

Effects of Higher Community Capacity Among Young Adults: Fewer Adverse Childhood Experiences (ACEs), Higher Social/Emotional Support and Better Health

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Twenty eight percent of adults in Washington State, about one and a half million, now live in counties that have developed high community capacity (*Differential Help to Fit Unique Community Conditions: www.fpc.wa.gov*).

For 16 years, the Family Policy Council has facilitated, in association with its local Community Public Health and Safety Networks:

- Collaborative leadership development and expansion;
- Local innovation and learning - including the impacts of Adverse Childhood Experiences (ACEs);
- A common language and system-based strategies for reducing ACEs and increasing resilience based on community strengths;
- Outcome-based decision-making, strategic alignment of funding and nimble adjustments to practice.

Washington State is one of the first six states to assess the prevalence of ACEs in its adult population with the CDC-sponsored instrument – Behavioral Risk Factor Surveillance Survey (BRFSS). These data, together with biennial measures of community capacity, were used to measure the impact of community capacity on reductions of ACEs, increased resilience, and the consequent decrease in rates of mental, behavioral and physical disorders.

The Family Policy Council and affiliated Community Networks have been working for 16 years on building community capacity. Changes in expected outcomes are now available for younger adults, 18 to 34, many of whom were children under 18 years of age during this period and subject to traumatic events related to ACEs.

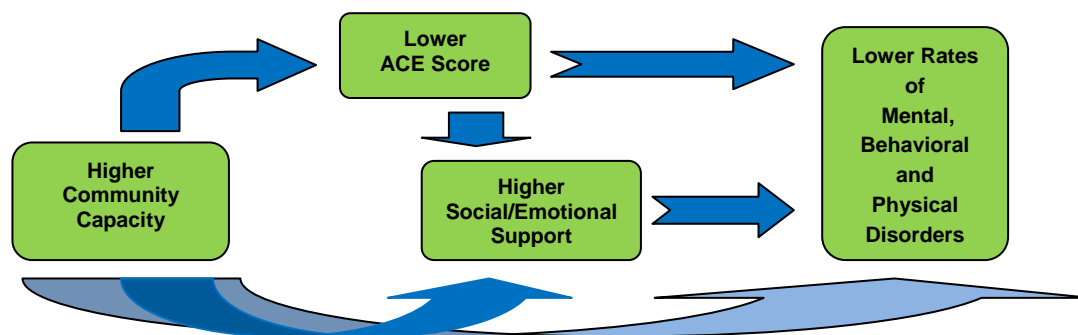
Major findings:

- Rates of mental, behavioral and physical disorders are lower in higher capacity communities among young adults, ages 18 to 34.
- The lower rates of disorders are partly due to reductions in ACEs and increases in social and emotional support associated with higher community capacity among young adults, ages 18-34.

Next steps:

More research should explore the factors underlying the independent effect of community capacity on reductions in mental, behavioral and physical disorders not fully explained by reductions in ACEs or increases in the one measure of resilience available in BRFSS: social/emotional support. *See the lower arrow directly linking 'Community Capacity' and 'Rates of Mental, Behavioral and Physical Disorders' in the flow chart below.*

Further research is needed to identify and measure additional types of resilience affected by community capacity.

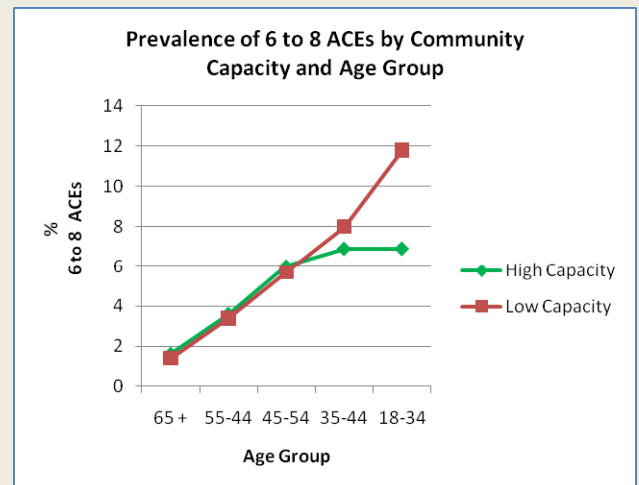
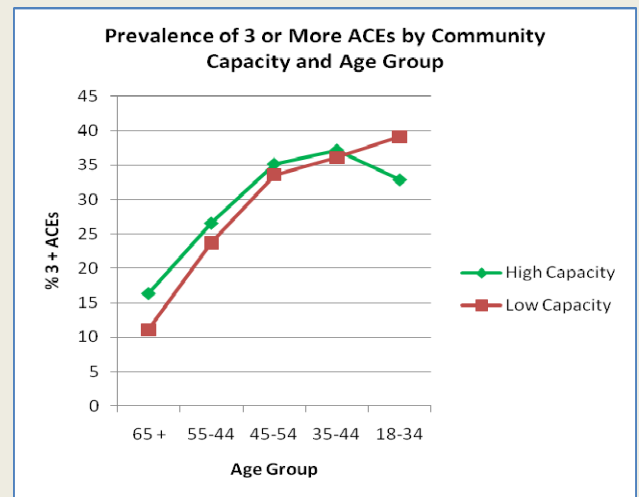


Does higher community capacity lead to reductions in Adverse Childhood Experiences (ACEs)?

The Family Policy Council has been working on increasing community capacity at the local level for the last 16 years. Children (under 18 years of age) who could have been impacted by changes over these last 16 years would now be between the ages of 18 and 34. We restricted our analyses to this age group.

We found that:

- For people over 35 years of age (who could not have been impacted as children by changes over the last 16 years), differences in average ACEs are related to age group and other social and economic factors.
- For young adults prevalence of ACEs is significantly lower in higher capacity communities.
- The trends over time across age groups in prevalence of ACEs diverge, with ACEs decreasing in higher capacity communities and increasing in lower capacity communities for young adults.
- The prevalence of the highest number of ACEs (6-8) increases to 12% among young adults in lower capacity counties, almost twice as high as the steady level of 7% found among younger age adults in higher capacity counties



Prevalence of ACEs among Younger Adults (ages 18-34)
 In Higher Versus Lower Community Capacity Counties
 (In Logistic Regression and Linear Regression Models for All Age Groups,
 Adjusting for Gender, Yearly Age, Education, Income and Race/Ethnicity)

	3 or more ACEs		ACE score (0-8)	
	Logistic Regression Model		Linear Regression Model	
High Community Capacity among Young Adults - ages 18-34 (1-0)	Log-Odds	-0.696	Regr. Coeff.	-0.576
	Sig.	0.001	Sig.	0.001
R ² = Unweighted N =	0.088 4,585		0.088 4,585	

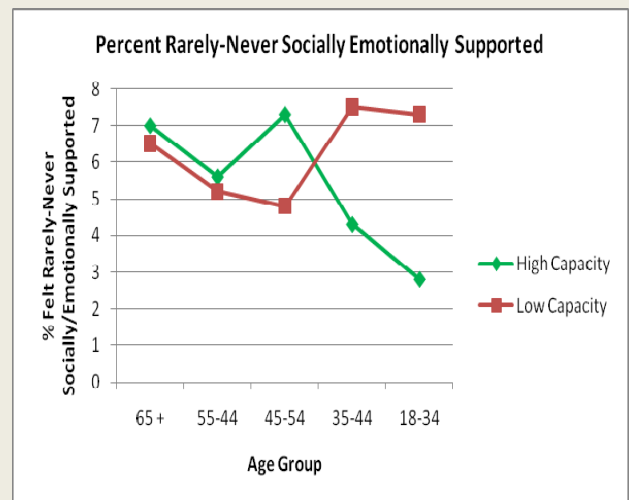
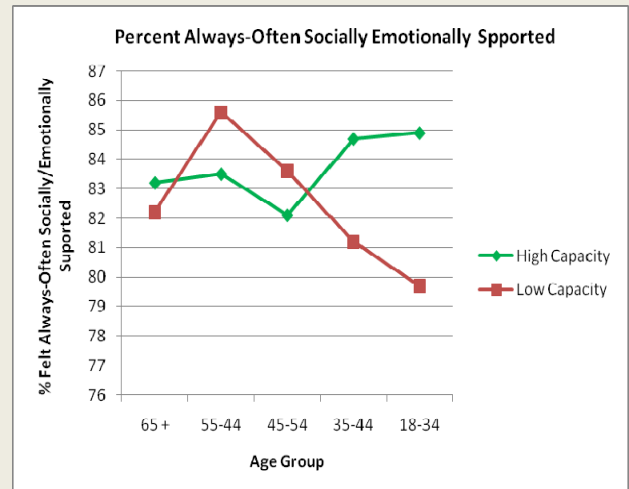
Can higher community capacity lead to increased resilience?

Recent research indicates that there are three factors of resilience – mastery, sense of belonging, and feeling part of a larger purpose.

Our data (BRFSS) had only one measure of resilience – feeling socially and emotionally supported – *always-often, sometime, rarely-never*.

We found that:

- Young adults (18-34 years old) in higher capacity communities are much more likely to report feeling social and emotional support *always or often*, and much less likely to report feeling social and emotional support *rarely or never*.
- Over time, across age groups, feelings of social emotional support *often or always* increase for younger age groups in higher capacity communities, whereas these feelings of *often or always* receiving social and emotional support decrease for younger age groups in lower capacity counties.



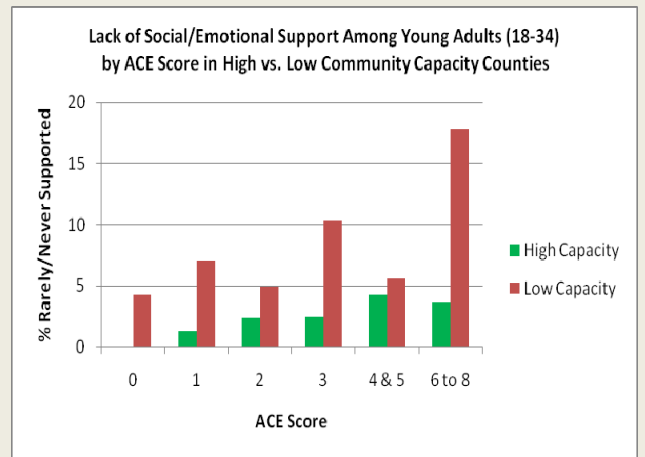
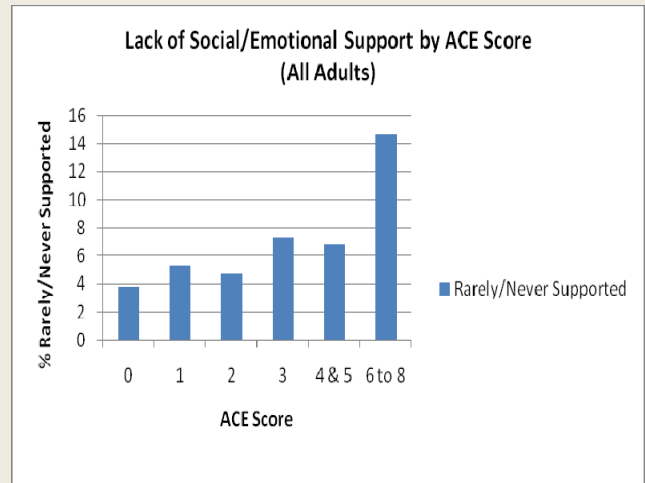
Prevalence of Social/Emotional Support among Younger Adults (ages 18-34)
 In Higher Versus Lower Community Capacity Counties
 (In Logistic Regression and Linear Regression Models for All Age Groups,
 Adjusting for Gender, Yearly Age, Education, Income and Race/Ethnicity)

	Rarely/Never Supported		Degree of Support (rarely/never, sometime, often/always)	
	Logistic Regression Model		Linear Regression Model	
High Community Capacity among Young Adults - ages 18- 34 (1-0)	Log-Odds Coeff.	-0.755	Regr. Coeff.	0.095
	Sig.	0.054	Sig.	0.001
R ² =	0.085		0.053	
Unweighted N =	4,638		4,638	

Does the accumulation of Adverse Childhood Experiences (ACEs) lead to increased feelings of lack of social/emotional support?

We found that:

- Over all age groups, people with higher ACEs are more likely to report higher lack of social/emotional support (*rarely or never feel social/emotional support*).
- For young adults (age 18-34), the relationship between higher ACEs and lack of social/emotional support continues in lower capacity communities, but in higher capacity communities, the relationship between number of ACEs and feeling lack of social/emotional support is much smaller.



Prevalence of Social and Emotional Support among Younger Adults (ages 18-34)
 By ACE Score and by Higher / Lower Community Capacity
 (In Linear Regression Model for All Age Groups,
 Adjusting for Gender, Yearly Age, Education, Income and Race/Ethnicity)

Independent Variables		
ACE score (0 to 8)	Regr. Coeff.	-0.035
	Sig.	0.000
High Community Capacity among Young Adults - ages 18-34 (1-0)	Regr. Coeff	0.097
	Sig.	0.018
R ² =	0.069	
Unweighted N =	4,530	

Does higher community capacity lead to fewer mental, behavioral and physical disorders among young adults (age 18-34)?

We selected particular mental, behavioral and physical disorders for the following reasons;

Mental Illness and Substance Abuse were selected due to the fact that they impact two of the eight ACEs in the next generation.

Smoking and obesity were selected because they constitute major risk factors for later chronic diseases.

Diabetes, asthma and cardiovascular disease were selected as major chronic diseases that occur at younger ages.

We found:

- Lower rates of mental, behavioral and physical disorders in higher capacity communities and statistically significant lower rates of
 - Severe depression
 - Binge drinking
 - Smoking
 - Obesity
 - Diabetes

Cardio-vascular disease occurs very infrequently among young adults, 0.8%. This hindered reaching statistical significance even though the rate was lower in communities with higher capacity.

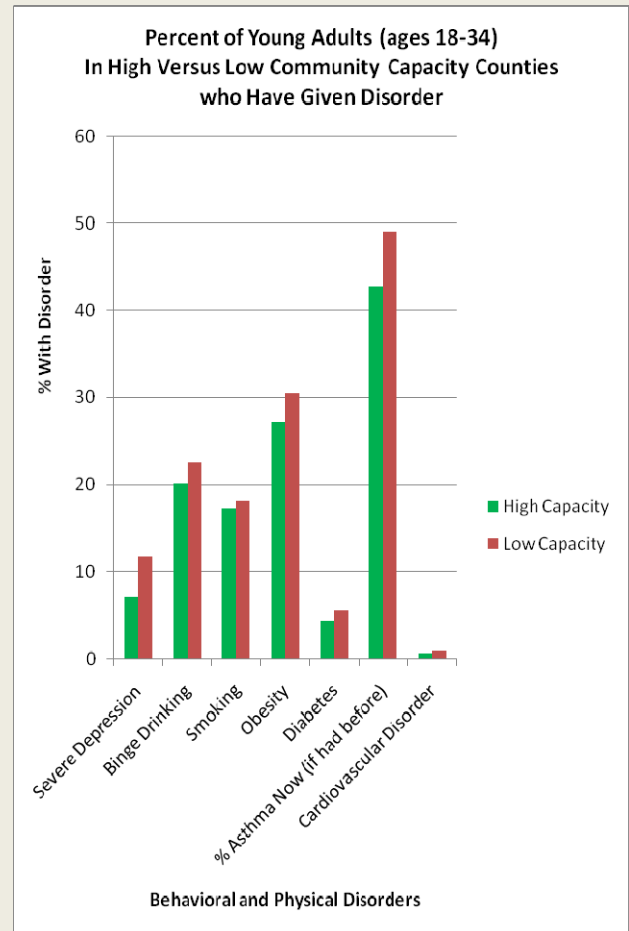
Prevalence of asthma among adult respondents was measured as a percentage having asthma among those that ever had asthma before the survey was taken. The total sample of adults became limited to 681 cases which made reaching statistical significance difficult though the asthma rate was lower in higher capacity communities.

Are lower rates of mental, behavioral and physical disorders in higher capacity communities due to reduced Adverse Childhood Experiences (ACEs) and higher social/ emotional support?

We found that:

- Lower ACEs and higher levels of social/ emotional support are related to lower rates of mental, behavioral and physical disorders.
- Rates of mental, behavioral and physical disorders are lower in higher capacity communities independent of reduced ACEs and increased levels of social/emotional support.

Further research is needed to explore other resilience factors associated with community capacity.



Prevalence of Behavioral and Physical Disorders among Younger Adults (ages 18-34)
 Due to Higher/ Lower Community Capacity Alone
 And Via Reduction of ACEs and Increase in Social/Emotional Support
 (In Statistical Models Accounting for Trends in Previous Age Groups and Adjusting for Gender, Specific
 Yearly Age, Education, Income Level and Racial/Ethnic Group)

Type of Disorder			Severe Depression	Binge Drinking	Smoking	Obesity	Diabetes	Asthma Now (if had ever)	Cardio-Vascular Disorder
Logistic Regression Model									
Independent Variable	Code	Effect							

Model 1: Total Estimated Effect of Community Capacity Alone

High / Low Community Capacity (ages 18-34)	1 or 0	Log-odds	-0.686	-0.577	-0.591	-0.707	-1.135	-0.659	-1.539
		Sig. (1 tail)	0.051 (0.025)	0.020	0.025	0.006	0.048	0.139	0.132

Model 2: Independent Estimated Effects of both ACEs and Community Capacity

ACE Score	0 to 8	Log-odds per ACE	0.329 0.000	0.108 0.000	0.212 0.000	0.056 0.023	0.044 0.231	0.068 0.230	0.104 0.006
High / Low Community Capacity (ages 18-34)	1 or 0	Log-odds	-0.676	-0.717	-0.493	-0.585	-1.013	-0.601	-1.411
		Sig. (1 tail)	0.080 (0.040)	0.000	0.077 (0.038)	0.024	0.060 (0.030)	0.353	0.166

Model 3: Independent Estimated Effects of Social/Emotional Support, ACEs and Community Capacity

Lack of Social-Emotional Support (compared to always/often supported)	Some: 1 or 0	Log-odds	1.618	0.405	0.686	0.147	0.148	0.467	0.191
		Sig.	0.000	0.027	0.000	0.297	0.411	0.184	0.328
	Rare/ Never: 1 or 0	Log-odds	1.976	0.054	0.304	0.112	0.003	0.399	-0.059
		Sig.	0.000	0.857	0.149	0.584	0.989	0.370	0.780
ACE Score	0 to 8	Log-odds per ACE	0.305 0.000	0.101 0.001	0.200 0.000	0.056 0.024	0.045 0.223	0.059 0.301	0.100 0.009
High / Low Community Capacity (ages 18-34)	1 or 0	Log-odds	-0.506	-0.706	-0.463	-0.569	-1.092	-0.783	-1.416
		Sig. (1 tail)	0.186	0.009	0.101 (0.050)	0.029	0.060 (0.030)	0.228	0.165

Stat. Model 3 fit: R ² (Nagelkerke)	0.301	0.104	0.171	0.038	0.156	0.146	0.198
Unweighted N =	4,476	4,488	4,529	4,374	4,529	681	4,469
Prevalence - all adults (all ages)	7.6 %	11.7 %	15.4 %	29.8 %	8.4 %	63% (8%)	6.5 %
Prevalence - young adults (18-34)	9.8 %	21.8 %	17.5 %	29.3 %	1.3 %	46% (7%)	0.8 %