

The Effects of Adverse Experiences on Income and Educational Attainment: A Comparison of Cisgender and Transgender Communities

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Abstract

I assess the impact of adverse experiences on income and educational attainment and compare the results between cisgender and transgender communities. To estimate the relationship, I use data from the Behavioral Risk Factor Surveillance System (BRFSS) 2019 & 2020 surveys for states that include both optional modules for Adverse Childhood Experience (ACE) Scores, and Sexual Orientation & Gender Identity (SOGI). The calculations for the estimates are made through a probit model that conveys the marginal effects of adverse experiences on income yielded later in life, and highest level of education achieved. My expected results are that facing adverse experiences decreases overall income and educational attainment, and that being both transgender & abused further decreases income and education levels.

Research Question & Importance

Research Question:

How does childhood abuse impact income and higher educational outcomes varying between cisgender and transgender identifying communities?

Importance:

Highlights differences between the cisgender and transgender communities that have, historically, not been as widely discussed.

Adds another dimension to our interpretation of the gender wage gap and patterns in labor force participation by including identity disparities.

Validates the experiences of those that have survived abuse, and its longer term effects on educational achievement and overall income yield.

Assessment States

2019: Delaware, Florida, Iowa, Mississippi, Rhode Island, Tennessee, Virginia, West Virginia, Wisconsin

2020: California, Georgia, Hawaii, Idaho, Iowa, Kansas, Massachusetts, Montana, New Jersey, Oklahoma, Rhode Island, South Carolina, Texas, Utah, Virginia, Wisconsin

Next Steps

Over the course of the next several weeks I intend to continue cleaning up the depictions of my data, run another probit regression for income information, append the tables together, and draw up graphs rather than just tables of information.

Based on work completed by SRCA Poster submission deadline of March 28, 2022. Next presentation of findings on April 28, 2022.

For more information, please contact Alexa via email at laskag59@oneonta.edu

Preliminary Summary Statistics: Education

High School Drop Out	Coef.	St.Err.	t-value	p-value	[95% Conf Interval]	Sig
Impacted By Rape	.255	.039	6.59	0	.179 .331	***
Impacted By Drug Abuse	.007	.019	0.39	.697	-.03 .044	
Impacted By Alcoholism	.111	.015	7.66	0	.083 .14	***
Impacted By Depression	-.155	.016	-9.78	0	-.186 -.124	***
Impacted By Imprisoned Adult	.221	.019	11.61	0	.183 .258	***
Impacted By Divorce	.087	.012	6.96	0	.062 .111	***
Impacted By Domestic Violence	.15	.017	9.09	0	.118 .183	***
Female Identity	-.11	.011	-9.69	0	-.132 -.087	***
Married	-.253	.012	-21.87	0	-.276 -.23	***
White	-.66	.014	-47.46	0	-.688 -.633	***
Black	-.548	.022	-25.35	0	-.591 -.506	***
stateD_1	.287	.057	4.99	0	.174 .399	***
stateD_3	.045	.059	0.76	.45	-.071 .161	
stateD_8	.334	.066	5.07	0	.205 .463	***
stateD_9	-.331	.085	-3.90	0	-.497 -.164	***
stateD_10	.317	.054	5.82	0	.21 .424	***
stateD_11	.281	.06	4.70	0	.164 .398	***
stateD_12	-.718	.067	-10.70	0	-.849 -.586	***
stateD_13	.128	.064	2.01	.044	.003 .252	**
stateD_15	.199	.06	3.30	.001	.081 .318	***
stateD_16	.051	.056	0.90	.367	-.06 .161	
stateD_18	.244	.068	3.61	0	.112 .377	***
stateD_23	-.122	.061	-1.98	.047	-.242 -.001	**
stateD_25	.393	.057	6.86	0	.281 .505	***
stateD_26	.122	.057	2.14	.032	.01 .233	**
stateD_27	-.1	.066	-1.52	.129	-.228 .029	
stateD_29	.057	.077	0.74	.458	-.094 .208	
stateD_32	.143	.061	2.35	.019	.024 .263	**
stateD_35	-.249	.065	-3.82	0	-.377 -.121	***
stateD_39	-.09	.065	-1.37	.17	-.218 .038	
stateD_40	.049	.059	0.83	.406	-.067 .165	
stateD_41	.226	.059	3.85	0	.111 .341	***
stateD_42	-.177	.067	-2.65	.008	-.308 -.046	***
stateD_43	.29	.063	4.63	0	.167 .413	***
stateD_44	.292	.057	5.12	0	.18 .404	***
stateD_45	-.053	.06	-0.88	.38	-.17 .065	
stateD_47	.082	.056	1.46	.143	-.028 .193	
stateD_49	.39	.063	6.19	0	.267 .514	***
stateD_50	-.134	.063	-2.12	.034	-.257 -.01	**
Constant	-1.037	.054	-19.30	0	-1.142 -.931	***

*** p<.01, ** p<.05, * p<.1

Methods

Hypotheses:

H_{01} : Being abused will decrease the overall income yield

H_{02} : Being abused will decrease the overall highest level of educational achievement

H_{03} : Identifying as transgender and abused will decrease income yield by a greater amount than being cisgender and abused

H_{04} : Identifying as transgender and abused will decrease overall educational achievement by a greater amount than being cisgender and abused

Probit Model, Excluding Abuse:

$$\text{prob}(y_y = 1 | X_x) = \Phi(\gamma_0 + \gamma_1 \text{GenderIdentity}_i + \gamma_2 \text{MaritalStatus}_i + \gamma_3 \text{Race}_i + \gamma_4 \text{Ethnicity}_i + \gamma_5 \text{State}_i + \gamma_6 \text{Year}_i)$$

Probit Model, Including Abuse:

$$\text{prob}(y_y = 1 | X_x) = \Phi(\gamma_0 + \gamma_1 \text{ACE}_i + \gamma_2 \text{GenderIdentity}_i + \gamma_3 \text{MaritalStatus}_i + \gamma_4 \text{Race}_i + \gamma_5 \text{Ethnicity}_i + \gamma_6 \text{State}_i + \gamma_7 \text{Year}_i)$$

Keywords

Term	LGBTQ+ Terminology and Definitions Definition
LGBTQ+	An acronym used to refer to the broad community of individuals that do not classify themselves as cisgender and/or heterosexual, standing for lesbian, gay, bisexual, transgender, queer and/or questioning, plus those individuals that identify in another non-cisgendered, heterosexual way.
Transgender	An identity that may be used by an individual that rejects their gender assigned at birth. This is typically noted as MtF (male to female), FtM (female to male), MtN (male to nonbinary), or FtN (female to nonbinary).
Queer	A blanket term synonymous with the acronym "LGBTQ+" commonly used by individuals who may not identify as heterosexual or cisgender.
Nonbinary	An identity for an individual that does not identify themselves within the confines of solely male or female genders.
Cisgender	An identity for individuals who accept their gender assigned at birth as their gender identity.
Transphobia	Discrimination, fear, or hatred of individuals who identify within the trans community.
Sex	The biological assignment of gender to an individual at the time of their birth, based on the physical anatomy of the infant. The two categories of assignment are "Assigned Female at Birth" (AFAB) or "Assigned Male at Birth" (AMAB).
Gender/Gender Identity	The personal, internal alignment and labeling of an individual's gender regardless of the agreement or dissonance with their sex assigned at birth.
Gender Minority	Refers to individuals that are transgender or gender diverse (i.e., nonbinary) in the broader community where most individuals tend to be cisgender.
Sexual Orientation	The sexual, romantic, emotional, and/or spiritual attraction of an individual to one or more other individuals.

Disclaimer: Each of these definitions are based on widely accepted descriptions of each term and defined in the context of this paper. Individuals that identify within the LGBTQ+ community may define these terms differently within the context of themselves.