The Relationship between School Disciplinary Resolutions with School Climate and Attitudes Towards School

Francis Huang, PhD

Statistics, Measurement, & Evaluation in Education
University of Missouri

Yolanda Anyon, PhD

UNIVERSITY *of* DENVER
1864

2019.03.18FH1

Agenda

- Introduction and Research Questions
- Methods
- Results and Discussion

UNIVERSITY of DENVER

Statistics, Measurement, & Evaluation in Education
University of Missouri

Several studies have suggested a variety of detrimental outcomes for students receiving an OSS (out of school suspension)

- Greater risk of dropping out, higher risk of school disengagement, great risk of incarceration, lower academic outcomes (e.g., Fabelo et al., 2011; Noltemeyer, Ward, & Mcloughlin, 2015)

- However, not much is known about other forms of disciplinary resolutions such as in school suspensions (ISS) and the use of restorative practices (RP; also known as restorative interventions or restorative justice)
  - Referred to as disciplinary resolutions (not sanctions)

UNIVERSITY of DENVER
1864

Statistics, Measurement, & Evaluation in Education
University of Missouri

However, less research is available on alternatives to OSS

- Important to investigate these other forms of resolutions as often, can be seen as a substitute for OSS

- ISS/RP be viewed as less harmful as students are still in school

- However, other studies have suggested that ISS is not really any better than OSS (Cholewa et al., 2017; Hwang, 2018; Noltemeyer et al., 2015)

For discussion purposes only / AERA 2019

Statistics, Measurement, & Evaluation in Education
University of Missouri

Some definitions…

- **Out-of-school suspension (OSS). I**nvolve the removal of students from school as a form of punishment

- **In-school Suspension (ISS).** ISS usually involve the removal of students from the classroom to a dedicated space in the school building where they are confined to complete coursework, and in some cases, receive support services.

Hypothesized to weaken school bonds since students are removed from school / classroom

Some definitions… (cont.)

- **Restorative Practices (RP).** Refer to a range of approaches that can be used to prevent conflict or intervene when an incident has occurred (Amstutz & Mullet, 2005; Wachtel, Costello, & Wachtel, 2009)

- However, the current study focused on restorative practices, such as circles, mediations, and conferences that are used to intervene and resolve conflicts at school after they happen

- Interventions are based on the idea that harm should be acknowledged openly and that collectively finding a solution for repairing the harm can be empowering to all

Less commonly used though growing in popularity… research is lagging. Results from first few RCTs are starting to appear…

UNIVERSITY of DENVER

Statistics, Measurement, & Evaluation in Education
University of Missouri

Important outcomes to consider

- School climate (using Authoritative School Climate Theory; Cornell & Huang)
  - Disciplinary structure (fairness of rules)
  - Student support (student teacher relationships)
- Attitudes towards school
  - School bonding (enjoy school, feel like being a part of school)
  - School disengagement (bored, don't try hard in school
- School safety
  - Feel safe in … (classrooms, hallways, bathrooms, etc.)

All of the above have been shown to be important outcomes in themselves

Basic research question

- Do students who receive a particular type of disciplinary resolution (OSS, ISS, RP) rate certain outcomes (climate, attitudes, safety) differently from students without sanctions?

Agenda

- Introduction and Research Questions
- Methods
- Results and Discussion

Participants: 30,799 students from 116 schools in Denver Public Schools (DPS)

- Admin data matched with disciplinary records
- Matched with responses to a school climate survey

	n (%)
Disciplinary Resolution	
None	28,054 (91.1)
Out of school suspension	859 (2.8)
In school suspension	694 (2.3)
Restorative practice	438 (1.4)
Combined resolution	754 (2.4)
Grade level	
6	5,595 (18.2)
7	5,197 (16.9)
8	5,004 (16.2)
9	4,820 (15.6)
10	4,166 (13.5)
11	3,452 (11.2)
12	2,565 (8.3)

Predominantly Latinx population in DPS

	M (SD)	n (%)
Racial Identity		
White		6,375 (20.7)
Asian		1,087 (3.5)
Black		4,135 (13.4)
Latino		17,841 (57.9)
Other[2]		1,361 (4.4)
Male		15,345 (49.8)
Eligible for free or reduced price meals (FRPM)		20,847 (67.7)
Eligible for special education		2,891 (9.4)
Emotional regulation problems	4.14 (1.55)	

Also included number and level (i.e., severity) of incident

Outcomes considered:
NOTE: all outcomes standardized in models for comparability

Scale intraclass correlation coefficients (ICC), reliability, and number of items.

Scale	ICC	School level reliability	Student level reliability	Number of items	Range
Disciplinary structure	.070	.88	.82	4	4 - 16
Student support	.061	.90	.84	5	5 - 20
School bonding	.077	.79	.74	4	4 - 16
School disengagement	.077	.69	.64	3	3 - 12
School safety	.080	.92	.83	7	7 - 28

MLCFA supported: RMSEA = .03, CFI = .98, TLI = .98, SRMR = .05

Regression models used...

- School fixed effects (accounting for all variability; better than multilevel models to control for noise due to clustering; Huang, 2016)

- Used school-level cluster robust standard errors

- All outcomes (and emoreg) were **standardized** so dummy coded variables can be viewed as standardized mean differences (0.20 = small, 0.50 = moderate, 0.80 = large; Cohen, 1992)

- Multiple imputation (10 datasets) were used: 91% had complete data– combined using Rubin's rules

Agenda

- Introduction and Research Questions
- Methods
- Results and Discussion

Statistics, Measurement, & Evaluation in Education
University of Missouri

UNIVERSITY of DENVER

Results from 116 schools with no covariates: coefficients interpreted as SMDs: Negative outlook for all DRs

Linear regression coefficients predicting outcomes: No covariates ($n = 30{,}799$)

	Disciplinary Structure	Student Support	School Bonding	School Disengagement	School Safety
Disciplinary resolution[1]					
OSS	-0.238***	-0.336***	-0.355***	0.411***	-0.149***
	(0.040)	(0.037)	(0.043)	(0.041)	(0.045)
ISS	-0.199***	-0.318***	-0.331***	0.322***	-0.183***
	(0.044)	(0.046)	(0.038)	(0.036)	(0.043)
RP	-0.148**	-0.273***	-0.209**	0.342***	-0.103
	(0.055)	(0.052)	(0.064)	(0.062)	(0.063)
Combination	-0.227***	-0.435***	-0.327***	0.416***	-0.113*
	(0.056)	(0.047)	(0.047)	(0.048)	(0.045)
R^2	.06	.05	.06	.08	.06

Notes. OSS = out of school suspensions. ISS = in school suspension. RP = restorative practice. Combined = Combination of disciplinary resolutions. [1]Students with no sanctions form the reference group. All models include school fixed effects. Cluster robust standard errors in parenthesis. * $p < .05$, ** $p < .01$, *** $p < .001$.

Results from 116 schools with covariates: Weaker relationship once covariates accounted for

Linear regression coefficients predicting outcomes: With covariates ($n = 30,799$)

	Disciplinary Structure	Student Support	School Bonding	School Disengagement	School Safety
Disciplinary resolution[1]					
OSS	-0.138*	-0.094	-0.156*	0.122**	-0.101
	(0.056)	(0.053)	(0.062)	(0.044)	(0.062)
ISS	-0.130*	-0.089	-0.129*	0.044	-0.138**
	(0.051)	(0.058)	(0.050)	(0.044)	(0.053)
RP	-0.079	-0.045	-0.013	0.055	-0.059
	(0.062)	(0.059)	(0.080)	(0.065)	(0.077)
Combination	-0.095	-0.089	-0.039	-0.001	-0.060
	(0.062)	(0.064)	(0.067)	(0.053)	(0.070)
R^2	.10	.10	.11	.26	.08

Notes. OSS = out of school suspensions. ISS = in school suspension. RP = restorative practice. Combination = a combination of disciplinary resolutions. [1]The reference group is students with no recorded discipline incidents. [2]The reference group is 6th grade students. [3]The reference group is White students. The classification of "Other" includes Native American or Alaska Native, Pacific Islander or Native Hawaiian, and Multiracial students. FRPM = free or reduced priced meals. All models include school fixed effects. Cluster robust standard errors in parenthesis. * $p < .05$, ** $p < .01$, *** $p < .001$.

Huang / For discussion purposes only / AERA 2017

Statistics, Measurement, & Evaluation in Education
University of Missouri

Summary

- Negative outcomes for those who were suspended (relatively small)

- Somewhat negative for those receiving RP but not statistically significant

UNIVERSITY *of* DENVER

Statistics, Measurement, & Evaluation in Education
University of Missouri

Experimental: Does DR cause negative outlook? Only those that received one ISS or OSS before or after filling out the climate survey (4 in April: BEFORE, 5 in May: AFTER)

	scale(disengage)	scale(str)	scale(bond)	scale(sup)	scale(safety)
ffiss4	0.045	-0.244	-0.323**	-0.382**	-0.102
	(0.135)	(0.199)	(0.147)	(0.176)	(0.182)
ffiss5	0.056	-0.043	-0.114	-0.005	-0.053
	(0.106)	(0.105)	(0.077)	(0.114)	(0.114)
ffoss4	0.287***	-0.100	-0.201**	-0.103	-0.115
	(0.098)	(0.078)	(0.086)	(0.091)	(0.099)
ffoss5	0.359***	0.034	-0.237**	-0.222**	-0.182
	(0.077)	(0.073)	(0.102)	(0.092)	(0.113)

If DR causes the outcomes, those suspended after the survey (5) was administered should NOT be different from those (reference group) without a sanction (as they haven't been reprimanded yet)

UNIVERSITY of DENVER 1864

For discussion purposes only / AERA 2019

Statistics, Measurement, & Evaluation in Education
University of Missouri

The Relationship between School Disciplinary Resolutions with School Climate and Attitudes Towards School

Francis Huang, PhD

Yolanda Anyon, PhD

Statistics, Measurement, & Evaluation in Education
University of Missouri

1864 UNIVERSITY of DENVER

Paper presented at the annual meeting of the American Educational Research Association, April 2019, Toronto, Canada.

Survey items

DISCIPLINARY STRUCTURE

DISFAIR: Discipline for those who break the rules is consistent and fair
DISKNOWRUL: I know the rules at my school
DISBULCONS: There are consequences for bullies or people who harass others
DISRULECON: There are consequences for students who break the rules

STUDENT SUPPORT

ADULTHW: An adult at my school is available when I need help with my schoolwork
ADULTPROB: If I have a problem or concern there is at least one adult in the school I feel comfortable talking to
ADULTCARE: Most of my teachers care about how I am doing in their class
ADULTENC: Most of my teachers encourage me to do my best
ADULTRESP: Most of the adults who work at the school treat me with respect

SCHOOL BONDING

ENJOYSCHOO: I enjoy going to school.
HOMEWORK: My homework is valuable and relates to what I learn in class.
APARTSCHOO: I feel like I am part of this school
GOODED: I am getting a good education at my school

SCHOOL DISENGAGEMENT

BORED: I am bored in school
TRYHARD: I don't try very hard in school
WISH: I wish I went to a different school

SCHOOL SAFETY

SAFEBATH: I feel safe in different parts of the school: Bathroom
SAFECLASS: I feel safe in different parts of the school: Classrooms
SAFEHALL: I feel safe in different parts of the school: Hallways
SAFECAFETE: I feel safe in different parts of the school: Cafeteria
SAFEOUT: I feel safe in different parts of the school: Outside the school
SAFEHOME: I sometimes stay home because I don't feel safe at school
SAFENOADUL: I feel safe in school when adults are not around

EMOTIONAL REGULATION PROBLEMS

EASYUPSET: I am easily upset
ANGRY: I get angry easily