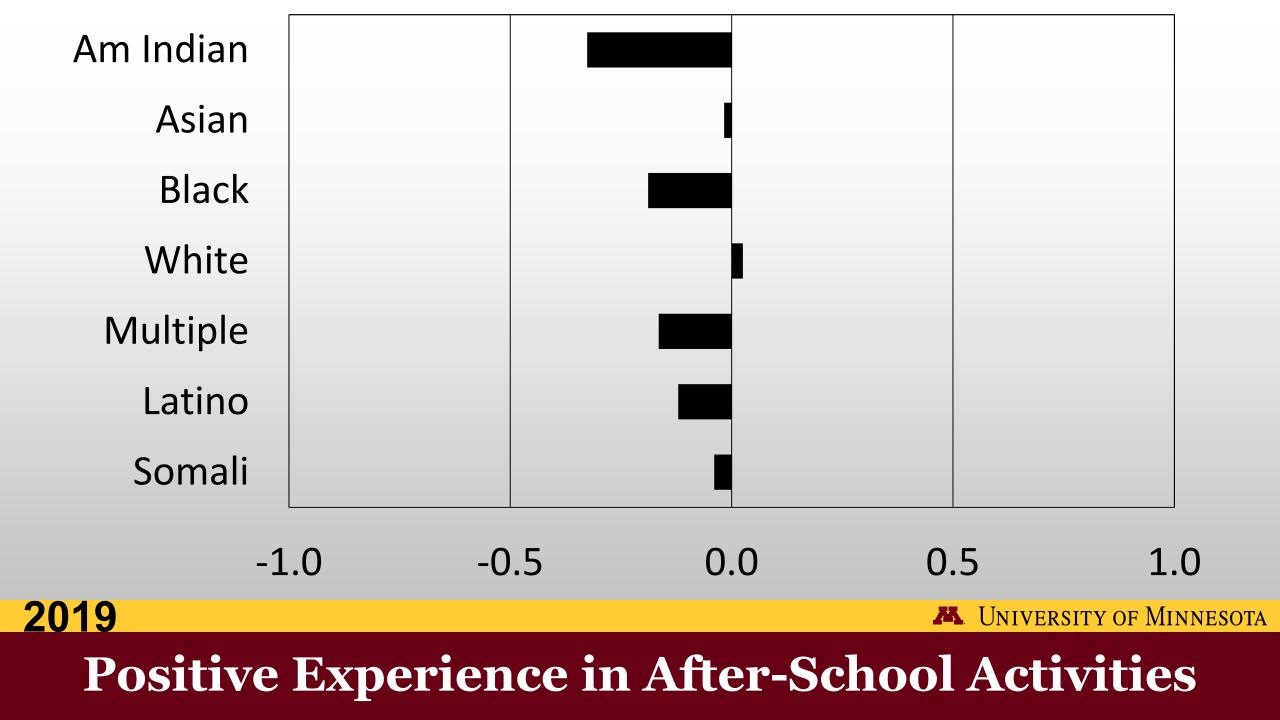


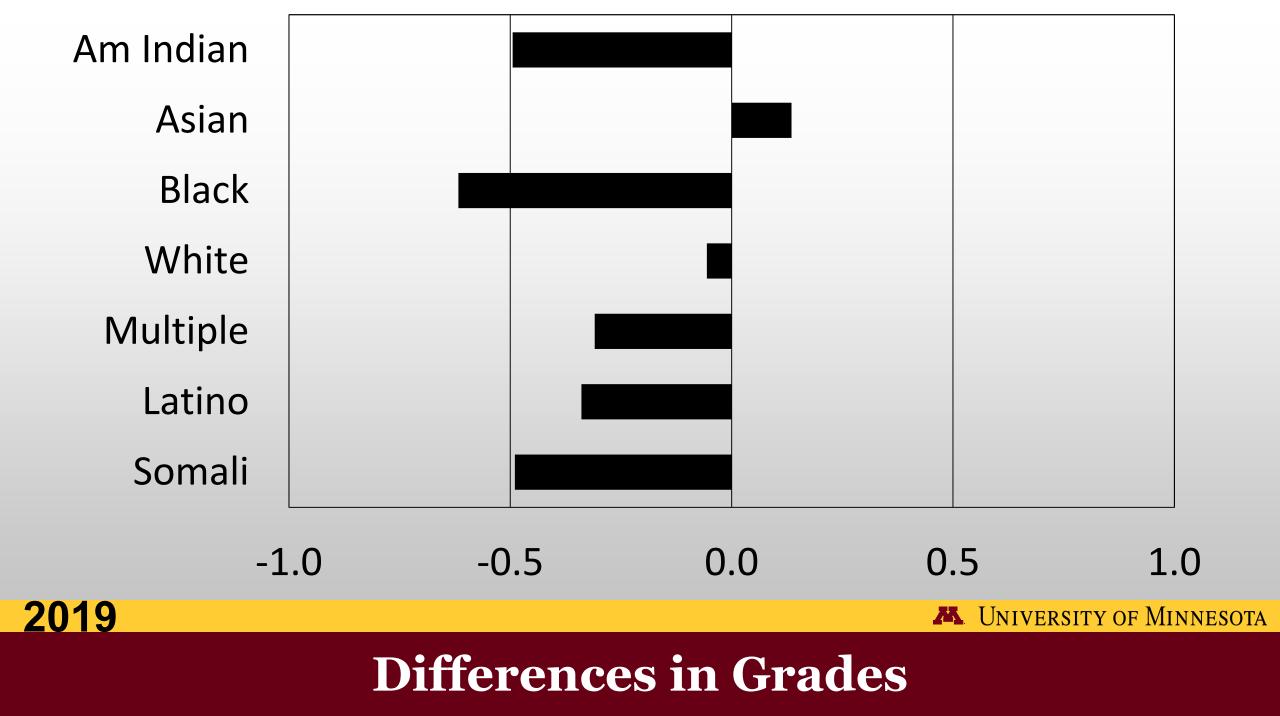


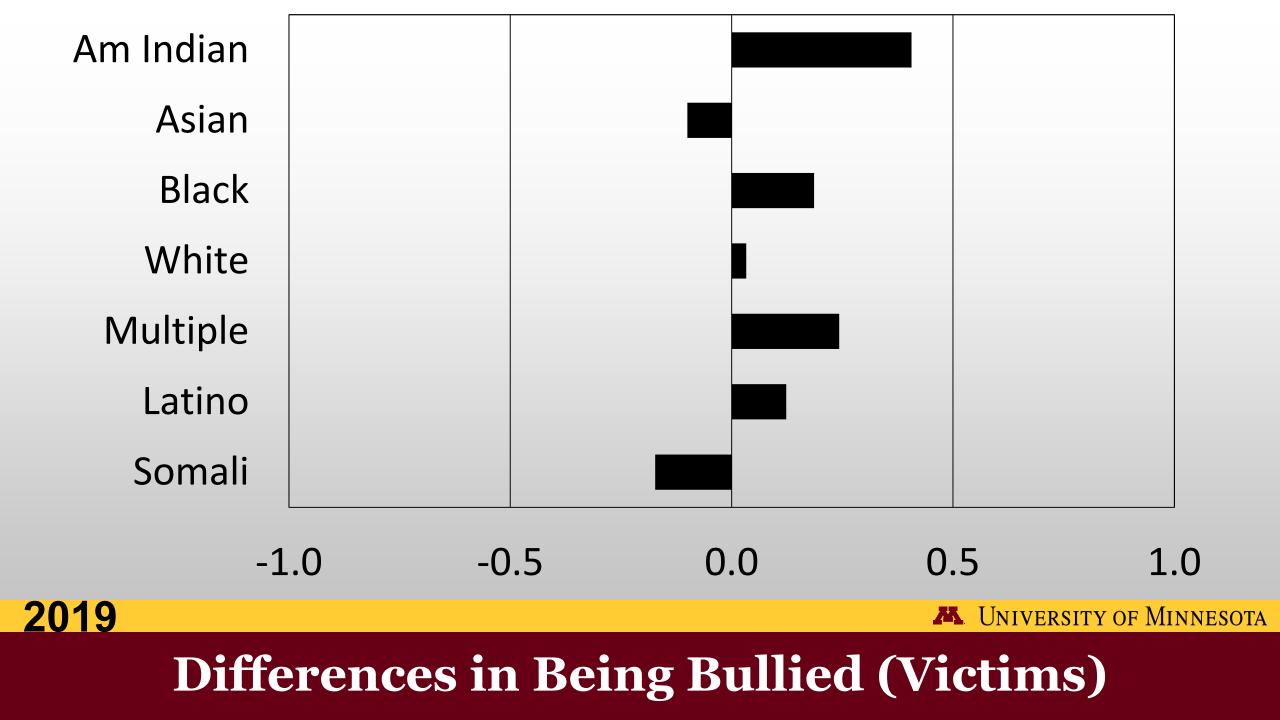


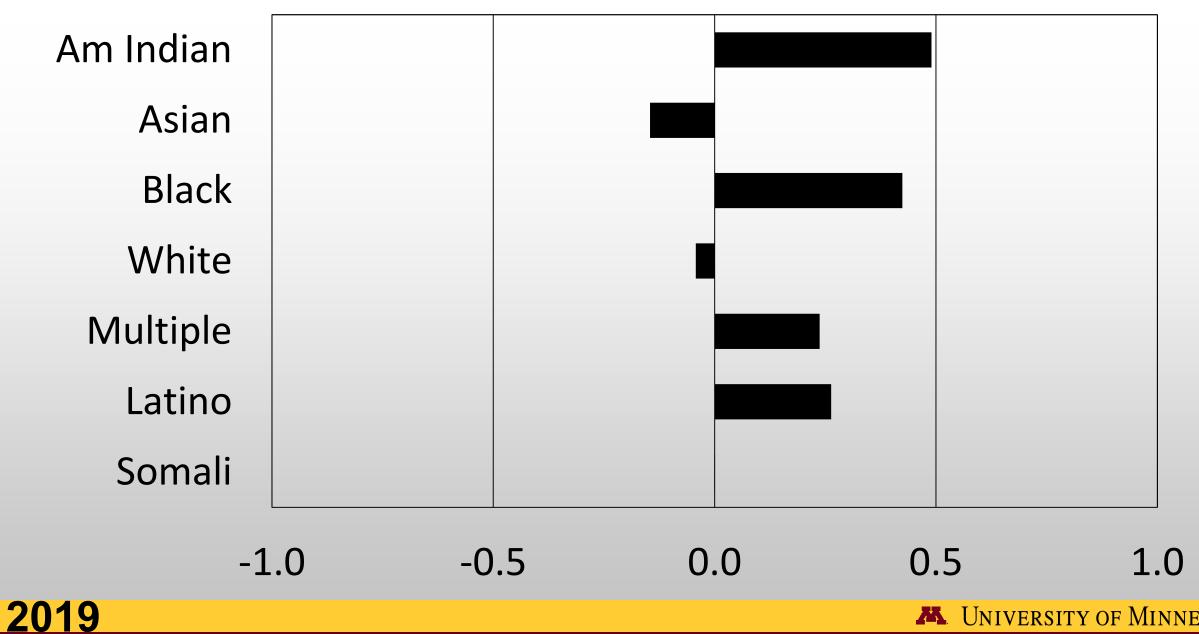






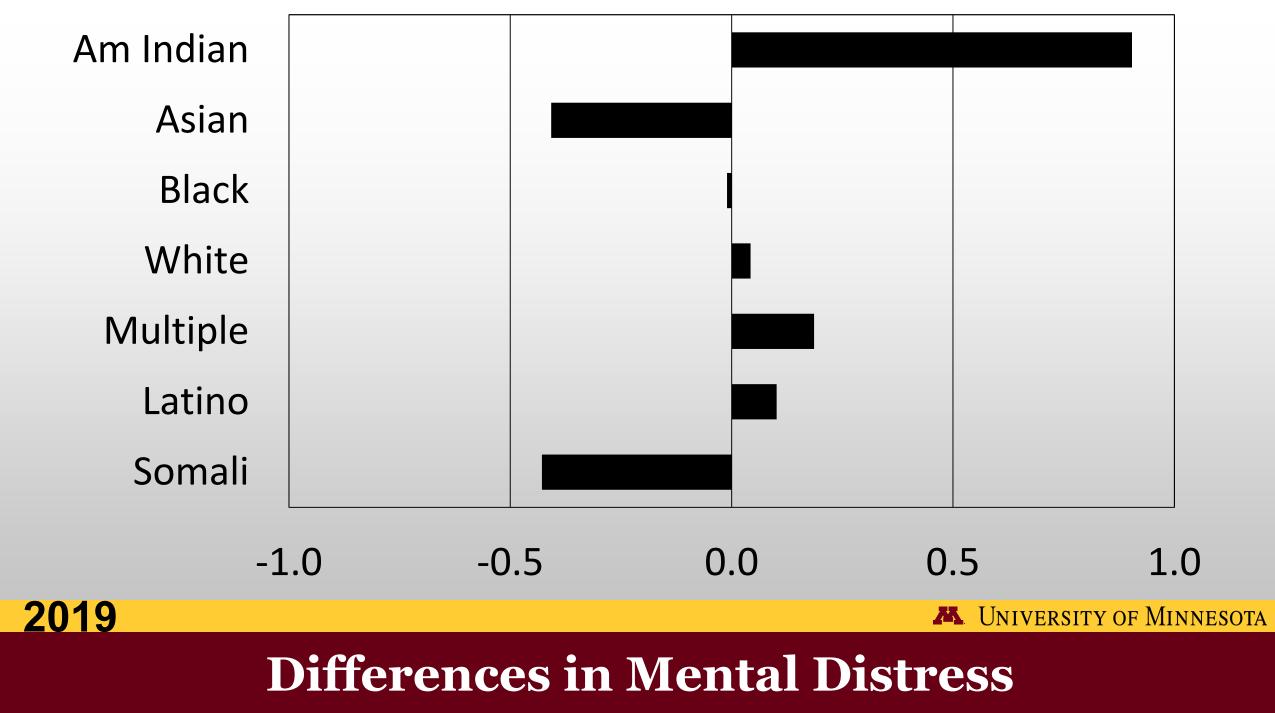






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### **Differences in Bullying (Perpetrators)**





# **Equipped for Learning**



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**Used by Generation Next** 

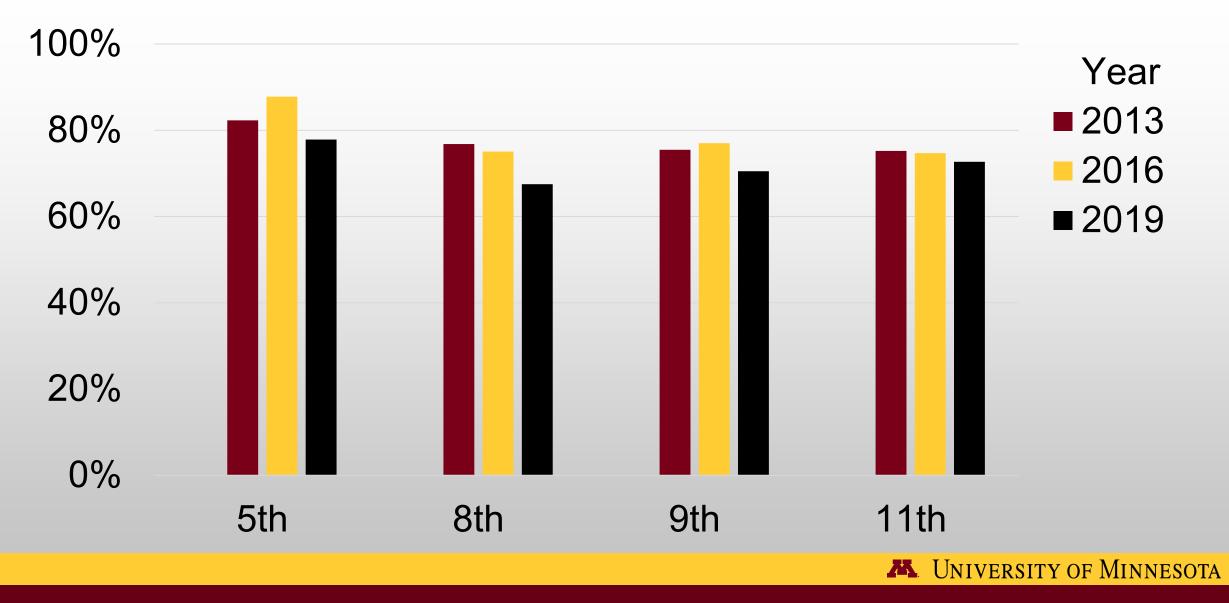
To be equipped means that, on average, the student

- recognizes characteristics associated with the developmental skill as being very much or extremely like them;
- agrees or strongly agrees with values, behaviors, and characteristics defining each skill;
- engages in relevant skill-based behaviors most or all of the time.

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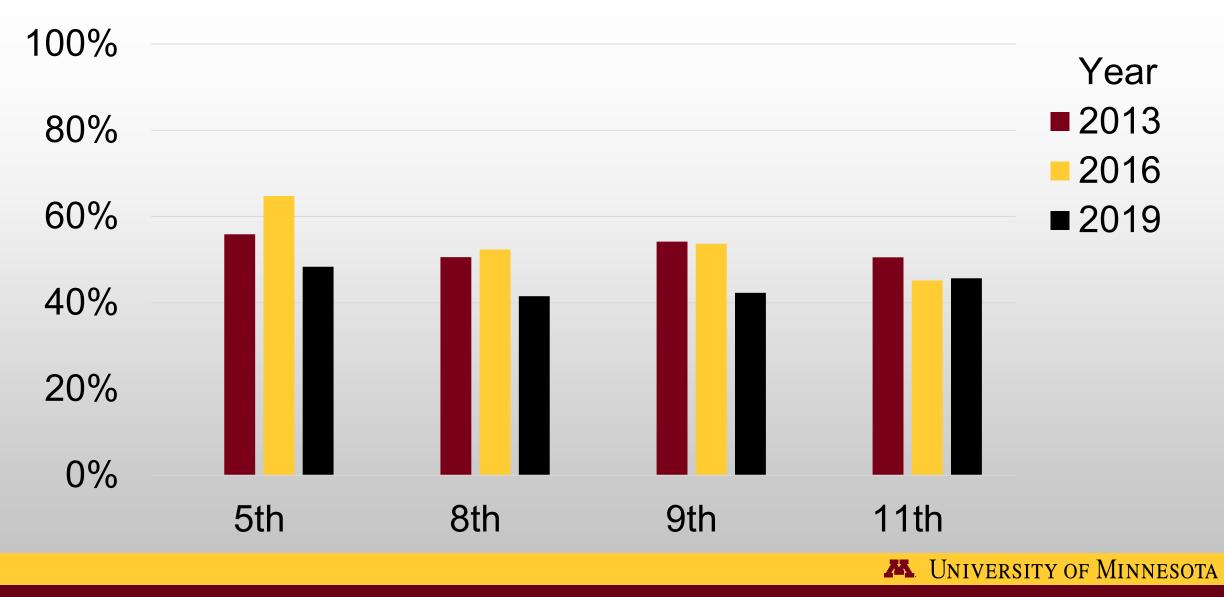
### **Equipped for Learning**

#### **Percent Equipped for Learning**



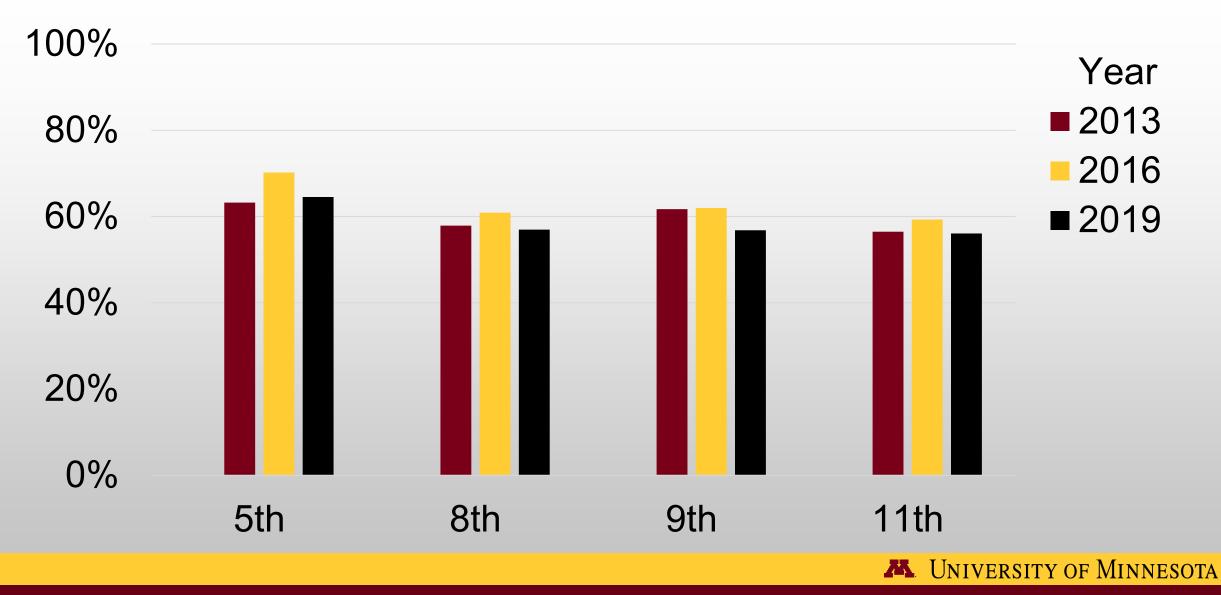
#### **Commitment to Learning**

#### **Percent Equipped for Learning**

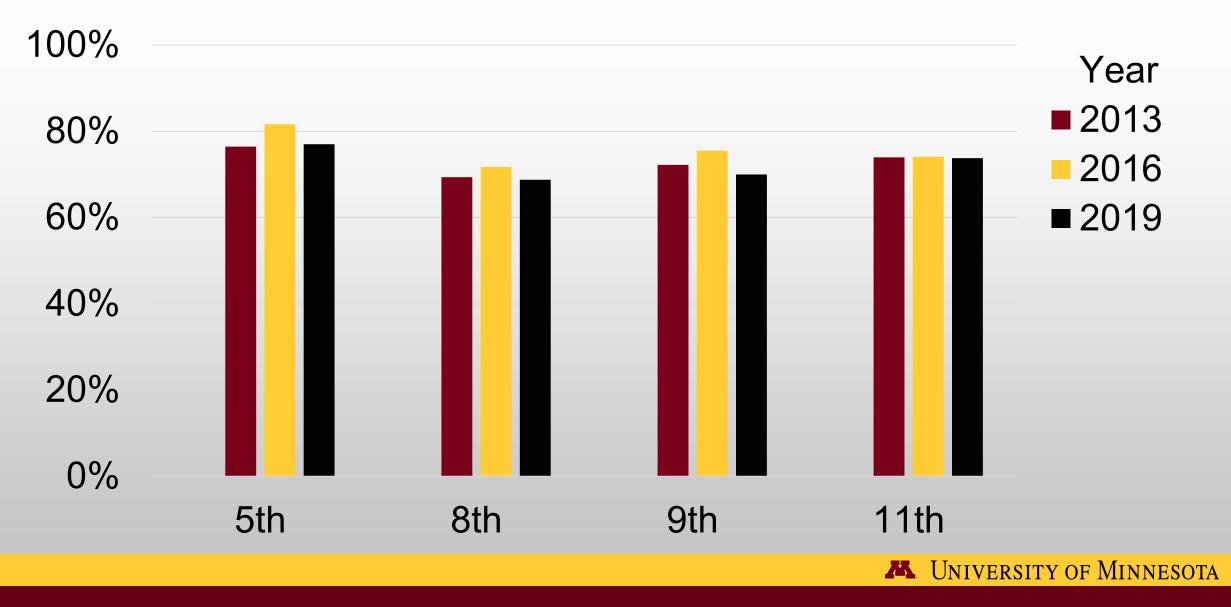


#### **Positive Identity**

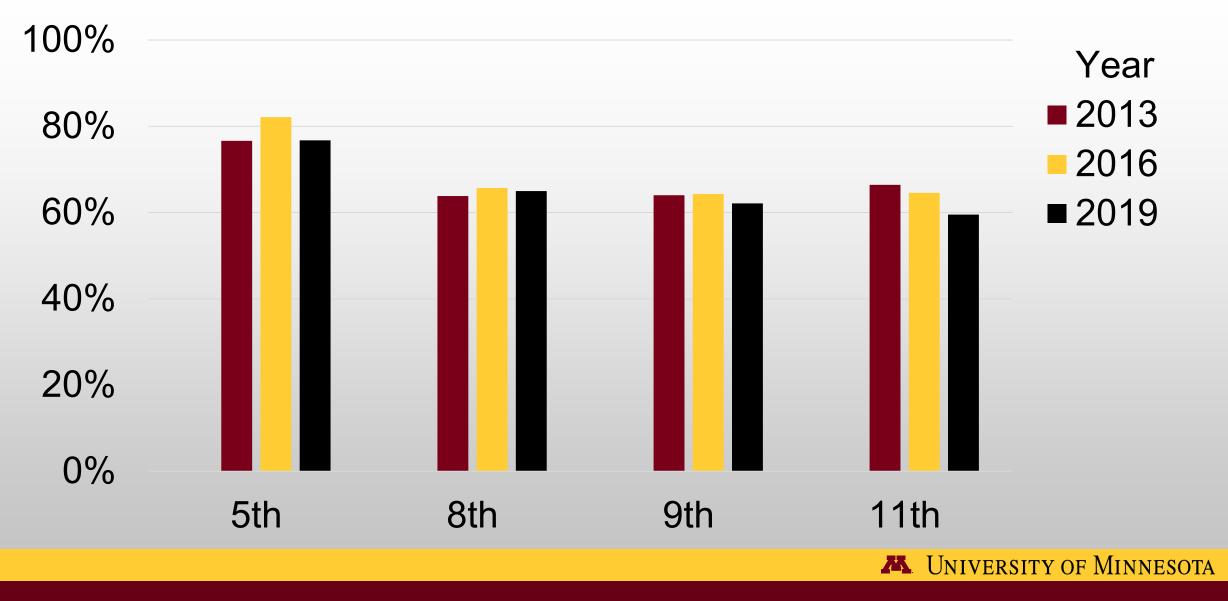
#### **Percent Equipped for Learning**



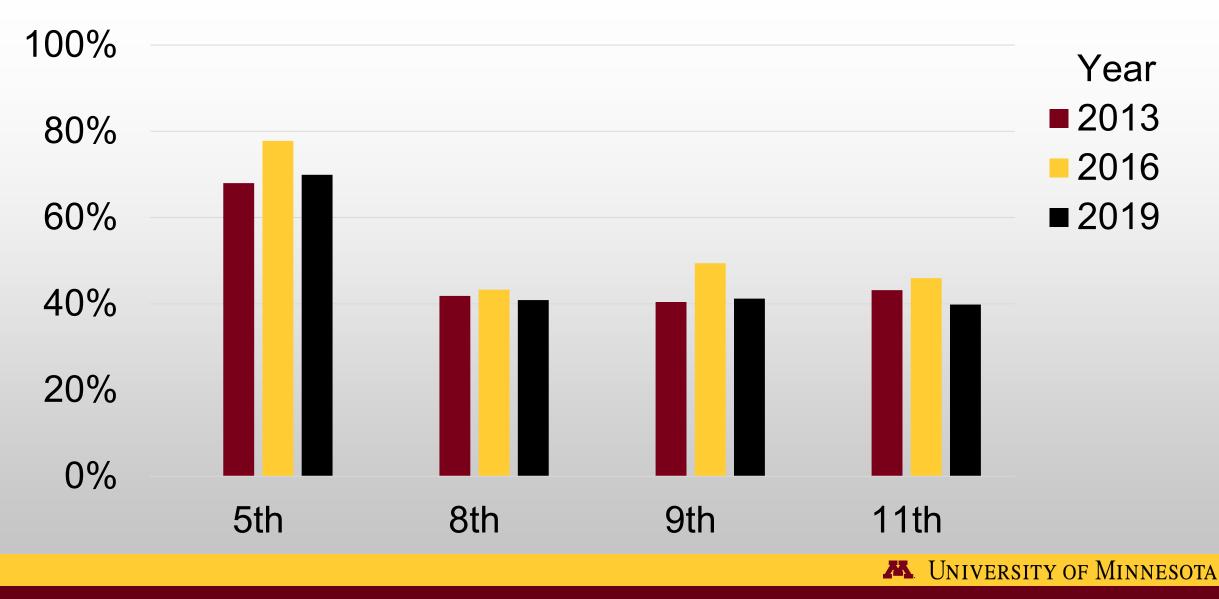
### **Social Competence**



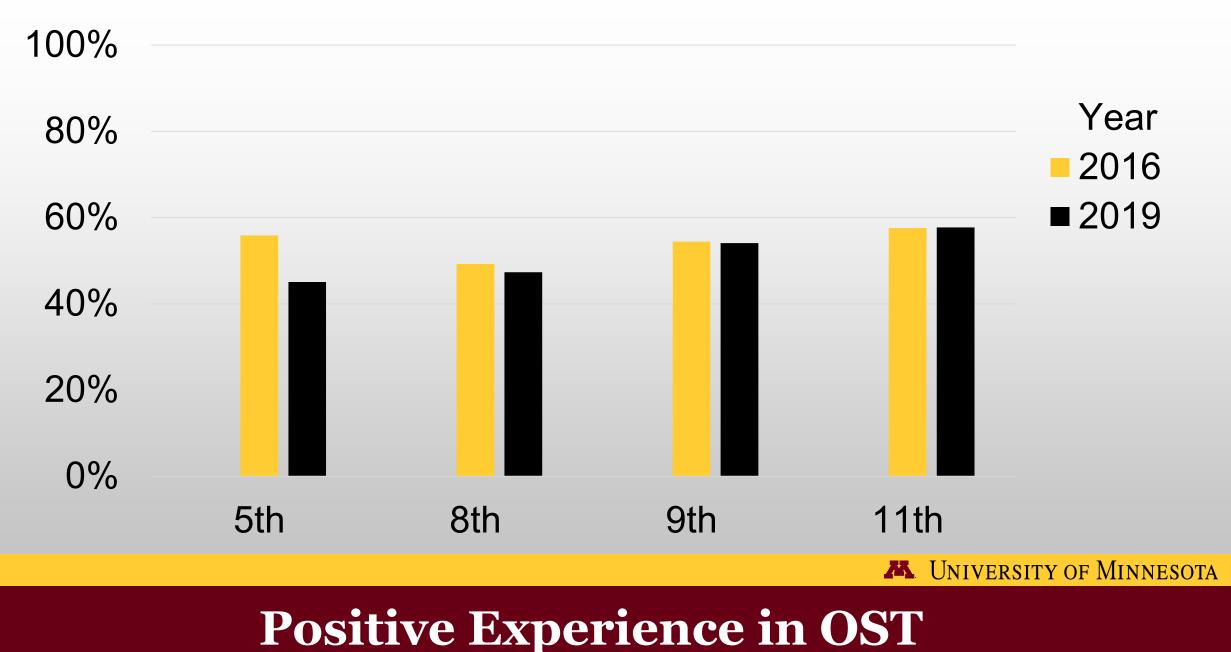
## **Empowerment**

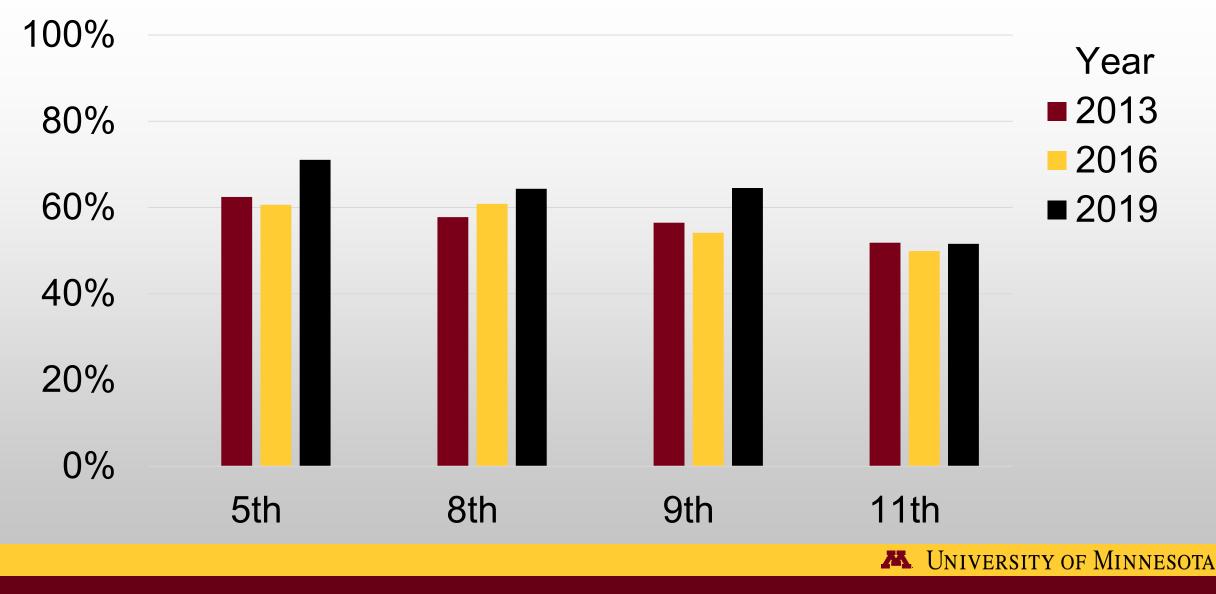


Family/Community Support

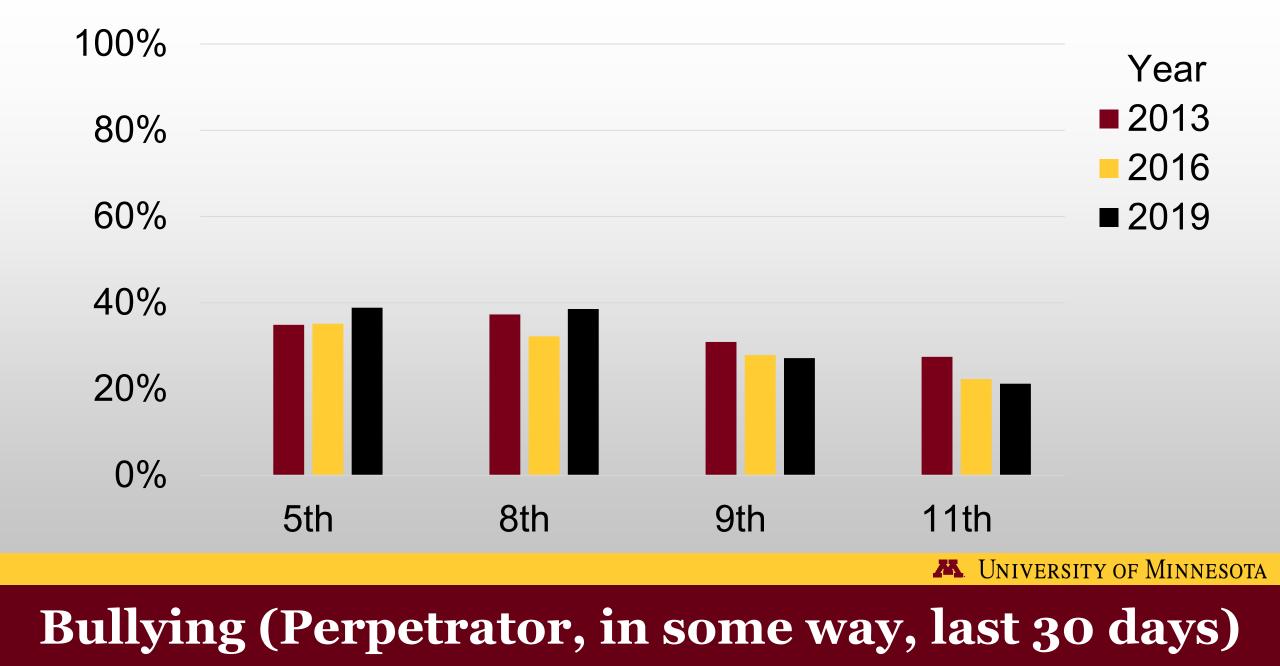


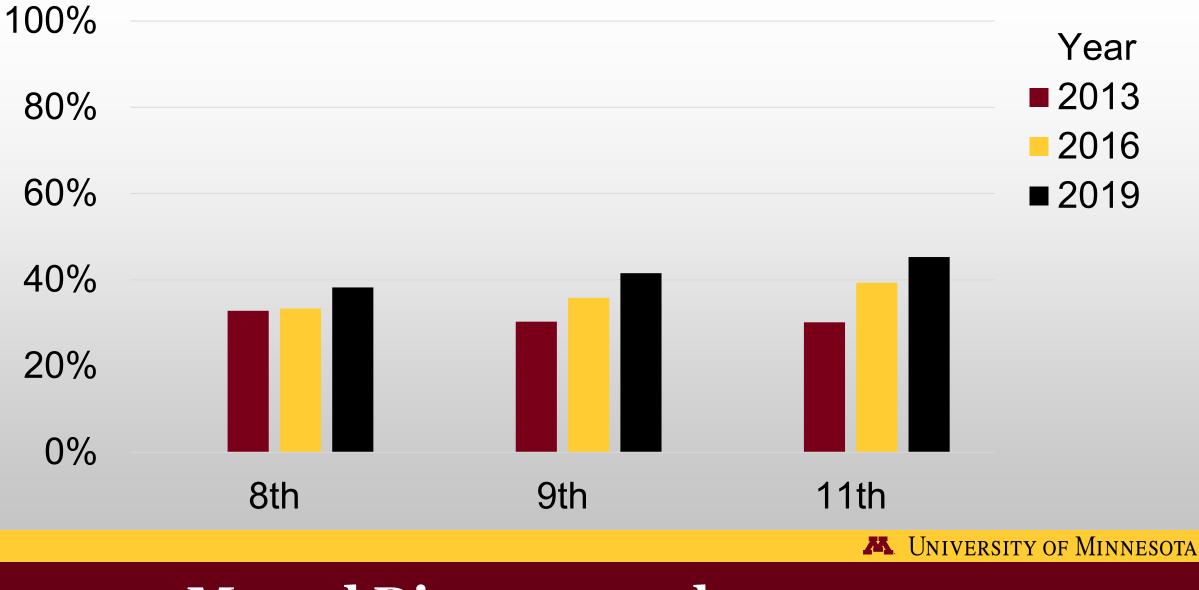
**Teacher/School Support** 



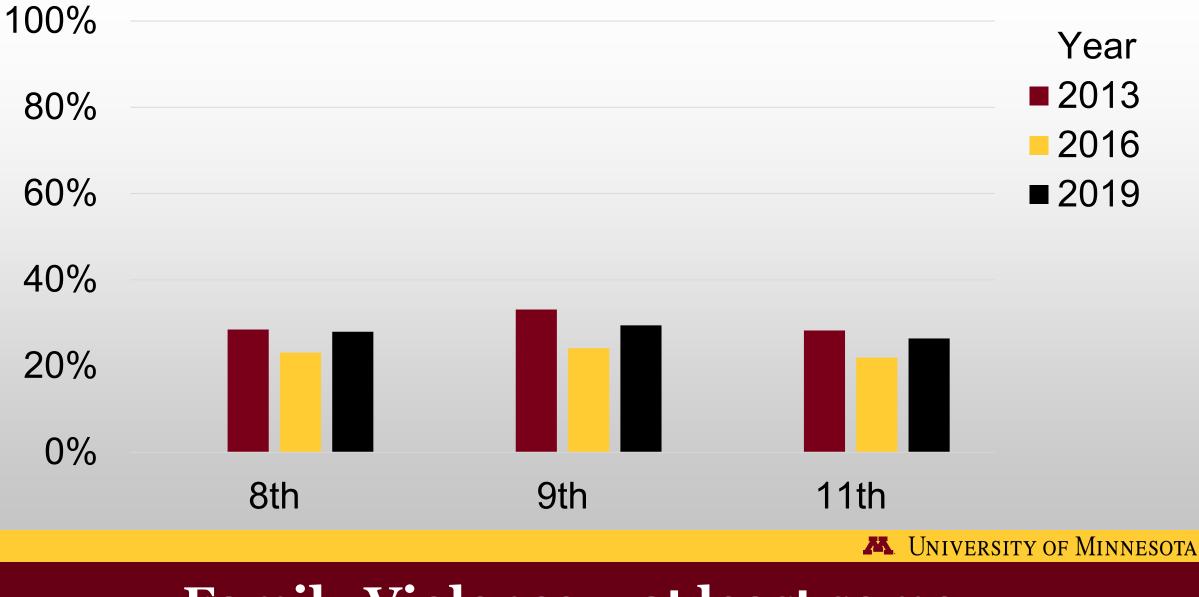


# Being Bullied (Victim, in some way, last 30 days)





**Mental Distress – at least some** 

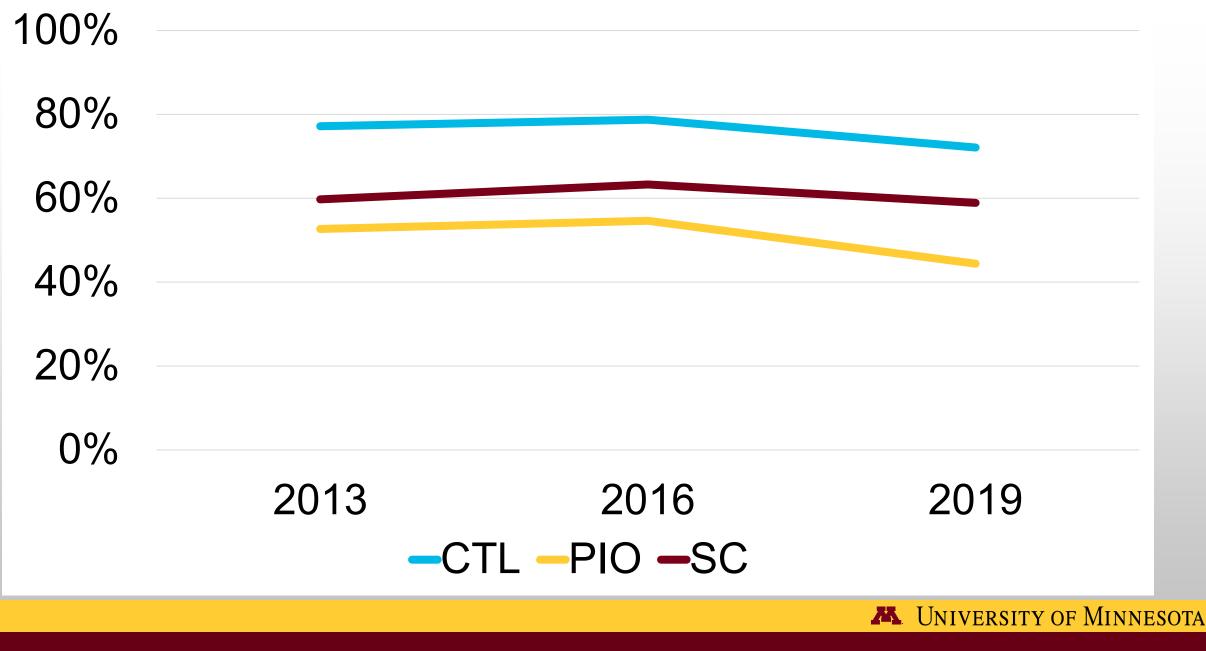


**Family Violence – at least some** 

Skills	Minnesota	PFSS
Commitment to Learning	71%	72%
<b>Positive Identity</b>	44%	44%
Social Competence	58%	59%

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# % Equipped for Learning – 2019



## **Change in Developmental Skills**

0 17% 16%
1 24% 25%
2 25% 25%
3 34% 34%
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# # of Developmental Skills Equipped - 2019

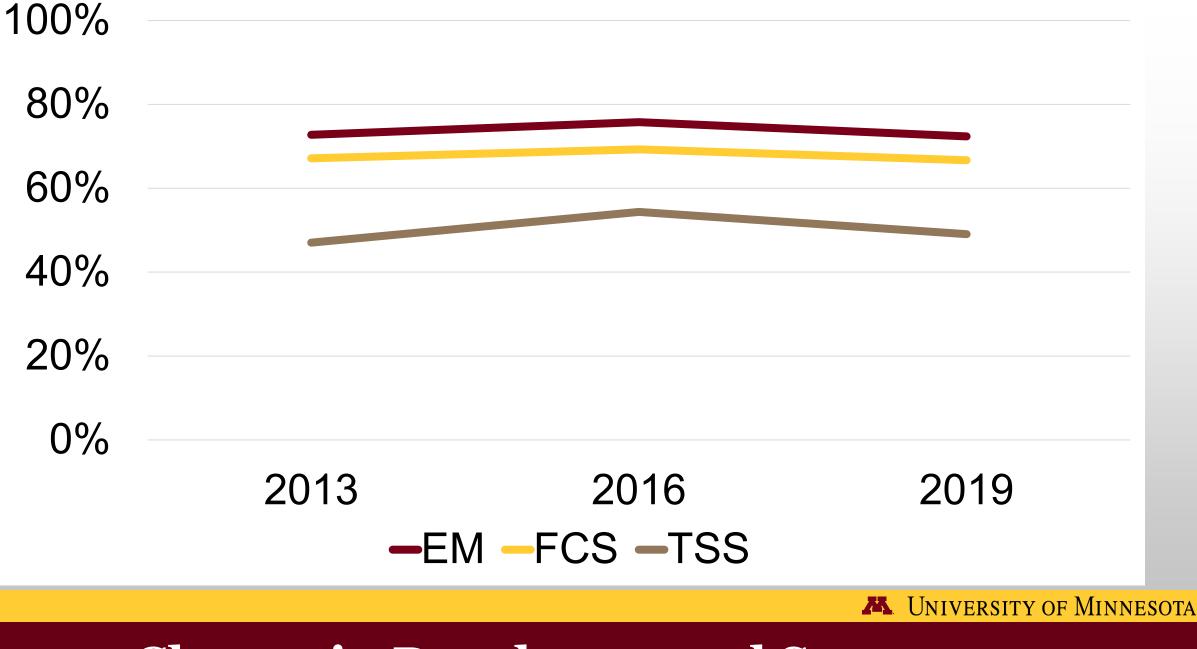
# Skills	2013	2016	2019
0	14.5%	12.8%	16.3%
1	21.5%	21.0%	24.9%
2	23.1%	22.1%	24.7%
3	40.9%	44.1%	34.1%

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**Change in the Number of Skills** 

Supports	Minnesota	PFSS
Empowerment	73%	72%
Family/Community Support	66%	67%
Teacher/School Support	49%	49%
Positive Experience	51%	50%
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# % Equipped for Learning – All students in 2019



## **Change in Developmental Supports**

# Supports	Minnesota	PFSS
0	17%	17%
1	17%	17%
2	26%	26%
3	40%	40%
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# of Developmental Supports Equipped – 2019		

# Supports	2013	2016	2019
0	15.8%	14.7%	17.0%
1	18.4%	16.6%	17.0%
2	28.2%	22.3%	26.2%
3	37.6%	46.3%	39.7%

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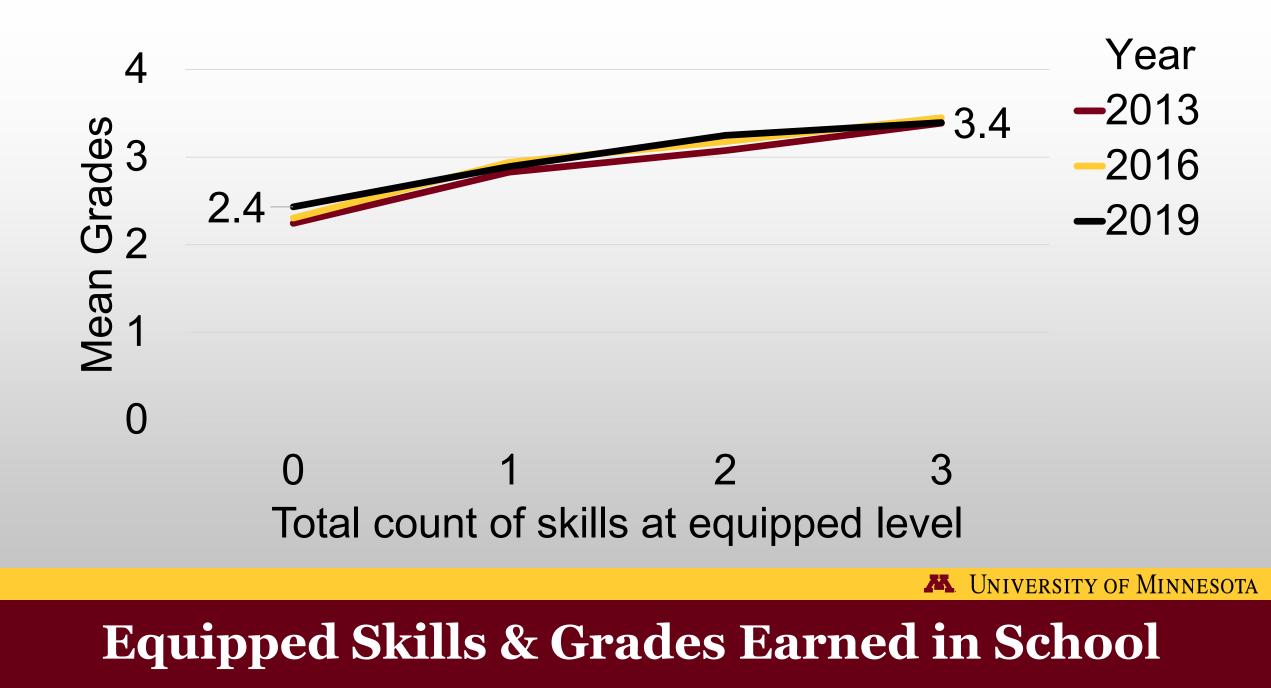
**Change in the Number of Skills** 

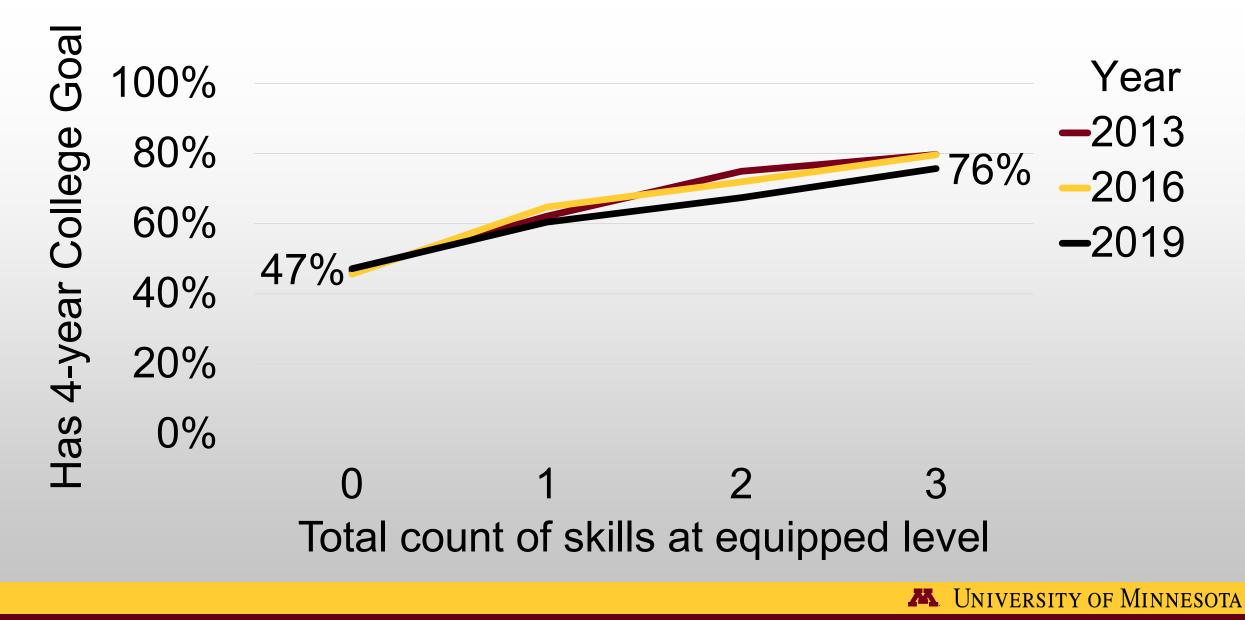
# **Does being equipped matter?**



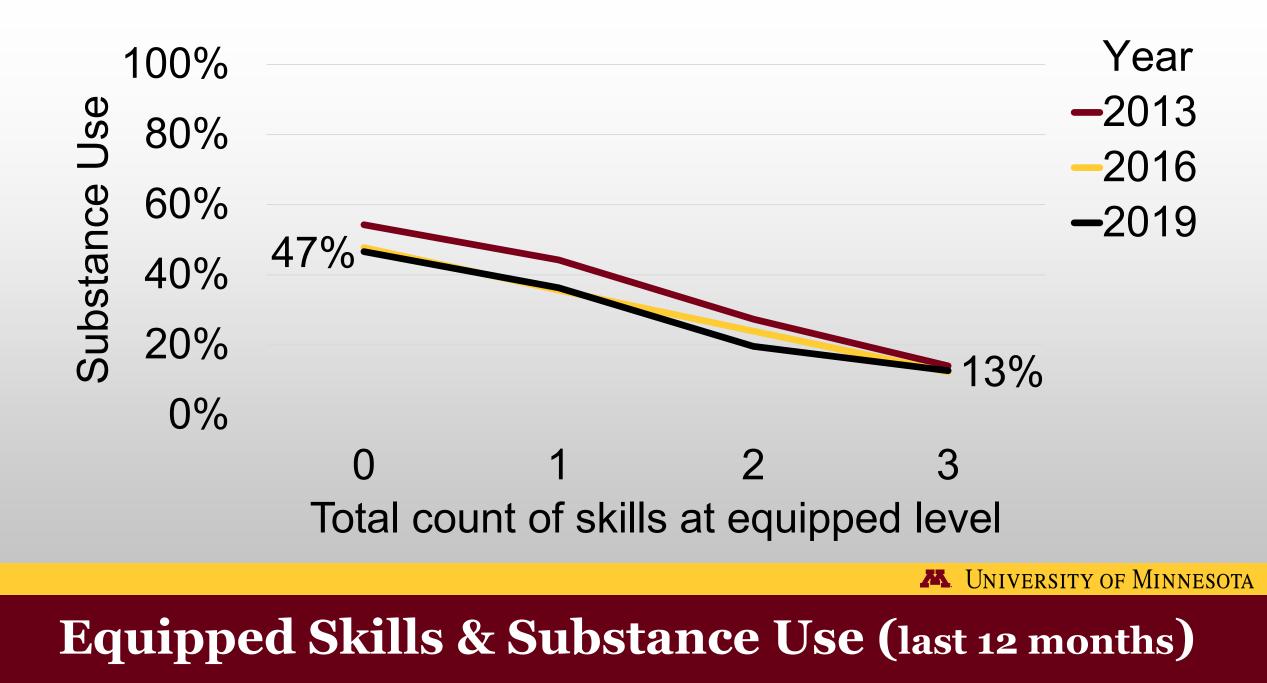
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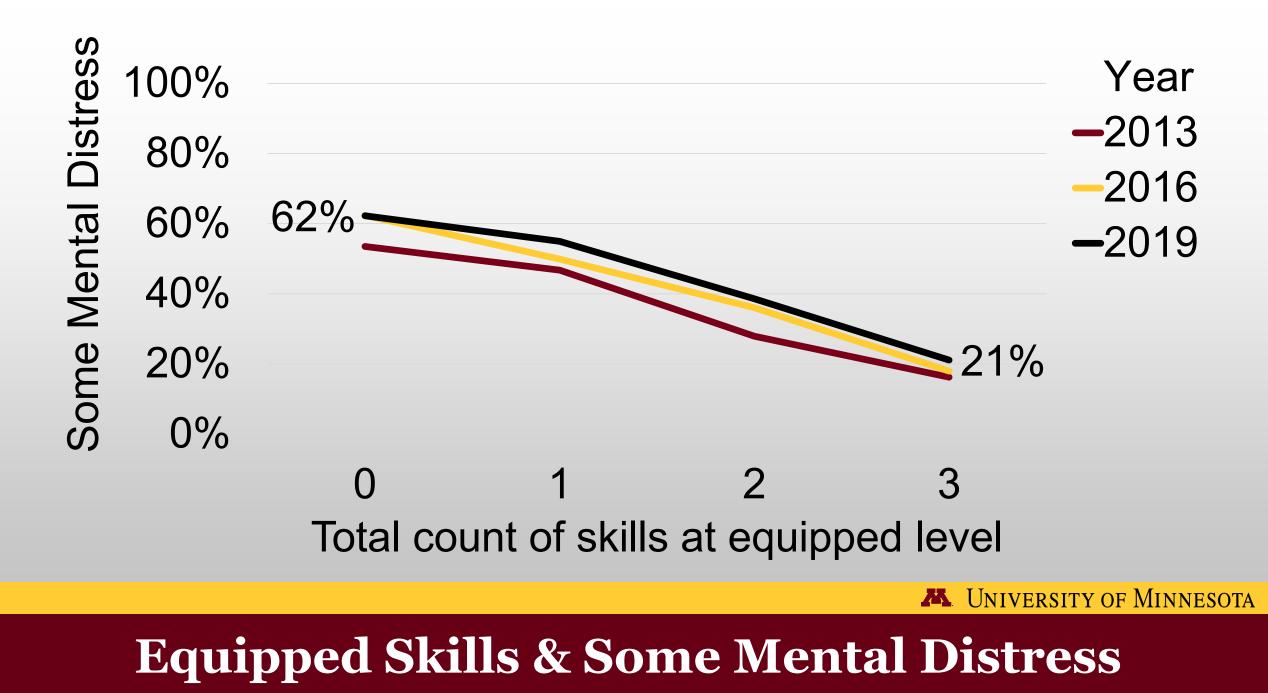
**Including All PFSS Schools - 2016** 





**Equipped Skills & College Gals** 

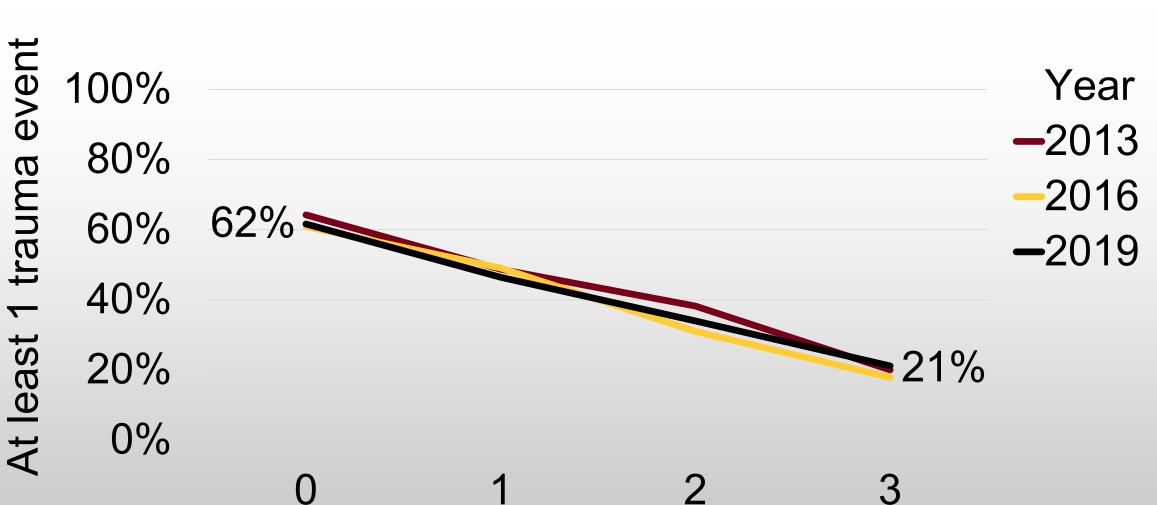


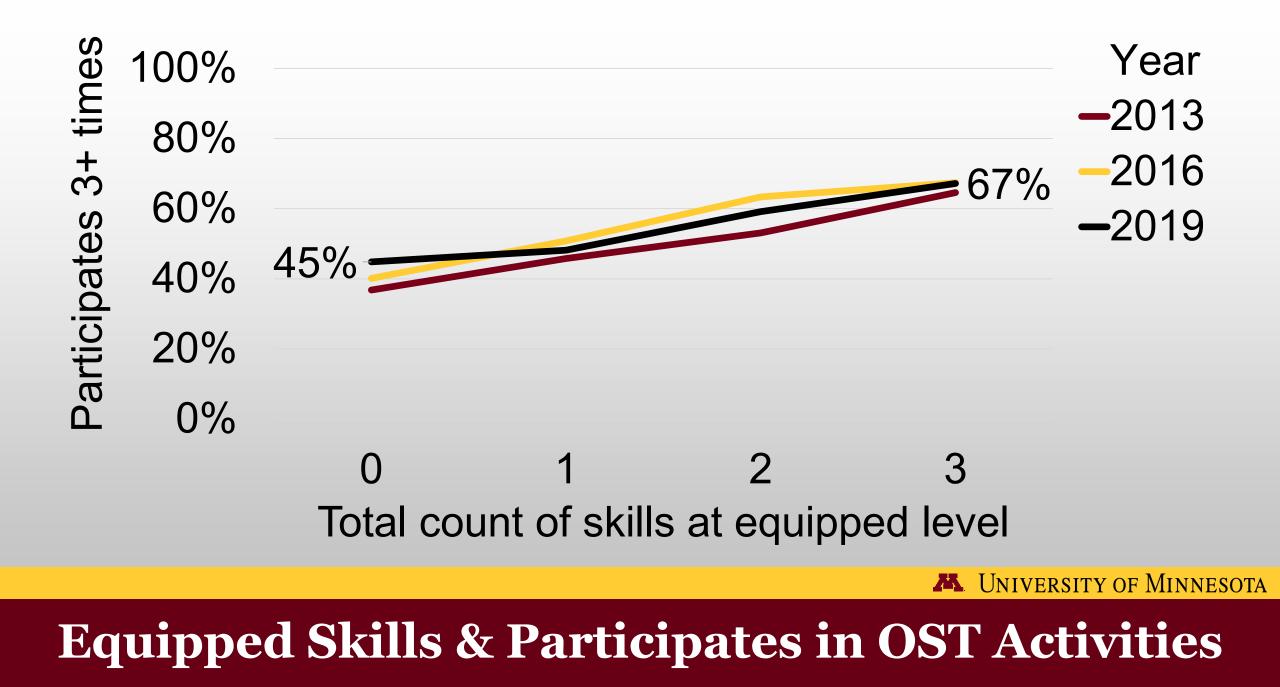


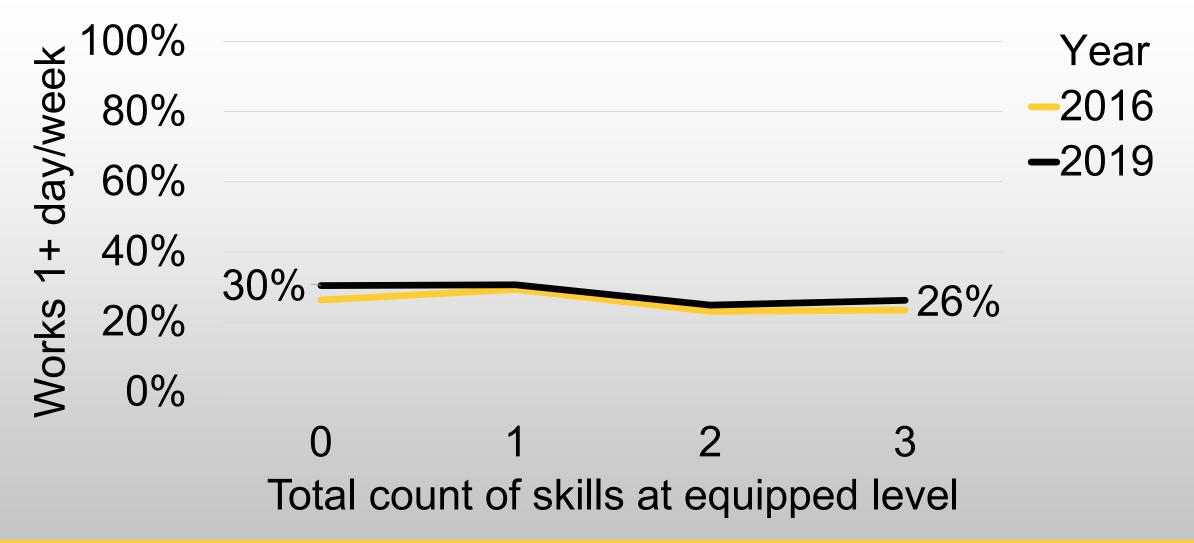
# **Equipped Skills & Experiencing Trauma**

Total count of skills at equipped level

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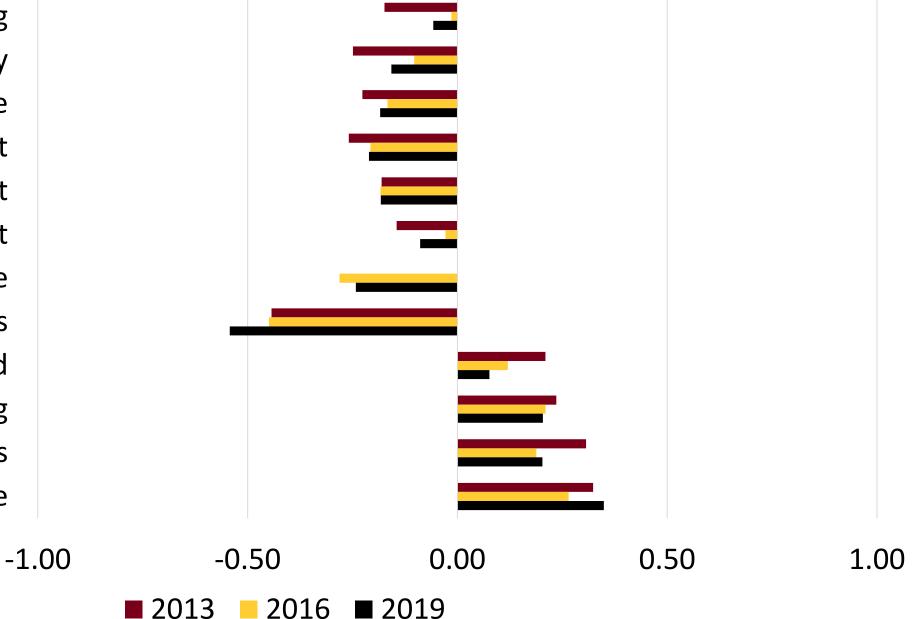
- Across families, schools, and communities, youth play many roles.
- Youth *identify* with multiple communities.
- This means there are multiple avenues to meet youth where they are to tailor our approaches to meet their needs and acknowledge preferences.
- The following figures compare PFSS youth with and without specific characteristics

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**Many Communities** 

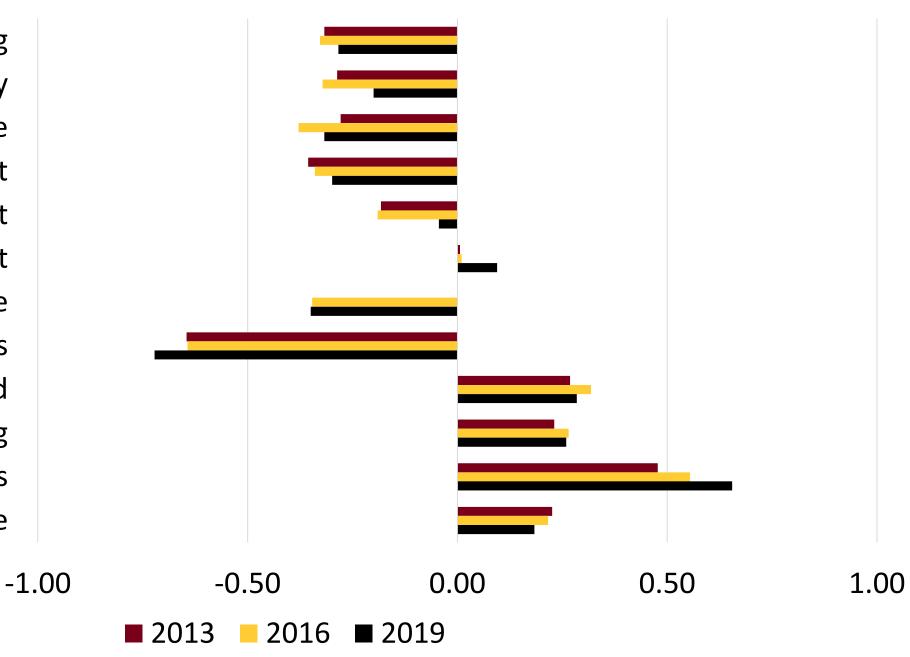
### Students receiving FRPL (36/34/34%)

**Commitment to Learning Positive Identity** Social Competence Empowerment Family/Community Support Teacher/School Support **Positive Experience** Grades Bullied Bullying **Mental Distress** Family Violence



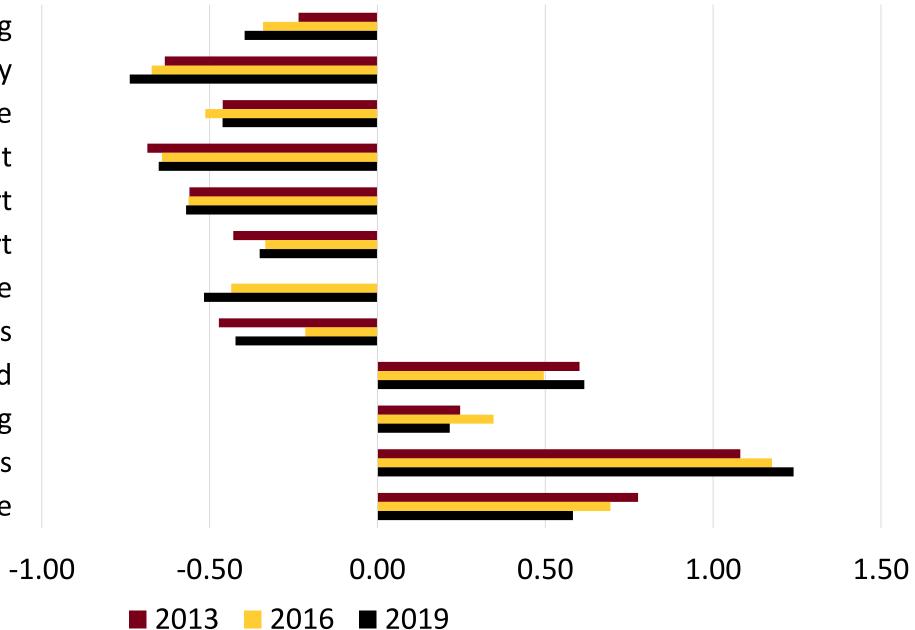
#### Students receiving Special Education (13/13/15%)

**Commitment to Learning Positive Identity** Social Competence Empowerment Family/Community Support Teacher/School Support **Positive Experience** Grades Bullied Bullying **Mental Distress** Family Violence



### Gay/Lesbian/Bisexual/Questioning/Queer Students (8/13/13%)

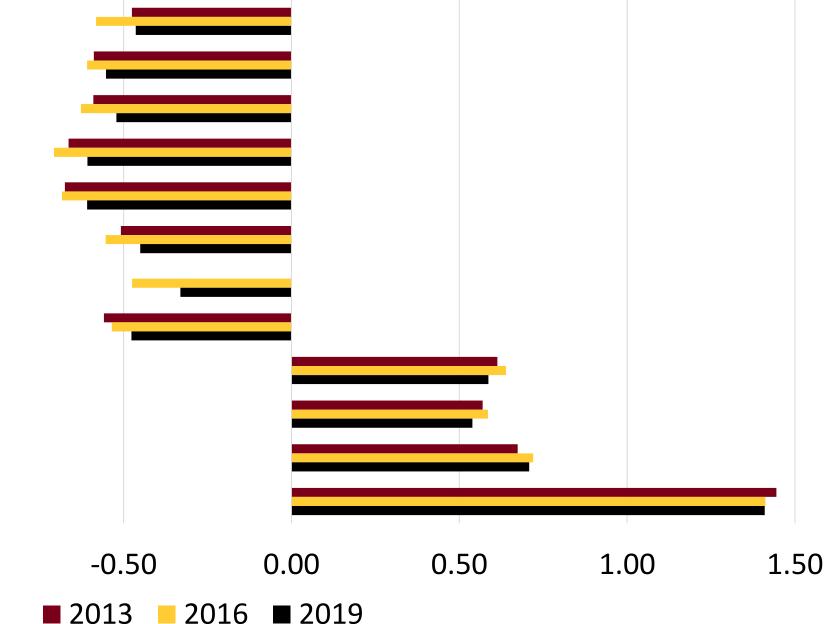
**Commitment to Learning Positive Identity** Social Competence Empowerment Family/Community Support Teacher/School Support **Positive Experience** Grades Bullied Bullying **Mental Distress Family Violence** 



Grades 9/11

### Some Trauma (37/34/37%)

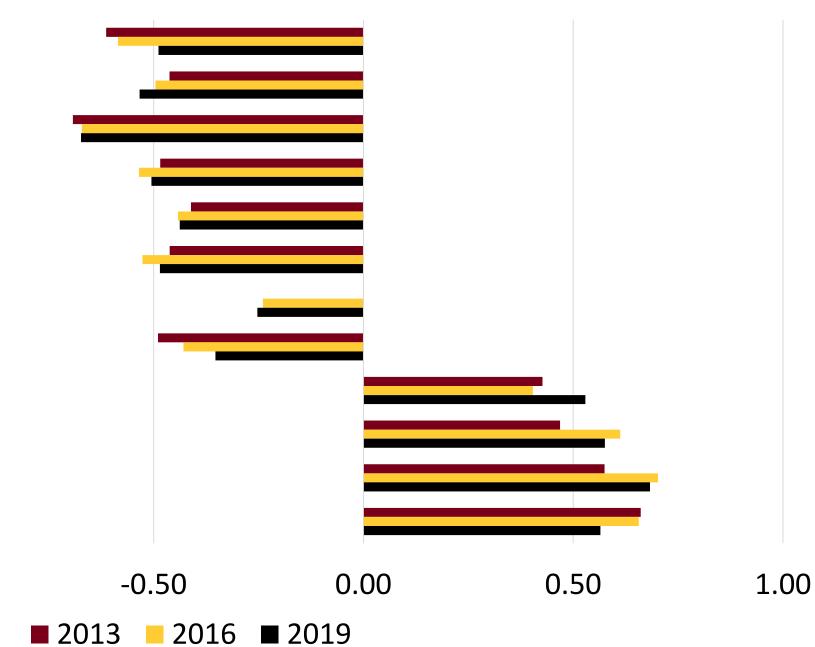
Commitment to Learning **Positive Identity** Social Competence Empowerment Family/Community Support Teacher/School Support **Positive Experience** Grades **Bullied** Bullying **Mental Distress** Family Violence -1.00



Grades 8/9/11

#### Substance Use in last 12 Months (30/26/27%)

**Commitment to Learning Positive Identity** Social Competence Empowerment Family/Community Support Teacher/School Support **Positive Experience** Grades Bullied Bullying **Mental Distress** Family Violence -1.00



Grades 8/9/11

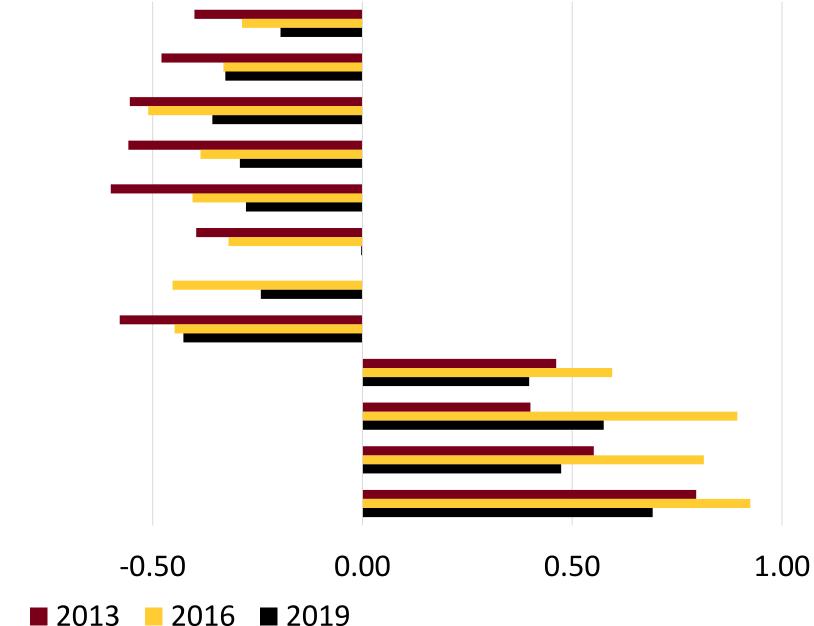
#### Bullied in some way last 30 days (57/57/64%)

**Commitment to Learning Positive Identity** Social Competence Empowerment Family/Community Support Teacher/School Support **Positive Experience** Grades 1.76 Bullied Bullying **Mental Distress** Family Violence -1.00 -0.50 0.00 0.50 1.00 2013 2016 ■ 2019

#### Experienced Homelessness (5.5/5.4/4.4%)

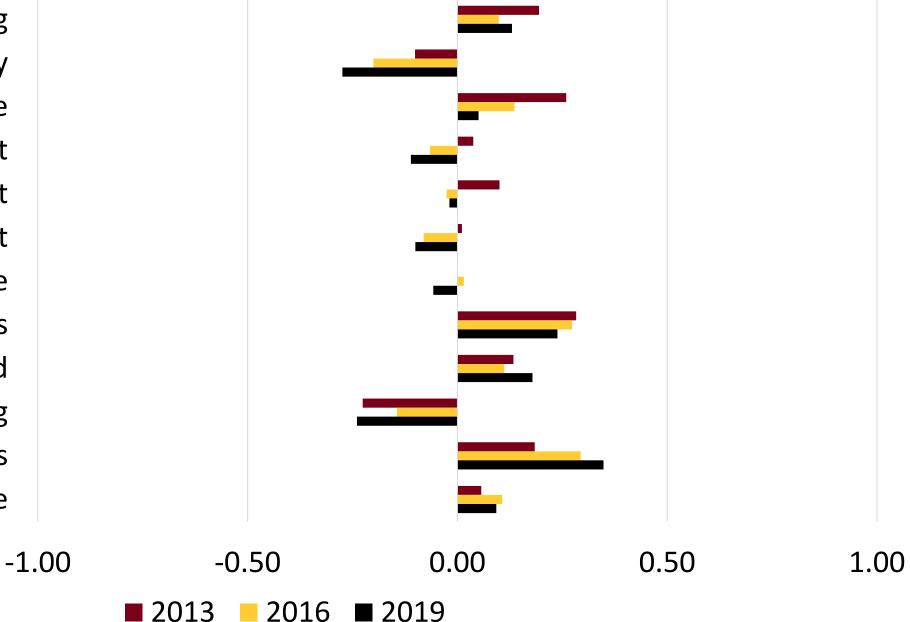
**Commitment to Learning Positive Identity** Social Competence Empowerment Family/Community Support **Teacher/School Support Positive Experience** Grades Bullied Bullying **Mental Distress** Family Violence

-1.00



## Female (50%)

Commitment to Learning **Positive Identity** Social Competence Empowerment Family/Community Support Teacher/School Support **Positive Experience** Grades **Bullied** Bullying **Mental Distress** Family Violence



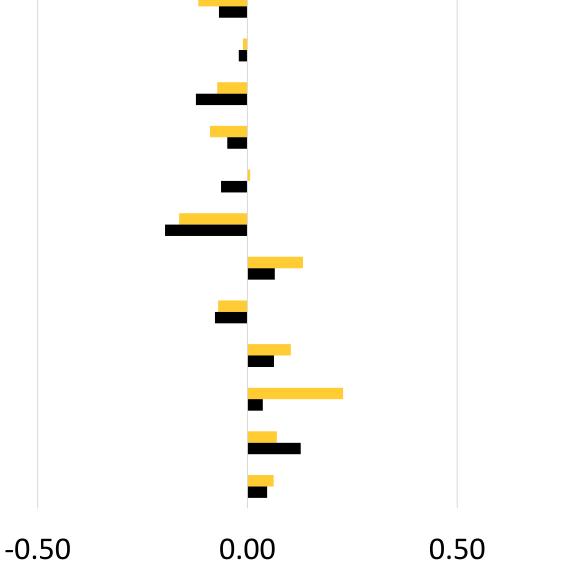
### Works at least 1 Day/Week (26/28%)

■ 2019

Commitment to Learning **Positive Identity** Social Competence Empowerment Family/Community Support Teacher/School Support **Positive Experience** Grades Bullied Bullying **Mental Distress** Family Violence -1.00

Grades 8/9/11

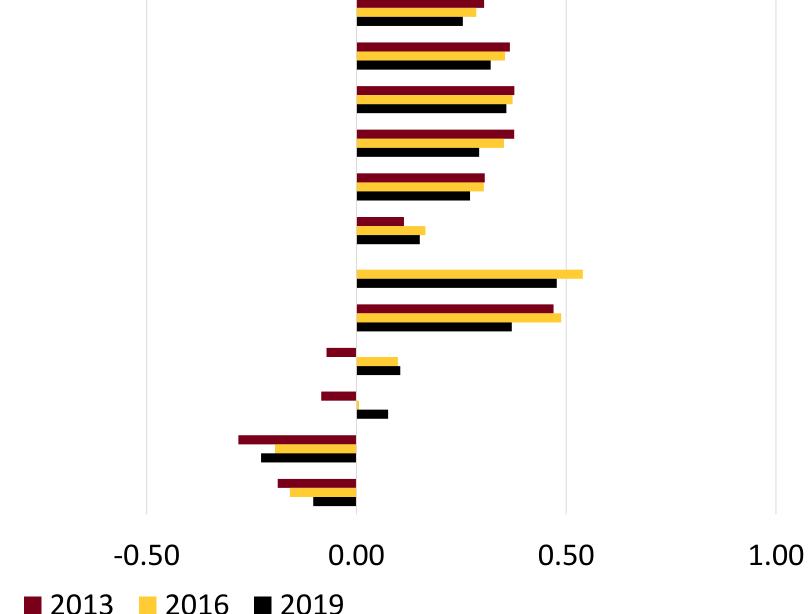
<mark> 2016</mark>



1.00

#### Participates in OST 3x/Week (53/59/56%)

**Commitment to Learning Positive Identity** Social Competence Empowerment Family/Community Support **Teacher/School Support Positive Experience** Grades Bullied Bullying **Mental Distress** Family Violence -1.00



#### 4-Year College Goals (69/68/62%)

0.50

1.00

**Commitment to Learning Positive Identity** Social Competence Empowerment Family/Community Support **Teacher/School Support Positive Experience** Grades Bullied Bullying **Mental Distress** Family Violence -1.00 -0.50 0.00 2016 Grades 8/9/11 2013 ■ 2019

# A closer look at after-school participation



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	2013	2016	2019		
Nia	1285	1502	1770		
No	47%	41%	44%		
Yes	1471	2145	2220		
1 <del>6</del> 5	53%	59%	56%		
After-School Program Participation (3x/week)					
The School I ogi and I al depation (3A/ week)					

	5th	8th	9th	11th	
No	552	441	373	404	-
INU	48%	39%	41%	51%	
Yes	591	695	542	392	
	52%	61%	59%	49%	
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#### **2019 Participation (3x/week) by Grade**

2019 Participation	5th	8th	9th	11th
Sports Teams	51%	54%	51%	41%
School activities & clubs	20%	23%	22%	25%
Tutoring or academic programs	15%	12%	9%	10%
Leadership activities - student gov't	12%	10%	7%	10%
Music, dance, art	25%	24%	15%	13%
Physical activity lessons, tennis, karate	21%	20%	14%	13%
Community clubs: 4-H, Scouts	13%	10%	6%	8%
Religious activities	25%	37%	31%	20%

2019 Participation	Am Ind.	Asian	Black	White	Multi	Latino	Somali
Sports Teams	39%	40%	44%	54%	53%	47%	32%
School activities & clubs	23%	20%	27%	23%	27%	19%	15%
Tutoring or academic programs	14%	12%	23%	9%	8%	13%	29%
Leadership activities - student gov't	10%	6%	18%	8%	10%	8%	18%
Music, dance, art	27%	17%	26%	20%	20%	22%	11%
Physical act lessons, tennis, karate	22%	14%	18%	18%	14%	17%	14%
Community clubs: 4- H, Scouts	11%	6%	15%	9%	5%	7%	12%
Religious activities	18%	9%	21%	31%	13%	24%	39%



## **Further Describing Area Students**



	2013	2016	2019	
Exercise 60 min/day at least 5 days/week	36%	44%	39%	
Sleep at least 8 hours/week school nights	52%	53%	50%	
Eats fruits + vegetables at least once/day	31%	36%	34%	
Used alcohol, marijuana, drugs in last 12 months	30%	26%	27%	
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**Health Indicators** 

	8 <sup>th</sup>	9 <sup>th</sup>	11th	
1 Never	85%	82%	70%	
2 Tried once or twice	8%	10%	11%	
3 Once or twice a year	1%	2%	2%	
4 Once a month	2%	1%	3%	
5 Twice a month	1%	2%	2%	
6 Once a week	1%	2%	4%	
7 Daily	1%	3%	9%	
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2019 - SELF Vape Use

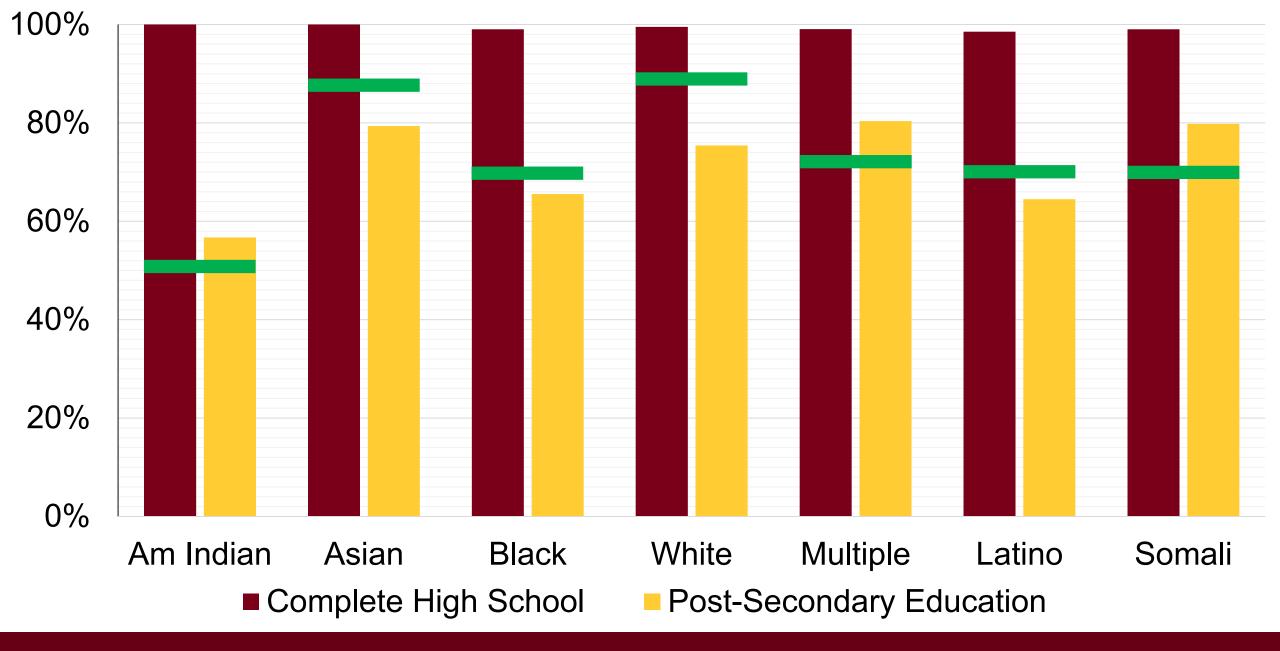
	8 <sup>th</sup>	9 <sup>th</sup>	11th	
1 Never	32%	12%	19%	
2 Tried once or twice	16%	14%	8%	
3 Once or twice a year	5%	4%	2%	
4 Once a month	7%	5%	5%	
5 Twice a month	4%	5%	3%	
6 Once a week	13%	16%	13%	
7 Daily	23%	43%	49%	
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2019 - PEER Vape Use

### A closing message...



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#### Post High School Plans – Grades 8/9/11

#### Consider designing a Student-Led Data Summit

We elevate student voice when students become

- Thought partners idea generators
- Decision makers
- Implementers

Examples: Northfield Promise & Washoe County Schools

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#### **Elevate Student Voice**

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