

Burden Reduction Strategies to Improve Equity in Program Access

Elizabeth Bell The University of Texas, Austin LBJ School of Public Affairs <u>Elizabeth.bell@austin.utexas.edu</u> & Academic Affiliate Office of Evaluation Sciences



Motivation

Persistent disparities in program access for marginalized communities.

- One driver of disparity is administrative burden—the learning, compliance & psychological costs in application process.
 - Disproportionately impacts marginalized communities (i.e., disabled, racialized groups, lowincome, non-cisgender) & access to assistance is stratified (e.g., Nisar 2017; Bell et al., 2023; Bell et al., 2024; Bell and Smith 2022; Heinrich et al., 2023; Christensen et al., 2021; Barnes, 2020; Chudnovsky & Peeters, 2020)
- Question remains: How can public managers reduce disparities in program access?



Burden Reduction Framework

 Table 1. Administrative burden reduction strategies.

Dimension	Strategy	Description
Distribu- tive	Shifting	Shifting the formal duty of enrolling or meeting administrative rules and requirements from the individual to the state or third parties (e.g., employers).
	Sharing	Helping individuals enroll or meet the administrative rules and requirements by providing, or publicly funding, assistance services or by regulating the private market of these services to make them more affordable.
Intensive- ness	Discarding	Reducing the number of steps by removing substantive or administrative requirements needed for receiving the benefit.
	Simplifying	Making it easier to meet a substantive or administrative requirement needed for receipt of the benefit.
	Expediting	Speeding up receipt of the benefit by accelerating the administrative process or by establishing presumptive eligibility.
Relational	Communicating	Increasing the availability and quality of information and feedback in interactions between individuals and the state.
	Respecting	Making state–individual interactions more welcoming and respectful by increasing autonomy and worth and minimizing intrusiveness and humiliation.

Benish, A., Tarshish, N., Holler, R., & Gal, J. (2024). Types of administrative burden reduction strategies: Who, what, and how. *Journal of Public Administration Research and Theory*, 34(3), 349–358. <u>https://doi.org/10.1093/jopart/muad028</u>



Sharing/Investing in Assistance

- Access to assistance is stratified & may be critical to reducing burdens & improving equity (e.g., Heinrich et al., 2022; Bell & Smith 2022)
- **Research Question:** How does increasing the number of school counselors in schools impact student access to burdensome means-tested college financial aid?
 - We predict increasing the number of counselors will disproportionately benefit lowincome students of color, by reducing the need to triage & improving access to assistance for those most in need.
 - Recent evidence suggests that workload matters for likelihood of discrimination among street-level bureaucrats (Guul, Pedersen, and Petersen 2021; Andersen and Guul 2019; Guul, Villadsen, and Wulff 2019; Assouline et al., 2021)



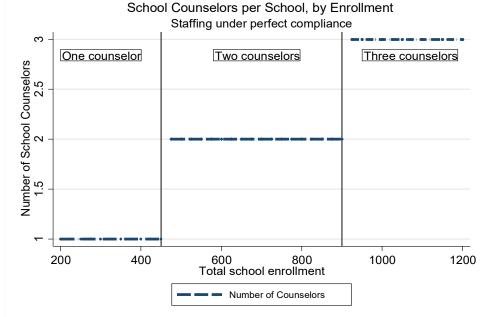
"Too few counselors"



- National average: 491-1
- Black students and low-income students are more likely to attend a school that does not have a school counselor

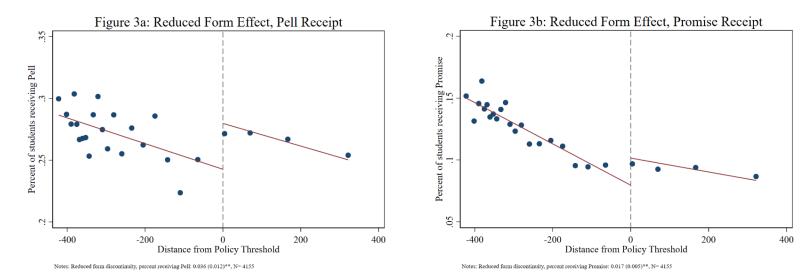
We leverage Oklahoma Staffing Policy, which mandates 450:1 ratio, to conduct a regression discontinuity design

 Rich administrative data on school staffing and on student access to financial aid for college (including Federal Pell Grant and Oklahoma's Promise)





Additional Counselors Improve Program Access



Under perfect compliance, we estimate a <u>32-</u> <u>percentage point</u> increase in Pell receipt and <u>15-</u> <u>percentage point</u> increase in Promise receipt from hiring a full 1.0 FTE counselor

Effects driven entirely by low-income Black, Hispanic, & Native students



Conclusion

Burden reduction strategies need to consider not only overall effects, but for whom.

- Communications interventions are politically and economically feasible, but effects are limited, and may not help those who are most in need
- Even discarding burdens can result in widening inequity if sharing/assistance isn't present

Personalized assistance & increasing administrative capacity increases equity in program access, mitigating negative impacts of admin burden on equity

- Similar findings in studies that examine FAFSA completion—nudges limited but assistance has large impacts

Future research:

- 1. How can we reduce psychological costs and improve trust in government?
 - Investigate whether trauma-informed training & operations can help.
- 2. What combination of strategies is most effective for improving *equity* in access?
 - How can we better diagnose the root cause of burden so that we align solutions to problem



Thank you!

Elizabeth.bell@austin.utexas.edu



Admin Burden in College Financial Aid

- Administrative burdens in aid apps reduce equity in access (Nisar 2020; Herd & Moynihan 2018; Christensen et al. 2020; Baekgaard et al. 2020; Deshpande and Li, 2019).
 - 35-50% of high school students fail to complete the notoriously burdensome FAFSA
 - Lower/middle income students lose estimated \$9,700 in grant and loan aid annually (Bird et al., 2019)
 - In aggregate, this complexity carries a \$4 billion price tag each year (Dynarski & Scott-Clayton, 2006)

• School counselors may provide critical support to students navigating complexity (Barnes, 2020; Bell et al., 2020; Maynard-Moody & Musheno, 2003; Mulhern, 2019; Wiley & Berry, 2018).

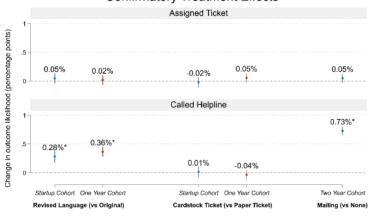


Reducing burdens with behaviorally informed communications

Ticket to Work

- Increased calls to helpline
- No increase in take-up for Ticket to Work, an employment support program for people with disabilities on SSI/SSDI

Figure 2. Redesigned mailings did not increase Ticket assignments, but had a small impact on Helpline calls



Confirmatory Treatment Effects



Table 4: Effect of Counselor Staffing on Financial Aid Receipt, by Cohort

Pre-2008

Post-2008

				First S	tage					First S	Stage		
		Reduced	d Form		-	2SL	S	Reduce	d Form		-	2SL	S
Received Pell,													
Count	All Students	-0.367	0.898	0.178	0.069	-5.151	0.900	6.233	0.000	0.155	0.004	50.791	0.039
		(2.852)		(0.098)		(40.370)		(1.764)		(0.053)		(23.341)	
	White	-0.526	0.783			-7.368	0.802	0.931	0.344			7.568	0.38
		(1.910)				(28.996)		(0.984)				(8.492)	
	Black	0.518	0.569			7.228	0.677	1.908	0.019			15.554	0.09
		(0.909)				(17.106)		(0.813)				(8.885)	
	Hispanic	-0.403	0.259			-5.631	0.548	0.543	0.020			4.425	0.08
		(0.357)				(9.216)		(0.233)				(2.494)	
	Native	0.879	0.358			12.262	0.541	2.627	0.000			21.418	0.02
		(0.956)				(19.695)		(0.693)				(9.209)	
Received Promise,													
Count	All Students	-0.586	0.621			-8.202	0.680	1.518	0.016			12.364	0.08
		(1.185)				(19.605)		(0.631)				(6.980)	
	White	-0.251	0.792			-3.520	0.806	0.247	0.557			2.006	0.57
		(0.950)				(14.127)		(0.419)				(3.545)	
	Black	0.051	0.834			0.708	0.849	0.398	0.041			3.240	0.11
		(0.242)				(3.683)		(0.194)				(2.004)	
	Hispanic	0.215	0.233			2.994	0.554	0.258	0.038			2.099	0.11
		(0.180)				(4.974)		(0.124)				(1.289)	
	Native	-0.163	0.679			-2.271	0.733	0.590	0.016			4.814	0.07
		(0.393)				(6.571)		(0.243)				(2.586)	
	Ν												
	observations	1,133						3,022					

Effects among Black, Hispanic, & Native students

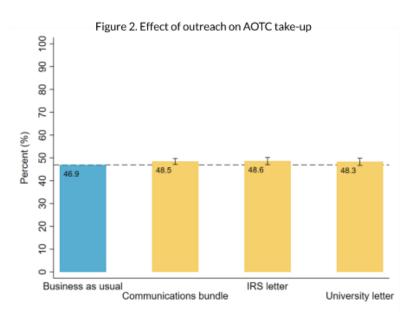
Concentrated in years post burden expansion in Promise program



Reducing burdens with behaviorally informed communications

American Opportunity Tax Credit (AOTC)

- 1.5 ppt increase in take-up of AOTC
- No effects on low-income students, who disproportionately do not take-up AOTC





Simplifying & Discarding

Small Business COVID-19 relief funds

- Evaluated city policy change that reduced documentation requirements in the middle of program roll out of COVID-19 small business relief funds
- Improved access for underserved (minority, women, disabled, and veterans) small businesses
 - but disproportionately helped non-underserved (white, men, non-disabled, non-veterans)



Conclusion

Reducing SLB workload increases equity in program access, potentially mitigating the negative impacts of administrative burden on equity

 Administrative burdens could contribute to racial disparities not only by imposing costs, but also by enhancing complexity/ambiguity, which creates room for discrimination

Mechanisms: 1) workload 2) new counselors shift organizational culture 3) new counselors share lived experiences of students and engage in active representation

Burdens could be so high that even an expansion in SLB capacity might not expand access for the most disadvantaged, esp if some reqs are out of their control



Data

- Administrative data from the Oklahoma State Regents for Higher Education, and Oklahoma State Board of Education (2005-2015)
 - Program access for Oklahoma's Promise & Pell Grant
 - Number of counselors/counselor FTE
 - Controls: professional staff FTE, administration FTE, teacher FTE
- Merged in data from the National Center for Education Statistics
 - School level controls (e.g. percent in FRL, percent in special education, racial diversity, etc.)



Oklahoma's Promise & Pell Grant

Pell Grant requires FAFSA completion, which many low-income and racially minoritized students struggle to complete

Oklahoma Promise program long-standing – created in 1992 & expanded burden in 2007

- Early application/commitment (by 10th grade)
- First dollar, AGI <=\$55,000
- 2.5 high school GPA and curriculum requirements
- Virtue commitment
- High administrative burden (Bell & Smith, 2020; Rowinger, Meyer, & Wang, 2021)
- Counselors disseminate info, monitor student progress, & certify compliance





Effect of Counselor Capacity on Aid Access

• H1: Across specifications, increased counselor staffing increases aid access

Table 3: Reduced form and 2	SLS					Table C3: Adding School Fi	xed Effects			
				2SLS	5				2SLS	
				Full Sample/No	Policy Bandwidth				Full Sample/No	Policy Bandwidth
	Below Mean	Reduced Form		Bandwidth	si 225		Below Mean	Reduced Form	Bandwidth	<i>si</i> 225
Received Pell, Percent	0.272	0.036 (0.012)	**	0.322 + (0.169)	0.125 (0.099)	Received Pell, Percent	0.272	0.068 *** (0.019)	0.462 * (0.199)	0.440 + (0.232)
Received Pell, Count	10.886	4.342 (1.530)	**	38.744 * (19.582)	12.901 (10.737)	Received Pell, Count	10.886			60.293 + (31.300)
			**					()	()	(00000)
Received Promise, Percent	0.127	0.017 (0.005)	*	0.152 + (0.079)	0.040 (0.040)	Received Promise, Percent	0.127	0.026 *** (0.007)	0.173 * (0.081)	0.179 + (0.099)
Received Promise, Count	4.765	0.866 (0.559)		7.703 (5.864)	2.094 (4.058)	Received Promise, Count	4.765	2.587 *** (0.733)	17.500 * (8.130)	20.075 + (11.317)
N observations N schools		4155 385		4155 385	1528 170	N observations N schools 		4155 385	4155 385	1528 170



Solutions to Burden: How do we advance equity in access?

1. Communicating & Respecting with Human-centered design (OES):

- Nudge RCT increased access to AOTC, but not among low-income students
- Nudge RCT does not increase access to Ticket to Work program for people with disabilities on SSI/SSDI
- 2. Simplifying & Discarding: How does reducing documentation requirements impact equity in access to COVID-19 small business relief funds?
 - Improved access for underserved (minority, women, disabled, and veterans) but disproportionately helped non-underserved (white, men, non-disabled, non-veterans)

3. Sharing:

 Access to assistance is currently stratified, but if we reduce SLB workload, we increase equity in access for intersectionally minoritized clients



Table 2: First Stage Estimates, Overall and by School FRL

				Counselor	FTE		Counselor	Caseload	
		BW	n	Estimate	p-value	п	Estimate	p-value	- Figure 2a: First Stage Compliance
Panel A	Overall	Full	4155	0.16	0.001	3393	-80.68	0.000	m - rigure za. First Stage Compliance
				(0.047)			(15.447)		
		Policy	1369	0.26	0.000	1339	-39.13	0.076	
		-		(0.062)			(22.025)		1 1 2.5
		MSE	847	0.24	0.020	595	-21.92	0.346	Flore
				(0.104)			(23.235)		~
Panel B: By FRL	Low-FRL schools	Full	2123	0.17	0.002	1748	-82.58	0.000	
				(0.054)			(16.680)		
		Policy	853	0.25	0.000	830	-17.14	0.391	
				(0.070)			(19.959)		
	High-FRL schools	Full	2032	0.14	0.103	1645	-68.30	0.020	─
				(0.085)			(29.411)		
		Policy	516	0.22	0.051	509	-65.89	0.198	Counselor co
				(0.113)			(51.158)		
	dard errors clustered		•	-		•			200 300 400 500 600 School Enrollment

Notes: Robust standard errors clustered on the running variable in parentheses. Policy bandwidth is +/-225; MSE bandwidth calculated using rdrobust in Stata. Counselor caseload represents the total enrollment in a school divided by number of counselors; schools with no counselors are therefore missing a counselor caseload value and dropped from caseload model. Includes year fixed effects.

Notes: The above figure shows school counselor staffing levels in Oklahoma public schools (BW: +/-225). Binsize = 50, First-stage linear discontinuity, counselor count: 0.271 (0.060)***, N= 1493

Policy Compliance: First Stage



Overview

Causes of unequal distribution of burden

- *State factors:* administrative capacity, discrimination
- *Individual factors:* Race, health, gender, disability, administrative capital etc.



Solutions to burden

- Scalable nudges
- Structural change reducing compliance costs
- Enhancing capacity of street-level bureaucrats

(1)



Method: Regression Discontinuity

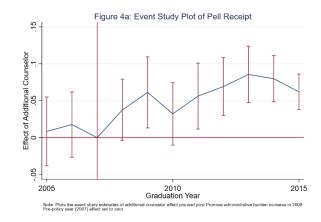
 $Staffing_{it} = \pi_0 + \pi_1(Distance_{it}) + \pi_2(Above_{it}) + \pi_3(Above_{it} * Distance_i)t + \delta_t + \mu_{it}$

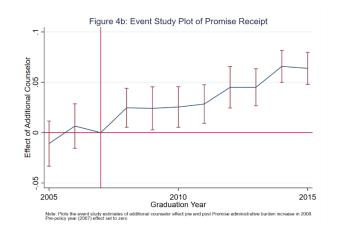
 $Y_{it} = \gamma_0 + \gamma_1(Distance_{it}) + \gamma_2(Above_{it}) + \gamma_3(Above_{it} * Distance_{it}) + \delta_t + v_{it}$ (2)

 $Y_{it} = \beta_0 + \beta_1(Staffing_{it}) + \beta_2(Distance_{it}) + \beta_3(Above_{it} * Distance_{it}) + \delta_t + \varepsilon_{it}$ (3)

- *Distance_{st}*: Enrollment_{st} Threshold
- *Above_{st}*: Indicator for Enrollment_{st} > Threshold
- *Staffing_{st}*: Counselor staffing in school in given year
- Y_{st} : School-level outcomes for aid access
- Controls: Includes school-level demographics (urbanicity, enrollment by race, share of students receiving special education, share of students on free or reduced price lunch), staffing information (teacher and administrator count), and district labor market indicators (district unemployment rate, share in poverty, and average income). Also include year fixed effects.









Theoretical Model & Hypotheses

H1: Increasing the number counselors will positively im proportion of low-income stu receiving burdensome mean financial aid.

H2: Increasing the number o school counselors will positiv impact the number of low-inc and racially marginalized stu receiving financial aid.

> Policy Change

Additional

street-level

bureaucrat is

hired

	C 1 1					
mp	of school pact the idents		Moderator: Level of Ambiguity	Adm	inistrative Burden Complexity	H3: The impacts of reducing counselors
	s-tested	program 1	s in the number of equirements create uty in eligibility		ease the time and effort red to evaluate eligibility	workload on low-inco students will be concentrated in the y
ive nc	ely ome dents					following expansions administrative burde
		ual Level anism	Organizational Level Mechanism		Ou	tcomes
•	reduces prioritiz	in capacity need for ing needy ents	Change in organizational demographics, peer effects, and/or culture		Short-term Outcome: Reduce implicit bias when choosing which clients to serve	Downstream Outcome: Increased access for marginalized clients

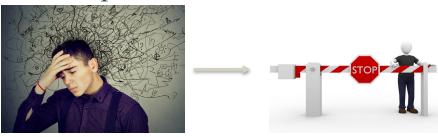
e impacts of ng counselors' ad on low-income ts will be trated in the years ing expansions in istrative burden.



Unequal Distribution of Burdens

Individual Factors

• Across 3 cases, health problems (i.e. ADHD/ADD, anxiety/depression, & pain) increased burdens & loss of access



State Factors

 For-profit colleges imposed more burden, while public colleges & MSIs reduced burdens in HEERF



Regression Discontinuity Assumptions

- » Manipulation Test 🗸
- » Density at Threshold 🗸
- » Observables Smooth at the Threshold \checkmark
- » Fidelity of Program Rule
 - » Fuzzy Design
 - » Strong first-stage discontinuity at threshold



N School Observations

N Unique Schools

4155

385

3563

338

592 69

7.4.0	Table 1: Sample								
KAS						Disconti	nuity		WHAT STARTS HERE CHANGES THE WORLD
of Texas at Austin					Full Sample		Policy Ba	undwi	
		Overall	Below	Above	Bandwid	th	si 2	225	
	Student Characteristics								
	% Free or Reduced Lunch	0.57	0.58	0.51	0.05	***	0.05	**	
					(0.016)		(0.022)		
	% Special Education	0.16	0.17	0.14	0.02	***	0.01	+	
					(0.004)		(0.006)		
	% Asian	0.01	0.01	0.01	0.00	+	0.00		
					(0.001)		(0.002)		
	% Black	0.04	0.04	0.08	-0.01		0.00		
					(0.015)		(0.023)		
	% Hispanic	0.07	0.07	0.08	0.02	***	0.02	**	
					(0.007)		(0.008)		
	% Native	0.24	0.24	0.24	-0.01		0.03	+	
					(0.013)		(0.018)		
	% White	0.64	0.65	0.58	0.00		-0.05	*	
					(0.016)		(0.023)		
	School Characteristics								
	Enrollment	227.34	163.75	610.11	0.00	*	0.00		
					(0.000)		(0.000)		
	Counselor FTE	0.77	0.54	2.13	0.16	***	0.26	***	
					(0.047)		(0.062)		
	Teacher FTE	15.25	11.84	35.78	1.56	***	1.41	***	
					(0.287)		(0.404)		
	Special Education FTE	1.50	1.02	4.37	0.08		-0.14		
					(0.139)		(0.202)		
	Professional Staff FTE	0.79	0.62	1.86	-0.05		0.05		
		1.24	0.07	2.04	(0.084)		(0.116)		
	Administration FTE	1.26	0.97	3.04	0.14	*	0.04		

(0.070)

4155

385

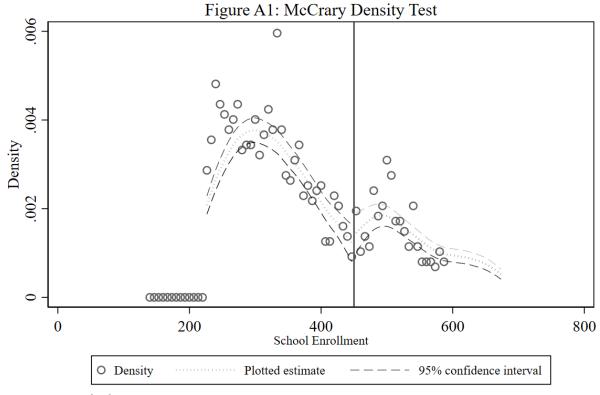
1369

159

(0.101)

Table 1: Sample								Table C1: Sample, School H	Fixed Effects						
					Discontinuity						WHAT STARTS HERE Discontinuity WORLD			D	
The University of Texas at Austin				Full Sample	e/No	Policy Bo	andw					Full Sample		Policy Ba	ndwidt
	Overall	Below	Above	Bandwidi	th	si	225		Overall	Below	Above	Bandwid	th	si 2	25
Student Characteristics								Student Characteristics							
% Free or Reduced Lunch	0.57	0.58	0.51	0.05	***	0.05	**	% Free or Reduced Lunch	0.57	0.58	0.51	0.01		0.00	
				(0.016)		(0.022)						(0.014)		(0.010)	
% Special Education	0.16	0.17	0.14	0.02	***	0.01	+	% Special Education	0.16	0.17	0.14	0.02	**	0.00	
-				(0.004)		(0.006)						(0.005)		(0.005)	
% Asian	0.01	0.01	0.01	0.00	+	0.00		% Asian	0.01	0.01	0.01	0.00		0.00	
				(0.001)		(0.002)						(0.001)		(0.001)	
% Black	0.04	0.04	0.08	-0.01		0.00		% Black	0.04	0.04	0.08	0.01	**	0.01	***
				(0.015)		(0.023)						(0.005)		(0.004)	
% Hispanic	0.07	0.07	0.08	0.02	***	0.02	**	% Hispanic	0.07	0.07	0.08	-0.01		0.00	
-				(0.007)		(0.008)						(0.004)		(0.004)	
% Native	0.24	0.24	0.24	-0.01		0.03	+	% Native	0.24	0.24	0.24	0.02	*	0.00	
				(0.013)		(0.018)						(0.008)		(0.008)	
% White	0.64	0.65	0.58	0.00		-0.05	*	% White	0.64	0.65	0.58	-0.02	**	-0.01	
				(0.016)		(0.023)						(0.008)		(0.008)	
School Characteristics				~ /		× /		School Characteristics							
Enrollment	227.34	163.75	610.11	0.00	*	0.00		Enrollment	227.34	163.75	610.11	0.00		0.00	
				(0.000)		(0.000)			·			(0.000)		(0.000)	
Counselor FTE	0.77	0.54	2.13	0.16	***	0.26	***	Counselor FTE	0.77	0.54	2.13	0.19	***	0.15	* *
				(0.047)		(0.062)			15.05	11.04	25.70	(0.061)	she she she	(0.060)	***
Teacher FTE	15.25	11.84	35.78	1.56	***	1.41	***	Teacher FTE	15.25	11.84	35.78	1.74	***	1.64	***
				(0.287)		(0.404)		Questial Education ETE	1.50	1.02	4.27	(0.516) 0.34		(0.521) 0.32	
Special Education FTE	1.50	1.02	4.37	0.08		-0.14		Special Education FTE	1.50	1.02	4.37		+		+
1				(0.139)		(0.202)		Professional Staff FTE	0.79	0.62	1.97	(0.186) -0.04		(0.166) 0.03	
Professional Staff FTE	0.79	0.62	1.86	-0.05		0.05		Professional Staff FTE	0.79	0.62	1.86				
				(0.084)		(0.116)		Administration FTE	1.26	0.97	3.04	(0.112) -0.01		(0.128) 0.01	
Administration FTE	1.26	0.97	3.04	0.14	*	0.04		Administration FTE	1.20	0.97	3.04				
				(0.070)		(0.101)						(0.105)		(0.112)	
				(()		School Fixed Effects							
N School Observations	4155	3563	592	4155		1369		N School Observations	4155	3563	592	4155		1369	
N Unique Schools	385	338	69	385		159		N Unique Schools	385	338	592 69	385		1509	
mque sensons	200	250		565				in Onique Schools	383	338	09	383		139	

TEXAS Checking for Manipulation

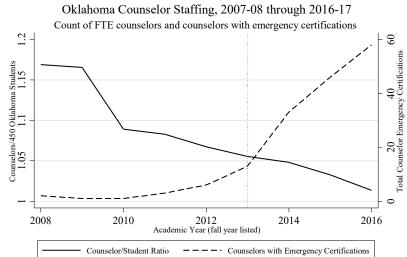


Note: Bin size = 6.67 Discontinuity estimate 0.163 (SE: 0.266)



Policy Compliance: Overall Staffing

School Characteristics				
	Overall	Below	Above	Discontinuity
Enrollment	227.04	163.86	610.40	0.00*
				(0.000)
Counselor FTE	0.77	0.55	2.13	0.18***
				(0.046)
Teacher FTE	15.17	11.79	35.73	1.61***
				(0.271)
Special Education FTE	1.49	1.02	4.33	0.09
				(0.132)
Professional Staff FTE	0.79	0.62	1.87	-0.01
				(0.082)
Administration FTE	1.26	0.97	3.04	0.15*
				(0.067)
*p<0.05, **p<0.01, ***p<0.001				



Notes: Counselor ratio represents the number of FTE counselors per thousand students enrolled in Oklahoma for a given year. Uses public data compiled from Oklahoma Department of Education state certificate counts, and school employee and school headcounts aggregated to the state level. Vertical line represents 2013-14 academic year.



Why Would Counselor Staffing Matter? Mechanisms:

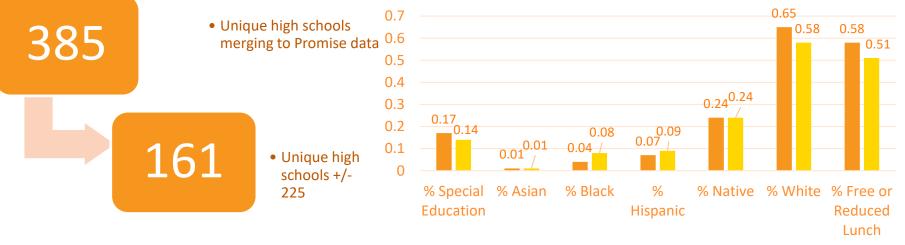
- More time with each student/fewer students in caseload develop better relationships (Krueger & Whitmore, 2001)
- Engage in more resource-intensive practices (Grabowski et al., 2011)
- Reduction in discrimination (Auwarter & Arguete, 2008; Francis, Dimmitt, de Oliveira, 2018; Welsch & Winden, 2018; Andersen & Guul 2019)
- Peer effects learning from colleagues (Jackson & Bruegmann, 2009) or increased productivity when being watched (Monsalve et al., 2014; Weisburst, 2018; MacDonald, Fagan, & Geller, 2016)
- Specialization of duties (e.g., one counselor manage all college applications, another all behavioral management)

May be especially important in accessing burdensome financial aid programs



Sample & Validity

Student Demographics



■ Below ■ Above



Theoretical Framework

