

Can Managerial Empowerment Mitigate Goal Displacement?

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Abstract

Attaching consequences to flawed performance measures can cause goal displacement where efforts to improve measured performance reduce efforts on unmeasured but important goals and contradict public values. In response to the pressure for accountability to results, public employees may prioritize high-stakes performance goals and high-value/low-cost citizens, encroaching upon democratic values such as equity. The discussion on mitigation strategies points to the importance of managerial empowerment in alleviating goal displacement. This paper studies the impact of managerial empowerment on goal displacement in public schools in New York City where school principals can choose to gain power over school management in exchange for accountability to school performance. Utilizing a difference-in-difference estimation strategy over multiple periods, we find that the Empowerment Zone experiment mitigated goal displacement in schools with sufficient organizational capacity. The finding suggests the potential of full implementation of performance management tenets in solving its unintended consequences and organizational capacity as a boundary condition for realizing the potential.

Keywords: Managerial empowerment, performance management, equity

1.Introduction

While performance management is increasingly used in the public sector for its potential to improve organizational performance, its limitations become clear. For instance, the reliance of performance management on incomplete and inexact performance information can distort public employees' efforts, causing various instances of goal displacement where efforts to improve measured performance can reduce efforts on unmeasured but important goals and contradict public values (Kelman and Friedman 2009; Moynihan 2015). In public education, high-powered performance management has been associated with better average student scores in high-stakes subjects (Wang and Yeung 2018; Nielsen 2014). However, it has also been associated with goal displacement practices such as allocating time away from subjects and areas that are not part of performance targets and focusing on students who are most likely to contribute to organizational performance at the expense of others (Booher-Jennings 2005; Benaine and Kroll 2020; Dee, Jacob, and Schwartz 2013; Heinrich and Marschke 2010). The practices are at odds with goals such as equity and well-rounded development that public education is supposed to promote. Hence, how public managers can reap the benefits of performance management while mitigating its unintended consequences of goal displacement is an important question.

Previous research has identified several remedies for goal displacement, such as improving performance measures and inspections, enhancing organizational capacity, and increasing the share of minority bureaucrats (Bevan and Hood 2006; Kelman and Friedman 2009; Resh and Marvel 2012). These remedies also raise the question of whether they are compatible with the full implementation of performance management. Performance management doctrines advocate for granting managers with operational autonomy in exchange for being accountable to specified results (Moynihan 2008). Increasing the unpredictability of performance auditing can decrease evaluative goal clarity and undermine the key pathway of improving performance through clear goal setting. Holding managers accountable to more process and outcome measures may restrict the autonomy needed to manage for results. Moreover, limited autonomy can frustrate the need for autonomy, weaken public service motivation, and keep minority public employees from acting on behalf of the traditionally disadvantaged citizen groups (Meier 2019; Corduneanu, Dudau, and Kominis 2020). Many of these questions point to the centrality of managerial autonomy in mitigating goal displacement.

Few studies have looked at the effect of managerial empowerment on mitigating goal displacement. As managerial empowerment is a key element in realizing the potential of performance management (Moynihan 2008), we aim to fill this gap. In particular, we examine whether managerial empowerment improves student performance in low-stakes subjects as much as it does in high-stakes subjects and whether empowerment improves the performance of more disadvantaged subgroups of students in public schools in New York City.

The effect of managerial empowerment on goal displacement can be ambiguous. On the one hand, managers need to be flexible to better serve citizens' heterogeneous needs and quickly respond to changing environments, including unanticipated problems (Moynihan 2008; Osborne and Gaebler 1992; Ouchi and Segal 2003). On the other hand, managerial empowerment may give managers more autonomy to respond to the incentive of performance management by prioritizing clients who are more likely to contribute to measured organizational performance, violating the equity requirement of delivering service based on need (Heinrich and Marschke

2010; Radin 2006). Furthermore, the effectiveness of managerial empowerment in mitigating goal displacement depends on organizational capacity. Organizations with limited resources may struggle to take on more responsibilities that come with the delegation and fail to improve high-stakes organizational performance, not to mention making progress in important but low-stakes organizational goals (Hemphill et al. 2010; Meier, Favero, and Zhu 2015). To cope with a higher workload after delegation, street-level bureaucrats may engage in the practice of prioritizing high-valued citizens and high-powered goals, deviating from the goal of serving every citizen (Tummers et al. 2015). In contrast, organizations with sufficient capacity can be in a good position to develop the knowledge and skills to reduce the conflict between the values of public administration, such as equity, and accountability pressure from performance management (Resh and Marvel 2012).

The Empowerment Zone launched in New York City public schools offers an ideal setting for testing the impact of managerial empowerment on goal displacement in performance management. A distinct feature of this accountability experiment is that principals in participating schools were granted more autonomy in budgeting, staffing, and instruction in exchange for accountability to overall school performance targets. Using a difference-in-differences estimation strategy over multiple periods, we evaluate the effect of Empowerment Zone on student subgroup performance in high-stakes and low-stakes subjects. We found that the Empowerment Zone improved school average performance not only in high-stakes subjects but also in low-stakes subjects. In addition, the Empowerment Zone increased proficiency rates of hard-to-serve and high-cost student subgroups, such as racial minorities and students with disabilities. The student-teacher ratio significantly moderated the effect. The effect was stronger in schools with a lower student-teacher ratio (higher organizational capacity). However, evidence of goal displacement still exists. In general, the positive effect of managerial empowerment is stronger in high-stakes subjects than it is in low-stakes subjects, and more privileged advantages subgroups of students seem to benefit more, though the difference is small.

This paper contributes to the literature on how to mitigate goal displacement in performance management. It shows that empowering managers can correct distortive behaviors due to incompleteness of performance measures, and it reaffirms the value of fully implementing the tenets of performance management (Moynihan 2008). To reap the full benefits of managerial empowerment in mitigating goal displacement, the study suggests that public organizations need to have the capacity to deal with the volume and complexity of decisions that come with empowerment. The findings support the significantly moderating effect of organizational capacity on the outcomes of empowerment and enrich the understanding of how organizational capacity matters for empowerment (Cogburn 2005; Overman 2016). Previous studies have shown that delegation is more likely to improve priority outcomes such as improving efficiency and enhancing accountability to citizens if public organizations are equipped with experienced staff and sufficient financial resources (Overman 2016). This study extends the literature and shows that organizational capacity matters not only for realizing the potential of delegation in attaining high-stakes goals but also making progress in low-stakes but important goals.

The rest of the paper is organized as follows. The first section reviews the literature on goal displacement in public organizations, mitigation strategies for goal displacement, pathways, and challenges from managerial empowerment to alleviate goal displacement. The second section describes the setting of managerial empowerment. The third and fourth sections

introduce data and estimation strategies. The fifth section presents the results. The sixth section concludes with a discussion of the theoretical and practical implications of findings.

2.Literature Review

2.1 Goal displacement in Performance Management

Goal displacement is likely to occur in public organizations that attach consequences to measured performance. As not every valuable goal can be measured with equal accuracy and certainty, measuring performance and attaching consequences to these performance measures can always prioritize some performance measures at the expense of others (Holmstrom and Milgrom 1991; Holmstrom 2016). The multiple dimensions of organizational performance and accountability to multiple stakeholders in public organizations further aggravates the omission of certain valuable goals. Unlike the private sector, the criteria for evaluating organizational performance in the public sector tend to be more diverse (Boyne 2002; Wichowsky and Moynihan 2008). Stakeholders are inclined to use various criteria in their evaluation of performance (Amirkhanyan, Kim, and Lambright 2014). As public officials are held accountable to these different stakeholders who may champion different values other than efficiency and effectiveness (Allison 2004), pursuing overall efficiency and effectiveness at the expense of other values is likely to be particularly problematic at public organizations. Empirical research has confirmed that high-stakes accountability reforms indeed lead to a series of goal displacement cases (Bohte and Meier 2000; Heinrich and Marschke 2010).

In public education, goal displacement caused by performance management can encroach upon equity, for which performance management is supposed to promote (Radin 2006). Promoting equity is one of the justifications for implementing performance management in public education because accountability to subgroup performance can draw attention and resources to traditionally disadvantaged student groups and improve these subgroups' performance (Dee and Jacob 2011; Kroll 2017). Still, because of the incompleteness of performance information in capturing all the important subgroups, teachers and staff were found to shift their attention and resources to students who are most likely to contribute to measured performance indicators away from those who are not (Booher-Jennings 2005; Hamilton et al. 2007). Some schools classify more low-performing students as special education students so that they would not count toward school performance (Jacob 2005). The strategic shift of resources and attention to boost school performance regardless of students' needs violates the equity requirement of teaching each student according to his or her needs. In addition, the focus of accountability on mathematics and reading has been associated with substitution of teachers' efforts away from low-stake subjects such as social studies (Dee, Jacob, and Schwartz 2013). Effort substitution will detract from the school mission of fostering students' all-round development (Rothstein, Jacobsen, and Wilder 2008). The incompleteness of performance information raises the question of how public managers can mitigate the omission of important goals for public organizations.

2.2 Identified Strategies for Mitigating Goal Displacement

Previous research has suggested at least four strategies to tackle goal displacement in public organizations. First, public managers can use a more comprehensive measure of performance, including not only measure of efficiency and effectiveness but also those integral to democratic institutions such as procedural justice, equity, trust, civic participation, political participation, and political efficacy (Wichowsky and Moynihan 2008; Yang and Holzer 2006). Second, policymakers supervising public managers can increase the frequency of performance auditing and make the auditing process transparent in retrospect but not in real time or in advance so that public employees cannot learn in advance how to game the system (Bevan and Hood 2006). Third, fostering public employees' internal motivation to serve the public interests, such as public service motivation, can drive public employees to improve unmeasured performance because public employees with strong public service motivation get satisfaction from advancing overall organizational mission (Kelman and Friedman 2009; Moynihan and Pandey 2010; Perry, Engbers, and Jun 2009). Fourth, increasing the share of minorities in public officials can partially mitigate the problem of overlooking minority interests in holding agencies accountable to flawed performance measures (Resh and Marvel 2012) .

While the previous strategies have informed our understanding of what public managers can do to mitigate goal displacement, they also raise questions of whether the strategies are compatible with the full implementation of performance management doctrines. Performance management doctrines advocate for granting managers with operational autonomy in exchange for accountability to specified results (Moynihan 2008). Increasing the frequency of auditing and uncertainty of the auditing process prior to the auditing can increase goal evaluation ambiguity and block the key pathway of performance management to improve organizational performance through clear goal setting. Moreover, holding managers accountable to more performance measures of intermediary outcomes such as clients' perception of fair treatment and end outcomes such as social trust and political participation can lead to an increase in the rules public managers need to comply with and further restrict public managers' autonomy needed to manage for results (Jakobsen and Mortensen 2016; Pollitt and Bouckaert 2017). Restricted autonomy can frustrate the inherent need for self-determination and make it challenging to maintain a high level of public service motivation (Buchanan 1975; Deci and Ryan 1985; Ryan and Deci 2017). Creating more performance goals, in general, increase goal ambiguity (Chun and Rainey 2005) while performance management aims to reduce goal ambiguity. Furthermore, minority bureaucrats still need the discretion to represent disadvantaged groups' interest in policymaking and administration (Meier 2019).

Many of the aforementioned questions point to the importance of managerial empowerment in unleashing the potential of performance management. Although managerial empowerment is supposed to be part of performance management doctrines, this part is rarely implemented in practice (Moynihan 2008). Various stakeholders have incentives in producing and protecting rather than repealing rules (van Witteloostuijn and de Jong 2007; Van Witteloostuijn and de Jong 2010). Central officers are usually reluctant to relinquish the control over finance and human resources because their professional training and working experience convince them of the importance of maintaining control over resources. Furthermore, elected officials do not have a strong incentive in advocating for managerial empowerment because they are primarily attracted to performance management for its symbolic benefits. Moreover, making rules regarding both the production and performance is a way to deal with the ambiguity in

running public organizations and a result of learning from implementing performance management (Jakobsen and Mortensen 2016).

2.3 The Effects of Managerial Empowerment on Goal Displacement

If managers are granted more autonomy in performance management, they can take a more flexible approach to serve different citizens' needs, especially those who are hard to serve under standard approaches. Citizens served by public organizations tend to be heterogeneous and have various needs that defy one-size-fits-all solutions (DeLeon and Denhardt 2000). Public administration values equity in serving heterogeneous citizens (Allison 2004). To meet the requirement, managers need to be allowed to tailor the programs to each citizen subgroup's needs (Osborne and Gaebler 1992). For example, student subgroups in public schools, such as students with limited English proficiency or students with disabilities, face different challenges and need different programs to address their needs. To help each student subgroup overcome these challenges, principals need to have the autonomy to tailor teaching staff, schedules, and teaching materials to fit students' needs (Ouchi and Segal 2003). Moreover, autonomy also helps principals to recruit, train, and maintain a high-quality teacher team. As principals' ratings of teachers are better than traditional indicators of teachers' effectiveness, such as teaching experience and educational attainment, at predicting teachers' effectiveness (Goldhaber 2015), principals are in a good position to develop staff plans, recruit effective teachers, run training programs for new teachers, and terminate consistently ineffective teachers.

Managers also need to be empowered to respond quickly to changing circumstances including the discovery of goal displacement in performance management. First, empowered managers are more likely to have the time and resources to tackle the problems of goal displacement. Empowered management is associated with better performance and is likely to make actual performance exceed expectations (Wang and Yeung 2018). When actual performance surpasses the goal, managers have a better chance of getting more resources and could shift their focus from performance-related goals to slack-related goals (Meier, Favero, and Zhu 2015). In public education, principals can shift their attention to performance in low-stakes subjects to ensure all-around development when their schools have attained the performance goals for high-stakes subjects. Second, empowered managers will be able to incorporate new information into program adjustment (Dee and Wyckoff 2017; Rockoff et al. 2011). Due to bounded rationality and public employees' strategic responses to performance management, policymakers at the central offices can hardly anticipate all the problems in implementation and design all the possible solutions to the problems in advance (Heinrich and Marschke 2010). Overcoming this challenge requires identifying emerging issues and adjusting in a timely manner. Because of their familiarity with the operation, empowered public managers are in a good position to make necessary and timely adjustments (Holm 2018).

If the theoretical reasons for why managerial empowerment can mitigate goal displacement at public organizations seem clear, there are also good reasons for why it is not so easy in practice. First, to cope with performance pressure for improving overall organizational performance, some public employees tend to spend more time and resources on high-value clients that are least costly or most effective for improving measured organizational performance (Booher-Jennings 2005; Heinrich and Marschke 2010; Tummers et al. 2015). Managerial empowerment may worsen the prioritization of high-value/low-cost clients because it gives

managers more leeway from administrative laws and regulations that are used to preserve the basic principles in the interactions between citizens and states such as equity and transparency (Pollitt and Bouckaert 2017; Rosenbloom 2007).

Despite some counterarguments, the positive effect of managerial empowerment in mitigating goal displacement may outweigh the negative effects. Therefore, we propose that

***Hypothesis one:** Managerial empowerment in performance management will mitigate goal displacement.*

If hypothesis one holds, we expect managerial empowerment to have a positive impact on low-stakes performance measures for schools. Moreover, we expect positive effects of managerial empowerment on the performance of racial minorities and student subgroups such as students receiving special education and students with limited English proficiency. Serving racial minorities, students with limited English proficiency, and students receiving special education tend to be more challenging and incur higher costs (O'Toole Jr and Meier 2011). Comparing these student subgroup performances with other subgroups' performance can shed light on whether schools divert efforts away from high-cost and hard to serve subgroups to low-cost and easy-to-serve subgroups. It is possible that in response to pressure for improving organizational performance, public employees may prioritize easy-to-serve citizens at the expense of hard-to-serve citizens (Tummers et al. 2015).

2.4 The Moderating Role of Organizational Capacity in Managerial Empowerment

Unleashing the potential of managerial empowerment in mitigating goal displacement also depends on organizational capacity. We adapt the definition of managerial capacity to define organizational capacity as the organizational ability to mobilize and utilize resources to aid the discharge of policy and program responsibilities (Ingraham, Joyce, and Donahue 2003, 15). Compared with managerial capacity, organizational capacity includes front-line bureaucrats and administrative staff as part of organizational resources. The inclusion is important in the study of goal displacement in performance management for at least three reasons. First, street-level bureaucrats have discretion in interpreting and implementing policy in their interactions with citizens (Lipsky 1980; Soss, Fording, and Schram 2011). Second, to cope with the shortage of staff and consequent excessive workloads, street-level bureaucrats may ration service and prioritizing some citizens at the expense of others, contradicting the equity value in the public sector (Tummers et al. 2015; Lipsky 1980). Third, street-level bureaucrats and other staff can use their expertise and experience to help managers make sense of performance information, adjust policy, and solve problems promptly (Behn 2014; Moynihan and Kroll 2016).

Organizational capacity can moderate the effect of managerial empowerment in at least two ways. First, organizational capacity reflects and determines the potential resources available for buffering environmental shocks and handling various tasks that come with delegation (O'Toole and Meier 2011). Managerial empowerment, like any managerial reforms, will, to some degree, change the routines (Moynihan and Kroll 2016). Organizations with slack resources can use the resources to absorb changes and take on more responsibilities that come with the managerial empowerment (Pfeffer and Salancik 1978; Cogburn 2005). Because of the absorption of the shock, public employees' workload can be kept at a reasonable level and they have less incentives to use coping behaviors to alleviate the demands and pressure. Delegating power to local units without the necessary human resources may negatively moderate the effect

of managerial empowerment on organizational performance because managers and staff may stretch themselves too thin to satisfactorily perform the core tasks. When a gap exists between actual performance and expected performance, public managers are less likely to pay attention to slack concerns such as unmeasured goals (Cyert and March 1964; Meier, Favero, and Zhu 2015). To alleviate the external demands associated with delegation, public employees may resort to coping behaviors, creating goal displacement such as rationing services and prioritizing high-value or low-cost citizens to reduce performance pressure (Tummers et al. 2015).

Second, organizations with high organizational capacity are in a good position to resolve the conflict between values of public administration and accountability pressure. Public administration is firmly anchored in democratic values such as equity and transparency and these democratic values are reflected in laws and regulations (Frederickson 1980; Radin 2006; Rosenbloom 2007). An unintended consequence of accountability to results is that public employees sometimes overlook important but unmeasured goals such as equity in their pursuit of measured and high-stakes goals (Booher-Jennings 2005; Heinrich and Marschke 2010; Tummers et al. 2015). Organizations with sufficient human resources can mitigate the conflict between the value of public administration and practices of relying on flawed measures which leads to goal displacement because they can invest more resources to develop the knowledge and skills to align the practices with values (Resh and Marvel 2012).

Evidence of the moderating role of organizational capacity on environmental shocks and reforms abound in public education. Organizations with sufficient organizational capacity are able to make timely decisions on resource allocation and personnel management to mitigate the negative effects of shocks (O'Toole and Meier 2011). Inexperienced and ineffective principals were found to be at loss and were struggling to improve school performance specified in performance contracts after the principal empowerment reform in New York City (Hemphill et al. 2010). Hypothesis two reflects the moderating role of organizational capacity.

Hypothesis two: Organizational capacity will moderate the effect of managerial empowerment in performance management on goal displacement.

3.Context

Improving public school performance was a key campaign promise for Michael Bloomberg in 2001. After being elected, Mayor Bloomberg gained control of NYC public schools and selected Joel Klein as school chancellor. The Bloomberg-Klein regime implemented a series of reforms in NYC public schools, of which the “Empowerment Zone” (EZ) was a signature one. The autonomy in exchange for accountability experiment started in 2004 with a pilot program called “the Autonomy Zone”. The EZ experiment was formally launched in 2006 with 332 of roughly 1,300 schools signed up for the experiment. The EZ was open for all schools to join, which was different from some other urban school districts, such as Boston and Chicago, that only awarded autonomy to high-performing schools. The EZ experiment expanded in the following years, growing to about 440 schools in 2007-08 AY and 480 schools in 2008-09 AY.

To join the EZ, principals had to sign a performance contract with the New York City Department of Education (NYCDOE)(see Appendix A). The contract reflected the key philosophy of the EZ experiment: to improve school performance, principals should be free from unnecessary red tape and have additional autonomy in making decisions that best fit their schools (Ouchi 2008). In exchange, principals should be held accountable to school performance target

in math and English . The contract specified the additional authorities that principals were granted, including authority over key educational decisions (e.g. curriculum, assessment, and summer programs), discretion over budget (additional funding averaging &150,000 and less restriction on select funds in existing budget), and exemptions from certain administrative requirements such as reporting and attending DOE meetings. In exchange, principals were held to meeting performance targets, such as meeting academic performance targets set annually by the Office of Accountability and complying with applicable laws, regulations, and rules. Rewards and consequences were also clearly specified in the contract. Schools meeting performance targets were eligible for rewards and recognitions, additional funding for their school, and an early extension of the performance agreement; Schools failing to meet targets were subject to progressive consequences, including designing intervention plans, leadership changes, and school closure.

The EZ fully implements the tenants of performance management in granting autonomy in exchange for accountability to results.” in performance management. Moynihan (2006, 78) defined the tenants of performance management as “using performance information to increase performance by holding managers accountable for clearly specified goals and providing them with adequate authority to achieve these goals.” Some high-powered accountability systems implemented after the No Child Left Behind Act only ratcheted up accountability, trying to pressure principals to improve performance. However, principals’ may still not have the authority or capacity to make meaningful improvements (Massell et al. 2005; Hamilton et al. 2007). The EZ distinguished itself by granting additional authority to principals so that they can make meaningful changes in their schools. Decisions were not made in DOE central offices and forced on schools; instead, principals can use their local knowledge to make the best decisions that fit their schools. The EZ thus gave principals means to achieve performance targets, and thus may mitigate unintended consequences of performance management, such as goal displacement or cheating.

4.Data

To investigate whether and how the EZ experiment mitigated goal displacement, we used administrative data of elementary and middle schools in NYC from 2005-06 AY to the 2008-2009 AY. The EZ experiment formally started in the 2006-07 AY, so our data covered one year before the experiment and three years after the experiment.

Dependent Variables

The dependent variables included: 1) average proficiency rates in high-stake subjects, such as ELA and mathematics, and low-stake subjects, such as science and social studies; 2) average proficiency rates of disadvantaged subgroups of students, such as students with disabilities and racial minorities, and relatively more advantaged subgroups, such as English proficient students and white students. Selecting these performance measure smeanas that we limit the sample to elementary and middle schools since only students in grade 3-8 took these tests.

Students’ academic performance is by no means a perfect measure of school performance since education involves more than just academics. However, as required by the NCLB and the

performance contract principals signed with NYCDOE, academic performance in high-stakes subjects such as ELA and mathematics was used by the New York State and the NYCDOE to measure school performance, which means it was part of the “official” measure indicators of school performance that principals were held accountable to. Incentives, as specified in the performance contracts, were structured around these official performance measures, and thus it is crucial to understand how schools responded to this performance measure (Rothstein, Jacobsen, and Wilder 2008). New York State Education Department classified students into four levels based on their test performance: Level 1 (Well Below Standards), Level 2 (partially proficient), Level 3 (proficient), and Level 4 (Exceeds proficiency). Average proficiency rates measure the percentage of students who performed at level 3 and 4.

Treatment variable

The EZ experiment was formally launched in the 2006-07 AY and we obtained the list of schools that entered the experiment from the NYCDOE. The experiment expanded in the following two years, and the expansion schools were obtained from the website of the NYCDOE.

Control variables

We controlled for a series of teacher, student, and school variables that may confound the relationship between the treatment and the dependent variables. These variables included: school enrollment, student-teacher ratio, percentages of teachers with advanced degrees (master’s or above) and teachers with fewer than three years of experience, percentages of students with disabilities, students eligible for free or reduced-price lunch, and students who were English language learners, male, white, Hispanic, Asian and African Americans.

5. Model and empirical strategy

We used a difference-in-differences design to investigate how the reform affected average proficiency rates across subjects and subgroups of students. Our basic model is:

$$Y_{st} = \alpha + \beta Empowerment_{st} + \delta X_{st} + A_s + B_t + \epsilon_{st}, \quad (1)$$

In Equation 1, Y_{st} is the average proficiency rates in school s and year t , X_{st} is a vector of time-varying control variables, including above mentioned school, students and teacher characteristics. A_s and B_t are school fixed effect and year fixed effect. ϵ_{st} is the error term. $Empowerment_{st}$ is a dummy variable that indicates the treatment status. The EZ reform expanded from the 2006-07 AY to the 2008-09 AY, which means that schools received the treatment in different years. To account for this, we used an approach that has been used in the econometrics literature (Beck, Levine, and Levkov 2010; Lavy 2020). For the 2005-06 AY (one year before the start of the EZ experiment), $Empowerment_{st}$ was 0 for all schools. For the 2006-07 AY, schools entered the zone in this year got $Empowerment_s=1$, and the rest of schools got $Empowerment_s=0$. Similarly, for the 2007-08 AY, schools that were in the EZ in that year (those started in the 2006-07 AY and those started in the 2007-08 AY) got $Empowerment_s=1$, and the rest of schools got $Empowerment_s=0$. The same approach was used for the 2008-09 AY. The coefficient β thus indicates the impact of the EZ on average proficiency rates.

To investigate whether or not organizational capacity may moderate the effect of the EZ, we followed the practice of conceiving capacity as the potential to handle various tasks (O’Toole and Meier 2010; Resh and Marvel 2012). Here, we used student-teacher ratio as a measure of organizational capacity. This measure has been used as a proxy of organizational capacity in previous studies. We assume that the lower the student-teacher ratio is, the higher the organizational capacity an organization has. We constructed an interaction term between $Empowerment_{st}$ and student-teacher ratio and estimated equation 2 as our final model:

$$Y_{st} = \alpha + \beta Empowerment_{st} + \gamma Empowerment_{st} * student\ teacher\ ratio + \delta X_{st} + A_s + B_t + \epsilon_{st}, \quad (2)$$

As we used panel data to estimate the model, observations of the same school over years are likely to be correlated, and residuals are likely to be heteroscedastic. To mitigate these problems, we used robust standard errors and clustered them at the school level.

Testing the parallel trend

A key identifying assumption of the difference-in-differences method is parallel trend, which means that the treatment and control groups would have the same trend in school performance had there been no interventions (Angrist and Pischke 2009). To investigate if the two groups had similar trends, we implemented a series of placebo tests by estimating a two-period difference-in-differences in the pre-treatment period. The idea is that assuming that the EZ reform had been implemented one year earlier in the 2005-06 AY, then a statistically significant effect in the 2006-07 AY would indicate the violation of the parallel trend assumption. Equation 3 shows the basic model in which $Empowerment_s$ indicates the treatment status, $YEAR_{0607AY}$ is the year dummy of the 2006-07 AY. P_{st} is the interaction between the year dummy and treatment status, and it is the variable of interest.

$$Y_{st} = \alpha + \beta Empowerment_s * YEAR_{0607AY} + \delta Empowerment_s + A_s + YEAR_{0607AY} + \epsilon_{st}, \quad (3)$$

Only selected school performance data were available prior to the 2006-07 AY, and Table 1 presents the results of estimating equation 3 with pre-treatment data. None of the coefficients of the interaction term was statistically significant, showing that the parallel trend assumption was not violated.

[Insert Table 1]

6. Results

To investigate how the EZ affected school performance, we first looked at its impacts on high- and low-stakes subjects. Table 2 presents the results of EZ’s impact on high-stakes subjects such as ELA and mathematics and low-stakes subjects such as science in selected grades. The results show that the main effect of Empowerment and the interaction terms are statistically significant for ELA and mathematics. Moreover, the effect of empowerment on student performance depended on the student-teacher ratio. For example, the global mean of

student-teacher ratio is 13.46. At this level, compared with non-EZ schools, EZ schools showed an average 0.81 percentage point increase in overall ELA proficiency rates and 0.77 percentage point increase in overall math proficiency rates. At a lower student-teacher ratio of 10, EZ schools showed a much bigger increase in proficiency rates. For example, compared with non-EZ schools, EZ schools showed a close to three percentage points increase in overall ELA proficiency rates and 2.7 percentage points increase in overall math proficiency. The significant interaction term suggests the boundary condition of the EZ experiment: managerial empowerment worked especially well in schools that had a higher organizational capacity to take on more responsibilities after delegation. As the standard error of the marginal effect of EZ changed with the student-teacher ratio, we mainly relied on marginal plots generated in Stata 14 to interpret the results.

[Insert Table 2]

We then investigated the impact of the EZ on low-stakes subjects that were not part of the high-powered accountability system. The results are presented in Table 2. The EZ had no impact on fourth-grade science and eighth-grade social studies. The effects on fifth-grade social studies and eighth-grade science were also contingent on the student-teacher ratio. As is shown in figure 1, the EZ did not significantly affect participating schools' performance in either grade five social studies or grade eight science at school with an average student to teacher ratio of 13.4. In schools with a student-teacher ratio less than 8, the EZ reform had a significant positive impact on the performance in grade eight science at the five percent level. For instance, EZ raised grade 8 science proficiency by 5.3 percentage points (p-value: 0.046) at schools with the student to teacher ratio at 7.5. Although the impact of EZ reform on grade five social studies also became larger, it was only significant at 10 percent significance level. After adjusting for multiple comparisons using randomization tests (Young 2019), the significant result of EZ on school performance grade 8 science remained significant (randomization-c p-value: 0.00392 and randomization-t p-value: 0.0859). Also, we can reject the null hypothesis that the EZ did not have any impact on the four low-stakes measures at the five percent significance level (the p-value for the randomization is 0.00392)

Next, we investigated the impacts of the EZ reform on student subgroups. The NCLB required schools to show adequate yearly progress in disadvantaged subgroups of students, which could confound the effects of EZ on student subgroups. However, the NCLB applied to all schools, regardless of whether these schools were in the EZ or not. The NCLB pressure on schools can thus be assumed to be relatively homogenous. If EZ schools demonstrated higher proficiency rates than non-EZ schools in subgroups of students, we could still attribute the improvement to the EZ experiment.

First, the results support hypotheses that managerial empowerment mitigates goal displacement in organizations with sufficient organizational capacity. We found that EZ improved all racial groups' high-stakes performance at schools with low student to teacher ratios (see table 3). The effect of EZ was only insignificant for white students' math proficiency (see figure 2-figure 5). With student-teacher ratio at 10, participating in the EZ improved English

proficiency rates of white, Asian, black, and Hispanic students by 3.89 (p-value: 0.02), 3.60 (p-value: 0.029), 2.24 (p-value: 0.007), and 2.80 (p-value: 0.003) percentage points respectively. Still, white and Asian students seem to benefit more from EZ. Except for white students, a similar pattern hold for the racial group performance in math proficiency. In schools with the student-to-teacher ratio at 9, EZ increased Asian students' math proficiency by 3.94 percentage points (p-value: 0.044), Hispanic students' math proficiency by 2.4 percent point (p-value is 0.048), and African American students' math proficiency by 3.26 percent points (p-value:0.05).

[Insert Table 3]

[Insert Figure 2-5]

Table 4 shows that managerial empowerment benefited both traditional disadvantaged and advantaged students in schools with sufficient organizational capacity. In schools with a student to teacher ratio at 10, EZ increased the ELA proficiency rates of students who were fluent in English and students with limited English proficiency by 2.92 percent point (p-value<0.01) and 2.5 percent points (p-value: 0.024) respectively. The corresponding increases in math proficiency were 2.12 percent points (p-value: 0.023) for students fluent in English and 2.97 percentage points (p-value: 0.10) for students with limited English proficiency. The EZ also raised the math proficiency of students receiving general education and students receiving special education by 2.13 percentage points (p-value: 0.023) and 2.97 (p-value: 0.010) respectively at schools with the student to teacher ratio at 10. Unlike the findings on racial groups, the effects of EZ on advantaged student groups were similar to those on traditionally disadvantaged subgroups. There is one finding deviating from this pattern. Although EZ improved the English proficiency of students receiving general education by 3.12 percentage points (p-value<0.01) at schools with the student-teacher ratio at 10, it did not significantly influence the same outcome for students with limited English proficiency.

[Insert Table 4]

[Insert Figures 6-9]

In general, the results show that the EZ produced positive effects not only on high-stakes subjects but also on some low-stakes subjects. The EZ also helped traditionally disadvantaged student subgroups to improve academic performance. The results thus support hypothesis one that managerial empowerment mitigates goal displacement. On other hand, the results also show that the positive effects are contingent on sufficient organizational capacity. The positive effects are much stronger in public schools with sufficient human resources and lower student-teacher ratios, which support hypothesis two.

7. Discussion

We found that the EZ experiment mitigated goal displacement in two ways. First, it improved school performance in some areas unspecified in the high-stakes performance contract. At schools with low than average student-teacher ratio, EZ improved school performance in grade 8 science, which is not part of the performance contract school principals signed with NYDOE. Second, it improved school performance for traditionally hard-to-serve and disadvantaged student subgroups who can be overlooked in the pursuit of better overall organizational performance. EZ improved not only the performance of advantaged and easy-to-serve student groups such as white, Asian, students fluent in English, and those receiving general education, but also traditionally hard-to-serve and disadvantaged groups such as racial minorities, students with limited English proficiency, and those with disabilities. Moreover, realizing the potential of managerial empowerment in mitigating goal displacement depends on organizational capacity. In schools with a higher-than-average student-teacher ratio, the impact of EZ on organizational performance turn significantly negative.

Admittedly, public schools in New York City are highly diverse – white students are actually a minority group. The average percentage of white students were only 15.3 across the study period. This means improving the performance of Hispanic and African American students is imperative for schools to meeting performance targets, which may weaken our claim that the EZ mitigated goal displacement. However, the positive effect that the EZ had on low-stakes subjects and other traditionally disadvantaged groups such as students with disabilities and limited English proficiency still show that the benefits of the EZ were widespread rather than narrowly focused on advantaged students.

Our findings hold several implications. If the tenets of performance management are fully implemented, unintended consequences of performance management can be mitigated. Evolving gaming behaviors in performance management have prompt researchers and policymakers to question whether it is worth continuing performance management in public organizations (Heinrich and Marschke 2010; Hood 2006; Terman and Yang 2016). If public employees can always find a way to game the system and substitute efforts from unmeasured but important goals to measured ones, does the benefits of performance management outweigh the cost of goal displacement? Our findings provide hope and direction to solve this predicament. One direction is to fully implement the tenets of empowering managers to manage for results in exchange for accountability to results (Moynihan 2008). Previous research has shown that managerial empowerment in exchange for result accountability has been associated with improvement in priority goals (Nielsen 2014; Ouchi and Segal 2003; Wang and Yeung 2018). We extend the research by showing the beneficial effects of managerial empowerment on low-stakes goals and hard-to-serve citizens. The finding suggests that a full implementation of performance management tenets can mitigate the unintended consequence of goal displacement and is compatible with important democratic values such as equity and students' all-round development (Radin 2006; Rothstein, Jacobsen, and Wilder 2008).

Despite the appeal of managerial empowerment, the record of managerial empowerment has been mixed (Overman 2016), highlighting the importance of contingency-based theory on the impact of managerial empowerment (Coggburn 2005). Our study echoes the importance and shows that organizational capacity moderates the impact of managerial empowerment on goal displacement. Our study contributes to the collective understanding of boundary conditions of

managerial empowerment by linking the literature on managerial empowerment with the literature on coping behaviors. The literature on coping behaviors holds that in response to an overwhelming workload, public employees tend to take shortcuts to alleviate the demands placed on them (Lipsky 1980; Tummers et al. 2015). Our results confirmed this prediction in the context of managerial empowerment in performance management. Organizations without sufficient organizational capacity struggle to handle new tasks that come with delegation (Hemphill et al. 2010). Hence, public employees at those organizations may be stretched thin and are not able to fully implement new programs to reap the benefits of empowerment. In the meantime, previous organizational routines are disrupted, leading to negative impact of empowerment on organizational performance in organizations with limited organizational capacity. In contrast, organizations with a higher level of capacity or resources may be able to direct resources to new emphasis areas to reap the benefits of decisions that fit their organizations.

Third, it is important to add two caveats to our findings. Managerial empowerment can not fully solve the problem of goal displacement. The improvements in low-stakes subjects were weaker than the improvements in high-stakes subjects. The results show that Black and Hispanic students did not benefit from the EZ as much as white and Asian students did, and disadvantaged subgroups, such as students with disabilities and limited English proficiency, did not benefit from the EZ as much as their more advantaged counterparts did. Though promising, managerial empowerment is not a cure to goal displacement. A “cocktail” therapy that combined a few remedies together may be more effective. A promising area for future studies is how different measures work together to mitigate goal displacement. For instance, it may be worth examining whether empowered minority managers implemented measures aiming to improve minority students' test scores and close the racial gaps in EZ.

Moreover, it can be challenging to replicate favorable conditions to ensure successful managerial empowerment and realize its potential for mitigating goal displacement. As is analyzed in the literature review section, policymakers need to be committed to implementing managerial empowerment to harness the full potential of performance management (Moynihan 2008). Many projects of empowering managers were not fully implemented (Pollitt and Bouckaert 2017; Overman 2016), not least because various stakeholders may have concerns with empowered managers (Moynihan 2008; van Witteloostuijn and de Jong 2007). Some of these concerns are legitimate. This paper touches upon two. The first one is that managers may use the new discretion to maximize their interest. One way of maximizing the interest is to keep gaming the system and avoid exert more effort to realize meaningful performance improvement. Our findings in New York City suggest the opposite that managers use their discretion to advance the public interest. We recognize that the concern over abuse of power can be justified in countries where the ethics of public service has not been fully internalized (Schuster, Meyer-Sahling, and Mikkelsen 2020). We encourage researchers to conduct more studies on the impact of managerial empowerment in both developed and developing countries to further evaluate the relationship between delegation and organizational outcomes and develop a contingency-based theory of managerial empowerment

Another legitimate concern is local units may not have the organizational capacity to handle the tasks associated with the delegation and were left to struggle without central support. That is also one of the reasons why all the schools were recentralized in 2015 under Chancellor Carmen Fariña who is appointed by Mayor Bill de Blasio (Taylor 2015). Our finding validates the importance of organizational capacity in realizing the benefit of managerial empowerment.

We also show that managerial empowerment works for schools with sufficient organizational capacity. Based on our findings and previous studies showing the positive impact of managerial empowerment in performance management on school performance (Nielsen 2014; Ouchi and Segal 2003; Wang and Yeung 2018), we suggest that offering more targeted support to struggling schools may be better in improving school performance.

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Table 1. The Results of Testing Parallel Trends

	Mathematics 4	Mathematics 8	ELA 4	ELA 8	Science 4	Science 8
<i>Empowerment_s</i> <i>* YEAR_{0607AY}</i>	1.18	-1.11	0.83	-0.58	0.16	-0.18
	(1.05)	(1.70)	(1.04)	(1.22)	(1.15)	(1.92)
N	1380	594	1380	591	1378	578
R^2 (within)	0.31	0.06	0.01	0.10	0.43	0.18

Note: Abbreviated results are shown. Robust standard error clustered at the school level

Table 2. The impact of EZ on proficiency rates in high-stake and low-stake subjects

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Overall ELA proficiency	Overall Math proficiency	Social studies 8	Social studies 5	Science 8	Science 4
<i>Empowerment_{st}</i>	9.004***	8.306***	0.394	6.689*	12.221**	4.987
	(2.112)	(2.733)	(4.908)	(3.648)	(5.521)	(3.532)
<i>Empowerment_{st}Student teacher ratio</i>	-0.609***	-0.560***	-0.106	-0.494*	-0.923**	-0.392
	(0.160)	(0.204)	(0.354)	(0.268)	(0.402)	(0.255)
Observations	3,681	3,685	1,365	2,712	1,358	2,705
R-squared	0.705	0.740	0.376	0.426	0.274	0.182
Number of dbn	962	963	389	698	398	686

Note: Abbreviated results shown. All models control for school and year fixed effects, school enrollment, student-teacher ratio, percentages of teachers with advanced degrees and teachers with fewer than three years of experience, percentages of students with disabilities, students eligible for free or reduced price lunch, and students who were English language learners, male, white, Hispanic, Asian and African Americans. Robust standard errors clustered at the school level in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 3. The impact of EZ on academic performance of racial subgroups

	White		Hispanic		African American		Asian or Pacific Islander	
	Overall ELA	Overall Math	Overall ELA	Overall Math	Overall ELA	Overall Math	Overall ELA	Overall Math
<i>Empowerment_{st}</i>	12.941***	6.349	6.500***	6.459**	9.365***	6.230*	11.50**	9.73**
	(4.820)	(4.339)	(2.784)	(2.969)	(2.998)	(3.281)	(4.92)	(4.94)
<i>Empowerment_{st}</i> <i>* Student teacher ratio</i>	-0.905***	-0.423	-0.426**	-0.468**	-0.684***	-0.424*	-0.79**	-0.64*
	(0.331)	(0.229)	(0.213)	(0.219)	(0.225)	(0.243)	(0.34)	(0.34)
Observations	2,117	2,117	3,664	3,671	3,452	3,455	2315	2361
R-squared	0.305	0.429	0.563	0.670	0.356	0.659	0.291	0.371
Number of dbn	617	611	959	960	928	929	661	676

Note: Abbreviated results shown. All models control for school and year fixed effects, school enrollment, student-teacher ratio, percentages of teachers with advanced degrees and teachers with fewer than three years of experience, percentages of students with disabilities, students eligible for free or reduced price lunch, and students who were English language learners, male, white, Hispanic, Asian and African Americans. Robust standard errors clustered at the school level in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Table 4. The impact of EZ on academic performance of subgroups of students

	Students with disabilities		Students without disabilities		Limited English Proficient		English proficient	
	Overall ELA	Overall Math	Overall ELA	Overall Math	Overall ELA	Overall Math	Overall ELA	Overall Math
<i>Empowerment_{st}</i>	2.298	8.479**	10.159***	6.514**	8.608**	7.350*	9.501***	7.284***
	(3.085)	(3.876)	(2.377)	(3.095)	(3.858)	(4.320)	(2.513)	(-0.489)
<i>Empowerment_{st}</i> <i>* Student teacher ratio</i>	-0.125	-0.550*	-0.704***	-0.439*	-	-0.438	-	-0.489***
	(0.234)	(0.294)	(0.179)	(0.230)	(0.303)	(0.330)	(0.163)	(0.210)
Observations	3,583	3,588	3,678	3,682	3,057	3,294	3,680	3,685
R-squared	0.535	0.660	0.695	0.701	0.499	0.621	0.731	0.711
Number of dbn	939	939	961	962	871	892	962	963

Note: Abbreviated results shown. All models control for school and year fixed effects, school enrollment, student-teacher ratio, percentages of teachers with advanced degrees and teachers with fewer than three years of experience, percentages of students with disabilities, students eligible for free or reduced price lunch, and students who were English language learners, male, white, Hispanic, Asian and African Americans. Robust standard errors clustered at the school level in parentheses; *** p<0.01, ** p<0.05, * p<0.1

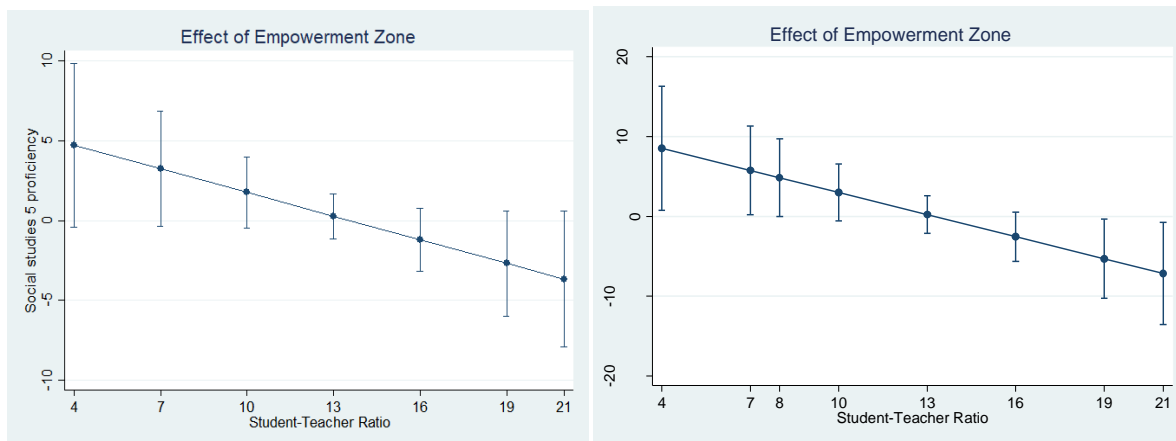


Figure 1. The impact of EZ on proficiency rates in low-stakes subjects

Note: All the figures used 95 percent confidence intervals.

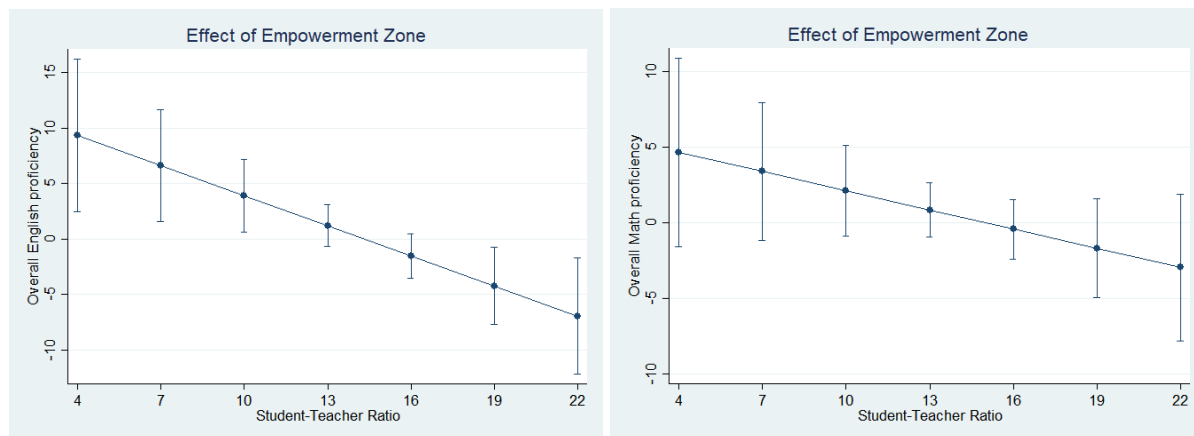


Figure 2. The impact of EZ on White students' proficiency rates in high-stakes subjects

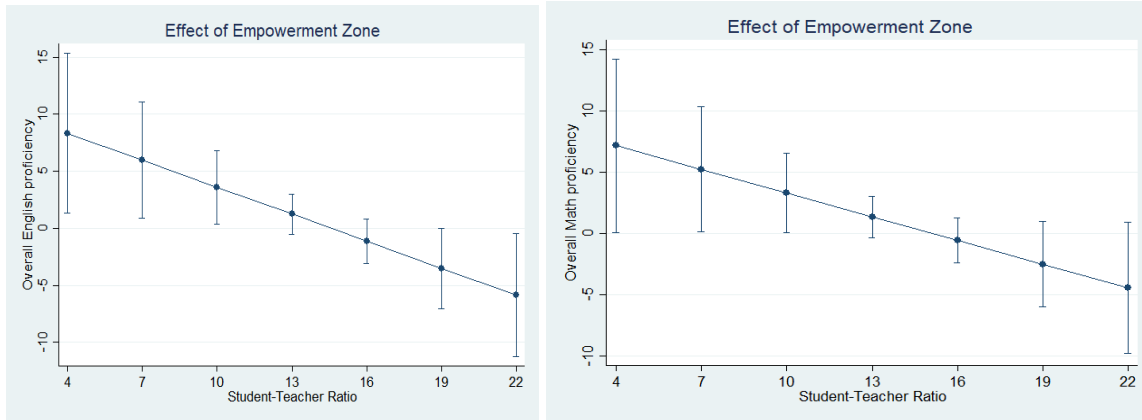


Figure 3. The impact of EZ on Asian students' proficiency rates in high-stakes subjects

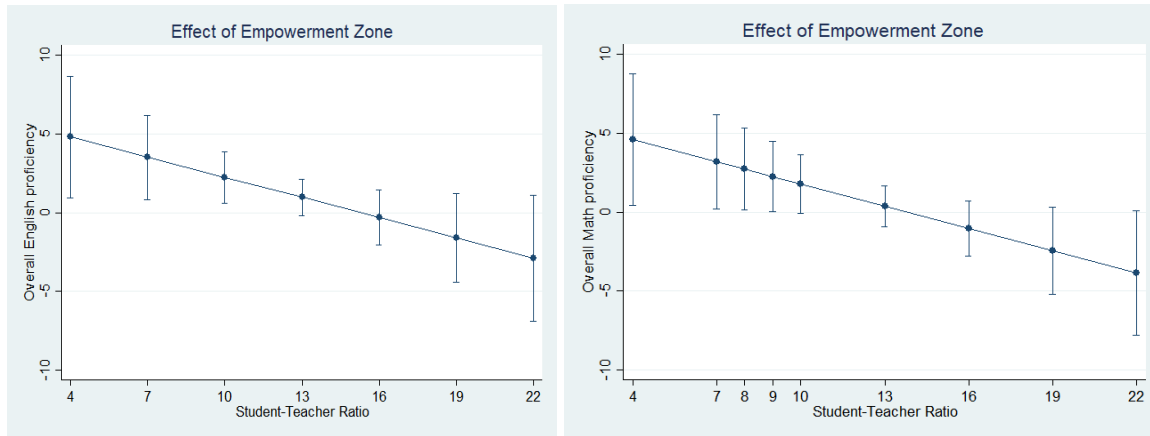


Figure 4. The impact of EZ on Hispanic students' proficiency rates in high-stakes subjects

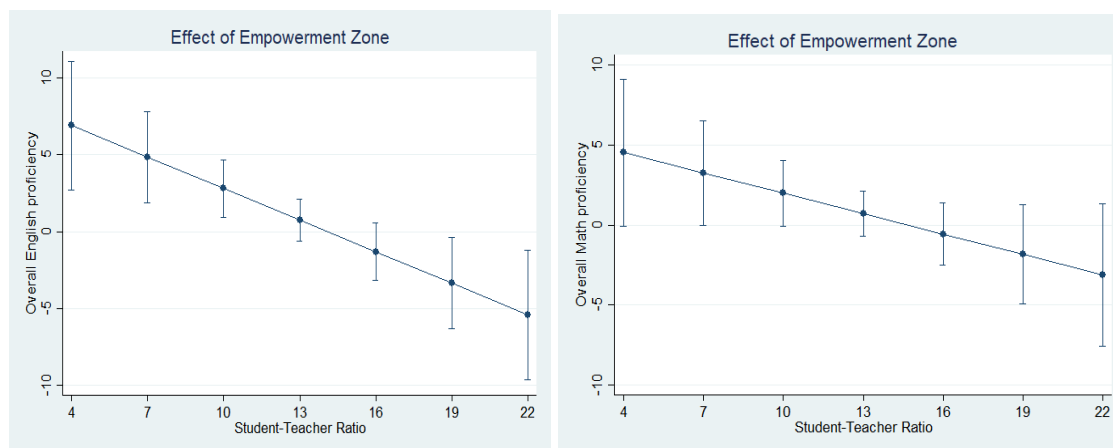


Figure 5. The impact of EZ on African American students' proficiency rates in high-stakes subjects

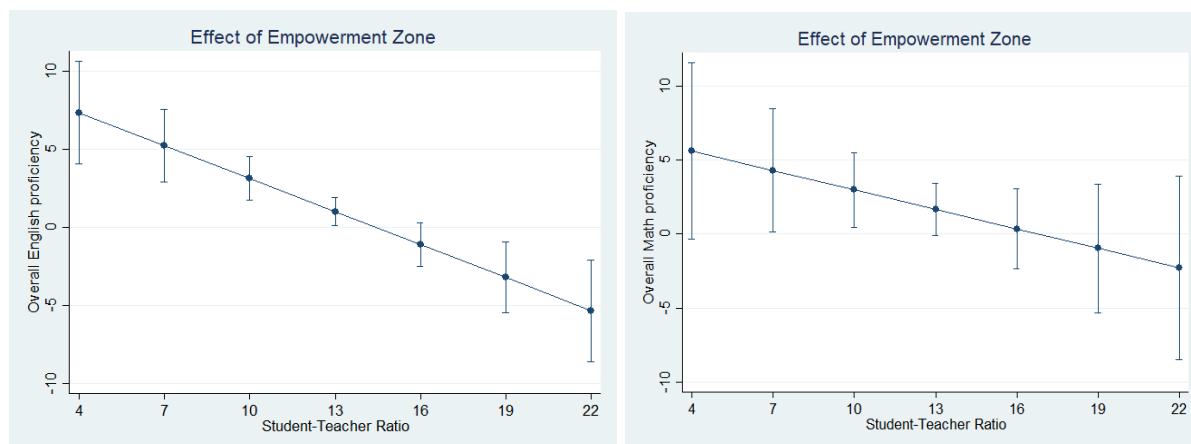


Figure 6. The impact of EZ on proficiency rates of students fluent in English in high-stakes subjects

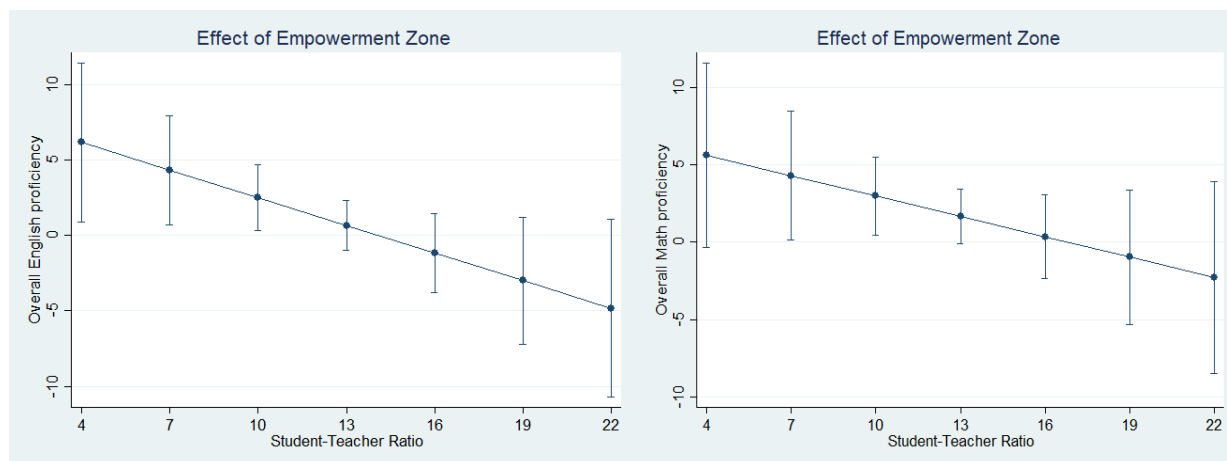


Figure 7. The impact of EZ on proficiency rates of students with limited English proficiency in high-stakes subjects

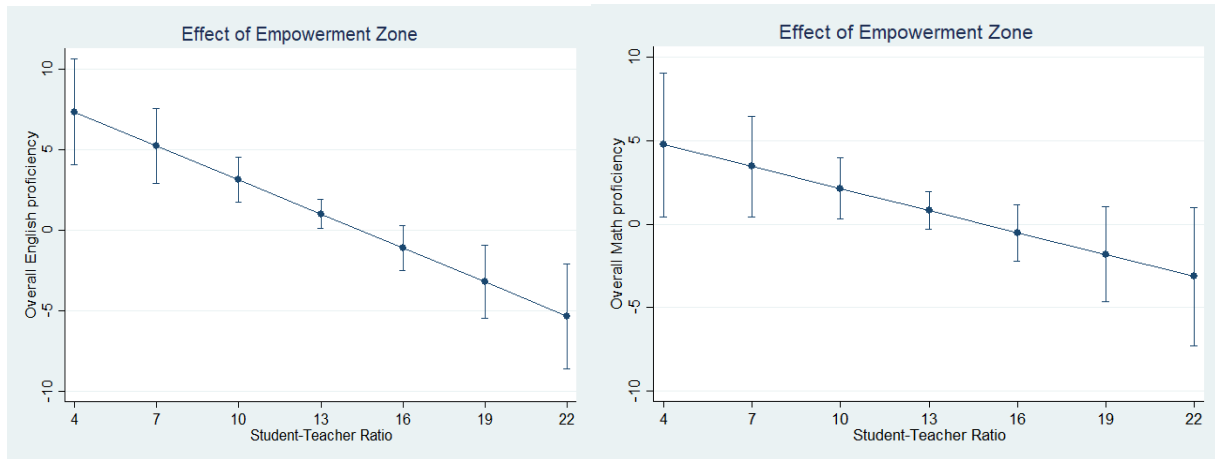


Figure 8. The impact of EZ on proficiency rates of students receiving general education in high-stakes subjects

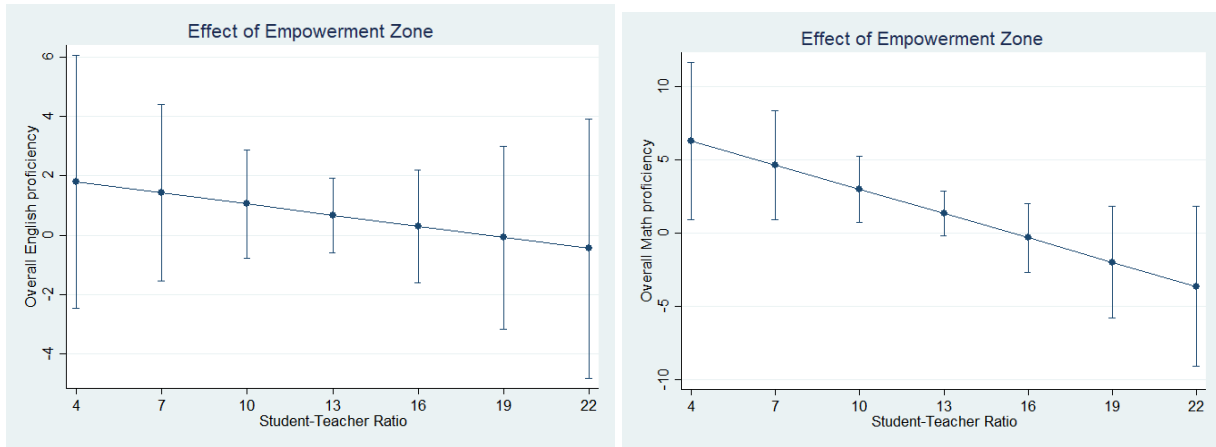


Figure 9. The impact of EZ on proficiency rates of students receiving special education in high-stakes subjects