

24) Unreported Victims of an Economic Downturn

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Stephens-Davidowitz (2013). **Unreported Victims of an Economic Downturn**

Child Maltreatment

<i>Maltreatment</i>	<i>Annual Incidents</i>
Google Searches for “child abuse” or “child neglect”	≈ 8.4 million
Referrals to agencies	≈ 3.3 million
Responses by agencies	≈ 2 million
Substantiated incidents	436,321
Child mortalities from neglect	1,560

Google AdWords, on 3/22/12, there were an average of 673,000 monthly searches in the United States, on desktops and laptops, including the phrase “child abuse.”

Sources of Maltreatment Reports, 2010

<i>Report Source</i>	<i>Percent</i>
PROFESSIONAL	58.6
Child Daycare Providers	0.7
Educational Personnel	16.4
Foster Care Providers	0.5
Legal and Law Enforcement Personnel	16.7
Medical Personnel	8.2
Mental Health Personnel	4.6
Social Services Personnel	11.5
NONPROFESSIONAL	27.7
Alleged Perpetrators	0.0
Alleged Victims	0.4
Anonymous Sources	9.0
Friends and Neighbors	4.4
Other Relatives	7.0
Parents	6.8
OTHER AND UNKNOWN	13.7
Other	7.9
Unknown	5.8

The Effects of the Great Recession on Reported Child Maltreatment Rates

$$\text{reported maltreatment}_{i,t} = \text{reporting}_{i,t} + \text{maltreatment}_{i,t}$$

$$\Delta \text{maltreatment}_i = \beta_0 + \beta_1 \Delta \text{Unemp}_i + \beta_3 X_i + \epsilon_i$$

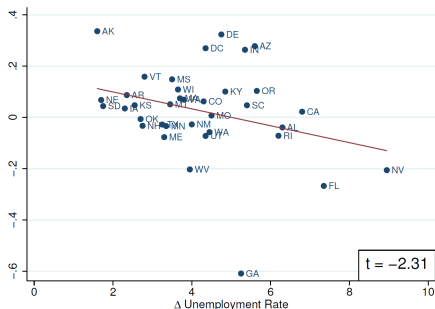
$$\Delta \text{reporting}_i = \alpha_0 + \alpha_1 \Delta \text{Unemp}_i + \alpha_3 X_i + \epsilon_i$$

$$\Delta \text{reported maltreatment}_i = \hat{\beta}_0 + \hat{\beta}_1 \Delta \text{Unemp}_i + \hat{\beta}_3 X_i + w_i$$

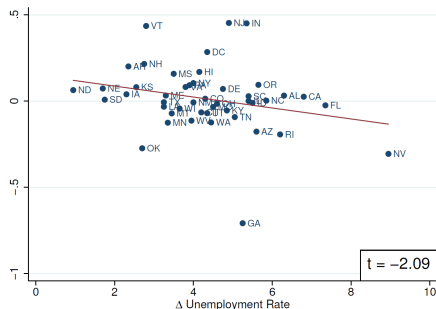
$$\text{where } \hat{\beta}_1 = \beta_1 + \alpha_1$$

Severity of Recession and Change in Reported Maltreatment

(a) $\Delta \ln(\text{Referral Rate})$



(b) $\Delta \ln(\text{Response Rate})$



Reported Cases of Child Maltreatment and Severity of Recession

	$\Delta \ln(\text{Referral Rate})$			$\Delta \ln(\text{Response Rate})$		
	(1)	(2)	(3)	(4)	(5)	(6)
Δ Unemployment Rate	-0.033** (0.014)	-0.022* (0.012)	-0.034** (0.014)	-0.032** (0.015)	-0.033* (0.017)	-0.027* (0.015)
Δ % Hispanic		-0.022 (0.054)			-0.041 (0.071)	
Δ % Black		-0.076** (0.030)			-0.107** (0.040)	
Δ % Age 0-4		0.097 (0.247)			-0.148 (0.223)	
% Hispanic			0.000 (0.002)			-0.002 (0.002)
% Black			0.001 (0.003)			0.000 (0.003)
% College			0.004 (0.003)			0.009* (0.005)
Adjusted R-squared	0.07	0.08	0.01	0.04	0.09	0.05
Observations	36	36	36	46	46	46

Search for “child abuse”

child abuse



Sign in

About 241,000,000 results (0.15 seconds)



Ads related to **child abuse**

[Child Abuse Statistics - 5 Children Die A Day from Abuse.](#)

[www.childhelp.org/](#)

Learn more and how to stop it.

[10 Signs of Child Abuse | joyfulheartfoundation.org](#)

[www.joyfulheartfoundation.org/](#)

Know the Signs & Symptoms of **Child Abuse**. Get Your Free Tip Card Now!

[Child Abuse | americanhumane.org](#)

[www.americanhumane.org/](#)

Learn More about Symptoms of **Child Abuse** & Neglect

Donate - Programs - How do I help a child? - Advocacy

[Child Abuse & Neglect: Recognizing and Preventing Child Abuse](#)

[www.helpguide.org/.../child_abuse_physical_emotional_sexual_negl...](#)

Do you know what **child abuse** looks like? Learn about common warning signs and what you can do to help.

Warning signs of child abuse - Risk factors for child abuse

Why these ads?

Ads - Why these ads?

[Child Abuse Information](#)

[www.kidsmatterinc.org/GetHelp](#)

Every **Child** Has The Right to be in a safe and loving home

[Effects of child abuse](#)

[www.sfcapc.org/](#)

Find statistics on **child abuse** and neglect. Learn about prevention.

[How to Report Child Abuse](#)

[dreamcatchersforabusedchildren.com/](#)

Hotlines & Resources. How to Anonymously Report **Abuse**.

[Child Abuse Definitions](#)

[www.stopitnow.org/](#)

Get FAQs and free resources to prevent **child sexual abuse**

Using Google to Proxy Maltreatment

$$\text{Google Maltreatment}_{i,t} \equiv \frac{[\text{searches w/ ("child abuse" | "child neglect")}]_{i,t}}{[\text{total searches}]_{i,t}}$$

Top searches for 'child abuse+child neglect'

child abuse neglect
child abuse statistics
child abuse prevention
about child abuse
child abuse report
child abuse reporting
child services
child sexual abuse
sexual abuse
child abuse services

Google Maltreatment (Victim)_t

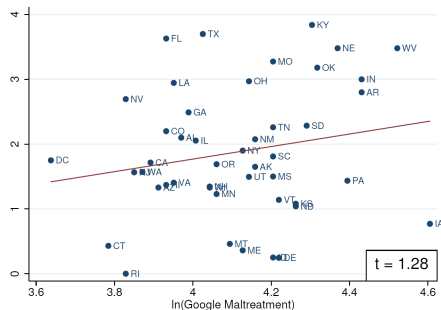
≡

$$\frac{[\text{searches w/ ("dad hit(s) me" | "dad beat(s) me" | "mom hit(s) me" | "mom beat(s) me")}]_t}{[\text{total searches}]_t}$$

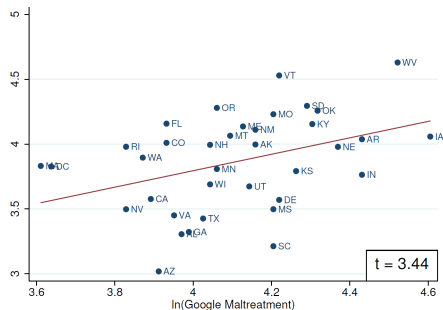
The screenshot shows a Google search interface with the query "dad hit me" entered in the search bar. Below the search bar, navigation tabs for "Web", "Images", "Maps", "Shopping", "More", and "Search tools" are visible. The search results indicate approximately 94,700,000 results found in 0.46 seconds. The first result is from Yahoo! Answers, titled "My dad hit me in the face!? - Yahoo! Answers", with a link to answers.yahoo.com. It shows 6 answers from September 10, 2008, and a top answer from "Teacher Adult You" stating "You do probably love your father very Much But who knows how bad it can Get Tell a Close Friend you can Trust ...". Below this are several related links with dates: "My dad hit me!!!!!!!" (Jan 11, 2013), "If my dad hits me again...?" (Jan 8, 2013), "I'm 18 and my dad hit me in the face. IS this legal?" (Sep 30, 2012), and "My dad hit me help me! :(? (Sep 1, 2012). The second result is from CaptainAwkward.com, titled "Question #169: My dad hit me. « CaptainAwkward.com", with a link to captainawkward.com/2012/01/.../question-169-my-dad-hit-me... It shows a post from Jan 9, 2012, by "I really, really need commenters who have experience with domestic violence/abuse counseling to weigh in here, thanks. This Letter Writer ...". The third result is from Ask Community, titled "What can I do if my dad hits me - Ask Community", with a link to www.ask.com. It shows a post from Feb 2, 2012, by "Im Turning 14 soon and me and my dad have always been fighting even since I was real little like a toddler he always gets in my face and spits ...". The fourth result is from kidzworld.com, titled "Dear Dish-It, My Dad Hits Me", with a link to www.kidzworld.com/article/5521-dear-dish-it-my-dad-hits-me. It shows a post from "Dear Dish-It, is here to whisper 't'yl after I've thought about this some more". Dear Dish-It, Please help. I don't know what to do. Yesterday I asked if I could go ...".

Google Maltreatment and Other Proxies, Pre-Recession

(a) Fatality Rate



(b) $\ln(\text{Referral Rate})$



The Effects of the Great Recession on Actual Child Maltreatment Rates

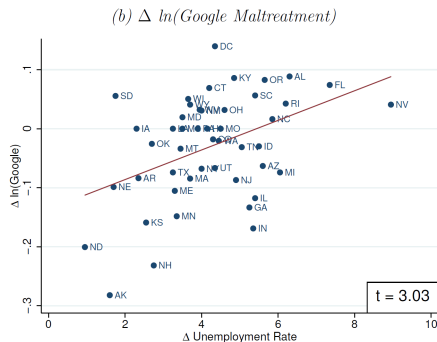
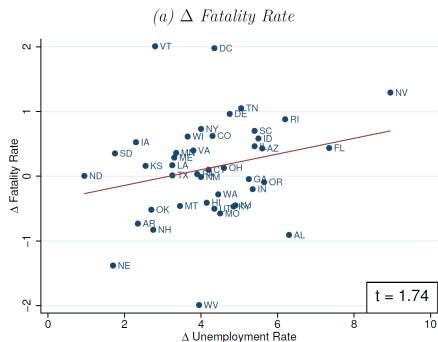
$$fatalities_{i,t} = \alpha_0 + \alpha_1 maltreatment_{i,t} + \gamma_i + \psi_t + \epsilon_{i,t}$$

$$google\ maltreatment_{i,t} = \lambda_0 + \lambda_1 maltreatment_{i,t} + \zeta_i + \eta_t + \mu_{i,t}$$

$$fatalities_i = \hat{\beta}_0 + \hat{\beta}_1 \Delta Unemp_i + \hat{\beta}_3 X_i + z_i$$

$$\Delta google\ maltreatment_i = \check{\beta}_0 + \check{\beta}_1 \Delta Unemp_i + \check{\beta}_3 X_i + q_i$$

Severity of Recession and Change in Actual Maltreatment

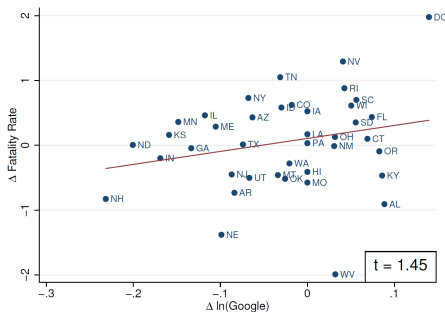


Child Maltreatment and Severity of Recession

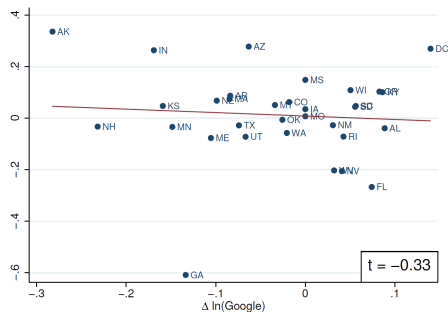
	Δ (Fatality Rate)			$\Delta \ln(\text{Google Maltreatment})$		
	(1)	(2)	(3)	(4)	(5)	(6)
Δ Unemployment Rate	0.121* (0.070)	0.110 (0.104)	0.111 (0.075)	0.025*** (0.008)	0.035*** (0.008)	0.022** (0.008)
Δ % Hispanic		0.034 (0.399)			0.030 (0.027)	
Δ % Black		-0.401*** (0.145)			-0.039*** (0.014)	
Δ % Age 0-4		-0.256 (0.921)			0.187** (0.078)	
% Hispanic			0.003 (0.008)			0.000 (0.001)
% Black			0.010 (0.009)			0.002* (0.001)
% College			0.057** (0.023)			-0.001 (0.002)
Adjusted R-squared	0.03	0.06	0.20	0.17	0.26	0.16
Observations	43	43	43	47	47	47

Changes in Google Maltreatment and Changes in Other Proxies

(a) Δ Fatality Rate



(b) $\Delta \ln(\text{Referral Rate})$

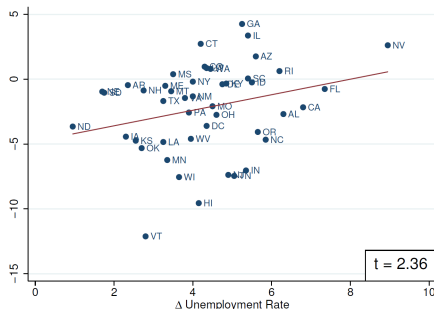


Substantiated Cases and Severity of Recession

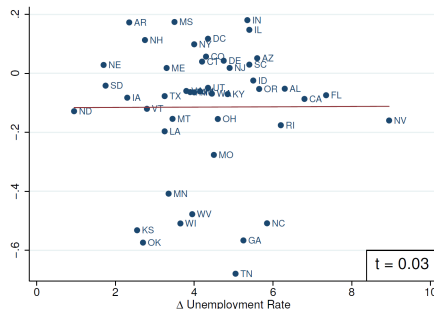
	<u>Δ % Substantiate</u>			<u>Δ ln(Substantiated Rate)</u>		
	(1)	(2)	(3)	(4)	(5)	(6)
Δ Unemployment Rate	0.599** (0.254)	0.139 (0.317)	0.336 (0.254)	0.001 (0.017)	-0.023 (0.022)	-0.010 (0.021)
Δ % Hispanic		1.824 (1.362)			0.019 (0.085)	
Δ % Black		0.488 (0.403)			-0.084*** (0.028)	
Δ % Age 0-4		-3.381 (3.963)			-0.392* (0.207)	
% Hispanic			0.084* (0.043)			0.004* (0.002)
% Black			0.035 (0.045)			0.002 (0.003)
% College			-0.038 (0.100)			0.008 (0.006)
Adjusted R-squared	0.05	0.06	0.04	-0.02	0.00	-0.01
Observations	46	46	46	46	46	46

Severity of Recession and Change in Substantiated Cases

(a) Δ % Substantiated



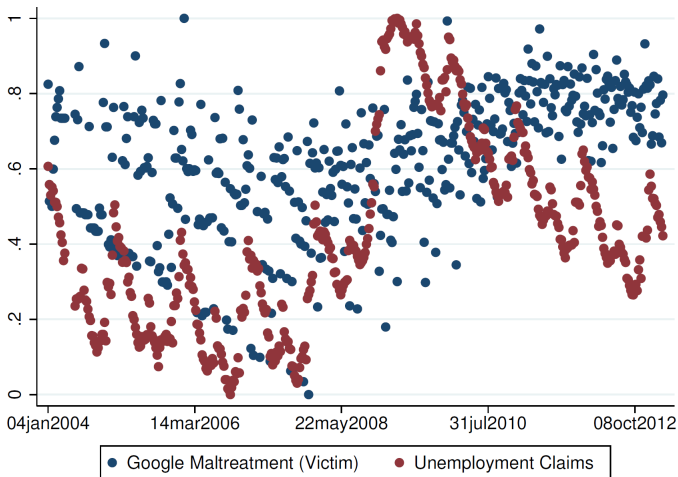
(b) $\Delta \ln(\text{Substantiated Rate})$



Weekly Google Maltreatment (Victim) and Unemployment Claims

		$\Delta \ln(\text{Google Maltreatment (Victim)})$				
	(1)	(2)	(3)	(4)	(5)	(6)
$\Delta \ln(\text{Unemployment Claims})$	1.135*	1.280**	1.421**	1.392	1.672*	1.809**
	(0.610)	(0.552)	(0.558)	(1.023)	(0.952)	(0.915)
Adjusted R-squared	0.24	0.32	0.34	0.26	0.33	0.36
Observations	469	465	461	469	465	461
Lags	1	3	5	1	3	5
Year FE	No	No	No	Yes	Yes	Yes
Month FE	No	No	No	Yes	Yes	Yes
Week FE	No	No	No	Yes	Yes	Yes

Unemployment Claims and Google Maltreatment (Victim), Weekly in United States

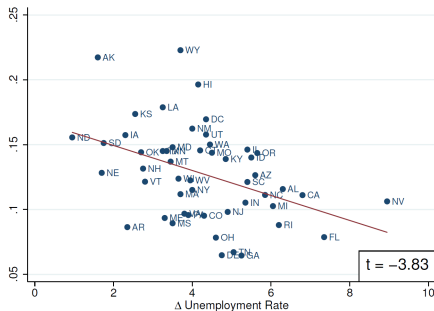


Government Spending and Reports of Maltreatment, Pre-Recession

	<u>Pct Referrals from Educators</u>		<u>ln(Referral Rate)</u>	
	(1)	(2)	(3)	(4)
ln(Education Spending Per Pupil)	0.061** (0.026)	0.096*** (0.034)		
Expenditure Per Capita		-0.068* (0.036)		-0.150 (0.272)
% Hispanic		0.000 (0.000)		-0.005 (0.005)
% Black		-0.000 (0.000)		-0.015*** (0.004)
% College		0.001 (0.001)		0.014 (0.010)
ln(Google Maltreatment)			0.689*** (0.221)	0.641** (0.273)
ln(Public Spending Per Capita)			0.370** (0.142)	0.447** (0.194)
Adjusted R-squared	0.10	0.09	0.19	0.39
Observations	47	47	36	36

Unemployment Claims and Google Maltreatment (Victim), Weekly in United States

(a) $\Delta \ln(\text{Government Spending per Capita})$



(b) $\Delta \ln(\text{Education Spending per Pupil})$

