

College Students and ACEs: Results from the Boynton Health 2015 College Student Health Survey

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Participating Schools

Four-year Private	Four-year Public	Two-Year Public
Augsburg College	Minnesota State University Moorhead	Century College
Carleton College	St. Cloud State University	Minneapolis Community & Technical College
St. Catherine University	University of Minnesota Crookston	MState (Detroit Lakes, Fergus Falls, Moorhead, Wadena)
The College of St. Scholastica	University of Minnesota Duluth	Normandale Community College
	University of Minnesota Twin Cities	Rainy River Community College
	Winona State University	Rochester Community and Technical College
		St. Cloud Technical & Community College

Methodology

Two-year public schools: 22.7%

Four-year public: 45.0%

Four-year private: 32.3%

Methodology

38,648 students were sent a survey

**Of the 38,648 surveys sent –
12,220 surveys were completed**

**31.6%
Response
rate**

Demographics

Survey participants		
Undergraduate N= 8997	Graduate N=1576	Non-degree or Unspecified N=1647
73.6%	12.9%	13.5%

23.3% of undergraduate males are 1st generation college students

26.1% of undergraduate females are 1st generation college students

Demographics

	Survey participants (%)			
	Aggregate (n=12220)	Two year (n=2775)	Four year public (n=5501)	Four year private (n=3944)
Average age (years)	25.0	27.1	22.9	26.5
Average age (years) Undergraduates	23.8	27.1	21.7	24.0
Gender				
Male only	27.5	28.9	32.2	19.5
Female only	59.8	56.8	54.2	69.8
Transgender/prefer a different identify term	0.9	0.8	0.9	0.8
Prefer to not answer	12.0	13.5	12.7	9.9

Demographics

Ethnicity (Check all that apply)	Survey participants (%)			
	Aggregate (n=12220)	Two year (n=2775)	Four year public (n=5501)	Four year private (n=3944)
Hispanic or Latinx	3.7	4.7	2.7	4.3
Hmong	1.9	2.3	1.2	2.7
Somali	0.8	1.8	0.6	0.5
Preferred to not answer/skipped question	15.1	16.2	16.0	13.1
None of the above	78.5	75.0	79.5	79.4

Demographics

Race (Check all that apply)	Survey participants (%)			
	Aggregate (n=12220)	Two year (n=2775)	Four year public (n=5501)	Four year private (n=3944)
American Indian or Alaskan Native	1.8	3.0	1.5	1.5
Asian	7.8	5.5	8.8	8.0
Black or African American	5.1	7.7	3.4	5.5
Native Hawaiian or Pacific Islander	0.3	0.4	0.3	0.4
White (includes Middle Eastern)	72.3	69.4	72.6	74.1
Prefer an alternative identifier	1.5	1.9	1.1	1.9
Prefer to not answer	2.5	3.1	2.6	2.2

Adverse Childhood Experience Questions

The following questions pertain to events that happened during your childhood. All questions refer to the time period before you were 18 years of age.

Did you live with anyone who was depressed, mentally ill, or suicidal?

- Yes
- No
- Don't know/Not sure

Were your parents separated or divorced?

- Yes
- No
- Parents never married
- Don't know/Not sure

How often did your parents or adults in your home ever slap, hit, kick, punch or beat each other up?

- Never
- Once
- More than once

Adverse Childhood Experiences

Mental Illness –household
Drinking problems-household
Drug use problem-household
Incarceration family member
Parents separated/divorced
Witness domestic violence
Experienced physical abuse
Experienced emotional abuse
Touched sexually
Forced to touch sexually
Raped

Adverse Childhood Experiences (ACEs) by Gender

ACE	All Students (N=12220)	Males (N=3338)	Females (N=7308)	Transgender/ Other (N=104)
Mental Illness –household	31.2	24.2	34.5	56.7
Drinking problems-household	22.7	19.4	24.3§	30.8§
Drug use problem-household	13.5	13.1§	13.8§	25.0
Incarceration family member	8.6	7.3	9.2§	10.7§
Parents separated/divorced*	25.7	25.0	26.1	29.8
Witness domestic violence	14.7	12.9	15.1	23.1
Experienced physical abuse	15.7	15.4§	15.7§	26.0
Experienced emotional abuse	43.0	39.8	44.6	64.4
Touched sexually	9.4	4.8	11.5§	15.4§
Forced to touch sexually	6.5	4.2	7.5§	10.7§
Raped	3.1	1.6	3.7§	3.8§
				★
Those with two or more ACEs	46.1	40.7	48.7	67.6

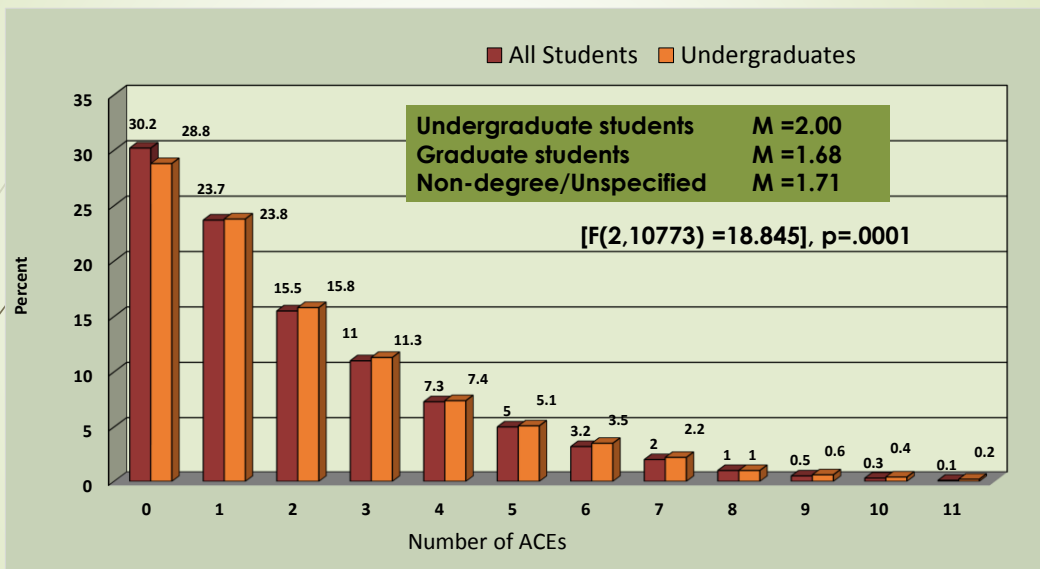
* Not diff
§ Not diff

Adverse Childhood Experiences (ACEs) by Race

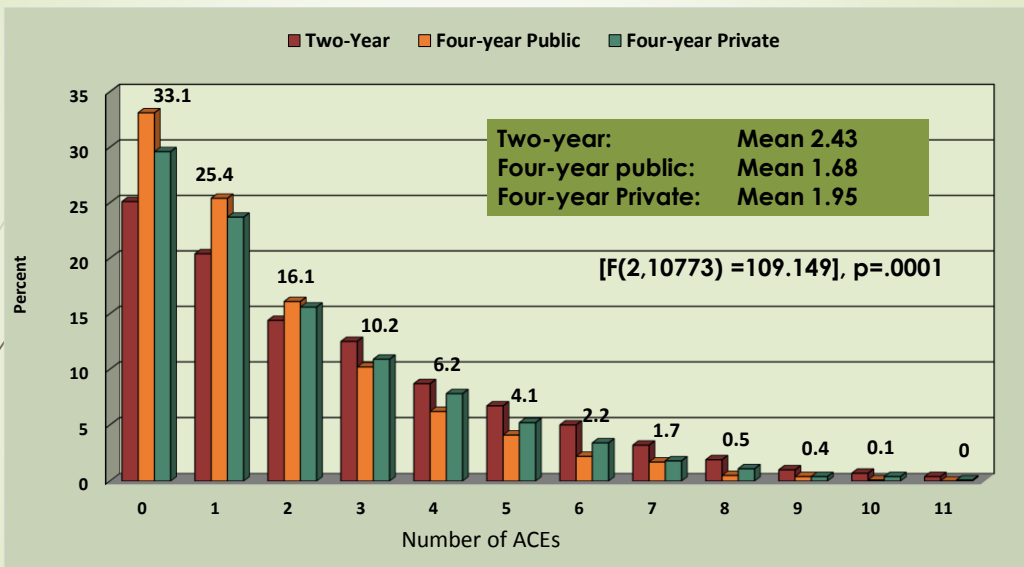
ACE	All Students (N=12220)	Students of Color (maybe multiracial) N=1592)	Multiracial White and Students of Color (n=353)	White only (N=8487)
Mental Illness –household	31.2	20.1	44.0	33.3
Drinking problems-household	22.7	17.2	34.3	23.4
Drug use problem-household	13.5	11.0	25.6	13.8
Incarceration family member	8.6	9.6‡	19.3	8.1‡
Parents separated/divorced	25.7	21.2	34.9	26.3
Witness domestic violence	14.7	23.7§	20.5§	12.4
Experienced physical abuse	15.7	22.7§	21.3§	14.0
Experienced emotional abuse	43.0	41.9§	54.1	43.2§
Touched sexually	9.4	13.5§	13.7§	8.5
Forced to touch sexually	6.5	8.9§	9.1§	5.9
Raped	3.1	4.4§	4.9§	2.7
				★
Those with two or more ACEs	46.1	47.6	60.9	45.5

‡ p= 0.04
§ No diff

Adverse Childhood Experiences (ACEs) Distribution



Adverse Childhood Experiences (ACEs) Distribution



Race Identity and ACEs

Racial Identification (self-report)	Number of ACEs Mean (SD)
American Indian or Alaskan Native only (n=69)	3.32 (2.4) §
Asian only (n=782)	1.61 (1.8) *
Black or African American only (n=443)	2.13 (2.3)
Native Hawaiian or Pacific Islander only (n=7)	2.28 (1.0)
White/includes Middle Eastern only (n=8170)	2.40 (2.2) *§†δ
Students of Color –Multiracial (n=24)	3.71 (2.8) †
Multiracial Students of Color and White (n=340)	2.84 (2.6) δ
Prefer an alternative identifier (n=145)	2.60 (2.3)
Prefer to not answer (n=293)	1.87 (2.0)

[F(8,10264) =18.331], p=.0001

Ethnic Identity and ACEs

Ethnic Identification (self-report)	Number of ACEs Mean (SD)
Hispanic/Latinx only (n=435)	2.46 (2.1) *†δ
Hmong only (n=225)	2.17 (2.0) †
Somali only (n=89)	1.14 (1.5) §†‡
Mixed ethnicity (n=15)	2.00 (2.5)
Not Hispanic/Latinx, Hmong or Somali (n=9587)	1.93 (2.1) *§
Prefer to not answer (n=293)	1.86 (2.1) δ

[F(8,10185) =8.019], p=.0001

Association between Mental Health Diagnosis and ACEs

Health Condition	Mean Number of ACEs (sd)			Statistic	P-value
	Never	Within the past 12 months	More than 12 months ago		
Alcohol/Drug Problems	1.85 (2.0) N= 10246	3.24 (2.7) N=129	3.71 (2.7) N=363	F(2,10735)= 172.69	.000
Anxiety	1.65 (1.9) N=7900	2.59 (2.3) N=1127	2.83 (2.4) N=1700	F(2,10724)= 308.70	.000
Depression	1.59 (1.8) N=7917	2.79 (2.3) N=817	2.95 (2.4) N=1988	F(2,10719)= 455.00	.000
Obsessive Compulsive Disorder	1.88 (2.0) N=10340	3.07 (2.7) N=126	3.28 (2.6) N=238	F(2,10701)= 73.88	.000

4.6%

26.4%

26.2%

3.4%

Association between Mental Health Diagnosis and ACEs

Health Condition	Mean Number of ACEs (sd)			Statistic	P-value
	Never	Within the past 12 months	More than 12 months ago		
Panic Attacks	1.76 (1.9) N= 9278	2.91 (2.5) N=529	3.11 (2.5) N=906	F(2,10710)=2 50.59	.000
Post Traumatic Stress Disorder	1.81 (1.9) N=10167	4.15 (3.0) N=167	4.24 (2.8) N=362	F(2,10693)=3 65.56	.000
Seasonal Affective Disorder	1.85 (2.0) N=9936	2.93 (2.4) N=280	2.98 (2.3) N=484	F(2,10697)= 105.26	.000
Social Phobia/Performance Anxiety	1.86(2.0) N=10705	2.72 (2.3) N=275	3.17 (2.4) N=428	F(2,10702)= 104.89	.000

13.4%

4.9%

7.2%

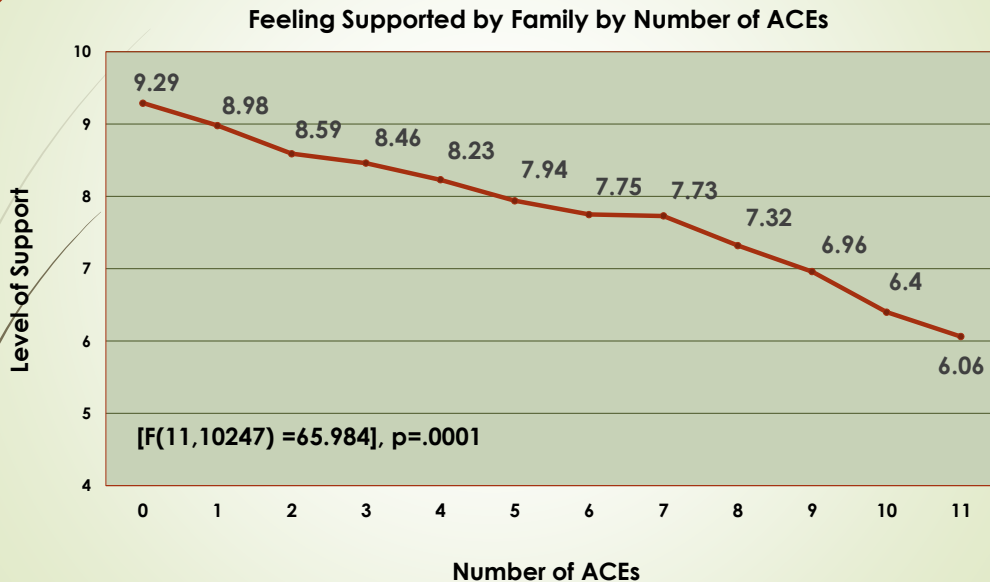
6.6%

Supportive Environment

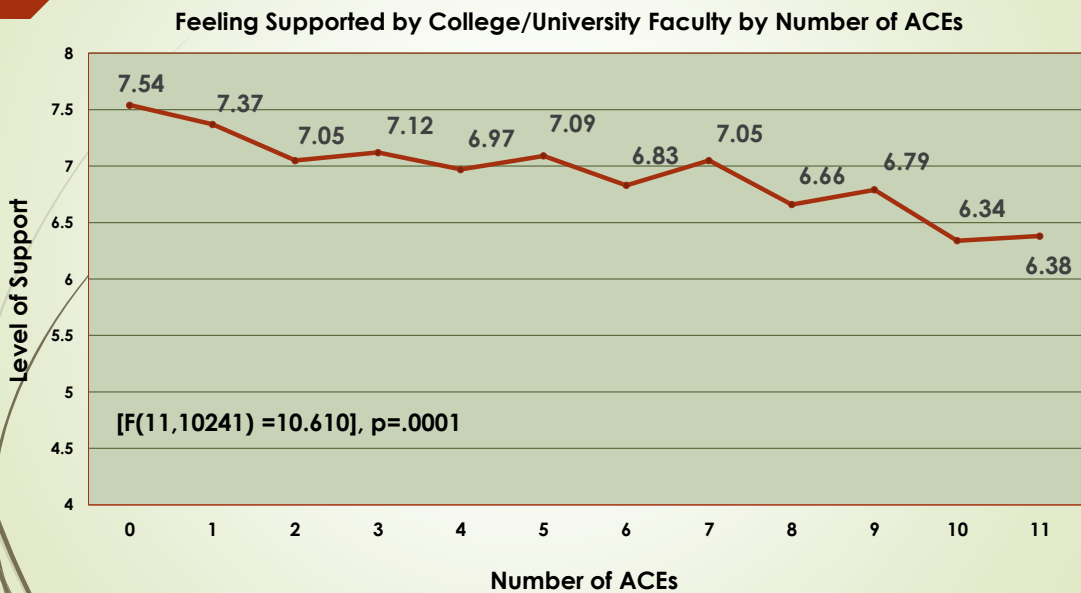
On a scale from one to ten, with one being very unsupportive to ten being very supportive, how would you rate your relationship with the following:

- Friends
- Family
- College/University Faculty
- College/University Staff

Association between “Feeling Supported” and ACEs



Association between “Feeling Supported” and ACEs



Resilience

Resilience is the quality that allows some individuals to encounter adversities in life and come back stronger than ever.

Psychologists have identified some of the factors that make someone resilient, among them a **positive attitude, optimism, the ability to regulate emotions, and the ability to see failure as a form of helpful feedback.**

Even after mishaps, resilient individuals possess an outlook that they **are able to change course and continue on.**

Brief Resilience Scale

Questions:

- 1 I tend to bounce back quickly after hard times
- 2 I have a hard time making it through stressful events.
- 3 It does not take me long to recover from a stressful event.
- 4 It is hard for me to snap back when something bad happens.
- 5 I usually come through difficult times with little trouble.
- 6 I tend to take a long time to get over set-backs in my life.

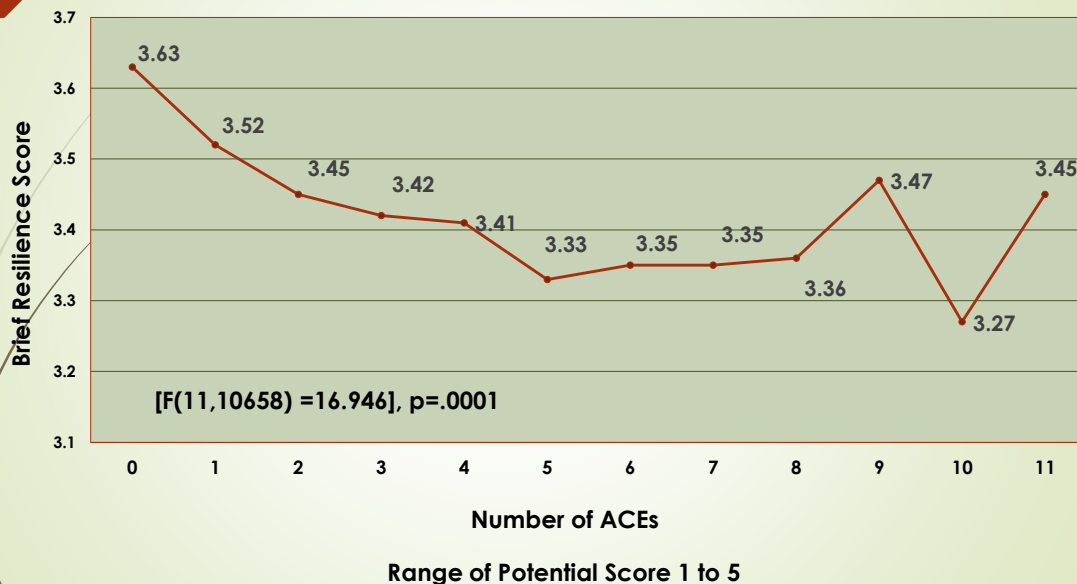
Response options:

Strongly Disagree (1) Disagree (2) Neutral (3) Agree (4) Strongly Agree (5)

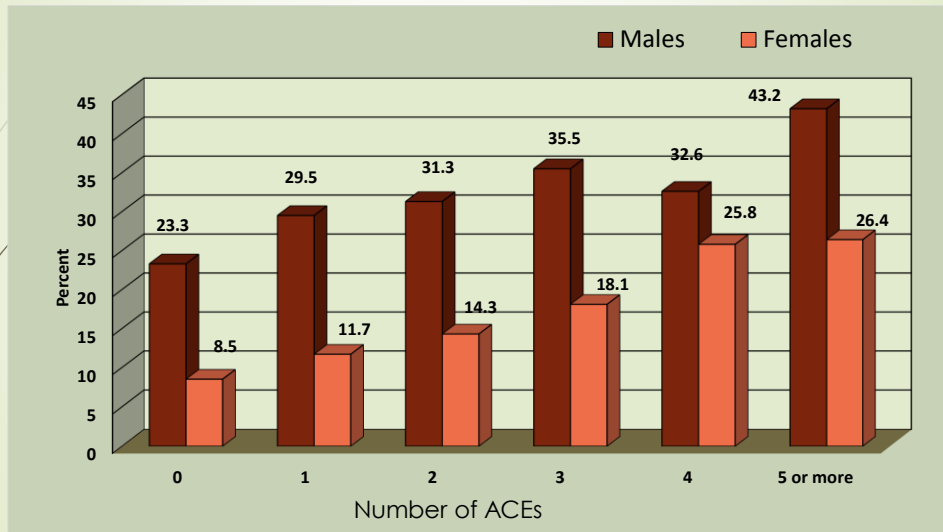
Scoring: Add the responses varying from 1-5 for all six items giving a range from 6-30. Then divide final score by 6 resulting in final scores ranging from 1 to 5.

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International journal of behavioral medicine*, 15(3), 194-200.

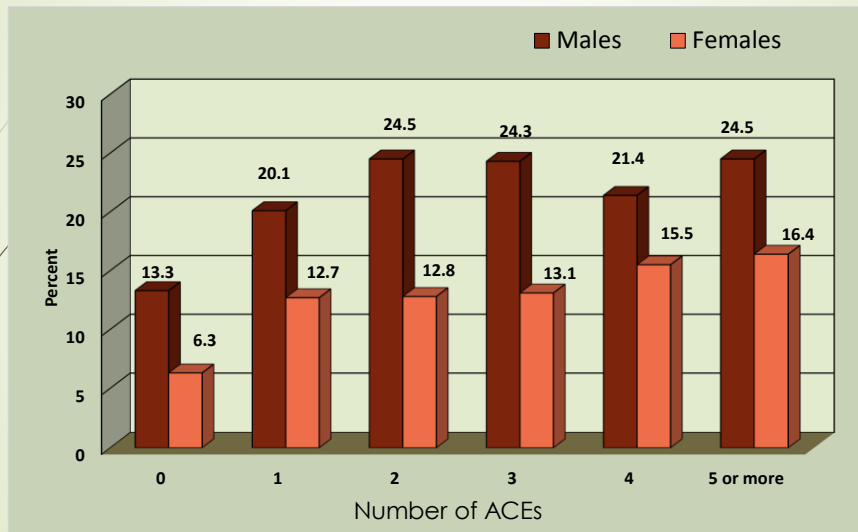
Association between "Brief Resilience Score" and ACEs



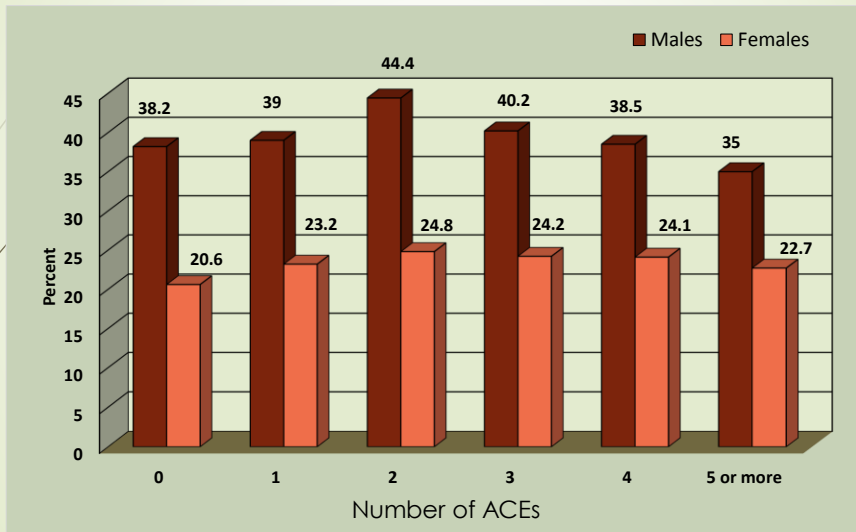
Adverse Childhood Experiences (ACEs) Association with Current Tobacco Use (undergraduates)



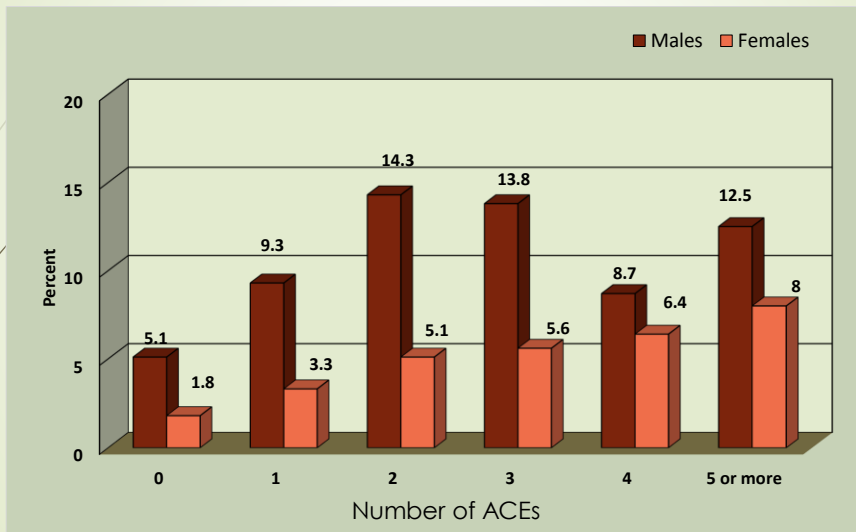
Adverse Childhood Experiences (ACEs) Association with Current Marijuana Use (undergraduates)



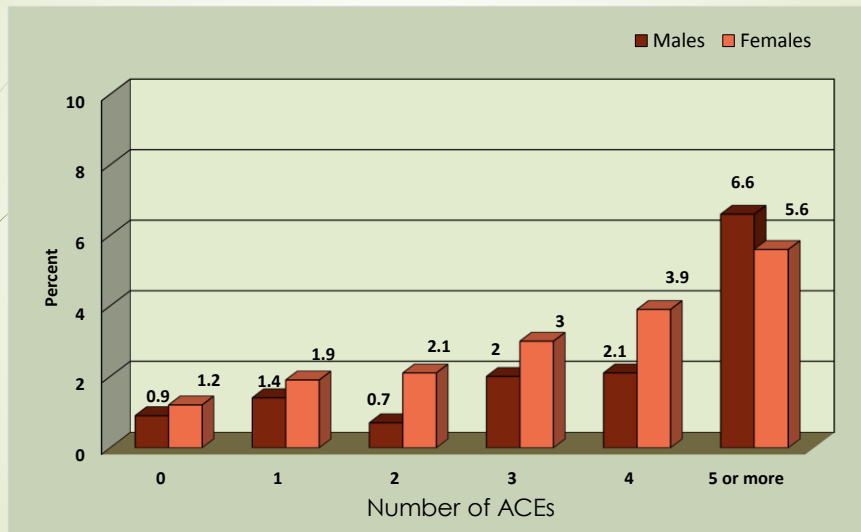
Adverse Childhood Experiences (ACEs) Association with High-Risk Drinking (undergraduates)



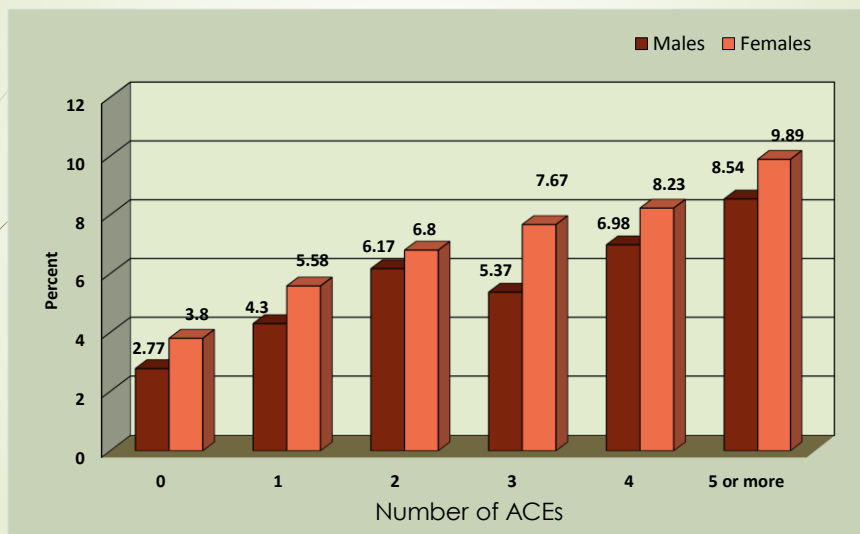
Adverse Childhood Experiences (ACEs) Association with Past 12 Month Illicit Drug Use (undergraduates)



**Adverse Childhood Experiences (ACEs)
Association Contacting a Crisis Line within the Past 12 Months (undergraduates)**



**Adverse Childhood Experiences (ACEs)
Association Mean Number of Days of Poor Mental Health (undergraduates)**



Poor days of health based on past 30 days

Survey Question:

During the past 12 months, how have the following affected your academic performance?

20 issues listed

Response options:

- ▶ I do not have this issue/not applicable
- ▶ I have this issue -my academics have not been affected
- ▶ I have this issue –my academics have been affected

Adverse Childhood Experiences (ACEs)

Association with Health Issues Potentially Impacting Academics (Report this is an issue)

Health or Personal Issue	Number of Reported ACEs					
	0	1	2	3	4	5 or more
Alcohol Use	16.6	19.9	21.3	21.7	20.8	19.8
Any Disability	7.5	10.5	11.9	14.3	12.5	20.0
Chronic Health Condition	7.9	10.9	13.9	12.6	14.9	21.4
Excessive Computer/Internet Use	16.1	43.3	46.9	45.2	45.8	45.0
Financial Difficulties	25.3	35.2	43.6	50.0	53.8	63.1
Food Insecurity	3.8	5.6	8.5	11.0	9.7	16.9
Mental Health Issue	16.9	28.3	37.0	41.4	45.5	58.1
Sexual Assault	0.7	1.1	2.2	3.2	2.7	5.7
Sexually Transmitted Infection	0.6	0.9	1.4	1.6	2.2	2.5
Sleep Difficulties	29.5	41.8	46.4	52.4	55.9	63.6
Stress	59.5	70.7	75.5	80.6	81.0	95.9
Upper Respiratory Infection	26.7	30.5	33.3	33.4	36.4	39.8

Adverse Childhood Experiences (ACEs)

Association with Health Issues Potentially Impacting Academics

(Among those who have this as an issue the percent that indicate it impacted their academics.)

Health or Personal Issue	Number of Reported ACEs					
	0	1	2	3	4	5 or more
Alcohol Use	6.0	9.5	11.5	8.7	12.3	17.2
Any Disability	50.8	43.6	58.4	55.1	53.1	60.2
Excessive Computer/Internet Use	29.8	36.6	39.0	42.9	42.2	42.2
Mental Health Issue	44.5	44.2	50.0	47.8	53.4	57.5
Sexual Assault	21.7	31.0	48.6	40.5	42.9	44.0
Sexually Transmitted Infection	15.8	4.5	16.7	15.8	17.6	18.2
Sleep Difficulties	38.3	44.3	50.7	48.9	48.7	58.1
Stress	31.6	41.2	45.9	46.4	49.7	54.7
Upper Respiratory Infection	26.8	31.5	36.6	33.7	39.3	45.2

Thank you