



Accountability pressure: Regression discontinuity estimates of how No Child Left Behind influenced student behavior



John B. Holbein^{a,*}, Helen F. Ladd^b

^a Postdoctoral Research Fellow, Princeton University, 307 Robertson Hall, Princeton, NJ 08544, USA

^b Sanford School of Public Policy, Duke University, 214A Sanford Bldg., Durham NC 27708, USA

ARTICLE INFO

Article history:

Received 15 June 2015

Revised 21 March 2017

Accepted 23 March 2017

Available online 29 March 2017

JEL classification:

I00

I28

I21

Keywords:

Performance-based accountability

No Child Left Behind

Non-cognitive skills

Regression discontinuity

ABSTRACT

In this paper we examine how failing to make adequate yearly progress under No Child Left Behind (NCLB), and the accountability pressure that ensues, affects various non-achievement student behaviors. Using administrative data from North Carolina and leveraging a discontinuity in the determination of school failure, we examine the causal impact of this form of accountability pressure both on student behaviors that are incentivized by NCLB and on those that are not. We find evidence that, as NCLB intends, pressure encourages students to show up at school and to do so on time. Accountability pressure also appears to have the unintended effect, however, of increasing the number of student misbehaviors. Further, we find some evidence that this negative response is most pronounced among minorities and low performing students: those who are the most likely to be left behind.

© 2017 Elsevier Ltd. All rights reserved.

1. Introduction

In recent years, education policy in the U.S. has moved distinctively towards a system of performance-based accountability as a primary means of improving student outcomes. This approach—which places pressure on schools by measuring, publishing, and incentivizing their performance—has been integral to both federal and state-level policies. Yet, the many empirical studies evaluating performance-based reforms have focused almost exclusively on student test scores or the behavior of teachers or school administrators. Much less work has paid attention to whether accountability pressure has effects on the non-achievement behaviors of students. In this paper we begin to fill this gap.

To do so we use administrative data from North Carolina to examine the extent to which accountability pressure generated under the federal No Child Left Behind Act (NCLB) affects student behaviors of two types: first, whether students show up to school when they are supposed to and second, whether students misbehave while in school. Specifically, we explore the effect of accountability pressure that originates from schools' failure to make Ad-

equate Yearly Progress (AYP).¹ While it is true that under NCLB all schools—regardless of their performance—face some pressure simply because they are a part of this performance accountability system, at the AYP cutoff marginally failing schools face an added dose of accountability pressure. This added pressure arises because marginally failing schools face a social stigma from being labeled “failing” and because they are exposed to a discrete jump in the likelihood of sanctions in future periods.² To identify the causal impact of this specific type of accountability pressure, we use a regression discontinuity design (RDD) that leverages exogenous variation at the arbitrary AYP cutoff. This approach isolates the causal effect of AYP failure apart from other observable and non-observable characteristics of students, schools, classrooms, and communities.

We find that failure-induced accountability pressure produces predictably mixed results for the non-achievement student behav-

¹ As we describe in further detail below, AYP is the criterion used to categorize schools based on student performance on standardized tests and other academic indicators. Schools that do not make AYP are labeled “failing” and face sanctions if they fail multiple times consecutively.

² Indeed, the threat of future sanctions may be particularly salient. For example, in our data for North Carolina described below, we find the increased threat of future sanctions for marginally failing schools is non-negligible in that a school that marginally fails in one year is 7–14 percentage points more likely to face sanctions in the next year ($p < 0.02$) than all-else-equally schools that marginally pass.

* Corresponding author.

E-mail addresses: jholbein@princeton.edu (J.B. Holbein), hladd@duke.edu (H.F. Ladd).

iors we examine. On the one hand, when schools face accountability pressure, students respond—as NCLB intends—by showing up to school and doing so on time. On the other, pressure leads to unintended and perhaps undesirable effects on how students behave when they are in school. Our measures of misbehavior include externalizing behavior that lead to suspensions, sexual offenses, and offenses that are required to be reported to law enforcement, among others. In addition to these overall results, we find important heterogeneities across school and student characteristics. Student responses vary depending on the non-achievement measures that NCLB requires schools to report and whether the school is under the direct threat of sanction with one or more previous failures. In addition, we find some evidence that increases in externalizing behaviors occur most among minority and low performing students—those who already exhibit higher levels of these anti-social behaviors at baseline. In sum, while performance-based school accountability produces some desired behaviors, it appears to potentially harm students in other important ways.

Our analysis makes three main contributions. First, it speaks directly to the lively policy debate surrounding performance-based accountability. Despite more than a decade of experience with the federal No Child Left Behind program, the debate involving standards and accountability continues. Our results provide policymakers with causal evidence that accountability pressure may generate unintended effects on student behaviors outside of what is picked up by standardized tests of academic achievement. Second, this paper reconciles the differing effects of accountability pressure on “showing up to school” vs. “behaving in school” by appealing to a multitasking principal-agent framework. In so doing, our paper extends this model to include situations where agents (school officials) must delegate responsibilities to second-level agents (students). Our results show that such a framework is valuable in understanding why performance-based accountability applied to schools affects student behaviors both positively and negatively. Finally, our work informs the growing body of research involving so called non-cognitive skills. An expanding literature has shown that student outcomes not fully captured by standardized test scores are important for performance in school and beyond (e.g., Carneiro, Crawford, & Goodman, 2007; Gilman, Dooley, & Florell, 2006; Heckman, 2000; Jacob, 2002; Jackson, 2012). Despite this growing literature, we still know relatively little about the targeted policies that can help nurture—or alternatively, harm—the development of these skills. Our analysis suggests that education policies primarily targeted towards the development of cognitive skills (like NCLB) may also affect non-achievement metrics of student success, sometimes in undesirable ways. Instead of leaving no child behind, performance-based accountability policies appear to sometimes harm and perpetuate inequalities in the attributes not captured by test scores shown to be so important in school and beyond.

2. Background

In recent years, policymakers have implemented performance accountability systems widely, with these now an integral part of health, agriculture, law-enforcement, nonprofit, environment, foreign policy, and education sectors (Stecher et al., 2010). These systems differ in their form and substance, but generally have three components, namely: measurement of performance, publication of results, and incentives to meet targets. Under the first component, policymakers set performance standards, measurement criteria, and determine how performance is to be reported. Under the second, individual actors' performance results are published. Finally, if the relevant actors fail to meet set standards, they face sanctions or consequences.

Prominent among these performance-based reforms is the federal No Child Left Behind Act of 2001 (NCLB). NCLB is considered by many to be the “most far-reaching education policy ... over the last four decades” (Dee & Jacob, 2011, 149), with the law substantially altering the education system by implementing universal performance-based accountability. Under this system, student performance is evaluated primarily using student test scores. Schools whose students fail to meet arbitrary performance thresholds that determine their level of “adequate yearly progress” are labeled failing. Additionally, a less-publicized NCLB provision requires schools to measure and report “other academic indicators” (or, OAI for short), which in many states include attendance or graduation rates.³ If schools fail twice consecutively, they enter a system of increasingly punitive sanctions. In the first sanction period, schools must allow transfers out of the school. In the second, schools must offer supplementary services (i.e. tutoring). In later sanction periods, district officials alter schools' leadership structure by removing administrators or implementing school-takeover.⁴ The stigma that comes with failing and the anticipation and realization of these sanctions combine to place a significant amount of *accountability pressure* on schools that fail.

In contrast to policies that are specifically directed at students, such as mandated exit exams or promotion requirements, NCLB applies pressure on schools, not students. As a result, accountability pressure is likely to affect school administrators and teachers most. Nonetheless, pressure may also be likely to spillover to students who, in turn, may react in positive or in negative ways.

2.1. Previous research on accountability pressure

Previous empirical studies of NCLB—and the similar local performance accountability reforms that preceded it—have focused primarily on how accountability pressure affects student test scores. Scholars studying such impacts have used a variety of panel and quasi-experimental techniques that can be divided into two types. The first includes studies that leverage differences *between* systems: comparing schooling units with and without accountability regimes. Analyses of this type are designed to shed light on the “full effect” of accountability pressure on student or school outcomes. However, inherent difficulties of establishing all-else-equal comparison groups make it difficult to identify causal effects with between systems designs. Seeking to address this limitation, studies of the second type compare schools *within* a given performance-accountability system. Under the NCLB context, for example, this approach compares outcomes for students who are in schools that fail to make AYP to those students in schools that do not, under the logic that failing schools face a higher dose of accountability pressure. A major advantage of this approach is that it permits all-else-equal comparisons: allowing us to compare schools as-good-as randomly assigned to failing to those as-good-as randomly assigned to passing. Its primary limitation, however, is that it focuses only on one piece, albeit an important one, of the total accountability pressure generated by a given accountability system.

While a complete review of the studies examining the effects of accountability pressure on student test scores is beyond the scope of this paper, we provide a short overview here, as this work provides important context for the present study. In an early study leveraging a between systems comparison, Ladd (1999) benchmarked students in Dallas' pre-NCLB accountability reforms to stu-

³ The OAIs we mention are those in place in North Carolina: the state we explore below. More generally, NCLB requires that schools report at least one OAI. However, the law gives states leeway in deciding what measure to use (NCLB, Part A, Subpart 1, Section 111, 2CVii).

⁴ Schools can exit these sanctions by passing two years consecutively.

Download English Version:

<https://daneshyari.com/en/article/4938327>

Download Persian Version:

<https://daneshyari.com/article/4938327>

[Daneshyari.com](https://daneshyari.com)