IMPROVING THE EDUCATIONAL OUTCOMES FOR MINORITIES: A STUDY OF THE INTERACTIVE EFFECTS OF PERSONNEL STABILITY AND REPRESENTATIVE BUREACRACY

A Dissertation

by

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ABSTRACT

The goal of this dissertation is to determine how to create more equal public policy outcomes within the realm of public education. It is a well known fact that despite the passage of legal decisions such as *Brown* (1954) and federal policies like *No Child Left Behind* (2001), Latino and African American students still perform at lower rates than Anglo students. This poor academic performance results in lower graduation rates, lower college attendance, and a lower socioeconomic status than Anglos.

This dissertation therefore sought to determine if two common bureaucratic theories, representative bureaucracy and personnel stability, could be used in combination with one another in order to improve the educational policy outcomes for African American and Latino students. Using data from Texas school districts from 1994-2010 and a cross-sectional longitudinal research design, I find that while each theory on its own improved the outcomes for these groups, the two did not have a significant combined effect on every indicator. Instead I find evidence of a substitution effect which allows one strategy to be used in place of the other in order to improve the academic performance of minority students. This creates a unique situation as this analysis suggests that there are other bureaucratic factors working to prevent an interactive effect from occurring on a consistent basis. Thus the next steps are to apply the same theories to other public organizations in order to determine if my findings are unique to public education and to determine if other public administration theories can be used to improve the outcomes for African American and Latino students.

DEDICATION

This dissertation is dedicated to my friends and family.

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I would like to thank numerous individuals who have helped me during this process. First I would like to thank my parents, Talmadge and Elizabeth Morton. They have provided me with so much support throughout graduate school. I would not have made it to this point without their encouragement. From the late night calls to the endless practice presentations they were forced to listen to, they have always been there for me. I am truly blessed to be their daughter.

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CHAPTER I

INTRODUCTION

In the United States we pride ourselves on being a nation based on equality. Equal rights, equal access to government services, equal chances to achieve the American Dream. We protest against those in other countries who we believe are not treating their citizens equally. In some cases we even resort to violence, all in the name of equality. In the midst of everything, we should ask exactly how equal are we? Despite the dramatic changes that have occurred, we still live in a very unequal nation. While examples of inequality can be seen in many cases, one of the most visible and disturbing is the inequality in public policy outcomes (Wilson 2012). The United States still does not provide equal public policy outcomes for minorities in a variety of policy areas, such as housing, healthcare, and education (Orfield 2004; LaVeist and Isaac 2012; Wilson 2012). While all of these areas are important, this dissertation will focus on public education.

Public education is one of the most important services the government can provide. It provides the education and reading/comprehension skills needed for individuals to enter the workforce, attend college, participate in the political process, and even order off of a menu. Given the importance of this service one would assume that it would be provided in an equal fashion to all individuals. Historically, however this has not been the case for minorities as there have been many unequal practices that have lead to large differences in academic achievement between minorities and whites (Coleman,

Campbell, Hobson, McPartland, Mood, Weinfield, and York 1966; Jones 1984; National Center For Educational Statistics 1995; Jencks and Phillips 1998).

One such practice was a more discreet form of segregation called secondgeneration discrimination that occurred right after the *Brown* (1954) decision (Meier, Stewart, and England 1989). This type of discrimination was not as visible as the previous "separate but equal" discrimination that occurred during Jim Crow, but it had the same effect on minority education. Second-generation discrimination consisted of the use of policies that on their face looked equal, but in reality resulted in racial segregation within the school (Meier et al 1989; Meier and Stewart 1991). Minority students were punished and placed in special education classes at higher rates in order to separate them from white students who were often placed in gifted classes (Meier et al 1989; Meier and Stewart 1991). The result was an unequal education which had long term effects such as lower graduation rates, lower college attendance, fewer life chances, and a lower socioeconomic status for Black and Latino students (Cohen and Tyree 1986). This achievement gap as it would come to be called was first noted in the Coleman Report during the 1960s and was studied intensely for the next few decades (Coleman et al 1966). Some progress was made in the 1970s and 1980s as there were some small decreases in the differences between minority and white NAEP (National Assessment of Educational Progress) test scores (Campbell, Hombo, and Mazzeo 2000; Loveless and Diperna, 2000). However, this gap began to widen again in the 1990s as the performance of Black and Latino students leveled off and white students, once again, began making significant gains (Lee 2002). This achievement gap resulted in the

continuation of the same negative socioeconomic consequences seen in the previous decades.

Despite the knowledge of these inequalities and their roots, similar educational disparities can still be seen today. Black and Latino students continue to perform at rates lower than Anglos. For example the NAEP's 2008 longitudinal study found that for 17 year old high school students there were no significant changes in the gap between Black students and white students (nationsreportcard.gov 2008). Thus the score gap remained at 26 points, which is equal to the same gap that occurred in 1992. There was also no significant change in the Latino-white achievement gap since 2004. The 21 point gap was the exact same size as the 1996 gap between these students (nationsreportcard.gov 2008).

During this same time period we see that, despite governmental efforts, minorities continued to have higher rates of poverty as well as lower incomes than Anglos (Johnson 2006; Oliver and Shapiro 2006). The lower socioeconomic status of minorities often resulted in their inability to move out of poor neighborhoods, which effectively recreated racially and economically segregated school districts. Considering the fact that the financial resources that fund the district come from the individuals living within it, scholars find that minority students were, and still are more likely to reside in districts with less wealth and fewer educational resources (Johnson 2006). This poses a major problem since increased access to resources is linked to improved academic performance (Wenglinsky 1997). Given the well established link between education and economic outcomes, the low academic performance of minority students (relative to

whites) often prevents minorities from achieving a significantly higher income level than their parents (Johnson 2006; Oliver and Shapiro 2006). In the end what we see is a vicious cycle of poverty/poor school district/poor performance that perpetuates the same educational inequalities seen in the 1960s despite the passage of new public policies, such as the *No Child Left Behind Act* (2001) which was supposed to effectively reduce the achievement gap and improve the performance of minority students.

While we can discuss the statistics associated with the achievement gap all day long, there is a more important discussion to be held. It begins with the question: How do we determine what needs to be changed in order to improve the educational outcomes for Black and Latino students? I argue that the public management literature holds the key for indentifying what inequalities exist and how public managers, such as superintendents, can change strategies in order to eliminate these inequalities. After all public management's ultimate goal is to determine how managers within public organizations can improve the agency's performance, and therefore provide public services in an efficient, equal, and effective way (Light 1999).

Using this line of thought one can make the argument for the usage of this literature for public education. School districts are large, complex public organizations. They have levels of employees, each with a role dedicated to achieving the end goal of providing a quality education to every student. Teachers are street-level bureaucrats responsible for implementing the federal/state/district policies aimed at education students. Principals and superintendents are organizational managers who work hard to implement procedures and strategies that will aid their teachers in providing a quality

education. Finally students are individuals seeking out a public service in order to improve their life chances. Given these characteristics, using the public management literature as a way to improve public education makes perfect sense. This is even truer when we consider the public education research of other public management scholars.

For decades scholars have hypothesized how the public management ideals of effectiveness, efficiency, and equality can affect the quality of public education service delivery. They have attempted to link many organizational factors such as organizational structure, bureaucratic competency, stability, and managerial strategies to the performance of school districts (Pitkin 1967; Mosher 1968; Wilson 1989; Light 1999). Over time some of these theories have demonstrated ways that not only improve organizational performance, but also create more equal policy outcomes for clients (Light 1999). For example Meier et al (1989) and Meier and Stewart (1991) linked passive representation within the school to reductions in second generation discrimination. Reductions in this type of discrimination improve the likelihood that minority students will experience higher academic performance. Years later Dee (2005) was able to make a similar link, therefore giving credibility to the theory of representative bureaucracy as one way to improve the academic outcomes for minorities. Scholars have also made links between managerial quality, managerial networking, organizational resources and structure, and more to education (O'Toole and Meier 2004; Goerdel 2006; Hicklin, O'Toole, and Meier 2008). The end results of these studies have been not only ways to improve the academic performance of minority students, but also recommendations that can benefit public organizations in general.

This dissertation follows in this line of research as its ultimate goal is to not only determine how to reduce the achievement gap and improve minority performance, but also determine how we can use two popular public management strategies as the way to do this. Like the previous research, this dissertation also serves a larger goal of discovering how to improve policy outcomes in a host of policy arenas. The two theories examined are the theory of representative bureaucracy and the theory of personnel stability. Each has been shown, through empirical support, as a way in which to improve organizational performance, and in some instances academic performance (Dunn 1997; Light 1999; O'Toole and Meier 2003; Dee 2005; Roch et al 2010). In most studies these two strategies are treated as the main independent variable. Demographic traits, longevity, and experience are often included in the models as control variables, but a close examination of the literature does not show any studies in which the two are interacted and examined for mitigating relationships. Consequently in this analysis I attempt to do exactly that.

More specifically I attempt to better understand the role of personnel stability¹ in relation to passive representation², as well as passive representation in relation to personnel stability. While policy recommendations can be made based on the conclusions of a personnel stability study, they still may not lead to the best outcomes for minority students. A stable organization is often comprised of individuals from

¹ In this study personnel stability refers to the changes in organizational personnel (Light 1999). It is measured as the percent of bureaucrats (teachers in this case) that return from the previous year to the organization.

² Passive representation refers to the demographic traits of bureaucrats, such as race, religion, and gender, and how they come to affect the policy outcomes and outputs of clients sharing these demographic traits (Wilkins and Keiser 2006).

various racial backgrounds that may or may not resemble the organization's clientele. Likewise a representative organization may have individuals with varying years of experience within the organization. These two traits, stability and representation, therefore are not mutually exclusive, but instead interactive. It is quite possible that when two are interacted we may see 1) no effect 2) a greater effect 3) a sign change from + to – or vice versa. Thus it is in the best interest of not only the clients who will be experiencing the outcomes related to the management strategy used, but also the public manager choosing the strategy to understand the range of effects related to the various combinations of these two theories.

Regardless of what this study does or does not find, it still serves a benefit to the public management discipline as well as education. If the two theories of personnel stability and representative bureaucracy can interact in such a way that they can improve the performance of minority students beyond the usual gains seen with just one strategy, then an argument can be made for an interactive relationship. If the theories fail to work as mitigating strategies, then we have the opportunity to create new hypotheses as to why they work individually but not together. Furthermore any findings or non-findings within the educational arena will help to answer the question as to why minority academic performance has yet to reach parity with that of Anglos over the past two decades. Any conclusions drawn must be tested with other data from other public agencies in order to determine its generalizability. Thus while this theoretical argument is limited to education, it has the potential to be applied to many different organizations and levels of personnel, therefore making it a springboard for other studies.

CHAPTER II

MINORITIES AND POSITIVE OUTCOMES

Most scholars believe that public organizations should be effective, efficient, and responsive. There is however, no consensus as to how agencies will come to embody these qualities, and thus fulfill the bureaucracy's goal of successful policy implementation (Mosher 1968). When we consider the diversity of an agency's clientele, the bureaucrats working within these organizations, and the different policy goals, it is no surprise that scholars have yet to create a general theory as to how agencies can improve their responsiveness to best meet the policy needs of their clients. Despite these major obstacles however, empirical research has been able to validate two strategies.

One management theory/strategy that has found support is the theory of representative bureaucracy. This theory argues that agencies that match the demographic of their clientele are more responsive to the needs of these individuals, and as a result, are able to achieve public policy goals more effectively and efficiently than are organizations that are more homogenous in nature (Selden 1997). Implicit in this theory is the idea that the more representative a bureaucracy is, the better it will be at identifying the needs of each group comprising the organization's clientele. The identification of such interests subsequently allows the organization to better respond to the needs of those groups that are often underrepresented and negatively impacted by public policies, such as minorities (Lim 2006; Meier and Nicholson-Crotty 2006). Given the increasingly diverse society in which we live in, as well as the continuation of

racial disparities in certain policy outcomes, this theory continues to be advocated by scholars as one way in which to improve organizational responsiveness to minority clients.

On the other hand, another strategy that has found empirical support comes from the stability literature. This theory contends that personnel stability can lead to better policy outcomes because bureaucrats who have worked in the same agency for an extended period of time have the opportunity to develop a specialized skill set that allows them to efficiently and effectively meet the needs of their specific clientele (Dunn 1997; Light 1999; O'Toole and Meier 2003). In addition, this theory argues that while employee turnover may bring new ideas and perspectives to an organization, it can also generate or exacerbate problems of inefficiency and ineffectiveness, therefore decreasing performance and responsiveness (Light 1999). As a result, some scholars contend that the key to improved performance and achieving policy goals lies in an organization's ability to maintain a stable workforce (O'Toole and Meier 2003).

While both of these theories have been supported through empirical research, it is evident that the representative bureaucracy literature often overlooks the significance of personnel stability, while the stability literature rarely mentions the importance of passive representation. Thus this study seeks to examine the interactive relationship between these two concepts. My goal is to determine how to best improve organizational responsiveness and performance in order to achieve better policy results for minorities. Therefore this analysis begins to answer the broad question: What are the

combined effects of the management strategies of personnel stability and representative bureaucracy on minority public policy outcomes?

Given the magnitude of this question, this paper focuses on two specific questions: *Does street-level personnel stability mitigate the negative effects of a lack of passive representation for minority clients? Can passive bureaucratic representation mitigate the negative effects of bureaucratic instability for minority clients?* In order to answer these questions, I use public school districts as a proxy for public organizations since they are highly decentralized organizations that rely on street-level bureaucrats' discretion and responsiveness in order to achieve state/federal policy goals (O'Toole and Meier 2003; Goerdel 2006; Rocha 2006). In addition there is much variation within the demographics of the teaching and student populations, as well as the personnel stability of each district. Thus both strategies are likely to be employed by the managers and bureaucrats within these organizations (Selden 1997; Dee 2004; Dee 2005).

In this initial study I do not find evidence of mitigating relationships. Thus the preliminary testing of my hypotheses in public schools allows me to determine that passive representation does not moderate the negative effects that teacher instability often has on the academic performance of minority students (Meier and O'Toole 2003). Instead I find evidence that these two strategies are substitutes for one another. In addition I find support for my hypothesis that a lack of both personnel stability and representation can severely decrease the performance of minority students.

Literature Review

Representative Bureaucracy

The theory of representative bureaucracy's primary focus is "how the demographic characteristics of bureaucrats affect the distribution of outputs to clients who share these demographic characteristics" (Wilkins and Keiser 2006, 87). In this theory two forms of representation are identified: passive and active (Pitkin 1967).

Passive representation occurs when the individuals within the bureaucracy share the same demographic characteristics (race, gender, etc) as their clients. Active representation occurs when bureaucrats who have discretion use it to advocate for the interests of a particular group of clients in order to diminish or eradicate the discrimination that has disproportionately affected this group (Mosher 1982; Hindera 1993). Passive representation leads to active representation when two conditions are met. First and foremost the policy must be one in which the bureaucrats have substantial discretion. Secondly it must be a policy area that is relevant to the demographic trait in question (Meier 1993a; Wilkins and Keiser 2006).

Based on these conditions, scholars often examine the impact that minority and female bureaucrats have on the policy outcomes for minority and female clients in public education, since this is a policy arena in which bureaucrats have considerable discretion, as well as one that has historically had negative impacts for these groups (Keiser, Wilkins, Meier, and Holland 2002; Dee 2004; Wilkins and Keiser 2006). In one analysis, scholars found that Black teachers are associated with increases in Black student performance (Meier, Doerfler, Hawes, Hicklin, and Rocha 2006). Rocha (2007)

for example, also found that Latino teachers are associated with increases in Latino student performance on one of the most visible indicators of student performance.

Keiser et al (2002) found that with an increase in the passive representation of women in the form of female math teachers, girls tended to have higher math scores. Thus the literature has some support for the theory of representative bureaucracy in that minority and female clients often experience more positive policy outcomes with the presence of passive representation.

Implicit in these studies of representative bureaucracy is the idea that nonminority bureaucrats are not associated with positive policy outcomes for minorities (Meier 1993b; Selden 1997; Meier and Nicholson-Crotty 2006). For example, Meier et al (1989) find that low levels of Black representation are associated with increases in the rates at which Black students were punished and tracked into lower level and special education classes. Meier and Stewart (1991) also find that low levels of Latino representation are associated with increases in the rates at which Latino students were punished and tracked into lower level and special education classes. Dee (2005) also finds the non-co-ethnic teachers are more likely to view non-co-ethnic students as disruptive, troubled, and unintelligent than are same-race teachers. The conclusion drawn therefore is that without the presence of minority bureaucrats to change, or resocialize, the values and beliefs of non-minority bureaucrats, non-minority bureaucrats will be unable to "reduce ignorance and rejection; [in order to] increase bureaucratic understanding of minority views and feelings" (Krantz 1974, 435; see also Lim 2006). Thus the most common conclusion drawn from the theory of representative bureaucracy

is that a lack of passive representation prevents minorities from experiencing the most beneficial policy outcomes.

Stability, Responsiveness, and Performance

In the public management literature scholars have identified five different forms of stability: structural, mission, production/technology, procedural, and personnel (Allison 1971; Wilson 1989; O'Toole and Meier 2003). While there is research on how all five forms affect responsiveness and policy outcomes, the focus of this initial study is personnel stability³ given that these are the individuals (top-level managers and street-level bureaucrats) responsible for implementing and tailoring broad federal/state policies to their clienteles' needs, and thus directly affect client outcomes (Selden 1997; Keiser et al 2002; O'Toole and Meier 2003). It is considered important, because while employee turnover can create positive changes in the form of new perspectives and ideas, it can also generate or exaggerate problems of inefficiency and ineffectiveness within the agency (Light 1999).

Research has shown that even though scholars advocate for organizational change and the recruitment of new individuals as ways in which to improve responsiveness and policy outcomes, high turnover amongst street-level bureaucrats can exacerbate "the difficulties involved in building competence, mutual trust, and long-term commitment" (O'Toole and Meier 2011, 137; see also Barzelay and Armajani 1992; Dunn 1997). They find that street-level bureaucrats especially benefit from personnel stability due to the constraints, workloads, and general unpredictable nature of the

³ As a concept personnel stability refers to the changes in organizational personnel over time (Light 1999).

relationships that they have with clients (Lipsky 1980; Meier and O'Toole 2007). The longer bureaucrats are employed in these organizations the more easily, and more effectively, they can deliver services and programs to clients in their particular jurisdiction due to the development of specialized skills and routines. Since bureaucrats develop these skills in response to their environment, they are better able to deal with certain cases than are other street-level bureaucrats who lack experience with this particular clientele. Since this skill set is so specialized however, it often does not transfer from organization to organization, further making street-level bureaucrat stability important to managers if they seek to accomplish the policy goals of their agency in an efficient and effective manner (O'Toole and Meier 2003).

The importance of personnel stability is even more visible when we consider the role of burnout-generated turnover within public organizations, and especially public education (Golembiewski 1990; O'Toole and Meier 2003). For years school administrators and scholars have been concerned with the shortage of teachers as fewer individuals are entering the education field and fewer are making it a life-long career (Ingersoll 2003). Instead teachers, like many other bureaucrats are now entering the public sector with higher/broader-ranging degrees that give them the opportunity to leave their organization in order to work in the private and/or non-profit sectors, as well as in other public organizations (Ingersoll 2003). Since teachers are more likely to leave public schools with high proportions of low income, poor performing, and minority students in order to take jobs in higher performing/wealthier districts, the impact of personnel instability on minority performance can be great (Shen 1997; Carroll,

Reichardt, and Guarino 2000; Scafidi, Sjoquist, and Stinebrickner 2002; Loeb, Darling-Hammond, and Luczak 2005).

Given the potential mobility of teachers, scholars have examined the effects that personnel instability rather than just inexperience has on student performance. Stability has been directly linked to performance because high teacher turnover means that a district must constantly hire new teachers in order to replace the teachers who are leaving (O'Toole and Meier 2003). These new teachers are often not as effective as those who have been in the district longer because they must learn (often through trial and error) what combination of skills and methods will work best for their particular classroom, as well as how to implement the theories they learned in school into actual working strategies, and deal with the daily distractions that can hinder their ability to teach (O'Toole and Meier 2003). Consequently these studies have found that lower-level personnel stability was positively and significantly related to student performance (O'Toole and Meier 2003, 54).

Likewise, Loeb et al. (2005) find that turnover introduces new challenges to the district such as a "lack of continuity in instruction, lack of adequate teaching expertise for making curriculum decisions and providing support and mentoring, and lost time and resources for replacement and training" (44). These issues negatively affect student performance by preventing teachers from having the expertise needed to implement policy decisions made by managers and school board members, as well as by diverting funds from other areas into the continuous recruiting, hiring, and training of teachers who may leave after only a few years (Sanders and Rivers 1996; Darling-Hammond

2003). Therefore, with the presence of lower-level personnel instability, a public organization is less likely to accomplish its mission and policy goals, which in the school's case is to provide a quality and equal education to all students.

Missing Relationship in the Literature

From the literature it is apparent that representative bureaucracy scholars tend to attribute increases in responsiveness and policy benefits mainly to demographic traits. This is evident in their heavy emphasis on only demographic characteristics in their two explanatory concepts of demand inducement (the idea that the presence of minorities within the bureaucracy will increase the demand for services from minority clients) and coproduction inducement (the idea that minority bureaucrats can better motivate minorities to make the behavioral changes needed to improve the outcomes they receive from public programs) (Selden 1997; Wilkins and Keiser 2001; Keiser et al 2002; Lim 2006; Meier and Nicholson-Crotty 2006).

While these studies support the theory of representative bureaucracy in that they demonstrate that passive representation can lead to better policy outcomes for minorities, they do not examine the potential mitigating effects that street-level stability can have for minority clients in unrepresentative bureaucracies. The fact that management scholars have found that stability can improve the responsiveness of street-level bureaucrats to their clientele suggests that representative bureaucracy scholars, by not considering personnel stability's effects on performance and policy outcomes, have overlooked an integral component of organizational responsiveness. I believe that before we make claims that only Black bureaucrats can lead to more beneficial outcomes

for Black clients, and thus we can improve the policy outcomes for Blacks by simply hiring more Blacks, we must be sure that a stable, non-representative bureaucracy that has had time to develop a specialized skill set to respond to the unique needs of Blacks does not have the same positive effects. This is especially important when we consider the ever-growing scarcity of Black bureaucrats in public organizations, such as schools (Irvine 1989). If minorities are already underrepresented within the public organization that can have the most dramatic impact on their lives, simply hiring more minorities, as suggested by the theory of representative bureaucracy, is not a realistic management strategy. This strategy is even less practical when we consider that the amount of Black teachers continues to decrease, despite efforts by universities and special interest groups to recruit these individuals into the profession.

I also argue that before we make claims that only Latino bureaucrats can lead to more beneficial outcomes for Latino clients, and thus we can improve the policy outcomes for Latinos by simply hiring more Latinos, we must be sure that a stable, non-representative bureaucracy that has had time to develop a specialized skill set to respond to the unique needs of Latinos does not have the same positive policy outcomes. This is especially true when we consider that despite the increase in Latino teachers in Texas in the last ten years, Latinos continue to perform at lower rates that Anglos (Loveless and Diperna 2000; NEAP 2000).

Likewise, we must consider the differences in outcomes that passive representation can have on client outcomes given an unstable staff. Consider an area, such as Texas, that has a large Latino population. It has been well documented that

while the U.S. considers any person with origins from a Spanish-speaking country a "Latino," this group is far from homogeneous (U.S Census 2000; Garcia-Bedolla 2009). A Guatemalan child who immigrated to the U.S. at the age of twelve and a fourth generation twelve year old Mexican-American student are going to have drastically different backgrounds, cultural values, socioeconomic statuses, and English language comprehension skills (Garcia-Bedolla 2009). Thus these two students will need different teaching techniques, programs, and amounts of specialized attention in order to experience positive educational policy outcomes (high academic achievement). It is quite possible that an unstable and representative teaching force can recognize the specific needs of these students given their shared life experiences and culture, while an unstable and unrepresentative teaching force may not (Hakuta 1998; Gonzalez and Darling-Hammond 2000). Therefore, I expect these two organizations, despite both being unstable, to result in different academic outcomes for Latino students.

Therefore, if we seek to achieve the goals of policies like *No Child Left Behind* (2001) and eliminate the racial disparities that remain in public education today, we must consider how certain public management strategies interact with one another (Campbell, Hombo, and Mazzeo 2000; Loveless and Diperna 2000). Given the potentially mitigating roles that these strategies may play, the next section attempts to consolidate both of these theories into a more cohesive theory in order to determine what type of public organization can provide the best possible policy outcomes for minority groups. Thus the following theory and hypotheses attempt to determine which combination of

public management strategies can eliminate the racial disparities that remain in public education that continue today (Campbell et al 2000; Loveless and Diperna 2000).

Theory

As mentioned before the purpose of this analysis is to examine the potentially mitigating effects of passive representation and personnel stability in order to determine how to improve organizational responsiveness and policy outcomes for minority clients. This study specifically examines this relationship within the school system since the internal structure of these public organizations makes them ideal for testing both theories simultaneously. For example, even though teachers operate under the basic state and district curricula, they are allowed great discretion in the ways in which they choose to implement these policies through their choice of teaching methods, incentives/deterrents, and interpersonal interactions (Roch, Pitts, and Navarro 2010). As a result, this freedom in policy implementation allows these street-level bureaucrats to directly influence the policy outcomes for minority clients. The large amount of discretion awarded to teachers combined with the well known Black-white and Latino-white achievement gap satisfies both theoretical conditions needed for representative bureaucracy (discretion and a policy area salient to a particular group) to be considered as a realistic management strategy, as well as for passive representation to lead to the active representation of minority interests (Selden 1997; Campbell et al 2000; Loveless and Diperna 2000).

Schools also satisfy the basic requirements for personnel stability to be considered as a feasible management strategy since the majority of the educational

policy implementation is done by street-level bureaucrats, who have the opportunity to create specialized skill sets and procedures in order to achieve the district's mission of providing a quality education. Moreover, the benefits of teacher stability on overall student achievement (though not disaggregated by race) have already been documented in the education literature, as scholars find that if new or inexperienced teachers have any concerns in implementing district/state-wide education policies they often turn to a senior teacher for guidance (Nettle 1998; Kauffman, Johnson, Kardos, Liu, and Peske 2002). This occurs because teacher stability allows for more frequent interactions with students, and therefore more knowledge about the students' specific needs and how to implement policies in ways that ensure that students perform well. In cases such as these, studies demonstrate that a stable teacher workforce can successfully improve students' academic performance (better policy outcomes) (O'Toole and Meier 2003).

Given the decentralized structure of public schools (and other similarly structured public organizations), I argue that the combination of personnel stability and passive representation should lead to beneficial policy outcomes for minority students since these organizations should be the most responsive to these clients. Conversely, those organizations that lack street-level bureaucrat stability and passive representation should have negative policy outcomes for minority clients since they should be the least responsive. While both of these arguments fall in line with the literature, what will be the most interesting will be the outcomes when I examine unstable and passively representative organizations and stable organizations that lack passive representation. In these cases, I expect the benefits of stability to mitigate the negative effects often

associated with an unrepresentative bureaucracy, as well as passive representative to moderate the negative effects of instability. Therefore, I propose that these two different organizations should provide similar policy benefits for Black clients. In order to better illustrate my expectations, I have created a specific hypothesis for each type of organization.

H1: Stable and passively represented public organizations will lead to positive policy outcomes for minority students.

I believe that as organizations become more passively representative and stable they should result in positive policy outcomes for minority students. In these districts I expect that, in accordance with the theory of representative bureaucracy, passive representation, in the form of minority teachers, should lead to the active representation of minority students' interests, because their shared life experiences should lead to minority bureaucrats holding similar values and beliefs as their minority clients (Selden 1997). These similar interests, when combined with the great discretion in education policy granted to street-level bureaucrats (teachers) in public schools, should lead to the same positive policy outcomes for minority students that other scholars have found (Meier 1993b; Dee 2004; Dee 2005).

However given that no population is completely homogenous, it cannot be assumed that all minorities have had the same life experiences and interests. Differences in class, education, country of origin, generational status, bilingualism, and other variables also play a critical role in how one exercises his/her discretion and consequently, how students perform (Welch and Foster 1987; Garcia-Bedolla 2009).

This is where I believe stability will become an important factor. As a minority teacher interacts with the same stable workforce and same-race clientele, he/she should eventually develop specialized skills and routines that can help them address not only the clientele's unique race-based interests, but also those tied to other social, economic, and environmental factors. The combination of passive representation and personnel stability therefore, should allow these organizations to effectively and efficiently respond to their clients' needs and lead to positive policy outcomes for minority clients.

H2: Passively represented, but unstable public organizations will lead to positive policy

outcomes for minority students.

I believe that even if organizations become more passively representative and more unstable organizations, they will still yield policy benefits to minority students. This will occur because even if there is constant teacher turnover and change that theoretically should bring about organizational inefficiency and ineffectiveness, the fact that these organizations match the demographics of their students, should allow bureaucrats to still be responsive to at least the race-specific needs of its minority clientele (Lipsky 1980). Since minority bureaucrats should share at least some of the same experiences and interests as their minority clients, they should understand some of the cultural, social, and learning differences of minority students before they even enter the organization (Pitkin 1967; Foley 1997; Gutierrez and Rogoff 2003). So even with teacher instability, Black and Latino teachers should not need as much time as non-minority teachers to create a specialized skill set to address their specific race-based needs. Likewise, since same-race teachers tend to view same-race students more

positively, they, unlike non-co-ethnic teachers, should not require the same continuous interactions with minorities in order to change their initial negative perceptions of these students (Dee 2004).

The benefits of the role-model effect should also play an important role. Teaching is an especially well respected profession within the Black community given that it was one of the few professions that led to greater social mobility for Blacks in the past (Irvine 1989). It is also seen as a tool for social mobility by Latinos. Growing up with this positive perception of teachers, Blacks and Latinos students may pay more attention and work harder in order to gain the approval of these teachers (Dee 2005). Thus even if there is constant teacher turnover, simply seeing a co-ethnic person in a position of authority should actually encourage same race students to perform better as they attempt to meet the expectations of their role models (Dee 2005). Consequently in these organizations, I do not expect the difficulties of personnel instability to completely hinder performance, as the passively representative workforce should be able to mitigate these effects and continue to provide better positive policy outcomes for Black and Latino students.

H3: Unrepresentative, but stable public organizations will lead to positive policy outcomes for minority students.

Even as organizations become more passively unrepresentative and stable minority clients should still experience positive outcomes. I argue that in accordance with the stability literature, even though these non-minority bureaucrats do not share the same life experiences as their Black or Latino clients, increases in personnel stability

within the organization should allow for the development of the specialized skills/procedures needed to easily identify and respond to the unique needs of their clientele (Lipsky 1980).

Furthermore the daily interaction with minority students and parents in the form of teaching, parent-teacher associations, and more generated by stability should resocialize non-minority teachers to be more sensitive to the unique cultural and academic needs of Black and Latino students much in the same way that the theory of representative bureaucracy argues that minority bureaucrats can change the values of non-minority bureaucrats (Krantz 1974; Lim 2006; Meier and Nicholson-Crotty 2006). Non-minority teachers then will be able to tailor broad education policies to their specific needs and make responsiveness to minorities the "organizational norm" much in the same way that minority teachers would.

Increased responsiveness to minorities' interests would also help the district achieve their principle policy goal of providing a quality education to all students. Since schools are like other organizations in which achieving organizational goals and meeting state/federal standards are extremely important to the survival of the agency, responsiveness to client interests should be reinforced through the yearly reviews each teacher, department, and district receives (TEA.gov 2010). Teachers who are aware of their clients' needs and are responsive to their interests should have higher performing students and therefore, more positive reviews from principals. This should reinforce the identification and adoption of such values because not only do they work to improve the overall performance of the organization, but they also give personal satisfaction in that

the differences that these non-minority teachers are making in the lives of their students is being recognized by superintendents and principals. This positive reinforcement is especially important for public employees because performance-based financial incentives are not always an option, therefore making the personal satisfaction gained from being responsive to one's clients and achieving agency goals even more important in maintaining responsiveness to minorities (Lipsky 1980). Administrators should also encourage these teachers to continue to improve their responsiveness to minorities' academic needs because it will lead to higher ranking and more funding for the schools. Consequently these organizations should lead to positive policy outcomes for minorities. H4: Unrepresentative and unstable public organizations will lead to negative policy outcomes for minorities.

Finally I hypothesize that as organizations become less passive representative, as well as are more unstable, minority clients can expect to experience negative policy outcomes. This hypothesis is based on the idea that if there is no passive representation of Black or Latino students within the school, there is little chance of the active representation of their demographic-specific interests. In terms of education, these teachers will be unaware of minorities' unique learning needs given that there are cultural-based learning differences between students (Foley 1997; Gutierrez and Rogoff 2003). The increasing lack of passive representation also decreases the likelihood that minority teachers within the organization can re-socialize non-minority bureaucrats to be more empathetic to minority students, which should result in these non-minority teachers continuing to hold onto stereotypes and negative perceptions of minorities as troubled

and unintelligent (Krantz 1974; Dee 2005). This works to further decrease the likelihood that minority students will experience positive academic performance (Dee 2005).

Furthermore, the increasing lack of stability should further prevent these non-minority teachers from developing the routines and organizational culture in which responsiveness to the group's specific needs is accepted and encouraged. Since instability should prevent non-minority teachers from recognizing even the non-race based needs of minority students, bureaucratic responsiveness to any of the groups' interest are highly unlikely to occur, which should result in decreased Black academic performance.

Thus in terms of policy outcomes for minority students are hypothesized to be:

	Passively Representative	Unrepresentative
Stable	Positive	Positive
Unstable	Positive	Negative

Table 1. Theoretical Expectations

Data and Methods

In order to model this relationship I used public school data from 1994-2010 from the Texas Education Agency. I have specifically chosen Texas because of its great variation in race/ethnicity, district sizes, and fiscal/personnel resources. This allowed me to control for the additional variables that can affect academic performance. In addition Texas publicly reports student performance by race for its yearly state-wide

standardized test. This allowed me to determine if passive representation and stability have a significant impact on the performance of African-American and Latino students above and beyond the traditional factors associated with performance. Finally, the large number of districts⁴ (more than 1000) combined with the diversity of these districts suggests that my findings will be generalizable to other public education systems as well as "organizations with similar characteristics (highly professionalized organizations with discretion vested in street level bureaucrats)" (Keiser et al 2002, 559; see also Meier and O'Toole 2003).

Stability and Representation

In this study teacher stability is defined as the stable year to year employment of all teachers. Therefore I measure my independent variable of teacher stability⁵ as the percent of teachers that return from the prior school year. I measured the independent variable of passive representative as either the percent of Black teachers or Latino teachers working in the district. I examined Blacks and Latinos as separate groups since there are cultural and linguistic factors that are unique to each group. Thus Black teachers, despite being minorities, will not have the same effects on Latino students because they are not co-ethnics. To further understand the relationship between representation and personnel stability I created the interaction term of teacher stability*passive representation. The use of this interaction in the model allows me to

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⁴ Texas has more than 8% of all school districts in the United States (U.S. Department of Education 2004).

⁵ Teacher stability is used instead of teacher experience since the variable collected by the TEA measures all experience a teacher has acquired regardless of the district. My teacher turnover variable attempts to capture only the experience, knowledge, and skills gained from longevity within the district.

determine if passive representation can mitigate the negative effects of street-level personnel instability, and if teacher stability can counter the negative effects that non-Black and non-Latino teachers have on the academic attainment of Black and Latino students (Meier et al 1989; Meier and Stewart 1991; O'Toole and Meier 2003; Dee 2005).

Policy Outcome

In order to determine the effects of these two variables on the policy outcomes for Black and Latino clients, I examined two key indicators: the Black student and Latino student pass rate on the state standardized exam or TAKS (Texas Assessment of Knowledge and Skills) test. I used the TAKS pass rate as a measure of policy outcomes because this exam is required for all students in grades 3 through 8, as well as grade 11, and is considered a high stakes test since passing this test is required for graduation in Texas (TEA.gov 2010). In addition, these scores are used by the state to rank districts and are considered "the most visible indicator of performance used to assess the quality of schools" (O'Toole and Meier 2003, 53). Black and Latino TAKS rates therefore should be of particular focus for all schools seeking to achieve/maintain state/federal education policy standards.

Environmental Forces

Lastly, I controlled for several constraints and resources that also affect student performance such as enrollment, class size, state aid, percent low-income students, percent Black students, percent Latino students, the previous year's Black/Latino TAKS pass rates, the white TAKS pass rates, and the percent of teachers with less than five

years of experience (Hanushek 1996; Hedges and Greenwald 1996). I chose to control for these particular variables because past research has shown that students who attend schools with more resources and fewer constraints tend to perform better than students who attend schools with limited resources and more constraints (Wenglinsky 1997).

Controlling for the percent of Black, Latino, and low-income students allows me to control for task difficulty because districts with a large percent of poor students and a highly diverse student body will find it more difficult to attain high academic performance because they have to make up for a less supportive home environment and deal with more complex, and more varied learning problems (Curiel, Rosenthal, and Richek 1986; Jencks and Phillips 1998). The control of state aid allows me to control for the financial resources of each district, since research confirms that students attending schools with more resources generally perform better (Wenglinsky 1997; Krueger 1999). Furthermore, controlling for the academic performance of whites in the model allows me to control for district quality since it allows me to compare how Black performance fares relative to white students, who are often the highest performing students in districts. A lag of the dependent variable is also included since the previous year's pass rates are often a key predictor for the next year's rates. This allows me to account for the cumulative influences of prior family, school, and peer factors on current achievement (Boardman and Murnane 1979; Todd and Wolpin 2003). Finally I control for teachers with less than five years experience given that teachers with more teaching experience are more effective and associated with higher student performance. Teaching with less than five years of experience differs from teacher turnover as it refers to any

teaching experience gained by an individual. The experienced assumed by the teaching turnover variable refers to only that gained through experience within a specific district. The basic model for my analysis therefore is:

Minority Academic Performance = Teacher Stability + Passive Representation + Teacher Stability*Passive Representation + controls + ϵ

Since this type of cross-sectional, time-series analysis needs to be concerned with violating the assumptions of the classical linear regression, I used an OLS with clustered robust standard errors model and fixed effects for years in order to resolve the issues that often plague panel data. According to Hamilton (1992), multicollinearity is present when the variance inflation factor, or VIF, for a variable is over ten (135). For my models multicollinearity was initially present. This was to be expected given the relationship between the variables in the education production function. In order to reduce the multicollinearity certain control variables, such as teacher salary, were removed from the model, as they did not significantly increase the explanatory power of the model. As a result, multicollinearity was greatly reduced. Finally, in order to establish a baseline relationship between stability and passive representation on the academic performance of Blacks and Latinos, I ran the same regression without the interaction term since there is very little literature on the effects of teacher stability on the academic attainment of different racial groups⁶ (Rivkin, Hanushek, and Kain 2005; Terry and Kritsonis 2008).

⁶ Appendix A

Findings

Stable and Representative School Districts- Blacks

In the regression⁷ (Table 2) both the key independent variables of teacher stability (.060) and Black representation (0.189) were statistically significant⁸. This finding supports the conclusions drawn in the personnel stability and representative bureaucracy literature (Lipsky 1980; Meier et al 1989; Selden 1999). This finding also helps to ease any potential doubts that teacher stability is a harmful phenomenon for Black students as some scholars would argue that any staff that stays in an organization too long can become "deadwood" and prevent the organization from being responsive to the needs of their changing clientele⁹ (Ingersoll and Smith 2003). The interaction term of teacher stability*Black representation (-.001) was not statistically significant which demonstrates that there is no interactive effect between these two variables. Given that my hypotheses were based on a range of data rather than one point, the marginal effects were graphed in order to determine the effects of personnel stability in unrepresentative districts and passive Black representation in unstable districts on the performance of Black students¹⁰ (Brambor, Clark, and Golder 2006).

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⁷ Mean VIF is 4.20.

 $^{^{8}} P < .05$

⁹ However this relationship must be examined in order to determine if the relationship is curvilinear.

¹⁰ All control variables were in their expected directions.

Independent Variable	Coefficient (Robust Standard Error)
Teacher Stability	.060* (.024)
Passive Representation	.189*
Teacher Stability*Passive	(.075) 001
Representation Lagged Black TAKS Pass Rate	(.001) .492*
	(.014) .428*
White TAKS Pass Rate	(.023) .328*
Enrollment (Logged)	(.163) 018
Class Size	(.083)
Percent State Aid	.025* (.008)
Percent Latino Students	016 (.011)
Percent Low Income	013 (.014)
Percent Black Students	115* (.021)
Teachers with less than 5 years experience	.042 (.014)
Constant	-4.99* (3.09)
N= 10608	(3.07)
$R^2 = .735$ * if p < .05	

Table 2. The Effects of Representative Bureaucracy and Personnel Stability on Black Performance

The first hypothesis is not supported since there is no interactive relationship. However I do find that stability improves Black performance within representative organizations and has a significant effect¹¹ on the performance of Black students until teacher stability reaches 90% (see Figure 1). This suggests that one way to improve the academic performance for Blacks, and potentially close the Black-white achievement gap, resides in a district's ability to maintain a stable teaching workforce.

While this finding is in congruence with the current literature, it fails to support my theory of interactive effects between these two management strategies. This is quite interesting as one would expect that if teacher stability is significant and passive representation is significant the two together should also be significant. Perhaps the two strategies do not have an interactive effect because they do not create a separate set of skills or unique knowledge. Black teachers should come into a district already knowing some of the unique characteristics of Black students. While these teachers learn new skills and procedures the longer they stay in the district, this new knowledge may not be specifically geared to improving the academic performance of Black students. Thus, there is no interactive effect. A similar argument can be made for teacher stability. The positive and significant effect of personnel stability suggests that stable teachers will increase the academic performance of Black students. It is possible that over time teachers learn how to adjust their teaching style to improve the performance of Black

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¹¹The lack of significance beyond 90% is most likely due to a lack of cases in this range. After plotting the data to examine its distribution only 10 of my 10,608 cases fell in this range.

students. However this knowledge is no different than the knowledge that Black teachers had in the first place, therefore preventing an interactive effect from happening.

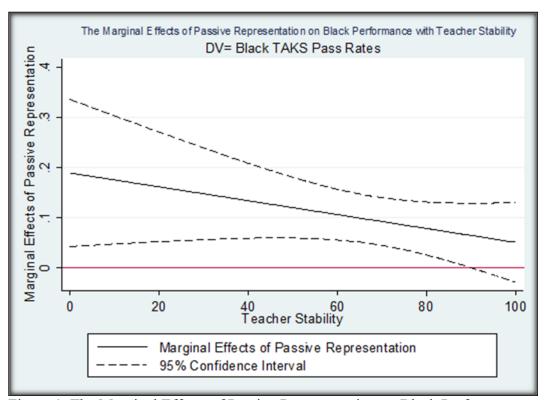


Figure 1. The Marginal Effects of Passive Representation on Black Performance

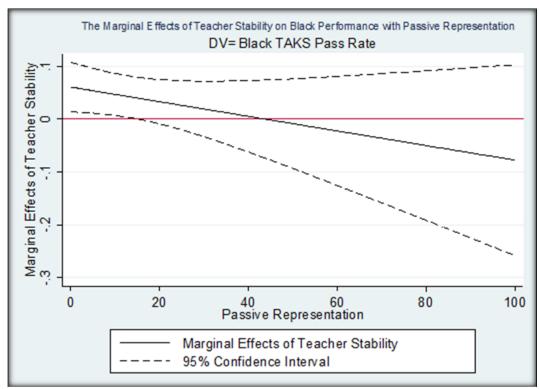


Figure 2. The Marginal Effects of Teacher Stability on Black Performance

Stable and Representative School Districts- Latinos¹²

In the initial non-interactive regression both the variables of teacher stability (.026) and passive representation (.067) were statistically significant ¹³. This finding further supports the current personnel stability and representative bureaucracy literature (Meier and Stewart 1991; O'Toole and Meier 2003). This finding also suggests that teacher stability in general is not as harmful for Latino and Black students as some race scholars have thought. This finding is especially relevant to education given that some scholars fear that teachers who have been in a district for too long are not be able to

 $^{^{12}}$ Mean VIF is 7.99. 13 P < .05

shake the preconceived notions and prejudice they hold against minority students, though a separate analysis is needed to examine if this relationship may taper off at some point.

In the regression with the interaction term (Table 3) the key independent variables of teacher stability (.011) and Latino representation (0.029) were not statistically significant. The interaction term of teacher stability*Latino representation (.001) was not significant which further demonstrates that there were no interactive effects. Given the possible issues associated with interaction terms and multicollinearity, I chose to graph the marginal effects of each strategy in order to determine the effects of personnel stability in unrepresentative districts and passive Latino representation in unstable districts on the performance of Latino students (Brambor et al 2006).

Independent Variable	Coefficient (Robust Standard Errors)
Teacher Stability	0.011
•	(.014)
Latino Representation	0.029
•	(.038)
Teacher Stability* Latino	0.001
Representation	(.0004)
Lagged Latino TAKS pass rate	.458*
	(.012)
White TAKS pass rate	.433*
	(.015)
Enrollment (logged)	278*
	(.101)
Class size	0.07
	(.055)
State Aid	4.39E-09
	(2.78E-09)
Percent Low Income Students	0.00004
	(.009)
Percent Black Students	-0.032*
D 41 4 C4 1 4	(0.01)
Percent Latino Students	-0.085*
T	(0.008) -0.0004
Teachers with Less than 5 years of	
Experience Constant	(.009) -22.62*
Constant	(1.65)
	(1.03)
N= 15914	
$R^2 = .760$	
* if p <.05	

Table 3. The Effects of Representative Bureaucracy and Personnel Stability on Latino Performance

It appears that my first hypothesis is not supported, as stable and representative organizations do not have a significant effect on the performance of Latino students. However stability does improve the academic performance of Latinos within representative districts (see Figure 3). This suggests that one way to improve the academic performance for Latinos and close the white-Latino achievement gap also resides in a district's ability to maintain a stable teaching workforce. This finding is the exact same relationship that I found for Black students which gives some credibility to my previous argument. Despite the heterogeneity of Latinos, the knowledge that Latino teachers have before they enter the district may be enough to improve the academic performance of Latino students. The additional skills gained through longevity in the organization may be general, and therefore not specially targeted to learning the nuances of their Latino students. Likewise teacher stability should improve non-Latino teachers of knowledge of the unique traits of Latino students so that they reach the same level of information that Latino teachers have. However this knowledge may not extend beyond this point therefore preventing an interactive effect from occurring.

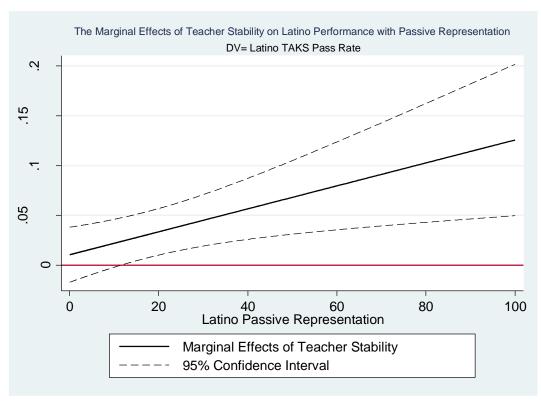


Figure 3. The Marginal Effects of Teacher Stability on Latino Performance

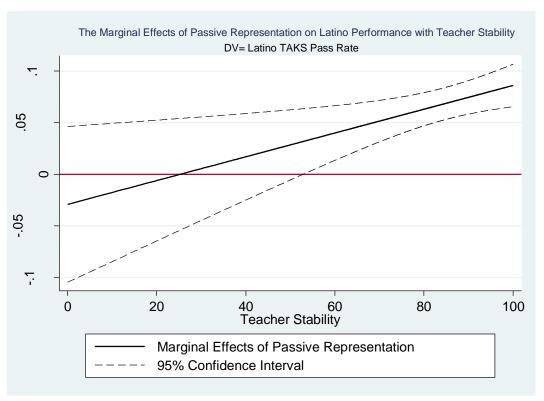


Figure 4. The Marginal Effects of Passive Representation on Latino Performance

Unstable and Representative School Districts- Blacks

However, since managers may be unable to pursue both personnel stability and representative bureaucracy due to the many external factors affecting their organizations (i.e. budget cuts, prospective employees, changes in hiring and training standards, etc), it is important to understand if passive representation is still significant in unstable districts. Since these managers still seek to meet state standards and improve their responsiveness to, and therefore the policy outcomes for their clients, I sought to determine if passive representation still improved Black performance when there was personnel instability.

From this graph (see Figure 1) it appears that the second hypothesis, while not completely supported due to a lack of interactive effects, shows that passive representation does have a positive and significant impact on the Black TAKS pass rate in unstable schools. This finding, while not exactly as I hypothesized, is good news for both the representative bureaucracy literature as well as for Black students. This finding demonstrates that even in very unstable organizations, such as those experiencing a loss of 30% of their bureaucrats from the previous year, passive representation can still lead to positive outcomes for Black students (Shen 1997; Carroll et al 2000; Scafidi et al 2002; Loeb et al 2005). This further demonstrates the importance of representative bureaucracy to improving the policy outcomes for Black students. It also offers additional support to the argument made in the previous two sections. Passive representation and teacher stability may both lead to the acquisition of similar knowledge, thus the lack of stability does not affect the information that Black teachers have about Black students. This would allow them to have a positive effect on Black academic performance in any environment as passive representation works as a substitute for personnel stability.

Unstable and Representative School Districts- Latinos

Given the results found for Black students, I sought to determine if passive representation retained its positive effect on the academic performance of Latino students within unstable schools. From this graph (see Figure 4) it appears that with extremely high levels of personnel instability (less than 55% of teacher returning) passive representation has no significant effect on Latino academic performance.

However whenever the distribution of the data is considered, the graph does show a similar relationship to the one found for Black students. When we consider that the average amount of teachers returning the next year is only 81% in Texas¹⁴, a district that only has 56% of teachers returning is still a very unstable organization. The marginal effects graph shows that passive representation has a positive and significant effect on the Latino TAKS pass rate once teacher stability reached 56%. Given that very few of the cases fall below 57.3%, this finding suggests that the strategy of representative bureaucracy have a positive effect on the educational policy outcomes for Latino students¹⁵ within unstable and stable school districts.

As a result, this finding demonstrates that passive representation, while not having an interactive effect with personnel stability, can still improve the educational policy outcomes for Latino. Although determining whether the increase in performance stems from the active representation of Latino academic interest by Latino teachers or the role model effect will require qualitative research, this initial analysis suggests that when given limited resources in which to use to improve Latino performance, pursuing representative bureaucracy as a substitute for personnel stability will allow for beneficial policy outcomes for Latinos in unstable environments.

Stable and Unrepresentative School Districts- Blacks

On the other hand creating and maintaining a representative bureaucracy is not always a viable option given the lack of African Americans choosing to pursue a career

 ^{14 85%} is the national average.
 15 This value (57.3%) is two standard deviations of the mean.

in education (Irvine 1989). As a result, attempting to maintain a stable workforce may be the best strategy a manager can pursue as they attempt to accomplish policy goals. I therefore examined the effects of personnel stability within unrepresentative organizations on Blacks' academic performance (see Figure 2). I found that personnel stability has a positive and significant effect on the educational policy outcomes for Black students in organizations in which passive representation 16 is less than 18%.

According to the theory of representative bureaucracy, unrepresentative organizations should not be associated with positive policy outcomes for minorities (Pitkin 1967; Meier 1993b; Selden 1997). Likewise several studies have demonstrated that Anglo teachers are associated with negative outcomes for Black students (Meier et al 1989; Dee 2005). However, these studies did not consider the role of personnel stability. While the effect is not one that is mitigating, personnel stability still works to improve the performance of Black students in both representative and unrepresentative school districts. Therefore this strategy could be used as a substitute for passive representation and thus be the best course of action for public managers to pursue if they seek to improve the academic performance of Black students but cannot create a representative bureaucracy. While this finding does not completely support my third hypothesis, it does offer support to the theory of personnel stability as one way to improve the policy outcomes for Black students.

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¹⁶ Most cases fall in this range. See Appendix B for the distribution of the data.

Stable and Unrepresentative School Districts- Latinos

In contrast to Blacks, I find that personnel stability only leads to positive policy outcomes for districts that have passive representation above 10% (see Figure 3). Thus it appears pursuing the strategy of personnel stability as a replacement and/or in lieu of creating a representative bureaucracy will only increase the Latino TAKS pass rate in a limited amount of unrepresentative organizations. This is quite an interesting finding. Personnel stability, while significantly related to Latino performance in the noninteractive regression, does not have a positive effect in the organizations that have the least amount of representation. This suggests that in these organizations the status quo of poor Latino performance continues. Furthermore, in the previous sections it became apparent that passive representation continues to have a positive effect on the Latino TAKS pass rate in both stable and unstable organizations. This finding suggests that not only does personnel stability not mitigate the negative effects of passive representation, but that in terms of improving the educational policy outcomes for Latinos, increased passive representation may be the driving factor. While this does not support my hypothesis, it does demonstrate an alternative strategy for some unrepresentative organizations to pursue, if hiring more Latinos is not a feasible option.

The fact that there is a significant effect also offers additional support to the argument that personnel stability and passive representation allows educators to obtain the same type of knowledge about their Latino students and thus one strategy may be able to be used as a substitute for the other. Additional qualitative and quantitative research is needed however to isolate what specific skills and procedures are being used

to improve the performance of Latino students. If through interviews, I find that both Latino teachers and stable teachers use similar techniques and teaching styles, then the argument that passive representation and personnel stability both lead to the acquisition of similar knowledge can be accepted. However, without this information on teaching styles, procedures, perceptions, and/or advocacy, I cannot readily accept this alternative theory.

Unstable and Unrepresentative Districts- Blacks

Finally the effects of completely unstable and unrepresentative school districts on the Black TAKS pass rate can be seen in the constant term. These types of schools are significantly related with a 4.99 percentage point decrease in the TAKS pass rates of Black students, which is in line with the current literature. We must consider how critical this impact is given that Blacks already pass the TAKS at lower rates than do Anglos (TEA.gov 2010). Already low Black academic performance is compounded by the inability of unstable and unrepresentative organizations to effectively identify, and respond, to the academic needs of minority students, which works to perpetuate educational inequality (Jencks and Phillips 1998). The detriment of unstable and unrepresentative districts becomes even more evident, given that 1) Blacks are more likely to attend these types of schools, and 2) poor academic performance also decreases the likelihood that these students will graduate (Cohen and Tyree 1986). Thus the impact of the negative policy outcomes associated with unstable and unrepresentative school districts are more likely to affect Black students, and extend far beyond the time

the student spends within the organization. This results in the perpetuation of educational inequality between Blacks and Anglos.

Unstable and Unrepresentative School Districts-Latinos

The effects of completely unstable and unrepresentative school districts on the Latino TAKS pass rate can also be seen in the alpha, or constant, term. These types of schools are significantly related with a 22.62 percentage point decrease in the TAKS pass rates of Latino students. Thus just as is the case with Blacks, already low Latino academic performance is compounded by the inability of unstable and unrepresentative organizations to effectively identify, and respond, to the academic needs of minority students, which works to perpetuate educational inequality (Jencks and Phillips 1998).

This is even more relevant when we consider that Latinos are more likely to live in areas in which teacher stability is an issue. For example, 27% of Latino fourth grade students did not have the same teacher at the beginning and the end of the year, which is 10% higher than for Anglo students. Likewise 25% of Latino high school seniors experience teacher absenteeism everyday as compared to 11% of Anglo seniors (ETS 2003). When we also take into account the fact that Latinos comprise 22% of students but only 7% of teachers nationwide, the detriment of unstable and unrepresentative districts becomes even more evident, given that poor academic performance also decreases the likelihood that these students will graduate (Cohen and Tyree 1986). Thus the impact of the negative policy outcomes associated with unstable and unrepresentative school districts continue to enable educational inequality between Latinos and Anglos.

Discussion

It is evident from these results even if there were no interactive effects of the management strategies of representative bureaucracy and personnel stability there are some interesting relationships to consider. This analysis demonstrates that passive representation can improve the educational policy outcomes for Black and Latino students in both stable and unstable organizations. This demonstrates that representation is not affected by the environmental factor of personnel stability. This makes it a beneficial strategy for public managers to pursue if they seek to achieve the goals set by top managers, the state, and NCLB. Likewise personnel stability works to improve the performance of Black and Latino students in both representative and in some non-representative school districts. Thus it is a beneficial strategy to pursue if superintendents and school administrators seek to improve the outcomes of minority students. Both of these findings suggest that even if there is not an interactive relationship between these two strategies, there is a substitution effect.

If, for example, a district realizes that they are unable to hire minorities in order to match the demographic of their clientele due to a lack of applicants, then pursuing a strategy of maintaining a stable teaching workforce may be the next best course of action in order to ensure that Black and Latino students perform well and meet the standards set by state and federal education policies. The district should implement programs that foster relationships between newer and older teachers in order to shorten the learning curve of new teachers, and therefore decrease the chances that the addition of new teachers will hinder the district's ability to maintain high performance (O'Toole and

Meier 2003; Loeb et al 2005). In addition administrators need to determine what types of fiscal and non-monetary incentives are needed in order to deter teachers from seeking out jobs in different districts or outside of education (Loeb et al 2005).

Likewise, if a district is constantly experiencing changes as it attempts to deal with high turnover and comply with new teaching certification standards, administrators within the district should consider hiring teachers that match the demographic of their clientele a priority. This strategy is one way in which the school can improve the outcomes for their minority students and reduce the disparities in minority and white students' performance. Since Black and Latino teachers also improve the performance of white students, these hiring decisions serve to even further benefit the district as it would help prevent the takeover of the district by the state if certain policy goals are not met (Meier, Wrinkle, and Polinard 1999). It also could increase the likelihood that they would receive the additional performance-based funding needed to better educate students and retain teachers.

The reality of these findings also has other repercussions for education policy as a whole. In both models passive representation and personnel stability had a positive effect. Given that fewer individuals are entering the teaching profession and making it a long term career, and that fewer Blacks are choosing to become educators, the future of Black and Latino education looks bleak (Irvine 1989; Ingersoll 2003). Unless legislators, educators, and administrators can find some way in which to make teaching a more attractive profession, recruit minorities to enter the profession, and/or keep teachers from leaving the field, Black and Latino students will continue to perform at

lower rates then Anglos. This would spell the continuation of the Black-white and Latino-white achievement gap which in turn works to perpetuate the racial disparities we see in graduation rates, college attendance, and socioeconomic status (Cohen and Tyree 1986).

Given these potential consequences the next step is to engage in qualitative research in order to determine if passive representation and personnel stability lead to the attainment of similar amounts of information about minority students. If teachers are able to reach similar knowledge levels, how much time is needed within the organization in order to acquire this information? Does the size of the minority student body increase the rate at which knowledge is gained? If however, the two strategies result in different types of knowledge, then we must ask why is there no interactive effect? As scholars we must address these questions and seek to gain a better understanding of the interpersonal relationships and advocate roles these teachers use in order to prescribe a set of suggestions that will help to improve the educational policy outcomes for minority students in any type of public school organization.

Conclusion

First and foremost this study demonstrates that there are no interactive effects between the management strategies of personnel stability and passive representation. However, additional knowledge on how to improve policy outcomes can be gained from examining passive representation within stable and unstable organizations and personnel stability within representative and non-representative organizations. I find that passive representation (with or without personnel stability), as well as personnel instability (with

or without passive representation) can improve Black and Latino performance and potentially help close the achievement gap as one strategy can be used as a substitute for the other (Stevenson et al 1990; Steinberg, Dornbusch and Brown 1992). This offers support to the current literature that a stable personnel and a representative personnel are associated with positive policy outcomes (Shen 1997; Light 1999; Carroll et al 2000; Scafidi et al 2002; Loeb et al 2005). It also suggests that these two strategies lead to the attainment of certain levels of knowledge that allow stable teachers and representative teachers to improve performance. As mentioned before, qualitative research will be needed in order to better determine if the knowledge is similar or if it is different and just has similar effects that prevent it from having an interactive effect.

Another interesting finding from this study is within unrepresentative school districts, a stable teaching workforce does not have any significant effects on the performance of Latino students once passive representation drops below 20%. This suggests that at least for Latinos, passive representation may be more important in terms of improving policy outcomes. This relationship may have something to do with the language barrier between Latino students and non-Latino teachers. Perhaps when passive representation is below 20% the information transmitted from teacher to teacher is more general knowledge on how to improve student performance rather than race or language specific. Additional research is still needed however in order to better understand why stability does not always have a positive effect on the academic attainment of Latinos.

In response to these preliminary findings, my future quantitative and qualitative research will focus on the nature of these bureaucrat/client relationships in order to determine exactly what mechanism is leading to a substitution effect rather than an interactive effect. For example, do minority students respond differently to minority and non-minority teachers despite their usage of similar teaching techniques? Or do minority and non-minority teachers use different techniques based on different information? Are the benefits of Latino teachers in unstable schools primarily the result of Latino students experiencing the role model effect (Dee 2005)? Do unrepresentative teachers (under 20%) within stable schools fail to improve Latino performance because they lack the role model effect? I believe that further understanding these interpersonal relationships is the next step in helping public managers choose the combination of strategies that will improve the policy outcomes for minorities, and therefore help them comply with state and federal standards.

While I expect to find similar results in organizations that are decentralized and allow street-level bureaucrats great discretion, there may be differences depending on the nature of the service/good provided, as well as the amount of coproduction needed to experience positive policy outcomes. For example, test scores are not a zero sum good, and students are required to do quite a bit of work themselves if they wish to perform well. Welfare benefits however are a zero sum good, and while they require coproduction from clients by complying with regulations, the nature of the good itself may limit the bureaucrat's ability to improve the outcomes for all of their clients. Thus I

would advocate for the application of this study to other agencies in order to determine the generalizability of these findings.

I also encourage scholars to consider how the other forms of stability can interact with passive representation not only at the street-level, but also at the top and middle management level. For certain organizations mission stability may be of more relevance then say technological stability, while in others the discretion of middle and/or top managers may limit the discretion awarded to street-level bureaucrats. Consequently only through the systematic examination of these theories can we fully understand the impact that stability and representative bureaucracy will have on the policy outcomes for minority clients, and thus be able to make recommendations on how to best meet the needs of all clients.

CHAPTER III

MINORITIES AND POLICY TOOLS

Effective, efficient, and responsive (Lipsky 1980). These are the characteristics that every public organization is supposed to have. Scholars however, have yet to suggest a managerial strategy that will allow agencies to embody all of these qualities. In the last twenty years scholars, as well as citizens, have also demanded that public organizations add an additional task to their workload: addressing the racial inequality in public policy outcomes. When we consider the wide range of policy goals, the many demographics that comprise an agency's clientele, and the diverse personnel working within these organizations, it is no surprise that scholars have yet to create a general theory as to how agencies can improve their responsiveness to best meet the policy needs of each and every client. Despite all of these factors however, empirical research has found two strategies that can help public organizations achieve these goals.

The first public management strategy is the theory of representative bureaucracy. Representative bureaucracies are agencies that share the same demographic traits as their clientele. This enables them to achieve public policy goals more effectively and efficiently than more homogenous organizations (Selden 1997). The basic premise of this concept is that a representative bureaucracy can better identify the needs of its clients due to shared life and socialization experiences (Selden 1997). The identification of such interests consequently allows the organization to be more responsive to the needs of those that are often underrepresented and negatively impacted by public policies, such as minorities (Lim 2006; Meier and Nicholson-Crotty 2006). Given the increasingly

diverse society in which we live in, as well as the continuation of racial disparities in policy outcomes, this theory continues to be advocated as one way to improve organizational responsiveness to minority clients and increase equality in policy outcomes (Meier et al 1989; Meier and Stewart 1991; Dee 2005).

The second public management strategy that has also found support is personnel stability. This theory argues that personnel stability improves policy outcomes because bureaucrats who have worked within the same agency for an extended period of time have the opportunity to develop a specialized skill set that allows them to efficiently and effectively meet the needs of their specific clientele (Dunn 1997; Light 1999; O'Toole and Meier 2003). While employee turnover can bring new ideas and outlooks to an agency, it can also produce or intensify problems of inefficiency and ineffectiveness, therefore decreasing performance and responsiveness (Light 1999). As a result, some scholars contend that the key to improved responsiveness and achieving policy goals lies in an organization's ability to maintain a stable workforce (O'Toole and Meier 2003).

While both of these theories have been supported through empirical research, it is evident that the representative bureaucracy literature fails to mention the significance personnel stability plays when it comes to policy outcomes. Likewise the stability literature rarely discusses the importance of passive representation when it comes to improving organizational responsiveness. Thus this study seeks to examine the interactive relationship between these two concepts. The overall goal is to determine how to improve organizational responsiveness and performance in order to achieve better, and more equal, policy results for minorities. Therefore this analysis begins to

answer the broad question: What are the combined effects of the management strategies of personnel stability and representative bureaucracy on public policy outcomes?

Given that it has been documented that policy tools influence policy outcomes, this study focuses specifically on the effects that these two management strategies have on the types of policy tools used by bureaucrats towards minority clients in order to exact client compliance within the organization's rules and regulations (Schneider and Ingram 1993; Schneider and Ingram 1997; Roch et al 2010). The relationship between punitive policy tools usage and negative outcomes has been especially well documented within the realm of education (Brown 2007; Skiba and Noam 2002; Roch et al 2010). As a result, this analysis examines how the interactive relationship of personnel stability and passive representation affects the type of punitive policy tools used against minority students. Thus this study attempts to answer the following questions: *Does street-level personnel stability mitigate or exacerbate the use of punitive policy tools against minorities when there is no passive representation? Does passive representation mitigate or exacerbate the use of punitive policy tools against minorities in unstable public organizations?*

In order to answer these questions Texas public school districts are used as a proxy for public organizations. These districts have been chosen because of their highly decentralized structure, the great amount of discretion that street-level bureaucrats have in this organization, and the large amount of data collected in regards to the use of discipline against students (Meier and O'Toole 2003; TEA.gov 2010). This allows me to examine how street-level personnel stability and passive representation affect the punitive policy tools used against minority students over a ten year period. Thus this analysis will allow

me to determine if certain types of organization (i.e. representative and unstable, stable and unrepresentative, etc.) are associated with an increase or decrease in the use of certain punitive policy tools against minority students.

Given that minorities still experience unequal levels of punishment within the public school setting, this study has implications for not only public management, but also for education policy (Skiba 2000; Skiba, Michael, and Peterson 2002; Roch et al 2010). Due to the fact that the type of policy tool used can dramatically impact a student's academic performance, and thus their future education and economic opportunities, as well as the fact that minorities continue to experience lower academic attainment than Anglos (another sign of unequal education outcomes), determining what organization(s) actually decreases the usage of such tools is one way to reduce the racial inequalities we see in public education today (Ekstorm, Goertz, Pollack, and Rock 1986; Hawkins, Doueck, and Lishner 1988; DeRidder 1991). In the end this study finds some support of an interactive relationship between the theory that representative bureaucracy and the theory of personnel stability.

Literature Review

Policy Tools and Performance

Punitive policy tools directly affect policy outcomes. In the case of education the tool selected often has a critical impact on the student's academic attainment (DeRidder 1991; Brown 2007; Skiba and Noam 2002; Roch et al 2010). Some of the more punitive tools, such as those related to discipline, can have especially harsh consequences for minorities (Brown 2007; Roch et al 2010). This occurs because these policy tools are

often used to "stigmatize behavior, and consequently the group linked with the behavior" (Schneider and Ingram 1993, 342; see also Schneider and Ingram 1997). Research has shown that these types of punitive tools send negative messages to the students, and can negatively impact their academic performance (Skiba and Noam 2002; Brown 2007). While this happens to all students, it is especially the case for minority students (Skiba and Noam 2002; Brown 2007). In extreme cases, clients choose to abstain from using services, which in terms of education means dropping out of school, which is already a significant issue for minorities who have higher dropout rates and lower academic achievement than Anglos (DeRidder 1991). This poses a problem since it indicates that supposedly "neutral" public organizations are selecting and using policy tools in ways that actually perpetuate, rather than mitigate, educational inequality (Skiba and Peterson 1999; Verdugo 2000). Thus it is important to understand if representative bureaucracy and personnel stability can interact in ways to mitigate these inequalities.

Representative Bureaucracy and Policy Tools

The theory of representative bureaucracy argues that "the demographic characteristics of bureaucrats affect the distribution of outputs to clients who share these demographic characteristics" (Wilkins and Keiser 2006, 87). This theory identifies two forms of representation: passive and active (Pitkin 1967). Passive representation occurs when the individuals within the bureaucracy have the same demographic characteristics (race, gender, etc) as that of the clientele it serves. Active representation occurs when bureaucrats who have discretion advocate for the interests of a particular clientele in order to diminish or eradicate the discrimination that has affected this group (Mosher

1982; Hindera 1993). In order for passive representation to lead to active representation, two conditions must be met. First the policy must be one in which the bureaucrats have substantial discretion, and second it must be a policy area that is salient for the demographic characteristic in question (Meier 1993a; Wilkins and Keiser 2006).

Based on these criteria, scholars have examined the impact that minority bureaucrats have on the policy tools used against minority clients in public education, since this is a policy arena in which bureaucrats have considerable discretion, as well as one that has historically had negative impacts for these groups. Scholars find that low levels of Black and Latino representation are associated with increases in the rates at which Black and Latino students were punished (Meier et al 1989; Meier and Stewart 1991; Roch et al 2010). Dee (2005) also finds the non-co-ethnic teachers are more likely to view non-co-ethnic students as disruptive and troubled then are same-race teachers. Coincidently these are the same characteristics often used to justify the use of punitive policy tools against students and help to explain why minorities continue to be disciplined at unequal rates (Skiba 2000; Skiba et al 2002).

Implicit in these studies of representative bureaucracy is the idea that non-minority bureaucrats are not associated with beneficial policy outcomes for minorities (Meier 1993b; Selden 1997; Meier and Nicholson-Crotty 2006). Thus without the presence of minority bureaucrats to change, or re-socialize, the values and beliefs of non-minority bureaucrats, non-minority bureaucrats will be unable to "reduce ignorance and rejection; [in order to] increase bureaucratic understanding of minority views and feelings" (Krantz 1974, 435; see also Lim 2006). An example of this can be seen in

Roch et al's (2010) study. They find that with an increase in the proportion of minority teachers, minority students of the same ethnicity experienced lower rates of expulsions and suspensions (see also Rocha and Hawes 2009). Their explanation for this finding is that these districts, due to the presence of minority teachers, were more aware of the negative ways in which punitive policy tools impact minority students. Consequently they were more likely to adopt more learning oriented discipline policies and provide more beneficial policy outcomes for underrepresented groups (Roch et al 2010, 53). Thus the literature has some evidence that the presence of minority bureaucrats can lead to a more responsive organization, improved program performance, and fewer punitive policy tools used against minorities.

Stability and Policy Tools

In the public management literature scholars have identified five different forms of stability (Allison 1971; Wilson 1989; O'Toole and Meier 2003). While there is research on how all five forms affect bureaucratic responsiveness and policy outcomes, the focus of this study is personnel stability¹⁷ given that these are the individuals (i.e. street-level bureaucrats) responsible for implementing broad federal/state/district policies and ensuring that clients comply with organizational rules (Selden 1997; Keiser et al 2002; O'Toole and Meier 2003). Personnel stability is critical because even though employee turnover can lead to positive changes such as the introduction of new perspectives and ideas, it can also create or worsen problems of inefficiency and ineffectiveness within the agency (Light 1999).

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¹⁷ As a concept personnel stability refers to the changes in organizational personnel (Light 1999).

Too much turnover can also exacerbate "the difficulties involved in building competence, mutual trust, and long-term commitment" (O'Toole and Meier 2011, 137; see also Barzelay and Armajani 1992; Dunn 1997; Elmore 1997). This hinders an organization's ability to effectively respond to the needs of its clients. Street-level bureaucrats benefit from personnel stability because it can ease the heavy workloads they often carry, as well as decrease the often erratic nature of the relationships they have with clients (Lipsky 1980; Meier and O'Toole 2007). The longer bureaucrats are employed in these organizations the more effectively they can deliver services to their clients due to the development of specialized skills and routines. Since bureaucrats develop these skills in response to their organizational surroundings, they are able to handle certain cases better than are other street-level bureaucrats who lack experience with this particular clientele (Lipsky 1980). Since this skill set is so specialized however, it often does not shift from bureaucracy to bureaucracy, thus making streetlevel bureaucrat stability important to managers if they seek to efficiently and effectively improve responsiveness and accomplish their policy goals (O'Toole and Meier 2003).

Given the benefits of personnel stability it is apparent why turnover is a concern especially for those within public education (Golembiewski 1990; O'Toole and Meier 2003). Recent studies have shown that teachers who leave a district or exit the profession completely often attribute it to several factors including high proportions of poor performing and minority students and student discipline problems (Shen 1997; Carroll et al 2000; Scafidi, Sjoquist, and Stinebrickner 2002; Ingersoll 2003; Loeb et al 2005). When we also consider that high teacher turnover means that a district must

constantly hire new teachers in order to replace the teachers who are leaving, these problems can create a vicious cycle. If discipline problems are already factors pushing teachers out of public schools, then it is highly likely that the additional personnel instability generated by these issues will only further exacerbate these discipline problems. This occurs because new teachers are rarely as effective as those who have been in the district longer given that they must learn (often through trial and error) what combination of skills and policy tools will work best for their particular classroom, as well as how to deal with the daily disruptions (such as students acting out) that can hinder their ability to control the classroom (O'Toole and Meier 2003).

While there is little research on the direct effects of street-level personnel stability on student discipline rates and policy tool usage, one can make inferences from studies that indirectly examine this relationship. Stable teachers should be more likely to enforce school rules fairly and consistently due to their knowledge of the district's formal and informal discipline policies. They should also be better able to choose the tool that works best for their clientele's long term academic interests (Skiba and Noam 2002; Brown 2007). These teachers therefore should choose extremely harsh policy tools (such as expulsions and suspensions) only when they are absolutely necessary. Unstable teachers, lacking the knowledge gained from constant contact with their clientele as well as a "lack of adequate teaching expertise for making... decisions and providing support and mentoring," should choose whatever tool they believe the "infraction" warrants, regardless of the effect it has on a student's future academic attainment (Loeb et al 2005, 44).

Therefore, one can assume that with the presence of lower-level personnel stability, a public organization should only use punitive policy tools when they are needed to help them accomplish both its short term (i.e. maintain a safe environment) and long term mission and goals (i.e. provide a quality education to students). An unstable street-level personnel on the other hand should use punitive policy tools as their primary means of exacting client compliance given their lack of experience with the clientele as well as their focus on the short term goal of controlling the classroom (Sanders and Rivers 1996; Darling-Hammond 2004).

Missing Relationship in the Literature

From the literature it is apparent that representative bureaucracy scholars tend to attribute increases in responsiveness and policy benefits mostly to demographic traits. While these studies support the representative bureaucracy literature in that they demonstrate that passively representative bureaucrats can lead to the use of fewer and less punitive policy tools for minority clients, they do not examine the potential effects that street-level stability can have for minority clients in unrepresentative bureaucracies (Wilkins and Keiser 2006; Keiser et al 2002; Meier and Nicholson-Crotty 2006). The fact that management scholars have found that stability can improve the responsiveness of street-level bureaucrats to their clientele's unique needs suggests that representative bureaucracy scholars, by ignoring personnel stability's effects on policy tool usage, have overlooked an integral component of organizational responsiveness and performance.

This is particularly relevant given the lack of literature examining the effects of personnel stability on punitive policy tool usage. Within education the use of tools such

as expulsions have been shown to be more detrimental to the graduation rates of minorities then are the less punitive policies, such as in school suspensions (ISS), since they actually segregate students from the rest of the student body (DeRidder 1991; Strauss 2001; Owen 2005). This segregation can create feelings of alienation/isolation which can lead to delinquency and eventually student attrition (Hawkins et al 1988). These punitive tools also often come with the stipulation that the work missed cannot be made up for a grade and the absences associated with delinquency and out-of-school suspensions (OSS) can add up to the point that students are denied credit and have to retake classes.

This combination often serves as an incentive for students, especially if they are low performing, to simply dropout, which severely limits their future educational and economic opportunities (Ekstorm et al 1986). Given the severity of these consequences, we must determine how the various combinations of street-level personnel stability/instability and representation/lack of representation affect the use of such tools against minorities. This is especially true if we seek to reduce the unequal use of punitive disciplinary measures against minority students and improve the academic performance of minorities so that it reaches parity with Anglos (Campbell et al 2000; Loveless and Diperna 2000).

Theory

Representation, Stability, and Schools

While the larger goal is to apply these findings to public agencies in general, I have chosen to test this theory using public school districts since their structure makes

them ideal for testing both theories simultaneously (O'Toole and Meier 2003). For example, even though teachers operate under the basic state and district curricula, they are allowed great discretion in the ways in which they choose to implement these disciplinary policies through their choice to report infractions, recommend punishments, and the tools used to exact compliance (Roch et al 2010). This large amount of discretion awarded to teachers combined with the well known unequal rates at which Blacks and Latinos are disciplined relative to whites satisfies both theoretical conditions needed for representative bureaucracy (discretion and a policy area salient to a particular group) to be considered as a realistic management strategy, as well as for passive representation to lead to the active representation of minority interests (Selden 1997; Campbell et al 2000; Loveless and Diperna 2000).

Schools also satisfy the basic requirements for personnel stability to be considered a feasible management strategy since the majority of the district's disciplinary policy implementation is done by street-level bureaucrats. These teachers have the responsibility of implementing specialized procedures that allow them to maintain a safe and distraction free learning environment (Light 1999). Once they have a system in place that is perceived as effective for their clientele, it is highly unlikely that they would change it. Moreover, the benefits of teacher stability have already been documented in the education literature, as scholars find that if new/inexperienced teachers have any concerns in implementing district/state-wide policies they tend to turn to a teacher who has been in the district for an extended time for guidance (Nettle 1998; Kauffman et al 2002). This occurs because the teachers with more tenure within the

district (the stable lower-level personnel) are more knowledgeable about the students' specific behaviors, needs, and problems due to their daily interactions with these students. Thus they are able to instruct new teachers on how to implement policies that are responsive to the needs of their students. Studies have supported this claim as they find that a stable teacher workforce can successfully improve the students' educational policy outcomes (i.e. academic performance) (Kauffman et al 2002). Thus the same logic should be applicable to the choice of disciplinary policy tools used.

I argue therefore that personnel stability and passive representation should lead to a decrease in the use of discipline tools against minority students since these organizations should be the most responsive to these clients. Conversely, those organizations that have no street-level bureaucrat stability and lack passive representation should increase the use of these policy tools against minority clients since they should be the least responsive to their specific interests. While both of these arguments fall in line with the literature, what will be the most interesting will be the outcomes when I examine unstable, but passively representative organizations and stable organizations that lack passive representation. In these cases I expect the benefits of stability to mitigate the negative effects often associated with an unrepresentative bureaucracy, as well as passive representative to mitigate the negative effects of instability. Therefore, I propose that these two very different organizations should decrease the use of punitive policy tools against minority clients. In order to better illustrate my theory, I have created a specific hypothesis for each type of the four organizations in my analysis.

H1: Stable and representative schools will decrease the usage of punitive policy tools against minority students.

I argue that as schools become more stable and passively representative they should decrease the use of punishments (OSS, ISS, and expulsions) towards minority students. First, as is in line with the theory of representative bureaucracy, minority teachers should share similar life experiences and socialization processes as minority students, and therefore have a better understanding of their unique needs. They should also be more familiar with the cultural differences of minority students, such as the vernacular/language used and clothing styles worn (Irvine 1989). Minority teachers should therefore be less likely to perceive minority students as potential troublemakers or as being overly aggressive the way that non-minority teachers who are not familiar with these traits would. Minority teachers should also have a better understanding (either through personal experience or anecdotes from friends) of the unequal rates at which minority students are disciplined, and thus be less inclined to use these tools in order to stigmatize what are simply the behaviors associated with the culture of minority students (Owen 2005; Hinojosa 2008; Payne and Welch 2010).

These benefits should be amplified by the fact that the specialized skills and procedures gained from personnel stability should help minority teachers to choose the right punishment for the violation. These minority teachers, knowing the long term consequences associated with extremely harsh forms of punishment (i.e. dropping out, poor performance, etc.) and the impact that these issues can have on overall organizational performance, should prefer less punitive tools in hopes that they can

increase the likelihood that minority students stay in school and graduate (Meier et al 1989; DeRidder 1991). Likewise, the stability of these teachers should make the use of less punitive punishment techniques an organizational norm, and therefore they should decrease the use of policy tools against minority students.

H2: Unstable and unrepresentative schools will increase the usage of punitive policy tools against minority students.

I hypothesize that as organizations become more unstable and passively unrepresentative they should increase the usage of punitive policy tools against minority students. Since these non-minority teachers do not share similar cultural values or life experiences they are unlikely to understand the unique speech patterns, language, or clothing styles of minority boys and girls (Irvine 1989). This lack of understanding works to reinforce the stereotypes that non-minority teachers often hold against minority students, such as being troubled, disrespectful, and belligerent (Irvine 1989; Skiba 2000; Skiba et al 2002; Dee 2005). As a result, non-minority teachers should be more willing to use punitive policy tools in order to stigmatize the behavior associated with minority culture by disciplining minority students for subjective "violations" that they would not usually report Anglo students for such as defiance, disrespect, and threat (Skiba et al 2002; Gregory and Weinstein 2008).

Furthermore, when the current context of public education is considered, the teacher shortage and the ever growing population of school age children, it is inevitable that classes will become much larger (Blasé 1986; Ingersoll and Smith 2003; Barnes, Crowe, and Schaefer 2007). Non-minority teachers in unstable schools should have an

even greater incentive to use punitive policy tools in order to control the classroom and limit distractions. These teachers, feeling overwhelmed and highly stressed within this unstable environment, may reach for punitive policy tools for any infraction that disrupts the classroom because they immediately remove the problem student from the classroom and allow the teacher to quickly return to his/her teaching duties (Blasé 1986).

The use of these highly punitive policy tools also serve as a visual reminder to other students to behave, and therefore by using these tools often, teachers may believe that not only will the student being punished learn to behave more quickly, but also the rest of the students will understand what behaviors are not tolerated. This is even more likely to occur when we consider that many schools now have zero-tolerance policies in which teachers have the right to immediately remove any student they believe is an immediate threat to the safety of themselves or any other students (Skiba and Rausch 2006).

The lack of stable employment within the organization should also prevent these teachers from learning better, more positive ways to help minority students, and instead adopt the tools used by other non-minority teachers. This "rubber stamping," which occurs whenever "bureaucrats adopt the opinions of other bureaucrats in order to aid in the decision-making process," is a technique used whenever bureaucrats are confronted with problems that require them to make critical decisions about clients and situations with limited information, which would be the case for non-minority teachers in an unstable environment (Lipsky 1980, 130). A non-minority teacher in an unstable environment may see these tools as a way to ease their workload so that they can devote

more time to teaching, and thus achieving the school's goal of improving performance without regard for the long term effects it can have on students' academic attainment (Blasé 1986). Consequently in these districts I expect to find the increase use of punitive policy tools against minority students.

H3: Unstable and representative schools will decrease the usage of punitive policy tools against minority students.

As schools become more unstable and representative they should decrease the usage of punitive policy tools against minority students. The fact that minority teachers should have a better understanding of the unique characteristics of minority students given their shared life experiences and interests should mitigate the tendencies of these teachers to reach for the most punitive policy tools in order to stigmatize cultural behaviors/attitudes like non-minority teachers would (Roch et al 2010). These shared life experiences should also mean that these minority teachers should have less work-related stress (in regards to adjusting to their new clientele) than unstable and unrepresentative teachers given that they have a better understanding of their clientele before they even enter the district (Lipsky 1980). In addition, since discrimination through the use of unequal punishment against minority students remains a salient issue in the minority community, representative bureaucracy should prevent these teachers from overusing punitive policy tools against minority students (Rocha and Hawes 2009; Roch et al 2010). Likewise, the fact that high levels of unequal discipline can affect academic performance (both for the student and the organization), these teachers should be hesitant to abuse any tools that can decrease the performance of students in a district that is already unstable

and most likely poor performing (Deridder 1991; Brown 2007). Therefore I expect that minority teachers in unstable districts will decrease the use of punitive policy tools against minority students.

H4: Stable and unrepresentative schools will decrease the use of punitive policy tools against minority students.

Finally, I hypothesize that as organizations become more stable and unrepresentative they should decrease the use of harsh policy tools against minorities. Non-minority teachers, due to their stable employment within the district, should be familiar with the unique characteristics, behaviors, and speech patterns of minority students. Consequently they should no longer view these traits as aggressive and disrespectful or use punitive policy tools in order to deter such behaviors (Skiba 2000; Skiba et al 2002; Dee 2004). These stable teachers should also be well aware of the negative effects that harsh forms of discipline can have on students' academic performance and future attainment, and therefore choose not to punish minorities for trivial issues the way that unstable and unrepresentative teachers would (Skiba and Rausch 2006; Roch et al 2010).

Furthermore, personnel stability should allow teachers to establish a formal and informal rubric for discipline based on the unique needs of the clientele. Since these teachers should also understand the long term performance consequences of such tools for all students as well as the organization, they should only use these types of punitive punishments for extreme cases (Deridder 1991; Brown 2007). Consequently, personnel stability should give these teachers the chance to create other tools that can better address

the needs of their students, thus decreasing the need and use of harsh forms of discipline (Schneider and Ingram 1993; Schneider and Ingram 1997).

Thus in terms of policy tool usage for minority students are hypothesized to be:

	Passively Representative	Unrepresentative
Stable	Decrease	Decrease
Unstable	Decrease	Increase

Table 4. Theoretical Expectations for Policy Tools

Data and Methods

The data for this study comes from the Texas Education Agency from 2000-2010. This dataset is composed of demographic data for students and teachers, as well as measures of district expenditures, student enrollment, and student discipline rates by district, which allow me to examine this interactive relationship across districts for ten years. The data also allow me to control for other factors that contribute to the usage of such policy tools. Using school districts¹⁸ as my unit of analysis allows me to specifically focus on how street-level bureaucrats affect the policy tools used against a specific group because of the large amount of discretion awarded to these individuals (Selden 1997). In addition, the diversity of these schools suggests that these findings will be generalizable to other educational systems as "well organizations with similar characteristics (highly

¹⁸ It is also the most disaggregated unit available given that school and individual level data is not available given federal privacy policy.

professionalized organizations with discretion vested in street level bureaucrats)" (Keiser et al 2002; see also Meier and O'Toole 2003).

In this study teacher stability¹⁹ is defined as the stable year to year employment of teachers. Therefore the independent variable of teacher stability is measured as the percent of teachers that return from the previous school year²⁰. The independent variable of Black passive representative is measured as the percent of Black teachers within the district, and the variable of Latino passive representation is measured as the percent of Latino teachers within the district. I have chosen to examine the effects of representation and stability on Blacks and Latinos separately in order to ensure that one group does not mask or alter the effects of another. This is a possibility given that even though a Latino teacher, for example, is a minority, he/she is still not the same race as a Black student. Given the argument posited by the theory of representative bureaucracy, it is logical to expect that this relationship would be different than if the teacher was a co-ethnic (Selden 1997).

In order to test the hypotheses and better understand the relationship between representation and personnel stability the interaction term of Teacher Stability*Passive Representation was created. The use of this interaction in the model allows me to determine if passive representation can mitigate the potentially negative effects of street-

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¹⁹ Teacher stability is used instead of teacher experience since the variable collected by the TEA measures all experience a teacher has acquired regardless of the district. My teacher turnover variable attempts to capture only the experience, knowledge, and skills gained from longevity within the district.

²⁰ A district with less than 68.5% teacher stability is considered unstable. This is one standard deviation below the mean.

level personnel instability, and if teacher stability can counter the negative effects that non-minority teachers have on the tools used to discipline minority students.

The dependent variables of punitive policy tools will be measured as the percent/number of minority students expelled, who received out of school suspensions (OSS), and who receive in-school suspensions (ISS). The controls will be those that account for district resources and constraints such as enrollment (logged), the percent of Black students, the percent of Latino students, the percent of low income students, teacher experience, the percent of teachers without a teaching permit, and the white discipline rate (Hanushek 1996; Hedges and Greenwald 1996). The variables of teacher experience and teachers without a permit are measures that allow me to determine that the relationships found are associated with teacher stability within the same organization rather than just experience. The control of Black, low income, and Latino students and enrollment are used to control for task difficulty which may encourage some districts to use policy tools differently than others (Curiel et al 1986; Jencks and Phillips 1998). The study also controls for the white discipline rate in order to determine if representative bureaucracy and passive representation matter beyond the effects they have on Anglo students.

Since this type of cross-sectional, time-series analysis needs to be concerned with violating the assumptions of the classical linear regression, I used an OLS with clustered robust standard errors model and fixed effects for years in order to resolve the issues that often plague panel data. According to Hamilton (1992), multicollinearity is present when the variance inflation factor, or VIF, for a variable is over ten (135). For my

models multicollinearity was initially present. This was to be expected given the relationship between the variables in the education production function. Consequently the key independent variables were centered in order to reduce the multicollinearity

Findings

Expulsions

There does not appear to be any significant relationships between the three key independent variables of teacher stability (.073), passive representation (.110), and teacher stability*passive representation (.005) and the percent of Black students expelled (Table 5). The same insignificant relationship can be found for the variable of teacher stability*passive representation (.002) and the percent of Latino students expelled (Table 6). On the other hand there is a positive and significant relationship for the variable of teacher stability²¹ (.403) which runs counter to the expectations that a more stable teaching force would be less likely to use the most punitive form of punishment given their knowledge of the negative effects it has on student achievement. However, given that I found that personnel stability and passive representation can still be statistically significant in different districts (due to issues of multicollinearity with the interaction term), I have graphed the interactive relationships²² in order to determine effects of each strategy within a range of organizations (Brambor et al 2006).

Statistically significant at the .05 level.
 See Appendix A for the non-interactive models.

Independent Variables	Coefficient (Robust Standard Error)
Passive Representation	.110 (.138)
Teacher Stability	.073
Passive Representation * Teacher Stability	.005 (.015)
Percent of Anglos Expelled	441* (.069)
Percent of Black Students	.513* (.140)
Percent of Latino Students	748* (.111)
Percent of Low Income Students	.342* (.099)
Enrollment (logged)	-2.34* (.950)
Per Pupil Instructional Expenditures	.001 (.002)
Teacher Experience	481 (.689)
Percent of Teachers without a Permit	165* (.071)
Constant	74.47* (16.83)
N= 471	
$R^2 = .752$ * if p < .05	
† if p <.10	

Table 5. The Effects of Representative Bureaucracy and Personnel Stability on Black Expulsions

Independent Variables	Coefficient (Robust Standard Error)
Passive Representation	153† (.087)
Teacher Stability	.403* (.146)
Passive Representation * Teacher Stability	.002
Percent of Anglos Expelled	504* (.060)
Percent of Black Students	753* (.107)
Percent of Latino Students	.703* (.120)
Percent of Low Income Students	118 (.080)
Enrollment (logged)	-2.35* (.756)
Per Pupil Instructional Expenditures	002 (.002)
Teacher Experience	332 (.557)
Percent of Teachers without a Permit	031 (.083)
Constant	84.80* (12.35)
N= 623	
$R^2 = .767$	
* if p <.05	
† if p <.10	

Table 6. The Effects of Representative Bureaucracy and Personnel Stability on Latino Expulsions

Stable and Representative Districts

From the graph (Figure 5) and the lack of significant coefficient it appears that stable and representative school districts do not have a statistically significant interactive effect on the Black student expulsion rate. A similar relationship is evident when the Latino student expulsion rate is examined (Figure 6). Both of these findings run counter to the first hypothesis. While these types of school districts are not related with increases in the usage of the harshest form of discipline, the fact that they do not decrease its usage suggest that Black students still experience unequal rates of discipline in the organizations that theoretically should be related to the best outcomes. The effect of this finding is even more detrimental when we consider the long term effects of expulsions on students. As mentioned before expulsions are related to decreases in future academic attainment, fewer life chances, and a lower socioeconomic status than students that are not expelled.

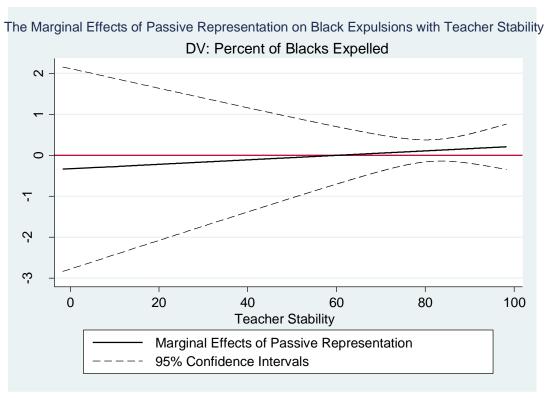


Figure 5. The Marginal Effects of Passive Representation on Black Expulsions

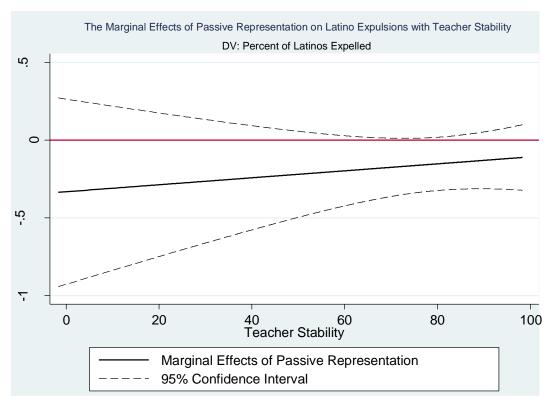


Figure 6. The Marginal Effect of Passive Representation on Latino Expulsions

In terms of the implications for Latino students, an interesting relationship emerges (Figure 6). It has been established that Latinos tend to be disciplined at higher rates and with harsher tools than Anglo students (Meier and Stewart 1991). This regression analysis also suggests that a one percent increase in teacher stability by itself is related to a .403 percentage point increase in the percent of Latinos expelled. While this does not support my hypothesis, there is a potential explanation for this positive and significant relationship. Given that expulsions are the harshest policy tool, teachers must have the approval of a principal or vice principal before the student is expelled (Texas Education Code sec.37.009). Since this process must be done very carefully as a

mistake or objection from the student's parents could result in a lawsuit, it makes since that a stable rather than unstable organization would have the personnel and structure in place in order to successfully implement this tool. Likewise stable schools should be more likely to have a set of guidelines that dictate what infractions lead to what punishments given that the stability of the bureaucrats would have allowed for the creation of organizational norms and procedures (Skiba and Rausch 2006). Thus even if the guidelines in place are biased against Latino students, teacher discretion is limited with this type of tool. While this explanation is plausible, the fact remains that neither personnel stability nor passive representation can decrease the percent of Latino students expelled as hypothesized.

Unstable and Unrepresentative Districts

The effects of unstable and unrepresentative districts, in the most extreme cases of no stability or representation, can be determined by examining the constant term. These types of districts (74.47) are significantly related to an increase in the percent of Black students expelled. Likewise, they are also significantly related (84.80) to an increase in the percent of Latino students expelled. Both of these findings offer support to hypothesis two, in that stable and unrepresentative districts are associated with increases in usage of policy tools against minority students.

Unstable and Representative Districts

Unstable and representative districts do not have a significant effect on the percent of Black and Latino students expelled (Figures 5 and 6). This finding does not support hypothesis three. It is feasible that a lack of stability could prevent teachers and

administrators from forming a unified organizational rubric when it comes to disciplinary procedures. Given the severity of expulsions, the additional personnel needed in order to successfully implement this tool, and the fact that parents and students have the right to appeal, it is possible that an unstable organization does not have the resources needed in order to use this tool effectively. Therefore they reserve this tool for extreme cases, such as bringing a weapon to school. Thus a lack of representation has no real effect on the rates at which minorities are punished. As mentioned before even though there is some good news in that these types of organizations do not increase the usage of the harshest form of punishment, the fact that they do not decrease it suggests that minorities students continue to experience the status quo, which in terms of discipline means being punished at unequal rates (Meier et al 1989; Meier and Stewart 1991).

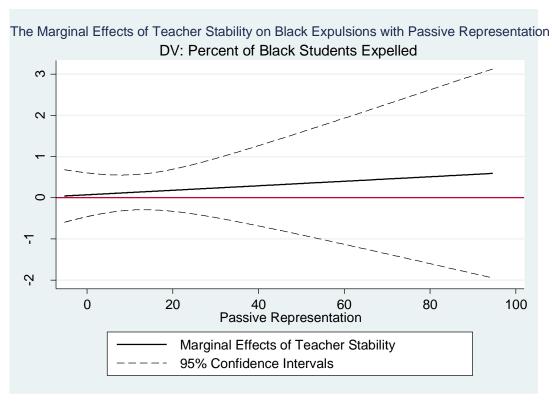


Figure 7. The Marginal Effects of Personnel Stability on Black Expulsions

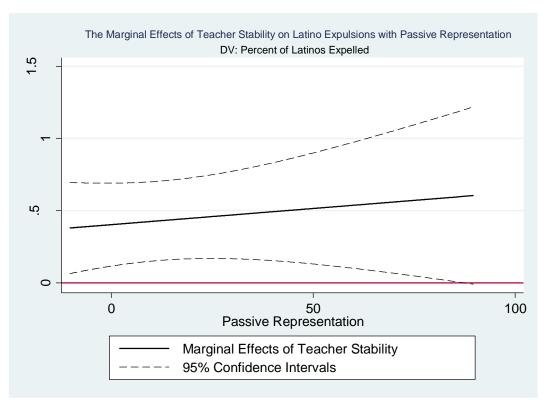


Figure 8. The Marginal Effects of Personnel Stability on Latino Expulsions

Stable and Unrepresentative Districts

Finally it appears that stable and unrepresentative districts do not have a significant effect on the percent of Black students expelled (Figure 7). This finding does not support hypothesis four. The fact that there is no relationship for Black students is disheartening as it hints at the idea that no combination of personnel stability and passive representation can help reduce the percent of Black students expelled. Given that being expelled from school increases the probability that a student will simply dropout of school or experience low achievement at another school, this relationship as well as the other three examined implies that Black students will also continue to experience lower

academic achievement and lower graduation rates than Anglo students (Hawkins et al 1988).

Personnel stability however does have a significant and positive effect on the percent of Latino students expelled within unrepresentative districts, though this relationship is not interactive (Figure 8). While this is not a mitigating relationship given the insignificant coefficient, it runs counter to what was expected in hypothesis four. Personnel stability itself is associated with an increase in the percent of Latino students expelled. It is also positive and significant when passive representation is low or missing the relationship. This collection of findings suggests that in terms of Latino expulsions, personnel stability has a greater effect than passive representation. More research is needed in order to better understand why this occurs, but based on this analysis it appears that the previous argument explains why stability increases the use of the harshest form of punishment against Latino students. As mentioned before stable schools should be more likely to have the resources and personnel in place in order to successfully use this policy tool. Thus these stable teachers could be bound by a set of procedures that are, for the most part, unaffected by personal discretion (Skiba and Rausch 2006). However as mentioned before this still means that we can expect Latinos to experience unequal rates of discipline which in turn will affect their achievement, graduation rates, and life chances (Ekstorm et al 1986).

One may wonder why there is such a difference between Black and Latino expulsions within the same type of district. A possible explanation is the cultural differences between the two groups. Teachers in stable school districts may not perceive

Black students as big a threat or problem as Latino students given that they speak the same language. Teachers, in accordance with the districts' disciplinary procedures, may use the harshest form of discipline to either stigmatize the use of Spanish or because of a misunderstanding given the language barrier. However before this explanation can be accepted, qualitative research is required.

Out-of-School Suspensions (OSS)

In the model for the percent of Black students receiving OSS two of the key independent variables are statistically significant (Table 7). A one percent increase in the amount of passive representation is related to a .166 percentage point decrease in the percent of Black students receiving OSS. There is a similar relationship for the percent of Latino students receiving OSS as a one percent increase in Latino teachers is associated with a .063 percentage point decrease (Table 8). Both of these findings are what we would expect to occur given the theory of representative bureaucracy (Selden 1997). In both models the variable of passive representation*teacher stability were positive and significant which suggest a mitigating relationship. However in order to understand the interactive relationship between these two strategies, I once again graphed the marginal effects (Brambor et al 2006).

Independent Variables	Coefficient (Robust Standard Error)
Passive Representation	166* (.084)
Teacher Stability	.015 (.048)
Passive Representation * Teacher Stability	.004* (.002)
Percent of Anglos Receiving OSS	412* (.034)
Percent of Black Students	.919* (.083)
Percent of Latino Students	515* (.045)
Percent of Low Income Students	.108* (.034)
Enrollment (logged)	.108 (.354)
Per Pupil Instructional Expenditures	.0002 (.0006)
Teacher Experience	.131 (.166)
Percent of Teachers without a Permit	008 (.054)
Constant	45.35* (5.84)
N= 3735	
$R^2 = .785$	
* if p <.05	
† if p <.10	

N= 3735		
$R^2 = .785$		
* if p <.05		
† if p <.10		

Table 7. The Effects of Representative Bureaucracy and Personnel Stability on Black OSS

Independent Variables	Coefficient (Robust Standard Error)
Passive Representation	063* (.025)
Teacher Stability	0006 (.039)
Passive Representation * Teacher Stability	.003* (.001)
Percent of Anglos Receiving OSS	292* (.001)
Percent of Black Students	566* (.053)
Percent of Latino Students	.826* (.040)
Percent of Low Income Students	152* (.025)
Enrollment (logged)	373 (.282)
Per Pupil Instructional Expenditures	.001 (.0003)
Teacher Experience	.485* (.133)
Percent of Teachers without a Permit	.053 (.053)
Constant	30.30* (4.70)
N= 4124	
$R^2 = .863$	
* if p <.05	
† if p <.10	

Table 8. The Effects of Representative Bureaucracy and Personnel Stability on Latino OSS

Stable and Representative Districts

In both models there is no complete significant relationship between stable and representative districts and the percent of Black (Figure 9) and Latino (Figure 10) students receiving OSS (due to the width of the confidence intervals). Only from 68.5% (the cut off for stable districts) to 79% stability for Blacks and 81% stability for Latinos do these types of organizations reduce the percent of minorities receiving OSS. These findings therefore do not fully support the first hypothesis that stable and representative school districts should decrease the usage of all punitive policy tools against minority students. When this finding is placed in a larger context, the implications become clearer. OSS is a harsh form of punishment since it removes the student from the school for several days. It has been documented as a tool that is related to increasing students' feelings of alienation and isolation in a way similar to being expelled, and as a result can lead to poor academic performance and increase the likelihood of dropping out (Hawkins et al 1988). Given that we expect school districts to strive to maintain a stable and representative workforce as they theoretically are expected to improve student performance, it is possible that this type of organization is actually counterproductive to these efforts when it comes to minority students. However more research is needed before any conclusions can be drawn.

Furthermore this is similar to the relationship found for expulsions. A potential explanation for this is that perhaps teachers in these stable districts must follow the disciplinary rubric for OSS as well as expulsions. Given the opportunity for students to fight the decision and the need for school administrators to be involved, teachers in

stable districts may have little discretion when it comes to this policy tool as the rubric for disciplinary procedures should become stricter as personnel stability increases (Texas Education Code sec. 37.009). This makes sense since more stability allows for teachers and administrators to create a certain organizational culture of discipline based on their experiences with the clients within their district. Thus the lack of discretion prevents them from being able to decrease the usage of OSS against Black and Latino students.

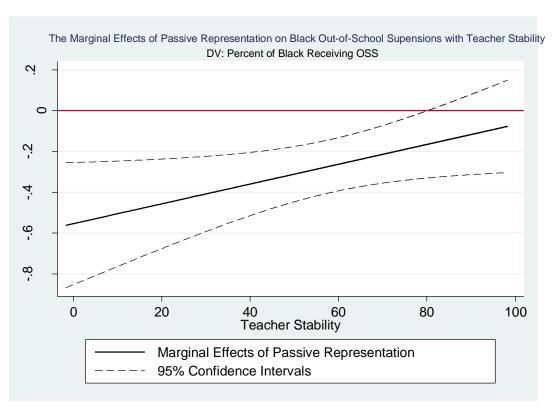


Figure 9. The Marginal Effects of Passive Representation on Black OSS

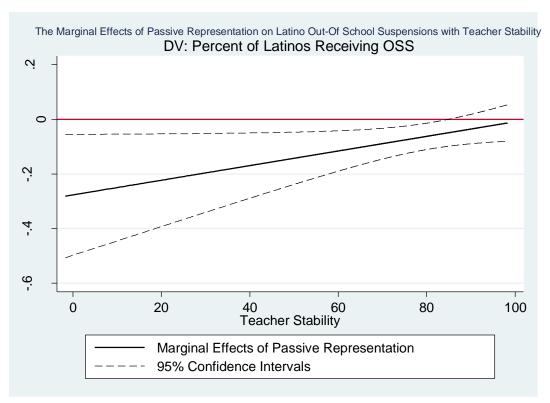


Figure 10. The Marginal Effects of Passive Representation on Latino OSS

Unstable and Unrepresentative Districts

Unstable and unrepresentative school districts are significantly related to an increase in the percent of Black and Latino students receiving OSS. This is in line with the second hypothesis and further demonstrates the detrimental effect that unstable and unrepresentative districts can have on minority students. These types of districts have been shown to decrease the academic performance of minority students on one of the most visible forms of student performance. Given the results of this analysis, minority students can also expect to be punished at higher rates and with harsher forms of discipline, which works to decrease their academic performance even more. This

implies that minority students will continue to have lower rates of academic attainment than do Anglos as long as they attend these types of districts.

Unstable and Representative Districts

In both graphs (Figures 9 and 10) it appears that unstable and passively representative districts are significantly and negatively related to the percent of Black and Latino students receiving OSS. While this offers support to the third hypothesis it calls into question as to why stable and representative school districts do not yield the same result. One possible explanation is that since these districts are already low performing due to the personnel instability, teachers may want to avoid using any harsh policy tools such as OSS that can also reduce overall performance, and instead choose other forms of discipline (Meier et al 1989). Given that these districts should not have the same rigid guidelines as those in stable schools, these teachers may be able to exercise more discretion and lower the rate of minorities who receive OSS. Teachers in stable and representative districts on the other hand are more likely to be in districts that already have a strict set of guidelines for what punishments should be used for each type of infraction (Skiba and Rausch 2006). As a result, teachers may not be able to use their discretion, even if they know the long term effects that this policy tool can have on student performance. However, before this explanation can be accepted additional research in the form of interviews or surveys must be done.

Stable and Unrepresentative Districts

Finally it appears that stable and unrepresentative school districts do not have a significant impact on the percent of Black and Latino students receiving OSS (Figures

11 and 12). This finding does not support hypothesis four, but is interesting since passively representative and unstable organizations were significantly related to a decrease in the percent of Black and Latino students receiving OSS. Given this relationship, one could conclude that at least for OSS, passive representation is the real driving force in terms of decreasing the percent of Black and Latino students being punished with this particular policy tool. While unrepresentative and stable organizations do not increase the rates at which minorities are punished, they allow the status quo of unequal punishment to occur. Consequently these minority students may be more likely to drop out of school than other students who are not punished, which would drastically affect their life chances, future academic attainment, and socioeconomic status. Thus it may be tentatively concluded that while personnel stability cannot decrease the percent of Black and Latino students receiving OSS, passive representation can mitigate the detrimental effects that personnel stability has on minority discipline rates.

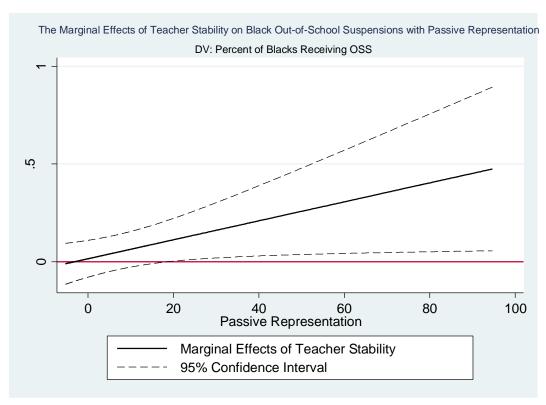


Figure 11. The Marginal Effects of Personnel Stability on Black OSS

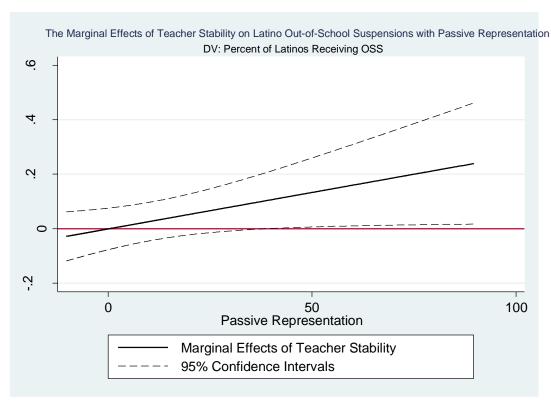


Figure 12. The Marginal Effects of Personnel Stability on Latino OSS

In-School Suspensions (ISS)

The variable of passive representation is significant in both the Black (Table 9) model (-.190) and the Latino (Table 10) model (-.099). This is similar to the relationship found for OSS, and as previously mentioned, in line with the current literature on representative bureaucracy (Selden 1997). The variable of passive representation*teacher stability (.002) is significant²³ for the model of the percent of Latinos receiving ISS, which is also similar to the OSS relationship and also suggest a mitigating relationship. In order to further compare the relationship that passive

²³ Statistically significant at the .10 level.

representation and personnel stability have on punitive policy tool usage, I once again graphed the marginal effects.

Independent Variables	Coefficient (Robust Standard Error)
Passive Representation	190* (.074)
Teacher Stability	.008 (.028)
Passive Representation * Teacher Stability	.002
Percent of Anglos Receiving ISS	197* (.029)
Percent of Black Students	1.29* (.065)
Percent of Latino Students	218* (.036)
Percent of Low Income Students	001 (.021)
Enrollment (logged)	.771* (.230)
Per Pupil Instructional Expenditures	.0004 (.0003)
Teacher Experience	132 (.117)
Percent of Teachers without a Permit	047 (.038)
Constant	18.21* (4.40)
N= 5768	
$R^2 = .865$	
* if p <.05 † if p <.10	

Table 9. The Effects of Representative Bureaucracy and Personnel Stability on Black ISS

Independent Variables	Coefficient (Robust Standard Error)
Passive Representation	099* (.016)
Teacher Stability	.027 (.024)
Passive Representation * Teacher Stability	.002† (.001)
Percent of Anglos Receiving ISS	332* (.029)
Percent of Black Students	523* (.041)
Percent of Latino Students	.817* (.038)
Percent of Low Income Students	107* (.016) .435*
Enrollment (logged) Per Pupil Instructional	(.213) .0003
Expenditures Teacher Experience	(.0002) .126
Percent of Teachers without a	(.084) 022
Permit Constant	(.024) 31.61* (4.34)
N= 7098	(1.57)
$R^2 = .923$ * if p < .05	
† if p <.10	

Table 10. The Effects of Representative Bureaucracy and Personnel Stability on Latino ISS

Stable and Representative Districts

From the graphs it appears that stable and representative school districts have different effects on the percent of Black (Figure 13) and Latino (Figure 14) students receiving ISS. As seen in the other models, there is no significant relationship between these types of districts and the percent of Black students receiving ISS once stability passes 85%, which does not fully support the first hypothesis. This suggests that at least for Black students, pursuing the strategy of maintaining a stable and passively representative bureaucracy will only help to decrease the rates at which OSS and ISS are used in a small range of stable and representative organizations. Knowing the unequal rates at which Black students are disciplined, as well as the effects that discipline in any form can have on students' academic performance, it is quite possible that the type of organization that is considered the "gold standard" actually works to continue inequality between groups.

However in the model for Latinos, there is a negative and significant effect between stable and representative districts (for the full range of stable and representative districts) and the percent of Latinos receiving ISS. This does support the first hypothesis in that these types of school districts should decrease the usage of all punitive policy tools against minority students. Given that ISS is one of the most common punishments given to students, this finding suggests that with the presence of stability and representation Latinos should experience this form less, which would lead to more equality in the rates in which they are punished as compared to Anglos.

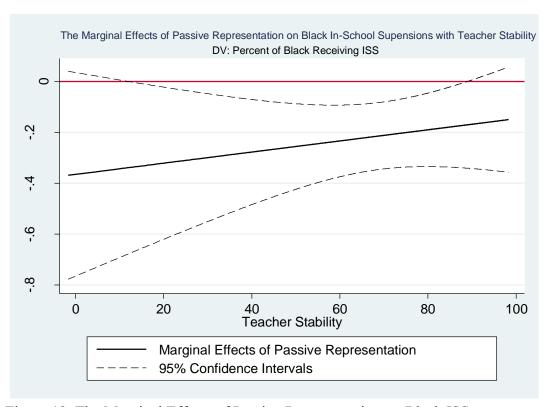


Figure 13. The Marginal Effects of Passive Representation on Black ISS

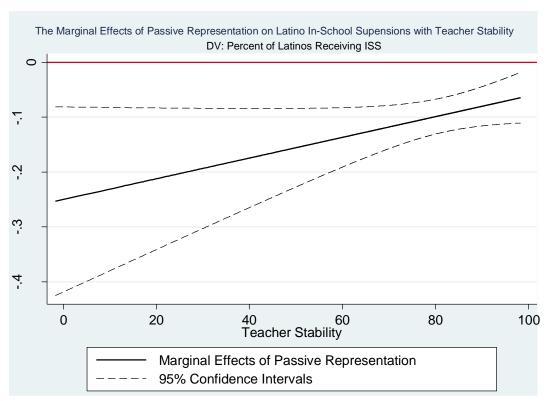


Figure 14. The Marginal Effects of Passive Representation on Latino ISS

A puzzle also emerges from these findings as the results for Black and Latinos differ. Perhaps there is a cultural difference that allows for different levels of discretion between Black and Latino teachers within these ranges of stable districts. It is possible that Latinos teachers are called upon to discipline Latinos especially if the student primarily speaks Spanish. As a result these stable teachers have the opportunities to limit the use of ISS that Black teachers do not. Furthermore since ISS is the least punitive, it should allow for more discretion in its implementation with this group. Since there is little need for principal or parent involvement, it is possible that Latino teachers are able to exercise their discretion when it comes to ISS even within the most stable

setting. Black teachers on the other hand may not affect the usage of this tool beyond a certain point because they do not have to overcome a language barrier which gives stable, Latino teachers more discretion with this tool. Only through the use of interviews will I be able to better understand this phenomenon.

Unstable and Unrepresentative Districts

Unstable and unrepresentative districts are positively and significantly related to the percent of Black and Latino students receiving ISS. This is the exact same relationship found for both expulsions and OSS and offers support to the second hypothesis. This suggests that not only are unstable and unrepresentative schools having a direct impact on academic performance, but that they are also indirectly decreasing performance even more given the drastic increase punitive policy tool usage associated with these types of districts.

Unstable and Representative Districts

In terms of unstable and passively representative districts, there is a negative and significant relationship for Latino students and no significant relationship for Black students (Figures 13 and 14). This partially supports my third hypothesis. Given that unstable and unrepresentative districts are associated with increases in the rates at which Latino students receive ISS, this finding proposes that the introduction of passive representation to unstable districts can be one way to decrease these rates. In the end this has the potential to not only create more equitable outcomes when it comes to discipline, but also work to improve the academic performance of Latino students within these districts. While there is no interactive relationship for Blacks, passive

representation does have negative and significant effect within some unstable districts. While the combination of the two strategies cannot decrease the rate at Blacks receive ISS, passive representation on its own does. When we consider that these types of organizations also decrease the rates at which Latinos and Blacks receive OSS the argument for passive representation as the driving force gains credibility.

Stable and Unrepresentative Districts

Finally it appears that stable and unrepresentative school districts do not have a statistically significant effect on the percent of Blacks and Latinos receiving ISS (Figures 15 and 16). This does not offer support to my fourth hypothesis. Given the previous results this implies that perhaps the argument for strict procedures and Zero tolerance policies is possible. If stable organizations limit the discretion that teachers have, then a lack of representation should not affect the rates at which punitive policy tools are used against minorities. However more research is needed in order to understand not only why these two groups of teachers differ in their decision to use certain policy tools, but also if there are other factors besides race that explain these differences.

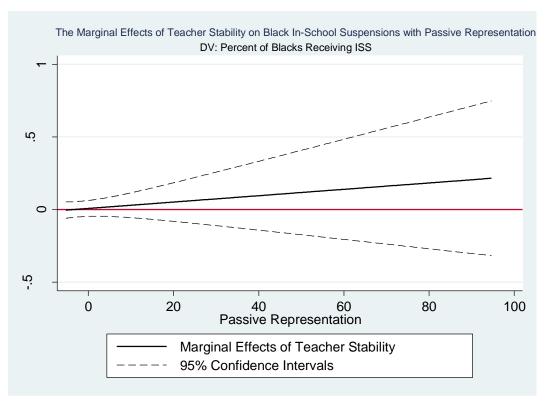


Figure 15. The Marginal Effects of Personnel Stability on Black ISS

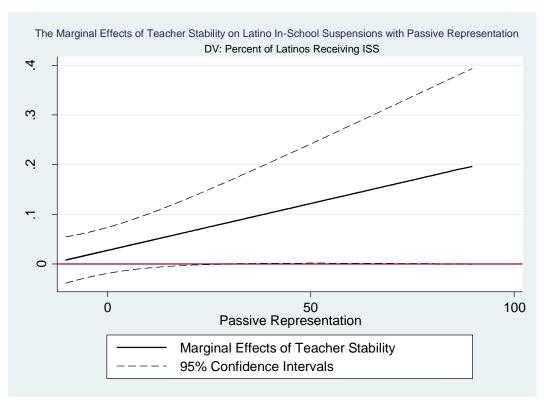


Figure 16. The Marginal Effects of Personnel Stability on Latino ISS

Discussion

Given these mixed findings, a better way of interpreting these results is to examine them by organization type rather than by if they support or do not support my hypotheses. <u>Unstable and unrepresentative</u> school districts have the exact same positive and significant relationship for all forms of punishment and for both Black and Latino students. These results are in line with the literature's expectations of what should occur since there is neither passive representation to act on behalf of minority students' interests and needs, nor a stable staff that has had the time to understand the unique

characteristics of their clientele and develop more positive ways in which to entice students to comply with school regulations (Lipsky 1980; Skiba et al 2002; Dee 2005).

I also find, for the most part, a consistent relationship for unstable and <u>representative</u> school districts. Except for expulsions, these school districts are related to a significant and negative relationship with the percent of minority students receiving OSS and ISS. Passive representation was negative and significant in both of these models, and given the previous findings for unstable and unrepresentative districts, these results suggests that passive representation is mitigating the use of punitive policy tools against minorities in these particular circumstances. Same race teachers have a better understanding of the cultural attitudes, academic needs, and life experiences of same race students, and therefore be less likely to use these tools in situations in which they are not absolutely necessary (Owen 2005; Hinojosa 2008; Payne and Welch 2010). In addition, this intimate understanding of their clients should also extend to their knowledge of the racial disparities that exist in education, as well as the additional negative effects that high teacher turnover can have on performance (Loeb et al 2005). Thus these same race teachers are unwillingly to use any form of punitive policy tool that can further hinder the academic performance of these students knowing the potentially detrimental effects it can have not only on the students' life chances, but also on the school's overall performance, state ranking, funding, as well as their job security. Furthermore the lack of stability allows for these teachers to exercise this discretion rather than being bound to a set of standards and procedures created by the organization.

These actions therefore work to mitigate the negative effects that stability would have on minorities if passive representation was not present.

There is even further support for the idea of stable organizations limiting discretion when the results for <u>stable and unrepresentative</u> school districts are examined. There are no significant relationships for the percent of minority students receiving ISS or OSS within these districts. Given that passively representative and unstable organizations were related to decreases in the usage of punitive policy tools, theory leads us expect to see decreases in the rates of discipline for these organizations as well. However, there are no significant relationships for these two variables, which suggest that personnel stability limits the ability of teachers to use their discretion. If this is true then while the hypotheses were not supported, these findings may suggests that stable organizations need to reconsider some of the procedures and policies they have in place when it comes to disciplining students. Even though these organizations do not increase the rates at which these punitive policy tools are used, they allow the status quo on unequal discipline to continue.

Based on this explanation, one may wonder why neither strategy, with the exception of unstable/unrepresentative organizations, effect for the percent of minorities expelled. While this analysis does not allow me to answer the question, I hypothesize that this is due in part to the nature of this particular policy tool. Teachers can make recommendations for each type of policy tool they believe should be used, but in the end an administrator must agree with their decision (Texas Education Code sec.37.009). Furthermore, the more severe the recommended punishment, the greater involvement

administrators' and parents' involvement have. Therefore with the recommendation for expulsions, the demographic of the teaching workforce does not warrant the same effect as they do for lesser forms of discipline since parents have the opportunity to appeal the decision and administrators must be able to justify the expulsion as the only suitable form of punishment (Texas Education Code sec.37.009).

Then why do we see a positive and significant relationship between Latino expulsions and personnel stability within unrepresentative districts? As mentioned before, this may be related to the language barrier between Latinos and non-Latinos. According to Dee (2005), non-co-ethnic teachers are more likely to view non-co-ethic students as belligerent and troublesome. If teachers and administrators have this perception, then they will be more likely to use a harsh policy tool (which may be in accordance with district policy) in order to exact student compliance (Loeb et al 2005, 44). When the language barrier is added to this situation, it is possible that non-Latino teachers are quicker to view Latinos as "unteachable," and thus reach for a tool like expulsions given that they cannot communicate with the student. It is also highly likely that the language barrier extends to Latino parents and school administrators. This inability to communicate lowers the chances of having the decision overturned, thus increasing the percent of Latinos, but not Blacks, expelled in stable and unrepresentative school districts. Additional research is needed however before this explanation can be accepted.

Finally there is the puzzle that is <u>stable and representative</u> school districts. The hypothesized relationship of decreasing the usage of punitive policy tools against

minorities only works for the percent of Latino students receiving ISS and some Black students. While I cannot be certain given the limitations of this study, there is an explanation that can explain the lack of relationship for minority expulsions and for minorities receiving OSS.

First stable and representative teachers should be fully aware of the negative impacts that a policy tool like expulsions or OSS can have on a student's academic attainment as well as their future life chances (Brown 2007; Skiba and Noam 2002; Roch et al 2010). Thus they should be less likely to use such a tool unless it is absolutely necessary or required by the district's disciplinary policy. When we consider the various other individuals (i.e. principals, parents, counselors, etc) involved in the disciplinary process within a stable district as well as the disciplinary procedures in place, it is even less likely that these teachers alone would have a significant impact on the percent of students expelled or receiving OSS. Given the structured environment that they work in, these teachers are unable to use their discretion in ways that reduce the rates at which minority students are expelled or receive OSS. However, only through the use of qualitative research can this argument be verified.

Conclusion

While this study cannot fully explain why street-level bureaucrats in stable/unstable and representative/unrepresentative organizations use certain policy tools against minorities, it does serve as a springboard for future studies. On the quantitative end, it would be interesting to determine how representation and personnel stability affect middle and top managers' willingness to support the usage of punitive policy tools

by street-level bureaucrats. This is especially important given that there are many procedures that require middle or top manager's authorization before the policy tool can be implemented. Perhaps it is the case that the stability of these individuals has a greater effect on the standard disciplinary procedures, and thus stability/instability at this level may yield a larger effect on the rates at which minorities are punished. Likewise passive representation also has a significant effect at this level. If a manager shares the same demographic trait as his/her clientele, then it is possible they would either enact different disciplinary guidelines or allow for the use of more discretion on a case by case basis. These results, much like the ones presented in this study, however need to be supplemented by interviews and focus group in order to fully understand why these relationships occur.

Given the ultimate goal is to create a general theory; it is also be beneficial to apply this theory to other public organizations. The combination of applying this theory to multiple organizations and to the different levels of bureaucracy allows scholars to predict the outcomes a certain clientele could expect to see in a certain type of organization. This could potentially allow scholars to identify what organizations have a negative impact on minorities and allow public managers to rectify the situation before it occurs. In the end this would serve to create more equitable outcomes between groups, which is the ultimate goal for most public organizations.

CHAPTER IV

MAGNITUDE OF EFFECTS

While the previous chapters have demonstrated a variety of relationships between street-level personnel stability and representative bureaucracy, they have only been able to show the direction in which these relationships run. This chapter will illustrate the magnitude of effects at the mean values, as well as the lowest and highest values of the statistically significant region. In order to determine these values, the original equation is rearranged in order to establish the effects of one independent variable at certain values of the other.

 $\hat{Y} = \beta_1 Stability + \beta_2 Representation + \beta_3 Stability *Representation + \alpha$ This rearrangement results in two equations:

Representation =
$$\beta_2 + \beta_3$$
(Stability)

Stability =
$$\beta_1 + \beta_3$$
(Representation).

By substituting in certain values for personnel stability or passive representation, this chapter is able to determine the range of effects that occurred in this study²⁴.

TAKS

Blacks²⁵

The mean value of personnel stability demonstrates that for every 1% increase in Black representation, there appears to be a .107 percentage point increase in the percent of Black students passing the TAKS. At the highest value of personnel stability (88%)

²⁴ For all of the studies the mean teacher stability value was 87.10%. The mean percent of Black teachers we 6.259%, and the mean percent of Latino teachers was 11.15%. ²⁵ See tables in Appendix B for complete listing of effects.

within the statistically significant region, a 1% increase in Black teachers is related to a .101 percentage point increase in the Black TAKS pass rate. At the mean level of passive representation a 1% increase in teacher stability is correlated to a .0537 percentage point increase in the percent of Blacks passing the TAKS. Likewise the same relationship can be found at the highest level of passive representation within the significant region. When Black passive representation is at 10% a 1% increase in personnel stability is correlated with a .05 percentage point increase in the percent of Black students passing the TAKS. These effects while small, demonstrate that even if the first hypothesis is not supported, pursuing a strategy of personnel stability and/or passive representation will improve the policy outcomes for Black students which lends further support to the idea of a substitution effect. Given the continued low performance of Black students any effect that leads to improvement in performance is considered beneficial.

In this study I also find that passive representation will improve the policy outcomes for Black students within unstable organizations. I find that at the lowest value of personnel stability (25%) a 1% increase in Black passive representation is associated with a .164 percentage point increase in the Black TAKS rate. Thus there is evidence that even within the most unstable schools, Black TAKS performance can be improved with the presence of passive representation. This suggests that if managers are having difficulty maintaining a stable workforce, hiring individuals that match the demographic of their clientele is one way to improve performance and policy outcomes for certain groups.

There is also evidence that stability can improve the policy outcomes for Blacks within unrepresentative organizations. At the lowest value of passive representation (1%), a 1% increase in personnel stability is correlated with a .059 percentage point increase in the Black TAKS rate. This relationship also demonstrates that organizations that lack representation can still improve the policy outcomes for Blacks if they are stable. While this outcome is not expected, according to the theory of passive representation, it offers a way for organizations to maintain positive performance for minorities (Selden 1997). This is especially important given that fewer minorities are entering fields like education thereby decreasing the likelihood of organizations being passively representative or able to maintain equal representation (Irvine 1989). These results therefore support the findings in chapter two in that one strategy can be used as a substitute when the other is not a feasible option.

Latinos

The effects on Latino students are very similar to the effects on Black students. At the mean value of personnel stability I find that a 1% increase in Latino representation is associated to a .1107 percentage point increase in the Latino TAKS rate. There is also a .119 percentage point increase in the Latino TAKS pass rate for every 1% increase in Latino teachers when teacher stability is at its highest (90%). This shows that passive representation can improve policy outcomes within stable school districts even when the combined effect of stability and representation is not statistically significant.

At the lowest value of personnel stability (55%) a 1% increase in passive representation is correlated with a .084 percentage point increase in the percent of Latinos passing the TAKS. This finding offers further support to the substitution effect idea as passive representation can still improve the policy outcomes for Latinos even within unstable organizations. While the magnitude of the effect is smaller than the effect within stable organizations, it still offers a way for the managers of unstable organizations to improve policy outcomes for minorities.

Whenever Latino passive representation is at its mean a 1% increase in personnel stability is related to a .0222 percentage point increase in the percent of Latino students passing the TAKS. At the highest value of passive representation (90%) a 1% increase in personnel stability is correlated with a .101 increase in the Latino TAKS pass rate. This offers additional evidence that personnel stability can improve the academic outcomes for Latino students. Even if the two management strategies do not have a combined significant effect, managers are able to improve Latino performance at a statistically significant level and reduce educational inequalities by pursing representation or stability (Jencks and Phillips 1998). Likewise at the lowest significant value of passive representation (12%) a 1% increase in personnel stability is correlated with a .023 percentage point increase in the percent of Latinos passing the TAKS test which suggests that while the effect is small, pursuing a strategy of personnel stability is one way to improve Latino performance within unrepresentative organizations.

ISS

Blacks

At the mean value of personnel stability, which also happens to be the highest value for stability within the significant region, a 1% increase in passive representation is related to a .0266 percentage point decrease in the percent of Black students receiving ISS. While this is not a significant interactive relationship it does show that passive representation can decrease the use of punitive policy tools within stable districts.

The lowest value of stability within the statistically significant region (60%) also demonstrates that a 1% increase in the percent of Black teachers is related to a .07 percentage point decrease in the percent of Blacks receiving ISS. This offers additional support for the idea that passive representation can decrease the use of punitive policy tools against Black students within unstable districts.

The marginal effects graph did not show any significant relationships for personnel stability at any value of passive representation²⁶. While more research is needed, these findings suggests that in terms of reducing the use of punitive policy tools against Blacks, passive representation has a greater effect than personnel stability. This means that even though personnel stability can improve Black performance on the TAKS test, it is not enough to decrease the use of ISS. The lack of relationship signals that the cultural differences between Black students and non-Black teachers is too much for stability on its own to overcome (Irvine 1989; Dee 2005). If this is the case than

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²⁶ The mean value of passive representation showed that a 1% increase in personnel stability is related to a .0205 percentage point increase in the percent of Black receiving ISS.

perhaps the addition of training teachers to better understand cultural differences can significantly decrease the rates at which Black students receive ISS.

Latinos

Using the mean value for personnel stability, one sees a .0644 percentage point increase in the percent of Latinos receiving ISS for every 1% increase in passive representation. At the highest value of teacher stability (90%), we see that a 1% increase in Latino representation is related to a .081 percentage point increase in the percent of Latinos receiving ISS. Both of these relationships run counter to what was hypothesized. This even more puzzling given that on its own passive representation is significantly related to a *decrease* in the percent of Latinos receiving ISS. It is even more confusing since the lowest value of teacher stability (30%) shows a different relationship. At this value a 1% increase in passive representation is associated with a .039 percentage point *decrease* in the percent of Latinos receiving ISS.

One possible explanation for the difference is that as stability increases districts have the opportunity to develop more cohesive and detailed rules of conduct within these districts, such as a Zero Tolerance Policy (Skiba, Russ, and Peterson 1999). These policies clearly state the punishment that every infraction warrants, leaving little room for teacher discretion or even parental involvement. Therefore despite their knowledge of how punitive policy tools affect minority students' performance, Latino teachers may have little choice in the type of punishment each student receives (Brown 2007). Teachers within unstable districts however may punish students based more on individual judgment since the lack of stability prevents the creation of a set of norms or

such a strict policy. This is a feasible explanation given that passive representation on its own significantly decreased the Latino ISS rate. However more research is needed before this conjecture is accepted.

One may ask why these results differ from the findings for Black students. It is quite possible that as personnel stability increases and the organization creates more uniform codes for discipline Latino teachers may punish Latino students for the use of Spanish either to stigmatize their use of the language and encourage students to adopt English. The choice to do this may be made given their knowledge that the use of Spanish often leads to increased discrimination in education and the workplace (Garcia-Bedolla 2009). This is a feasible explanation given that as stability increases passive representation leads to higher rates of Latino students punished. Black teachers, not having to deal with a language barrier will not have this problem and thus they are able to decrease the rates at which Black students are punished.

There was not a significant relationship when the marginal effects of teacher stability were examined²⁷. This is the exact same relationship that was found for Black students, which signals that the same underlying factor is at work. Personnel stability was able to increase the amount of Latinos passing the TAKS even within unrepresentative organizations. It does not have the same effect for ISS rates. Given that minority students are often punished in order to stigmatize certain cultural behaviors, it is possible that even though stable teachers do not increase the rates in

²⁷ At the mean value of passive representation there was a .0493 percentage point increase in the percent of Latinos receiving ISS with every 1% increase in personnel stability.

which minority students receive ISS, they do not have the cultural training necessary to decrease these rates (Schneider and Ingram 1993, 342; see also Schneider and Ingram1997).

OSS

Blacks

At the mean value of personnel stability, a 1% increase in the percent of Black teachers is related to a .1608 increase in the percent of Black students receiving OSS. At the highest significant value of personnel stability (79%), a 1% increase in Black passive representation is related to a .15 percentage point increase in the percent of Blacks receiving OSS. At the mean value of passive representation, a 1% increase in teacher stability is associated with a .040 percentage point increase in the percent of Blacks receiving OSS. For the highest value of passive representation (80%), there was a .335 percentage point increase in the percent of Blacks receiving OSS for every 1% increase in teacher stability. Furthermore, for the lowest value of passive representation that was significant (22%), a 1% increase in teacher stability was related to a .103 percentage point increase in the percent of Blacks receiving OSS.

All of these findings are similar to what I found for the percent of Latinos receiving ISS. In addition, like with Latinos' ISS rates, passive representation alone was significantly related to a decrease in the rate at which Blacks received OSS. As mentioned before stability is playing a more unique and indirect role than expected.

OSS is one of the more punitive policy tools that can be used (DeRidder 1991; Skiba and Noam 2002; Brown 2007; Roch et al. 2010). In many districts it also requires a vice

principal or principal to authorize the teacher's recommendation for OSS (Texas Education Code. Sec. 37.009). Stable districts have the opportunity to create a more uniform set of rules and norms (i.e. Zero Tolerance Policies) that establish what behaviors warrant certain punishments. This results in a decrease in the discretion teachers have over this form of discipline. Thus, even though Black teachers know that OSS is extremely detrimental to Black academic performance, they have their hands tied regarding this particular situation (Brown 2007). However in-depth interviews are needed before these theories can be accepted.

There is one exception. The lowest value of personnel stability (15%) is correlated with a .106 percentage point *decrease* in the percent of Blacks receiving OSS with a 1% increase in passive representation. At this low level of stability, the previous explanation holds as unstable schools, given the high turnover, do not have the same opportunity to establish a uniform organizational culture of policy tool usage resulting in principals relying more heavily on the individual decisions that teachers make due to their own heavy workload (Light 1999). These teachers, sharing the same demographic trait as their students, are less likely to use OSS given the known negative effects that is has on minority student performance ((DeRidder 1991; Skiba and Noam 2002; Brown 2007; Roch et al 2010). This is quite possible given that passive representation on its own significantly decreased the percent of Blacks receiving OSS. More research is needed in order to fully understand this relationship.

Latinos

At the mean value of passive representation a 1% increase in teacher stability is correlated with a .0275 percentage point increase in the percent of Latinos receiving OSS. At the highest value of Latino passive representation (75%), a 1% increase in teacher stability is related to a .2244 percentage point increase in the percent of Latinos receiving OSS. The lowest value of Latino representation within the statistically significant region (50%) demonstrates a .1494 increase in the percent of Latinos receiving OSS with a 1% increase in teacher stability. For the mean value of personnel stability, a 1% increase in passive representation is associated with a .1821 percentage point increase in the percent of Latinos receiving OSS. At the highest value of teacher stability within the statistically significant region (78%) a 1% increase in passive representation is related to a .171 percentage point increase in the percent of Latinos receiving OSS. All of these effects are similar to the relationships found for Latino ISS rates and Black OSS rates. Consequently the same explanation of stable districts enacting stricter policies that limit teachers' discretion holds true.

For the lowest value of teacher stability (25%), a 1% increase in Latino representation is related to a .012 percentage point increase in the percent of Latinos receiving OSS. This is different than the relationships found for Latino ISS rates and Black OSS rates. One explanation for this is that within unstable districts Latino teachers use OSS instead of ISS as a way to stigmatize certain cultural behaviors. Latino teachers know, either through their own personal experiences or those of their friends and family that Latinos who are not fluent in English are often discriminated against (Welch and

Foster 1987; Garcia-Bedolla 2009). They then choose to use OSS as a way to stigmatize this behavior believing that this "tough love approach" will help students in the long run (Schneider and Ingram 1993, 342; see also Schneider and Ingram1997). While this punishment is harsh, it is not necessarily as punitive as other tools like expulsions, and given the instability of the district, these teachers may be too overwhelmed with other responsibilities to use ISS which requires that a teacher sit in and watch students. OSS will also send a clear message to other Latino students that the behavior is not tolerated. This would explain the difference in effects for Blacks and Latinos as Blacks, for the most part, are already fluent in English. However qualitative research will be needed before this hypothesis can be accepted.

Expulsions

Blacks

The marginal effects for stability and passive representation did not show any statistically significant regions²⁸. I hypothesize that this is due in part to the nature of this particular policy tool. Even though teachers can make recommendations for the policy tool they believe should be used, an administrator must agree and authorize with their decision (Texas Education Code sec.37.009). In addition, the more severe the punishment recommended, the greater the involvement of administrators and parents. Therefore with the recommendation for expulsions, the stability and demographic of the

²⁸ At the mean value for personnel stability, a 1% increase in the percent of Black passive representation is correlated with a .5185 percentage point increase in the percent of Black students expelled. The mean value of passive representation demonstrates that a 1% increase in personnel stability is associated with a .104 percentage point increase in the percent of Blacks expelled.

teaching workforce does not have the same effect that they do for lesser forms of discipline since parents have the opportunity to appeal the decision and administrators must be able to justify the expulsion as the only suitable form of punishment (Texas Education Code sec.37.009). Thus the use of the tool extends beyond a teacher's sole discretion.

Latinos

At the mean value of passive representation I find that a 1% increase in the percent personnel stability is related to a .4253 percentage point increase in the percent of Latino students expelled. For the highest value of passive representation (70%), I find a .543 percentage point in the percent of Latinos expelled for every 1% increase in personnel stability. Likewise at the lowest value (0%), I find a .403 percentage point increase in the percent of Latinos expelled for every 1% increase in personnel stability. Thus in this case stability increases the rate at which Latino students are expelled within both representative and unrepresentative school districts. The previous argument posited for stable districts having a set rubric for disciplinary procedures also applies here. Teachers may be unable to exercise discretion in these districts even if the policies in place work to punish Latinos at higher rates than other students (perhaps as a way to stigmatize certain behaviors such as the use of Spanish).

There was not a significant relationship when the marginal effects of passive representation were examined²⁹. The previous explanation holds in that with the

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²⁹ At the mean value of teacher stability a 1% increase in the percent of Latino teachers is correlated with a .0104 percentage point increase in the percent of Latino students expelled.

recommendation for expulsions, the demographic of the teaching workforce does not have any effect given the nature of this policy tool. Since the parents of students have the opportunity to appeal the decision and administrators must be able to justify the expulsion as the only suitable form of punishment, this tool may be beyond the reach of any teachers' discretion (Texas Education Code sec.37.009).

Conclusion

In the end I find further evidence of a substitution effect for the performance variables³⁰. While there is no interactive effect, the presence of one strategy can still lead to improved outcomes for Black and Latino students. This is especially evident given that for Black students one strategy had the greatest effect on performance when the other strategy was at its lowest level. The lack of effects for expulsions further support the idea that the nature of this tool is preventing passive representation and personnel stability from having a significant effect as it requires many more individuals to implement when it comes to Black students and Latino students in some organizations. These effects also suggest that the difference between Black students punished and Latino students punished may be attributed to the difference in language between the two groups. More research however is required.

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³⁰ This is similar to the findings in the previous chapter.

CHAPTER V

CONCLUSION

This study attempted to examine the effects of two common public management strategies in order to determine how strategies like personnel stability and representative bureaucracy could be used to create better policy outcomes for minority students. While in some cases this analysis has offered more questions than answers, it takes the critical first step needed to determine if and how current public management strategies interact with one another as well as how they affect outcomes for groups that historically have been disadvantaged (Selden 1997; Light 1999). Thus this study should be used as a springboard for similar scholarship using other management strategies as well as examining the effect of personnel stability and representative bureaucracy within other public organizations. Only through extensive study can we determine what unique combination of strategies work to accomplish the goal of creating equitable outcomes for all groups.

From these analyses some conclusions can be drawn. First in terms of academic performance all districts, with the exception of those that are unstable and unrepresentative, failed to demonstrate an interactive relationship. These strategies did however show a substitution effect as one strategy can be used in place of the other in order to improve minority performance. This is a beneficial finding as it can help managers who cannot pursue either personnel stability or passive representation improve the academic attainment by pursuing an alternative strategy. While the two strategies did show this effect, they did not show a combined, interactive effect. This leaves us

with the question of why? The limits of this analysis do not allow me to make any hard conclusions, but rather offer another set of hypotheses.

As mentioned in chapter two, perhaps these two strategies result in the acquisition of similar skill sets. For example, imagine we have two teachers. One is a minority teacher, the other a non-minority teacher. Following along with the theory of representative bureaucracy, let us assume that this minority teacher is familiar with the minority-white achievement gap (Pitkin 1967; Meier 1993b; Selden 1997). She is also familiar with the boisterous nature of some minority males, the vernacular used by this group, as well as other issues that plague this clientele such as poverty (Dee 2005; Gregory and Weinstein 2008). If she is aware of these issues before she enters the organization, how can personnel stability improve her knowledge of this clientele? Other teachers who have been in the district longer then our minority teacher may be able to teach procedures and skills that ease her workload or allow her to communicate better with administrators, but what new knowledge can they give her about her racial group? This is not to say that this teacher does not care to learn anything new about her clientele, but instead the facts she learns are too general enough to be applied to the whole group. Stability instead, only give her the opportunity to offer additional support to students on an individual basis, which would not show up in an aggregated analysis. Thus despite our teachers efforts, there is no significant, interactive effect.

Now let us discuss our non-minority teacher. Once again we will assume that the theory of representative bureaucracy's assumptions hold (Selden 1997). This non-minority teacher therefore should enter the organization with little or no knowledge of

the minority group's special interests because she does not share the same life experiences or culture. In fact, according to Dee (2005), she may even hold prejudice against the minority group and view them as troublesome, lazy, and unintelligent. After a few years within the school district, her perception of these students can change. She may hear stories about great academic achievement, generosity, and hard work from other teachers who have been in the district for years (Lipsky 1980; Dunn 1997; Kauffman 2002). She herself could have positive experiences with minority students that challenge her previous prejudices about these students. Instead of blaming these students for low performance, she would see the effect that poverty plays for this group as well as other factors. All of this knowledge should make her more in tune to the difficulties that this minority clientele faces when it comes to education, which allows her to adjust her teaching style in ways that benefit this group. Furthermore, as a part of the stable personnel, she would then be able to impart the general knowledge, skills, and procedures she has gained to other teachers with no experience with this clientele, which works to improve minority student performance (Lipsky 1980; Loeb et al 2005).

Assuming that the assumptions of both personnel stability and representative bureaucracy hold, it is completely possible that our minority teacher and non-minority teacher have similar perceptions of minority students' needs as well as a similar repertoire of skills to address these needs, which would explain the substitution effect found in this analysis. If the organization is stable and representative, it is even quite possible that our minority teacher played a role in re-socializing our non-minority teacher and changing her initial perceptions of minority students (Meier and Nicholson-

Crotty 2006). This leads to the acquisition of a similar set of ideals and skills that while allowing these two strategies to be substitutes for each other and improve performance, would not have an interactive effect. If the organization is unstable and representative, then one expects that minority teachers would come in with a set of ideas about their minority clientele due to shared life experiences and values (Selden 1997). This allows them to improve minority student performance without the need for increased stability as personnel stability should not add any unique information about this clientele that would have a drastic effect on performance. Finally in an unrepresentative and unstable organization there would be no one entering the organization with beneficial knowledge about this minority group as well no stable personnel to pass on information or skills, which results in a decrease in the academic performance of minority students (Lipsky 1980; Selden 1997). While this theory is all conjecture, it explains the findings in chapter two in a logical manner. However, without a survey of teachers' skills, perceptions, and teaching techniques this theory cannot be tested at this time.

Just as much as stability could help non-minority teachers adjust their teaching styles to the needs of minority students, it can also hinder their ability to prevent the use of punitive policy tools against them. For example, for expulsions I find that no districts, with the exception of unstable and unrepresentative districts, have a significant effect on the rates at which minority students are expelled. Looking from the glass half full perspective, the upside is that these districts do not increase the usage of the most punitive policy tool teachers have. However from the glass half empty perspective they

do not decrease its usage either. This suggests that at least for expulsions, a different managerial strategy will be more successful in reducing these rates.

When OSS rates were examined, only unstable and representative districts decreased the percent of minority students receiving OSS. Unstable and unrepresentative districts increased the rates at which minorities received OSS. These findings, when combined with the findings for expulsions, suggest that the amount of street-level bureaucratic discretion varies greatly between stable and unstable organizations. As mentioned before, the use of these punitive policy tools require an administrator's consent before the can be implemented. A stable personnel will be well aware of the issues with parents, of claims of unequal treatment, and threats of lawsuits that come with these types of punishments (Skiba and Rausch 2006). They, as a result, can create a rubric that clearly states the infractions that warrant these types of punishments (Skiba and Rausch 2006). This implementation of stricter policies and more uniform disciplinary procedures effectively prevents stable and/or representative teachers from taking an advocate role and decreasing the rates at which minority students are punished.

Then why is there a difference between expulsions and OSS? Expulsions are the most punitive policy tools. In Texas they fall into two categories: expulsion out of the district and expulsion to a JJAEP (TEA.gov 2010). In either case most students who are expelled have a record of multiple other offenses warranting previous punishments like removal from a school (in some rare cases), OSS, ISS, and detention. Before they are expelled, the student and their parents have the chance to appeal the case and attempt

to plea bargain in a sense, for a lesser punishment (Texas Education Code. Sec.37.009). The administration of this tool therefore is a lengthy process, which involves not only the teacher, but also the vice principals, principals, and superintendent. Knowing the heavy workloads that all of these individuals carry, as well as the limited financial and personnel resources each district has, it is quite possible that, unless the case is extreme, the district defaults to the second most punitive which is OSS. If minority teachers are present within stable schools who have these policies outlined, it is probable that they use their limited discretion to advocate for the use of OSS as an alternative punishment to expulsion. While this results in an increase in the amount of minorities receiving OSS, it keeps these students in the district and hopefully improve their chances of graduating (DeRidder 1991; Skiba and Peterson 1999; Roch et al 2010).

Unstable and representative teachers can decrease the rates at which student receive OSS because they may not be tied to the same disciplinary structure as stable and representative teachers are. While these schools have some zero-tolerance procedures in place, such as automatic expulsion if a weapon is brought to school or after a student's third fight, teachers may not have the experience with the clientele necessary to create a rubric of disciplinary measures for every infraction. These minority teachers, who should share knowledge of the overuse of discipline against minority students, use their discretion in order to choose less punitive measures such as lunch clean up or detention as a way to punish students (Meier et al 1989; Gregory and Weinstein 2008; Roch et al 2010). When we consider the added fears that these teachers have of these students

"running the streets" while in OSS, it is even more probable that they would seek to prevent any punishment that would leave students unsupervised (DeRidder 1991).

Finally it appears that both stable and representative districts and unstable and representative districts decrease ISS rates for Latinos and for the range of some districts, Black ISS rates. The fact that unrepresentative and stable districts have no significant effect suggests that passively representative teachers are actually be able to use some discretion for the use of the policy tool. ISS is one of the least punitive tools that teachers can use, and in the dataset, the most commonly used. Given the rates it is used, it is possible that vice principals and principals rely more on the teacher's discretion for the use of ISS, as it gives them time to focus on more serious cases and issues. If this is the case, then minority teachers can use this limited discretion in order to reduce the percent of minority students who receive ISS.

Then why do Black teachers not have the same consistent effect? They should have the same discretion when it comes to this policy tool, right? While Black teachers are be given the same discretion, they may not have as many times to exercise it as Latino teachers do in every stable district. For example, if the infraction is language based or involves a student that speaks primarily Spanish, a Latino teacher may be asked to intervene and translate on behalf of a teacher or administrator. This gives them the opportunity to advocate on behalf of the student in ways and in all stable districts that Black teachers are not able to. However before these tentative conclusions can become policy recommendations, extensive qualitative research is required.

Given the structure of this dissertation as well as the lack of interactive relationships, there is the expectation of certain criticisms which must be addressed. First and foremost the criticism is why the combination of strategies improves outcomes and mitigates the negative effects for some groups in some instances, but not for others. More specifically, scholars will ask why do stable/unstable and representative/unrepresentative street-level bureaucrats (in this study teachers) act the way they do? These questions are after all critical if we seek to make strategy recommendations or policy outcome predictions for public organizations. It is apparent that this study, being solely quantitative, cannot fully answer these questions, but it does give the discipline a step in the right direction. It allows us to see that there are in some cases similar interactive relationships between personnel stability and representation as well as similar substitution effects for Black and Latino clients. While the rest of these findings run counter to the hypotheses, they suggest that whatever phenomenon is occurring works similarly for these two groups. Thus it gives us an idea of what policy outcomes to expect with the use of certain strategy combinations as well as helps structure the questions need for the next step: qualitative research. Without this initial analysis there is a chance scholars have missed an opportunity to engage in qualitative, as well as additional quantitative, research in a policy area that has a significant and long lasting effect on American society. This study therefore has the potential to provide a greater understanding as to how public management strategies can be used to improve the policy outcomes for minority groups so that they are equitable to the outcomes of Anglo clients.

The second major criticism expected is how is this study "new" given that these strategies have been used by public managers and studied by scholars for decades? This study is not an attempt at the creation of new theory, but an attempt to better understand the theories we currently have. There is no consensus on the effects of personnel stability or representative bureaucracy on minority clients (Selden 1997; Light 1999; O'Toole and Meier 2003; Lim 2006; Meier and Nicholson-Crotty 2006). Scholars therefore continue to examine these management strategies in hopes of being able to fine tune these theories so that predictions can be made. This analysis stems from the same goal. Knowing exactly how representation affects minorities is a noble goal and is extremely beneficial to the discipline. However, rarely is representation the only theory at work. This is especially true within public organizations as street-level bureaucrats bring a host of characteristics, experiences, and beliefs with them. Knowing the assumption that all bureaucrats will adopt the culture and views of the organization and that representative bureaucracy is based on the assumption that individuals keep these unique traits, it is especially necessary to examine how a strategy like personnel stability interacts with representative bureaucracy and influences policy outcomes (Mosher 1982; Selden 1997). Thus while this study is not "new" it is needed in order to better understand how both of these management strategies can work as substitutes for one another in some cases and as interactive in others.

The next step is obvious. Qualitative research is needed in order to fully understand these findings. We must know why street-level bureaucrats act in certain ways. We must know what constrains their behavior as well what encourages them to

use their discretion. We must understand if street-level bureaucrats are actually using different techniques and skills based on their work and life experiences, or if the difference in outcome is based more on the client and their perception and interaction with these bureaucrats. In the end we must have a greater understanding of the individuals within the organization before we can understand the effects that the organization has on policy outcomes.

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APPENDIX A

NON-INTERACTIVE MODELS

The Effects of Representative Bureaucracy and Personnel Stability on Black

Performance: Non-Interactive Model

Independent Variable	Coefficient (Robust Standard Error)
Teacher Stability	.042*
	(.020)
Passive Representation	.090* (.024)
	(.024)
Lagged Black TAKS Pass Rate	(.014)
	.429*
White TAKS Pass Rate	(.023)
Envellment (Legged)	.290
Enrollment (Logged)	(.160)
Class Size	.001
Cidss Size	(.080.)
Percent State Aid	.025*
	(.008)
Percent Latino Students	015
	(.011) 014
Percent Low Income	(.014)
	120*
Percent Black Students	(.021)
Teachers with less than 5 years	.041
experience	(.014)
Constant	-3.40*
	(3.09)
N= 10608	
$R^2 = .735$	
* if $p < .05$	

The Effects of Representative Bureaucracy and Personnel Stability on Latino

Performance: Non-Interactive Model

Independent Variable	Coefficient (Robust Standard Errors)
Teacher Stability	.026*
	(.012)
Latino Representation	.067*
	(.008)
Lagged Latino TAKS Pass Rate	.458*
	(.012)
White TAKS Pass Rate	.433*
	(.015)
Enrollment (logged)	248*
	(.101)
Class size	0.055
	(.054)
State Aid	5.06E-09
	(2.80E-09)
Percent Low Income Students	0.002
	(.009)
Percent Black Students	032*
	(.01)
Percent Latino students	085*
	(800.)
Teachers with Less than 5 years of	-0.0008
Experience	(009)
Constant	-24.03*
	(1.49)
N= 15914	
$R^2 = .760$	
* if p<.05	

The Effects of Representative Bureaucracy and Personnel Stability on Black Expulsions:

	Coefficient
Independent Variables	(Robust Standard Error)
independent variables	(Robust Standard Error)
Passive Representation	.123
rassive Representation	(.136)
Toochon Stobility	.128
Teacher Stability	(.216)
Percent of Anglos Expelled	443*
refeelt of Anglos Expelled	(.069)
Percent of Black Students	.511*
Teremi of Diack Students	(.140)
Percent of Latino Students	754*
1 erecut of Latino Students	(.105)
Percent of Low Income	.350*
Students	(.094)
Enrollment (logged)	-2.32*
Emonment (logged)	(.929)
Per Pupil Instructional	.001
Expenditures	(.002)
Teacher Experience	500
	(.703)
Percent of Teachers without a	176*
Permit	(.075)
Constant	69.96*
	(17.25)
	` ′
N= 471	
$R^2 = .752$	
* if p <.05	
† if p <.10	
11 h 410	

The Effects of Representative Bureaucracy and Personnel Stability on Latino

Expulsions: Non-Interactive Model

	C
T . 1 1 4 X7 *. 1.1	Coefficient
Independent Variables	(Robust Standard Error)
	222
Passive Representation	.222
m 1 0, 100	(.156)
Teacher Stability	.512*
	(.145)
Percent of Anglos Expelled	523*
	(.059)
Percent of Black Students	890*
	(.128)
Percent of Latino Students	.578*
	(.094)
Percent of Low Income	102
Students	(.078)
Enrollment (logged)	-2.95*
	(.699)
Per Pupil Instructional	002
Expenditures	(.002)
Teacher Experience	481
	(.524)
Percent of Teachers without a	049
Permit	(.082)
Constant	98.41*
	(10.50)
N= 623	
$\mathbf{R}^2 = .767$	
* if p <.05	
† if p <.10	
-	

The Effects of Representative Bureaucracy and Personnel Stability on Black OSS Rates:

	Coefficient
Independent Variables	(Robust Standard Error)
independent variables	(Robust Standard Error)
Passive Representation	219*
assive Representation	(.069)
Teacher Stability	.051
reacher Stability	(.046)
Percent of Anglos Receiving	411*
OSS	(.034)
Percent of Black Students	.935*
	(.083)
Percent of Latino Students	519*
	(.045)
Percent of Low Income	.116*
Students	(.034)
Enrollment (logged)	.239
	(.360)
Per Pupil Instructional	.0003
Expenditures	(.0006)
Teacher Experience	.132
	(.164)
Percent of Teachers without a	003
Permit	(.053)
Constant	45.82*
	(5.73)
N. 2525	
N= 3735	
$R^2 = .784$	
* if p <.05	
† if p <.10	

The Effects of Representative Bureaucracy and Personnel Stability on Latino OSS Rates:

	Coefficient
Independent Veriables	
Independent Variables	(Robust Standard Error)
Danisa Danisa da di an	.288
Passive Representation	
Too show C40 hilitar	(.059) .011
Teacher Stability	**
Dancout of Angles Desciping	(.039) 297*
Percent of Anglos Receiving	
OSS Percent of Black Students	(.029) 586*
rercent of black Students	386* (.065)
Percent of Latino Students	.782*
Percent of Latino Students	(.037)
Percent of Low Income	143*
Students	(.025)
Enrollment (logged)	421
Emonnent (logged)	(.277)
Per Pupil Instructional	.0006
Expenditures	(.0004)
Teacher Experience	.490*
reacher Experience	(.135)
Percent of Teachers without a	.491
Permit	(.135)
Constant	35.40*
Constant	(4.70)
	(1.70)
N= 4124	
R ² = .863	
* if p <.05	
† if p <.10	

The Effects of Representative Bureaucracy and Personnel Stability on Black ISS Rates:

	C CC*
T 1 1 487 111	Coefficient
Independent Variables	(Robust Standard Error)
Passive Representation	210*
	(.064)
Teacher Stability	.022
	(.032)
Percent of Anglos Receiving	196*
ISS	(.029)
Percent of Black Students	1.29*
	(.065)
Percent of Latino Students	218*
	(.036)
Percent of Low Income	002
Students	(.021)
Enrollment (logged)	.792*
	(.223)
Per Pupil Instructional	.0004
Expenditures	(.0003)
Teacher Experience	156
•	(.116)
Percent of Teachers without a	047
Permit	(.038)
Constant	17.96*
	(4.24)
	,
N= 5768	
$R^2 = .865$	
* if p <.05	
† if p <.10	
1 II b ~.10	

The Effects of Representative Bureaucracy and Personnel Stability on Latino ISS Rates:

	Coefficient
Independent Variables	(Robust Standard Error)
Passive Representation	034
	(.042)
Teacher Stability	.019
	(.024)
Percent of Anglos Receiving	347*
ISS	(.029)
Percent of Black Students	558*
	(.050)
Percent of Latino Students	.755*
	(.035)
Percent of Low Income	105*
Students	(.016)
Enrollment (logged)	.295
	(.207)
Per Pupil Instructional	.0003†
Expenditures	(.0002)
Teacher Experience	.141†
	(.084)
Percent of Teachers without a	043†
Permit	(.024)
Constant	35.96
	(4.22)
N= 7098	
$R^2 = .923$	
* if p <.05	
† if p <.10	
1 4	

APPENDIX B

DESCRIPTIVE STATSTICS

Variable	Obs	Mean	Std. Dev.	Min	Max
Latino TAKS Pass Rate	18349	60.878	18.981	0	100
Black TAKS Pass Rate	12499	54.45	20.5	0	100
Latino Passive Representation	20251	11.152	20.594	0	100
Black Passive Representation	19868	6.259	15.14	0	100
Teacher Stability	19289	81.702	12.432	0	100
Lagged Latino TAKS rate	18348	60.885	18.974	0	100
White TAKS Pass Rate	19314	76.419	14.699	0	100
Logged Enrollment	20417	6.826	1.517	1.791	12.263
Class Size	20399	13.040	3.289	1	84.333
State Aid	19898	5659665	2.21e+07	0	5.88e+08
Percent Latino Students	20417	30.609	27.724	0	100
Percent Low Income Students	20403	50.615	20.606	0	100
Percent Black Students	20417	10.088	16.280	0	100
Percent Teachers with less	20426	32.339	15.354	0	100
than 5 years experience					
Black Expulsions	738	42.927	24.614	4.545	100
Latino Expulsions	1221	61.58	26.422	8.235	100
White Expulsions	1142	53.019	23.464	1.531	100
Black ISS Rates	6240	22.882	21.822	.073	100
Latinos ISS Rates	9135	37.7	28.501	.433	100
White ISS Rates	7973	55.275	29.036	.156	100
Black OSS Rates	4390	36.234	25.593	.101	100
Latino OSS Rates	5265	45.786	29.191	.763	100
White OSS Rates	6572	52.586	29.419	.189	100

Magnitude of Effects Tables

Effects of Personnel Stability at Different Levels of Passive Representation:

	TAKS	ISS	OSS	Expulsions
Minimum Observed	0.059	-	0.103	-
Mean	0.0537	-	0.04	-
Maximum Observed	0.05	-	0.335	-

Black Students

Effects of Passive Representation at Different Levels of Personnel Stability:

	TAKS	ISS	OSS	Expulsions
Minimum Observed	0.164	-0.07	106	-
Mean	0.107	-0.0266	0.1608	-
Maximum Observed	0.101	-0.0266	0.15	-

Black Students

Effects of Personnel Stability at Different Levels of Passive Representation:

	TAKS	ISS	OSS	Expulsions
Minimum Observed	0.023	-	0.1494	0.403
Mean	0.0222	-	0.0275	0.4253
Maximum Observed	0.101	-	0.2244	0.543

Latino Students

Effects of Passive Representation at Different Levels of Personnel Stability:

	TAKS	ISS	OSS	Expulsions
Minimum Observed	0.084	-0.039	0.012	-
Mean	0.1107	0.0644	0.1821	-
Maximum Observed	0.119	0.081	0.171	-

Latino Students

Data Distribution Graphs

