Accountability Pressure and Non-Achievement Student Behaviors

John Holbein
PhD Candidate
Sanford School of Public Policy
Duke University
John. Holbein@duke.edu

Helen F. Ladd
Professor
Sanford School of Public Policy
Duke University
hladd@duke.edu
Introduction and motivation

Contributes to literature on effects of school-based accountability pressure under NCLB.

Some schools are labeled as failing
=> pressure on teachers and administrators

Their challenge is to change behavior of students.
Relevant behaviors of students

1. **Student learning** (as measured by test scores)

   Not the focus of this paper – see Ladd (1999), Jacob (2005), Reback et al. (2011), Neal and Schanzenback (2010), and Ahn and Vigdor (2014)

2. **Coming to school** (being where they are supposed to be when they are supposed to be there)

3. **Behaving well in school** (e.g., not fighting, not being disruptive, not being suspended)

Behaviors 2 and 3 may serve as proxies for “non-cognitive” skills.
Multitasking framework

Teachers and administrators have limited time and resources to allocate among tasks.

**Primary task**: promote student learning (or the appearance of learning)

**Levers**:
- Improve teaching practices
- Devote more time to content that is tested
- Teach test-taking skills
- Game the system

All incentivized by NCLB
Multitasking: Task 2

Task: To get students to school and on time

Levers:

Call parents
Send reminders
Threaten punitive measures

NCLB incentivizes reduced absenteeism in elementary and middle schools but not in high schools.
Multitasking: Task 3

**Task:** To get students to behave well and to be respectful of others.

**Levers:**
- Devote classroom time to such skills
- Set and enforce behavioral norms

Not incentivized by NCLB.

**Predictions related to tasks 2 and 3:** Accountability pressure will reduce absences, (and maybe tardies), but will increase student misbehaviors.
Data and context

North Carolina Administrative Data (NCERDC)

- Years 2007-2012
- 5,000,000 student-year observations, clustered into 11,000 schools (unit of observation)

Treatment: School “failure” under NCLB in the prior year

Outcomes of type 1: “Showing up to school” (incentivized)
Outcome of type 2: “Behaving in school” (not incentivized)
Methods: Logic and technique

Compare student behavior in schools that “fail” (the prior year) to schools that just miss failing.

Logic: “Failing” is essentially random near the cut point. (Especially with additional statistical controls.)

School failure is the result of a complicated calculation.

That’s good for us, because it is hard for the schools to manipulate.
That’s bad for us, because it is hard to estimate precisely how close schools are to the cutoff.

⇒ We need to use a fuzzy regression discontinuity technique
Running variable: proximity to failure (Ahn & Vigdor 2014)
Showing up at school

• Our measures (collapsed to the school level)
  – Student absences
  – Student tardies

In next two figures, failing schools are on the right. The effect of failure is measured at the cut point between not failing and failing.
Accountability Pressure & Absences

Absences

Log # Absences (School)

Proximity to Failure
Accountability Pressure & Tardies

Log # Tardies (School) vs. Proximity to Failure

The graph shows a scatter plot with the x-axis representing Proximity to Failure and the y-axis representing Log # Tardies (School). The data points suggest a positive correlation between the two variables, with a trend line indicating the relationship.
Magnitudes

School failure leads to:

=> about 280 fewer absences in a school, on average, or about 0.5 fewer absences per student.

=> about 80 fewer tardies in a school level, on average, or about 0.2 fewer tardies per student.
Misbehaviors

- 3 individual measures
  - Fighting
  - In-school suspensions
  - Out-of-school suspensions
- 7 constructs
disruptive, violent, sexual, weapons-related, falsification-related, possession of controlled items, reportable offenses.

Clear pattern: School failure appears to increase most of them but not all the estimates are statistically significant and they differ somewhat based on the bandwidth used.
Accountability Pressure & Suspensions
Accountability Pressure & Fights

![Graph showing the relationship between Proximity to Failure and Log # Fights (School)]
Magnitudes

• Out of school suspensions: 16% increase, or about 21 more per school.
• Fights: 14% increase on average, or about 1.4 more per school.
• Others – less precisely estimated increases
  o disruption related: 20%
  o Sexual offenses: 13%
  o possession related: 12%
  o reportable offenses 14%
Variation in impacts

• By school characteristics
  – Bigger effects if schools are under sanction
  – No effects on absences at the high school level

• By student academic performance
  – More absence reduction in upper quartile
  – More misbehavior in upper and lower quartiles (i.e. U-shaped)
Variation in impacts (cont.)

• By student race and ethnicity
  – Absenteeism down most for white students
  – Misbehavior up most for minorities (and mainly blacks)
Conclusions

Pressure on schools from “failing” under NCLB affects student behaviors in predictable ways

Absences and tardies down
Misbehaviors up

Misbehaviors up most for the lowest performers and probably for black students – the groups most likely to be left behind