

Government Institutions and Citizen Participation:

Can Charter Schools Build A Foundation for Cooperative Behavior?

Abstract

A recurrent theme in political science links the structure and performance of public policies and institutions to citizen attitudes toward government and their willingness to participate in politics and the policy process. In this paper we explore the ability of government to affect these fundamental aspects of citizenship through institutional design. Specifically, we examine how charter schools—currently among the most popular forms of school reform in the nation—affect parent attitudes toward and involvement with schools and politics more broadly. Using survey data collected in Washington, D.C., a city with an extensive system of charter schools, we find that, compared to parents in traditional public schools, charter school parents have attitudes commonly thought to be the foundations of civic participation and social capital. We then estimate a system of equations that model the complex “virtuous circle” of community-building attitudes and behavior. We find empirical evidence of a link between school-centered attitudes and broader civic attitudes and behavior.

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A recurrent theme in political science links the structure and performance of public policies and institutions to citizen attitudes toward government and their willingness to participate in politics and the policy process. Ostrom (1998) argues that identifying the ways in which government institutions and policies can be designed to encourage cooperative behavior is one of the central issues in contemporary political science (also see Lubell et al. 2002). However, the literature on social capital portrays a decline in cooperative attitudes and behaviors (see Putnam 1995 or Putnam 2000) and questions the extent to which government policies can nurture them (see especially Fukuyama 1995).

In this paper, we focus on schools as arenas in which a particular set of citizens—parents—can develop the norms and expectations essential for cooperative behavior. We pay particular attention to the extent to which reorganizing schools through the introduction of school choice affects such attitudes. We believe that by analyzing how a change in the way an important government service, in this case, schooling, is organized and then linking this institutional change to the attitudes parents hold toward each other and toward teachers allows us to address two fundamental questions:

- Can government institutions build the foundation for interpersonal trust, cooperation and participation in the policy process?
- And, if the answer is yes, is this effect domain specific or are the effects more general, spilling over into attitudes and behavior in other, broader, domains?

Specifically, we examine the effect of a particular institutional reform—the introduction of charter schools—on parents. After reviewing the literature linking the design of government

institutions to civic participation and attitudes, we turn to an empirical analysis of survey data collected in Washington, DC. We begin by assessing the effect of enrollment in charter schools on a variety of familiar measures of school and broader civic attitudes and behaviors. We then turn to a comprehensive model that connects these measures in a coherent system, enabling us to examine the complex interdependencies among the measures.

As we proceed, we must keep in mind that, while schools are an important government institution in the lives of parents, they nonetheless represent but one venue in which parents interact with each and with public employees. In turn, there are “real world” constraints on the extent to which we should expect changes in the way schools are organized to affect broader changes in political attitudes and behavior. While we should therefore expect, at best, modest effects, existing research suggests that these links do exist.

Institutions Can Affect Political Attitudes and Behavior

A wide range of work shows that institutions, such as religious congregations, neighborhood associations, and schools can serve as training grounds for the development of civic and political skills. Rosenstone and Hansen (1993) show that political participation is firmly rooted in the institutions and organizations that mobilize individuals and structure their involvement. Verba, Schlozman, and Brady (1995) find that networks of recruitment, which in turn are embedded in institutions and organizations, are critically important for explaining civic volunteerism. Similarly, Skocpol, Ganz, and Munson (2000) argue that civic associations and citizen participation in the United States developed less from the purely local decisions of individuals and more as a consequence of the institutional patterns of federalism, electoral politics, and political parties (also see Berry et al. 1993; Valley 1996; Minkoff 1997; and Cortes 1996).

Another body of work investigates “policy feedback”, documenting how the treatment clients of government programs receive affects their broader orientations toward government and political action. The idea of a feedback loop was raised at least as long ago as Lowi (1964), who argued that public policies are not only the product of politics but have an independent effect on the range and level of political activity associated with them. Contemporary work in this tradition has moved from the systemic level that Lowi had in mind to study the links between different institutional arrangements and the behavior of individual citizens (see, for example, Mettler 2002). Research investigating this feedback loop links the way in which policies are structured to the sense of responsibility, duty, and obligation held by policy recipients. Completing the loop, these attitudes in turn shape political behavior of policy recipients pertaining to the policy and even spilling over to broader policy and political domains. As Schneider and Ingram argue, the way in which government policies are implemented “affect people’s experiences with the policy and the lessons and messages they take from it. These, in turn, influence people’s values and attitudes,...their orientations toward government, and their political participation patterns.” (Ingram and Schneider 1995: 442; also see Schneider and Ingram 1997; Soss 1999; A. Campbell 2000; and Mettler 2002).

This idea has been explicitly tested in the domain of social welfare programs. For example, Verba, Schlozman and Brady (1995, chaps. 7, 14) show that beneficiaries of non-means-tested programs are more likely to be involved in welfare-related political activity than are recipients of means-tested programs, such as AFDC. Andrea Campbell (2000) has also demonstrated the existence of this feedback loop, which may be particularly strong among lower income recipients of social security (also see Mettler 2002 for a discussion of the greater effects of the GI Bill on less advantaged recipients). Similarly, Soss (1999) shows that recipients of

SSDI believe more strongly in their political efficacy compared to recipients of AFDC, who were more likely to be poorly treated by bureaucrats and who, in turn, developed feelings of powerlessness. Closer to the policy domain we study here, Soss also shows that Head Start, a program that encourages parental participation and involvement, consistently mitigated the demobilizing effects of AFDC: "...a more participatory program design encourages more positive orientations toward political involvement. Head Start provides clients with evidence that participation can be effective and fulfilling. From the perspective of participatory theory, it is not surprising that these experiences have spill-over effects." (Soss 1999: 374).

Yet another line of research, developed in the field of public administration, has explored the importance of "coproduction"—how citizens and government officials interact in the delivery of specific services and how these interactions are related to broader patterns of civic engagement. Scholars in this tradition have noted that for many public goods, such as community policing efforts (for example, Neighborhood Watch or Crime Stoppers), or sanitation removal programs that depend on residents' cooperation in curbside recycling or transporting waste to specific areas for collection, cooperative behavior among citizens and between citizen/consumers and providers is essential.

Unfortunately, the term coproduction has all too often been confined to a limited set of citizen activities focused on particular acts involved in narrowly defined public services. Yet the benefits of coproduction may extend beyond the specific service and can, like other institutional arrangements that encourage citizen involvement, positively affect political behavior and attitudes. According to Levine (1984):

Coproduction lays the foundation for a positive relationship between government and citizens by making citizens an integral part of the service delivery process. Through these experiences citizens may build both

competence and a broader perspective, a vision of the community and what it can and should become. (Levine 1984:181; also see Marschall 2000)

Policy Feedback and Social Capital

The connection between government and citizen behavior also plays a central role in recent explorations of social capital. Many analysts argue that social capital is essential to the smooth functioning of markets and democratic politics (e.g., North 1990; Putnam 1993; Fukuyama 1995; Schneider et al. 1997; Adler and Kwon 2002)—but the role of government institutions and practices in fostering social capital has been debated.

For example, Fukuyama (1995) stresses the importance of social capital to politics and markets, but does not think much of the ability of government to create or nourish it. Similarly, for Putnam, social capital is generated mostly through the quality of secondary associations and not through government action. Putnam suggests that “civic virtue” comes from experience in associational life, which teaches “skills of cooperation as well as a sense of shared responsibility for collective endeavors” (Putnam 1993, 90). In this regard, Putnam’s reference to the “amateur soccer clubs, choral societies, hiking clubs, bird-watching groups, literary circles, hunters’ associations, Lions Clubs, and the like in each community” (1993: 91) is often cited. But it is his image of “bowling alone” (Putnam 1995) that summarizes his notion of the decline of non-political associations in the U.S. as indicative of declining social capital.

In his recent work, Putnam (2000) has argued for a broader view of the foundations of social capital, including a much more expansive role for government, but the essence of his social capital framework is built on the claim that civil societies that are characterized by a richly variegated associational life will also tend to exhibit norms of political equality, trust, and tolerance, and active participation in public affairs.

Clearly even the most “resolutely society-centered” views of social capital (to use Levi's [1996] characterization of Putnam's early statement of his theory) must recognize that institutional and bureaucratic context helps define the boundaries of civic engagement and the way in which citizens respond to government and politics. That is, there are government and bureaucratic processes and structures that affect the quality of grass-roots activity, associational life and social capital more generally (see, for example, Skocpol et al. 2000). And there is evidence that government institutions that treat citizens well encourage political participation and political attitudes supportive of democratic practices. In this paper we ask if one such institution, schools of choice, has this effect.

Linking Institutional Structure To Political Behavior: The Case Of Schools

All forms of school choice, such as alternative schools, magnet schools, open enrollment programs, vouchers, and charters, expand the range of options available to parents. Early choice reforms, however, did not have a view of systemic change. But more recent school reforms have explicitly coupled choice with a broad challenge to the current system of education.

The concern for how the broad institutional arrangements of schools affect their performance was energized by the work of John Chubb and Terry Moe, who, in their 1990 book, *Politics, Markets, and America's Schools*, forged a clear link between choice, markets, and the relationships between stakeholders in schools. Chubb and Moe argue that while school reform has often been considered an “insider's game,” played by bureaucrats, administrators, teachers, and other school professionals and fought over what may seem like technical problems (for example, curriculum, testing procedures, or tenure), the bedrock issue in school reform is the issue of governance: who has the right to participate in the decision making process and at what

levels? Chubb and Moe consider this to be a “constitutional” issue because it structures subsequent decisions made by school officials, teachers, parents, and students.

Building on this argument, many proposals for reform now seek to rewrite the relationship between stakeholders, building on a widely shared vision emphasizing small, autonomous schools, unburdened by a large administrative structure, and fueled by a desire to bring parents, students, teachers, and administrators into cooperative, supportive relationships. In this vision, parents are given not only the power to choose but are seen as essential to school governance and to the creation of “effective” schools in which the resulting stronger community leads to higher academic performance.

Henderson (1987:1) argues that: “The evidence is now beyond dispute: parent involvement improves student achievement. When parents are involved, children do better in school, and they go to better schools.” Similarly, according to Ostrom (1996: 1079): “If students are not actively engaged in their own education, encouraged and supported by their family and friends, what teachers do may make little difference in the skills students acquire.” Bryk and his colleagues have repeatedly demonstrated that parents must be involved in schooling to ensure the quality of schools as institutions serving the community. They also show that children from low-income and minority families gain the most from parent involvement (see, for example, Bryk and Schneider 2002, Bryk, Lee, and Holland 1993, or Bryk, Sebring, and Rollow 1998). Clearly, this vision of effective schools means that stakeholders work together to “coproduce” higher quality education, making the relationship between parents, students and teachers more cooperative and interdependent (see e.g., Henig 1994:187; Ostrom 1996).

While linking the coproduction of education to broader indices of political participation has not been widely investigated, the work on social capital and schools does hint at such a link.

Indeed, Coleman's classic article on social capital specifically addresses the question of how effective school communities can create this elusive commodity (Coleman 1988). Other work has followed Coleman's lead. For example, Schneider, Schiller and Coleman (1994) and Astone and McLanahan (1991) examine social capital as a function of the interactions between administrators, teachers, parents, and children. Bryk, Lee, and Holland (1993) identify the "value added" of Catholic schools to a range of outcomes, many of which relate to norms that support participation and political attitudes (see also D. Campbell 2000). Berry et al. (1993: 294) cite the shift to parental control over local schools in Chicago in the late 1980s as a rare example of a successful attempt to get low-income parents more involved in local public affairs. Schneider and his colleagues (1997, 2000) show how public school choice increases social capital of parents, measured by volunteerism, PTA membership, and sociability.

Clearly, this aspect of the school reform movement focuses on transforming parents from passive clients of a government service to active partners entitled to a say in how schools are run and how students are taught. In the empirical analysis that follows we explore the link between school choice and parental attitudes and behavior more systematically than existing work, paying particular attention to the inferential issues raised by the self-selection of parents who choose to choose.

Charter Schools as an Institutional Reform

Why should we expect charter schools, arguably now the most common form of school choice in the United States, to increase the number of parents with higher levels of social capital, trust and, more generally, attitudes supportive of democratic participation? If, as Schneider and Ingram argue, how government policies are implemented "affect people's... orientations toward government, and their political participation patterns" (1995, 442) and if, as Soss and others

argue, how government agencies treat their clients affect how clients see themselves as citizens, then the fact that charter schools are committed to changing the relationship between parents and schools, making them more central to the school's educational mission, should produce positive changes in parental attitudes and behavior.

Charter schools have been subject to fairly intense scrutiny. While much of this research has shown that charter schools are not as transformative of the entire process of education as their advocates hoped, there is evidence that charter schools are in fact changing the relationship between the school and the parent.¹ And it is this aspect of change that is central to our argument.

Hill et al. (2001), in one of the most comprehensive studies of charter schools to date, argue that charter schools, freed from many of the bureaucratic rules and regulations governing traditional public schools, have created new key "accountability" relationships with the teachers, on whose performance the schools depend, and with families, whom the schools must attract and satisfy (p. 6). These accountability relationships, according to Hill et al., transform the way in which teachers, administrators and parents deal with each other. For example, choice gives parents authority to make requests and expect school to respond appropriately to the needs of individual children (also see Berman, et al. 1998). Combined with the that fact that charter schools usually offer a smaller, more intimate setting, staffed by people who chose to work in the school, the conditions for stronger ties between parents and the schools exist.

A growing number of studies confirm that charter schools have higher rates of parent

¹ Given their popularity and the expectations that surround them, it is not surprising that charter schools have attracted a large and still growing body of research. Much of this research is contentious but has, overall, produced a more realistic assessment of the potential and the payoff of charter schools. The research has focused on a variety of topics, some central to the more wide ranging issue of the effects of choice (for example, are charter schools innovative? Do they produce higher student achievement? Do charter schools leverage change in other traditional public schools?) and others quite specific to the charter school "movement" (e.g., How strong are chartering laws? Does it matter who charters the schools?). See, for example, Gill et al. (2001) or Hill et al. (2001).

involvement than other schools. These higher rates stem from a culture as well as policies that nurture (if not quite force) higher involvement (Corwin and Flaherty 1995; Bryk, Lee, and Holland 1993; Finn et al. 1997). For example, in California, many charter schools use contracts to require parental involvement, including their presence at the school. Contracts often include student attendance requirements, and parent commitment to provide educational materials at home and to support school codes (Schwartz 1996). According to Miron and Nelson (2000), among Pennsylvania charter schools, half the schools require parent volunteerism, and 25 percent of parents report that they volunteer more than three hours per month. Similarly, Henig et al. (1999) find evidence public charter schools in Washington DC reach out to parents.

Choice may also put pressure on administrators, teachers and staff to be more “consumer friendly.” As Hassel writes: “charter schools cannot take their ‘customers’ for granted. Their very survival depends on the degree to which families believe the schools are responding to family preferences and working hard to provide the education they demand.” (Hassel 1999: 6). Teske et al. (2001) find that parents visiting charter schools were, on average, treated better than parents visiting DC public schools and that the charter schools treated parental requests for information about programs more seriously and responsively than did staff at the DC public schools.

In short, while the debate about the effects of charter schools on educational achievement continues, as an institutional reform there is consensus that charter schools are likely to create a milieu in which parents are better treated and in which they are encouraged to be active “co-producers” of their children’s education. Does it follow that this better treatment creates a feedback loop generating political attitudes and behaviors supportive of democratic practices?

To answer this question, we conducted a telephone survey of parents in the Washington

DC school district, where the charter school movement is one of the strongest in the country, representing about 25 percent of the publicly funded schools in the city and enrolling almost 15 percent of the students. Before turning to our findings, however, we must first address an important methodological issue: self-selection into charter schools.

Who Chooses Charter Schools? The Problem of Self-Selection

Charter schools, like most choice plans, are what Elmore (1991) calls “option demand” choice. In contrast to a system of “universal choice,” in which all parents must choose, option demand choice consists of a two-stage process. First, parents must “choose to choose”—they must be dissatisfied enough with their existing schools or be sufficiently attracted to an alternative to their neighborhood school that they decide to exercise choice. Once they decide to choose, the parent then has to select among the alternatives to find a school in which to enroll her child.

Given this process, the possibility of endogeneity due to self-selection must be taken into account when studying any outcomes of choice. That is, it is likely that the individuals who choose to choose are not representative of the entire population of parents (see, for example, Schneider, Teske, and Marschall 2000) and the characteristics that are motivating them to choose may affect their subsequent behavior and attitudes toward the schools. As is well known, results from quasi-experimental studies of the effects of public policy (or other such “treatments”) are potentially biased when the factors predicting self-selection into the program (here, charter schools) are correlated with the outcome measures (Greene 2000: 933-934; Maddala 1983).

The key stage in the decision process that creates problems for statistical inference is the decision by parents to apply for a charter school. Once this step is taken, however, the structure of the education system in Washington DC provides a second selection mechanism. Since the

demand for charter schools in Washington exceeds supply, charter schools facing excess demand must conduct lotteries for admission. Thus there is a population whose motivation to choose charter schools is identical to that of charter school parents (that is, both sets of parents have chosen to choose), but who through the luck of the draw have been denied access to charter schools. These two selection mechanisms are presented in a simple diagram in Figure 1. In our telephone survey of parents whose child was in the traditional DC public schools, approximately 13 percent said that they had tried to enroll their child in a charter school but failed (and about the same percentage was successful). This lottery process thus serves as a natural experiment by providing a mechanism for random assignment into the charter schools.

FIGURE 1 HERE

If parents with a child enrolled in a charter school are the “treatment” group, there are thus two control groups of interest—those parents who tried but failed to get their child in a charter (whom we refer to below as “Denied Access Parents” or DAP) and those who never chose to choose (the DC public schools [DCPS] group).² The former group is more likely to be similar to the charter parents on potentially unmeasured quantities, and the comparison requires little in the way of statistical machinery. The comparison to the latter group, on the other hand, requires statistical attention to the issue of self-selection. Here we account for this through the

² Our sampling frame was fairly complex. The basic design consisted of a random-digit dial survey of about 500 parents, and an additional list survey (also telephone) of about 500 charter parents. Both surveys were conducted simultaneously between September and December 2001 by the Center for Survey Research at Stony Brook University. The actual sample sizes in the analyses we report below are 624 for the DAP comparisons (of these 60 are parents who applied but were denied access to the charter schools and remaining 564 are in the charter schools) and 1128 (the same 564 charter parents plus 564 non-charter controls, sampled with replacement—see below) in the DCPS comparisons. When appropriate, we downweight (post-stratify) the charter parents to their proportion of the population. Missing values in the independent variables in the dataset (which comprise almost 6% of the total) are handled via multiple imputation (Little and Rubin 1987; Rubin 1987) using the method of predictive mean matching (Van Buuren and Oudshoorn 1999) using the MICE package for the S language. We imputed five complete datasets and averaged the results following Rubin (1987).

use of propensity score matching (Dehejia and Wahba 1999; Dehejia and Wahba 2002; Rosenbaum and Rubin 1983; Rosenbaum and Rubin 1985), a method that essentially adjusts the sample to better approximate a randomized trial by selecting control observations that match the treatment observations as closely as possible on a summary measure of their probability to select the treatment.³ In the analyses that follow we present both of these comparisons (charter parents to DCPS parents and charter parents to DAPs) to better gauge the effects of enrollment in charter schools on parental attitudes and behavior.

What to Measure?

Clearly the issues and attendant measures that have been used by researchers looking at how the quality of government services affects citizen attitudes and behavior are wide ranging. In this paper, we begin with a set of measures of interpersonal trust. Interpersonal trust is not only essential for improving school performance, especially in inner-city schools (most notably see Bryk and Schneider 2000), but according to Burns and Kinder (2000), provides the foundation for cooperation and, ultimately, for democratic politics.

While our survey questions draw heavily from Burns and Kinder, other work supports our concern for interpersonal trust. Ostrom places trust at the center of the “core relationships” she argues are essential for cooperation (1998, especially pages 12-13). Leana and Van Buren (1999: 542) argue that organizational social capital lies in trust and “associability”—which they define as “the willingness and ability of individuals to define collective goals that are then

³ We estimate the propensity scores using a probit model to regress charter enrollment on dichotomous covariates for race (White, Hispanic, Other—Black is the excluded mode), marital status, employment status, number of years the respondent lived in D.C., number of years in the neighborhood, years of education (and the square of this number), frequency of church attendance, and a five-category grade (A-F) that the respondent assigns to the D.C. public schools in general. Of these, church attendance, education and education squared, the D.C. schools grade, and the White dummy are significant at conventional levels, and the model as a whole yields a slight reduction in error from prediction using the modal category. We then use nearest-neighbor matching and test the quality of our matched sample by comparing the first and second moments in five strata of estimated score (Becker and Ichino 2002).

enacted collectively.” For Putnam, the norm of generalized reciprocity helps solve collective action problems and creates a viable community with a shared sense of commitment and identity (Putnam 2000; also see Casella and Rauch 2002). Adler and Kwon (2002) argue that *goodwill* is central to the concept of social capital, since information, influence and solidarity flows from goodwill—and hence the effects of social capital is based on goodwill (p. 18). Perhaps most germane to this study, Bryk and Schneider argue that “a broad base of trust across a school community lubricates much of a school’s day-to-day functioning...and is especially important as we focus on disadvantaged schools” (2002: 5-6). As noted, Bryk and Schneider link high levels of trust not only to the smooth operation of the school, but ultimately to academic performance.

We tailor our questions to the school environment to measure the foundation of trust and cooperation among parents and between parents and teachers, reflecting the importance of such relationships to the coproduction of education, which is a hallmark of effective schools. We also accept Burns and Kinder’s argument that trust is rooted in specific practices and dispositions toward neighbors and others in general: that people earn trust by “keeping promises, by being honest and respectful, and by being courteous.” (Burns and Kinder 2000: 7).

To measure levels of trust, we use the following questions, which are based on measures developed by Burns and Kinder, and modified to fit the school environment:

Survey Questions

I’m going to ask you a few questions about the parents of the students who attend your child’s school.⁴

⁴ Earlier in the survey, if the parent respondent had multiple children in the DC schools, she was asked to answer all the questions in the survey about the child whose birthday was next (to randomize the survey). In the actual survey where we use the term “your child”, the CATI system inserted the name of the child upon whom the survey was focused.

- Thinking about those parents, would you say they *treat others with respect* all of the time, most of the time, some of the time, hardly ever, or never?
- What about *irresponsible*? Would you say that *irresponsible* describes these parents extremely well, quite well, not too well, or not well at all?
- Would you say that the word *honest* describes these parents extremely well, quite well, not too well, or not well at all?

In the survey, the questions were repeated, substituting teachers for parents.

We first explore the effects of charter school enrollment on these specific measures; we then expand our list of dependent variables to include measures of school-based behavior and measures of attitudes and behavior for the larger world of politics outside the school. Figure 2, below, summarizes the indicators of attitude and behavior that we measure and use in subsequent analyses.

FIGURE 2 HERE

As the figure shows, our school-domain behavior questions include the familiar measures of PTA membership, volunteering at school events, and measures of how often the respondent contacts her child’s teacher and school administrator. Our measures of broader civic attitudes are a series of questions drawn from the literature on political efficacy (Campbell et al. 1960; Converse 1975; Converse 1964) and includes measures of both “internal” and “external” efficacy (Campbell, Gurin, and Miller 1954 [1971]). More specifically, we measure the respondent’s trust in government, understanding of politics, belief that she is well-qualified to participate, and agreement with the statement that “I don’t think public officials care much what people like me think.” Finally, we have two measures of broader civic behavior: the number of non-school civic

groups that the respondent belongs to (on the importance of membership in civic associations see Putnam 1993; 1995; 2000), and how often the respondent attempts to contact elected officials.

Using these measures, we return to the specific questions we posed earlier:

- Do parents who have enrolled their children in charter schools exhibit attitudes more supportive of cooperative behavior within the school?
- Do these attitudes translate into actual school-based behavior?
- Do these school-based norms and behaviors affect parents in other areas of civic and political life?

The Foundations for Cooperation and Trust are Higher Among Charter School Parents

As a first cut at answering these questions, we estimate separate regressions of each of the Figure 2 measures on a dichotomous variable indicating whether-or-not the respondent's child is in a charter school for two samples—the DAP and DCPS comparisons.⁵ Since none of our measures are continuous and unbounded, we estimate a maximum-likelihood model appropriate for each dependent variable: ordered probit for the categorical measures, probit for the dichotomous variables, and negative binomial regression for the counts of educational discussants and civic organizations.⁶ The results are presented below in Table 1.

TABLE 1 HERE

As evident in Table 1, the effect of charter school enrollment is statistically significant at conventional levels on all six *school attitude* measures for both comparison groups. Ordered

⁵ We include control variables for the DAP comparison in the event that the lottery process is a less-than-perfect mechanism for randomization into treatment and control groups. Our controls are the race, gender, employment status, education level, marital status, and frequency of church attendance of the respondent, as well as the length of time they have lived in their neighborhood and in DC in general, and their attitude towards the DC public school system. They have no substantive effect on the outcomes.

⁶ Lagrange multiplier tests indicate that the negative binomial model is preferable to the Poisson model for these variables, probably due to the presence of unobserved heterogeneity (see Cameron and Trivedi 1986 for details).

probit coefficients are not particularly useful in illustrating substantive import, however. To better show the effect of charter school participation on parent attitudes, Figures 3 and 4 show the difference in predicted probabilities of each of four response categories between charter and traditional public school parents.⁷

FIGURES 3 and 4 HERE

As Figures 3 and 4 illustrate, charter school participation has a substantively significant effect on the probability of choosing a more positive response category for the six school attitude measures in both the DAP and DCPS comparisons. In every case, predicted probabilities for charter parents are higher for the most positive response category, and lower (or statistically equal) for the other three categories, than are those of their traditional public school counterparts.

This analysis answers our first question: the institutional reform of charter schools appears to foster the attitudinal foundation upon which increased civic participation can be built. However, as evident in Table 1, there is no conclusive evidence that charter participation has a large effect on school-based behavior or broader behavior and attitudes. For the DAP comparison, the only other statistically significant effect is found for the variable measuring respondents' understanding of politics; in the DCPS case, both trust in government and understanding politics are significantly larger for the charter group. On the other hand, PTA membership and frequency of contacting politicians are lower on average among charter parents when compared to the DCPS controls, suggesting that while charter enrollment may influence broader attitudes, it may have not have the expected effect on participation in the school and the

⁷ We calculate the predicted probabilities using the method of stochastic simulation, with results appropriately averaged over the imputed datasets (King, Tomz, and Wittenberg 2000; Tomz, Wittenberg, and King 2000). Control variables are held to the sample mean (or mode for dichotomous covariates).

broader world of politics. Before dismissing this link between attitudes and behavior, we turn to a more complicated empirical model.

Creating a “Virtuous Circle”: Do Attitudes

Towards Schools “Spill Over” to Behavior and Broader Domains?

The causal story that we are investigating is, in a sense, a temporal one: first, educational institutional reforms change attitudes, then attitudes change school-based behavior. Finally, these changes spread to other, broader domains of associational life. At present we are limited to cross-sectional data, but this does not prevent us entirely from further investigating spillover effects.

FIGURE 5 HERE

To do so empirically, we first consider a system of simultaneous equations that describes the social system of interest. Figure 5 presents such the connections among the key theoretical concepts in such a system. Rather than assuming away the possibility of complex endogenous or reciprocal relationships among our key quantities of interest, we instead estimate a model that allows for the detection of these theoretically important linkages, and remains in keeping with the theoretical and empirical tradition of modeling social capital as a “virtuous circle” (Brehm and Rahn 1997; Putnam 1993).

More formally, our model consists of the following four equations:

$$\begin{aligned}
 \text{School Attitude}_i = & \beta_{10} + \beta_{11}\text{Charter}_i + \beta_{12}\text{Broader Attitude}_i + \gamma_{11}\text{Gender}_i \\
 & + \gamma_{12}\text{White}_i + \gamma_{13}\text{Hispanic}_i + \gamma_{14}\text{Other Race}_i + \gamma_{15}\text{Education}_i \\
 & + \gamma_{16}\text{Church Attendance}_i + \gamma_{17}\text{DC Schools Attitude}_i \\
 & + \gamma_{18}\text{Time Lived in DC}_i + \gamma_{19}\text{Time Lived in Neighborhood}_i \\
 & + \varepsilon_{1i}
 \end{aligned} \tag{1}$$

$$\begin{aligned}
 \text{School Behavior}_i = & \beta_{20} + \beta_{21}\text{Charter}_i + \beta_{23}\text{Broader Behavior}_i + \beta_{24}\text{School Attitude}_i \\
 & + \gamma_{25}\text{Education}_i + \gamma_{210}\text{Marital Status}_i + \gamma_{211}\text{Employment Status}_i + \varepsilon_{2i}
 \end{aligned} \tag{2}$$

$$\text{Broader Attitude}_i = \beta_{30} + \beta_{34}\text{School Attitude}_i + \gamma_{31}\text{Gender}_i + \gamma_{32}\text{White}_i + \gamma_{33}\text{Hispanic}_i + \gamma_{34}\text{Other Race}_i + \gamma_{35}\text{Education}_i + \gamma_{36}\text{Church Attendance}_i + \varepsilon_{3i} \quad (3)$$

$$\text{Broader Behavior}_i = \beta_{40} + \beta_{42}\text{Broader Attitude}_i + \beta_{45}\text{School Behavior}_i + \gamma_{45}\text{Education}_i + \gamma_{410}\text{Marital Status}_i + \gamma_{411}\text{Employment Status}_i + \varepsilon_{4i} \quad (4)$$

The four endogenous dependent variables are data reduction constructs created by principal components analysis of the measures discussed above and listed in Table 1. The control variables are the same used earlier. In general, we control the attitude measures with a broad vector of socioeconomic variables and the behavior measures with a narrower vector of more economic measures.⁸ Because it is likely that the residuals are correlated across equations, we estimate this system of equations simultaneously using three-stage least squares (Zellner and Theil 1962).⁹

Results for the key variables of interest are presented graphically in Figure 6 for the DAP controls and Figure 7 for the DCPS group.¹⁰ As above, results are similar but there are some key differences between the two groups. Use the DAP controls there is a statistically significant path from charter participation through school attitude and broader attitudes to broader, civic behavior (see Figure 6). In the DCPS comparison, however, the links between charter participation and school attitudes, and school and broader attitudes are present, but there is no significant link between these broader participatory attitudes and corresponding behavior (see Figure 7).

⁸ An alternative argument is that some of the controls, such as length of residence or church attendance, might have a more immediate effect on behavior. We reject this approach here, granting theoretical primacy to attitude over behavior.

⁹ The Hausman test (jointly and equation-by-equation) of the more efficient 3SLS estimator versus the consistent 2SLS estimator indicates that the former estimates are consistent. Note also that here again missing values are handled via multiple imputation. Since preserving the discrete nature of the covariates is not important here, we use the Bayesian multivariate normal method, again using MICE (Van Buuren and Oudshoorn 1999, Rubin 1987). See also King, Honaker, Joseph, and Scheve. (2001).

¹⁰ Among the control variables, education is statistically significant at the .05 level in the latter three equations, gender in the third, marital status in the second, and church attendance in the first. Full results are available from the authors on request.

FIGURES 6 and 7 HERE

Why the difference? One possibility, alluded to above in the section on the effects of selection, is that there is some unmeasured quantity that the charter and DAP parents possess at some level when compared to the DCPS parents, and that this quantity is correlated with the missing attitude-behavior link. A strong candidate is some psychological trait, such as motivation or propensity to become involved. In any event, this discrepancy suggests a need for further research—particularly the collection of panel data to better measure change and causality. But the discrepancy also serves as a warning to education policy researchers (and others) to carefully consider their control groups and to take advantage of natural experiments whenever possible.

Also, somewhat surprisingly, in neither case do we find any effect (direct or indirect) of charter school status on school-based behavior. Schneider et al. (2000) found that in the well established school choice programs in District 4 of New York City and Montclair, New Jersey, choice had an effect on the same school-based behavioral measures that we employed in this study. One possibility is that choice programs have to be in place for a longer time than the DC program in order to support actual changes in school-based behavior. Another possibility is that the very structure of a *city-wide* charter school movement, such as found in Washington DC, may not yield the kinds of increases in school-based participatory behavior found in a small compact central city district or in a small compact affluent suburb. In fact, since charter schools in DC draw students from across the city, the lack of proximity to their student's homes and the resulting lower accessibility may create barriers to converting participatory attitudes into participatory behavior in the schools themselves.¹¹

¹¹ According to our respondents, it takes students in DC charter schools almost 50 percent longer, on average, to get to their school than it does children in the DC public schools.

Designing Schools for Democracy

In the 1800s, Horace Mann argued that public schools were a venue in which the growing number of immigrants to the United States could learn the norms of American civic life and develop the capacity to be engaged in American democracy. Indeed, according to David Campbell (2000), linking American public schools to the need to produce “better citizens” became one of the main supports for the rapid expansion of public education in the United States throughout the late 19th and early 20th centuries and continues to be one of the expectations placed on today’s schools (also see Henig 1994: 201).

Clearly creating better citizens is a complex task with many components, but according to Guttman, one of the defining characteristics of a democratic education is the “ability to deliberate” in a context of “mutual respect...” (1999: 46). This perspective is clearly in line with Burns and Kinder’s emphasis on respect and honesty, and with Putnam’s broad vision of social capital. For these authors, respect for others and mutual trust are essential for the smooth working of democratic societies. For Putnam, in particular, the norm of generalized trust built within social networks that people form as they interact in voluntary associations and other settings—including schools—is central. In his view, as trust is built, collaborative effort results, and as successful collaborative efforts move forward more trust is built, creating a “virtuous circle.”

While much of the argument examining the role of schools in fostering democratic norms and practices focuses on children, we have extended that analysis showing that, to borrow Sapiro’s term, schools also act as venues of “adult political learning.”¹² (Sapiro 1994) In this

¹² This may be a liberal “borrowing”: Sapiro’s analysis is more a general piece on adult political learning focusing on the timing and sequence of political socialization over a life time, but the term fits our argument—and the concept that Sapiro studies is related to the idea we explore here.

redesigned setting, parents are encouraged to become integral to the functioning of the school, and, as this fundamental change takes place, they can learn to respect one another and other members of the school community. In this atmosphere of cooperation and mutual respect, parents develop norms essential for democratic participation.

Our argument and empirical results are congruent with the idea of “policy feedback” linking the treatment of citizens to political participation and with the idea of a virtuous circle. Our results also suggest that Soss’s findings linking Head Start to more participatory political attitudes and behavior may be generalized to other school-based programs that encourage parental participation. Specifically, our evidence suggests that charter schools in Washington DC have created an atmosphere in which parents are building the foundations for higher levels of trust, respect, and cooperative behavior among themselves and between themselves and their children’s teachers. We should also keep in mind that this foundation is being built within an inner city population that is of extremely low socioeconomic status and overwhelmingly from racial minority groups¹³—a population in which the store of trust and social capita have been depleted and a population in which levels of political participation and other forms of democratic practices are also severely depressed.

We believe that charter schools in DC may have already accomplished the easiest task (which may not be all that easy)—parents whose children are enrolled in charter schools have attitudes more supportive of a strong educational community and supportive of increased involvement in the coproduction of education. We also see that these stronger school-based

¹³ Over 80% of our sample is African-American and another 8% Hispanic. The modal educational category is high school graduate (35%), with an additional 12% with less than 12 years of education. One third of the respondents reported total family incomes of less than \$25,000, and half had family incomes less than \$35,000.

attitudes may have spilled over into more participatory attitudes towards politics in general and perhaps to broader political behavior.

Schneider and Ingram (1997) argue that democracy can be improved through public policies designed to advance citizenship by listening to, educating, and involving ordinary people. We find that charter schools may contribute to the fulfillment of that vision, becoming sites for adult political learning that are producing more positive attitudes toward the school community and nourishing participatory attitudes and behavior in the broader political world.

Figure 1: Two Stages of Selection

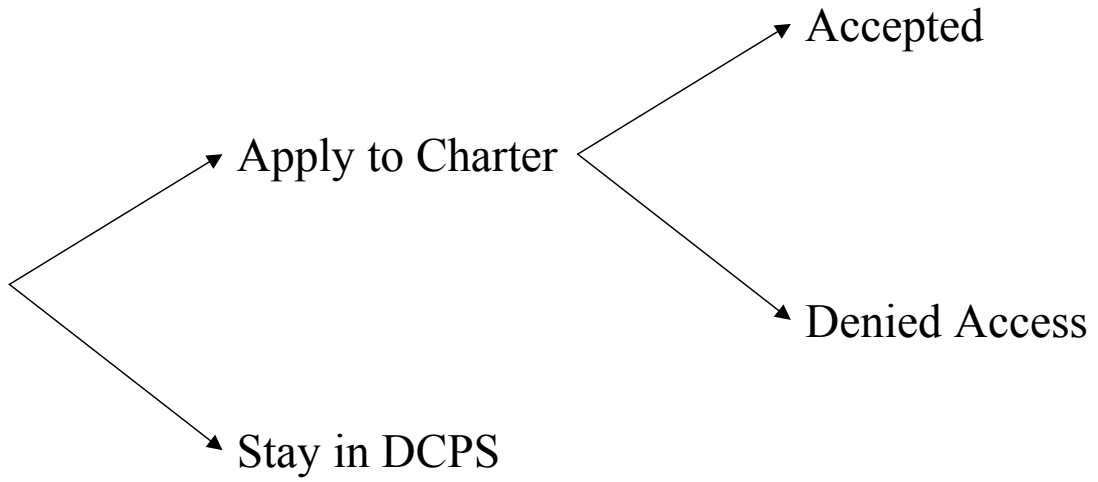


Figure 2: Measures of Attitude and Behavior

	Schools	Broader Context
Attitude	<ul style="list-style-type: none"> • Teachers Respectful, Responsible and Honest • Parents Respectful, Responsible, and Honest 	<ul style="list-style-type: none"> • Trust in Government • Understand Politics • Well-Qualified to Participate in Politics • “Politicians Don’t Care”
Behavior	<ul style="list-style-type: none"> • PTA Membership • Frequent Volunteer • Frequency of Contacting Teachers and Administrators • Number of Educational Discussants 	<ul style="list-style-type: none"> • Membership in Other Civic Organizations • Frequency of Contacting Elected Officials

Table 1: The Effect of Charter Schools on Attitudes and Behavior

<i>Outcome Variable</i>	<i>Coefficient on Charter (Standard Error) DAP Comparison</i>	<i>Coefficient on Charter (Standard Error) DCPS Comparison</i>
<i>School Attitudes</i>		
Teachers Respectful ^a	.573 (.170)	.414 (.113)
Teachers Responsible ^a	.331 (.163)	.123 (.095)
Teacher Honest ^a	.617 (.160)	.386 (.100)
Parents Respectful ^a	.359 (.193)	.292 (.111)
Parents Responsible ^a	.278 (.167)	.191 (.080)
Parents Honest ^a	.322 (.185)	.308 (.109)
<i>School Behavior</i>		
PTA ^b	-.027 (.176)	-.134 (.105)
Frequent Volunteer ^b	.140 (.180)	-.073 (.080)
Talk to Teachers ^a	.217 (.181)	.120 (.132)
Talk to Administrators ^a	-.128 (.204)	.112 (.093)
Number of Discussants ^c	-.059 (.157)	.033 (.084)
<i>Broader Attitudes</i>		
Trust in Government ^a	.113 (.164)	.188 (.131)
Understand Politics ^a	.341 (.154)	.125 (.076)
Well Qualified to Participate in Politics ^a	.006 (.149)	-.083 (.088)
Politicians Don't Care ^a	.074 (.151)	-.019 (.067)
<i>Broader Behavior</i>		
Number of Organizations ^c	.309 (.345)	-.160 (.158)
Contact Politicians ^a	-.134 (.182)	-.158 (.127)
Number of Observations	624	1128

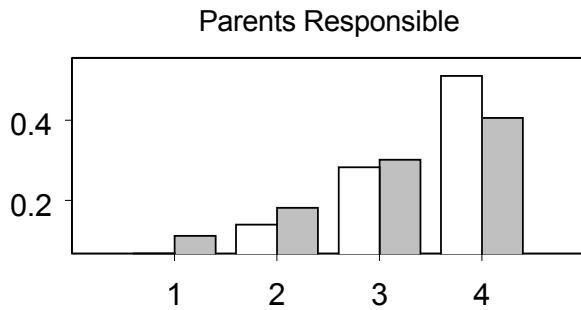
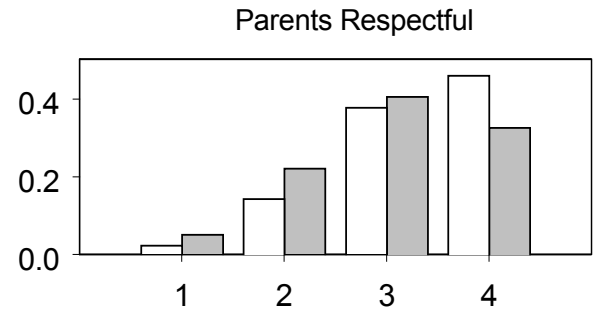
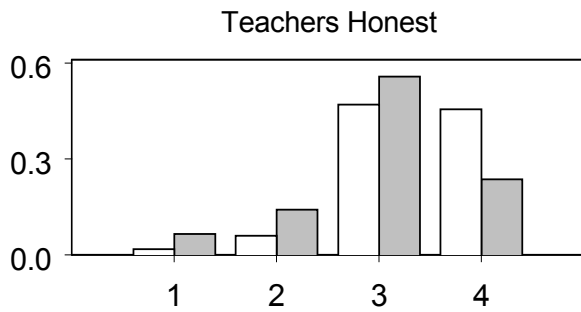
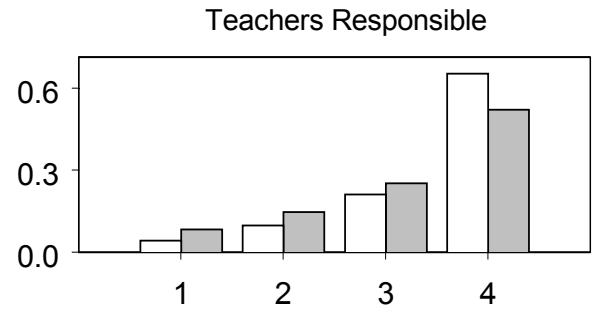
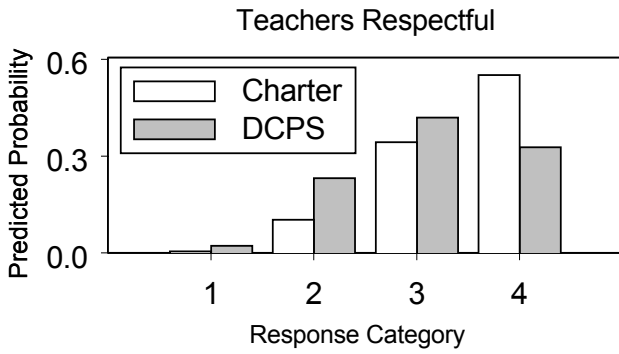
^a Ordered Probit Regression

^b Probit Regression

^c Negative Binomial Regression

Figure 3: Predicted Probabilities of Response for School Attitude

Measures, DAP Controls



**Figure 4: Predicted Probabilities of Response for School Attitude Measures,
DCPS Controls**

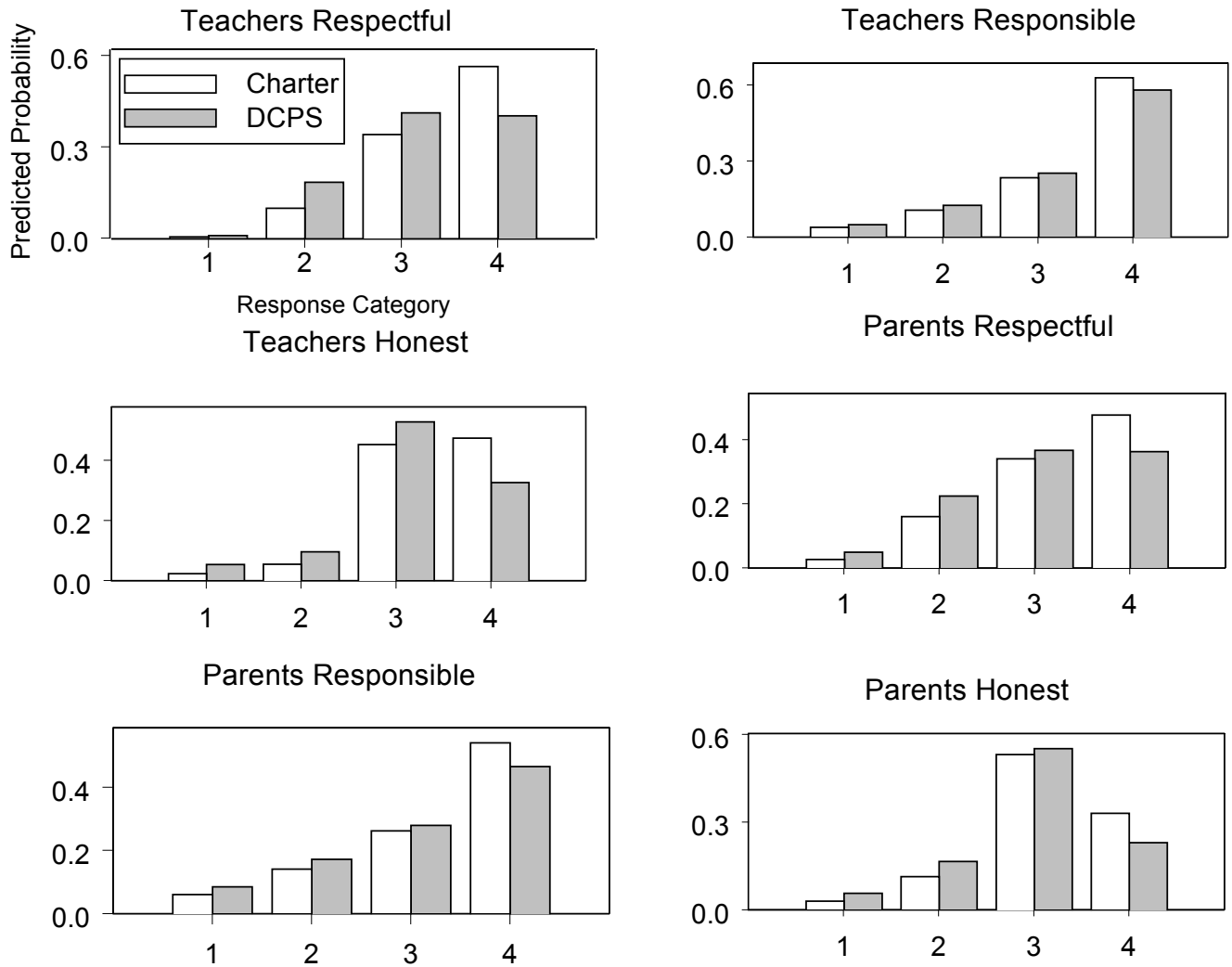


Figure 5: Hypothesized Relationships Among Attitudes and Behavior

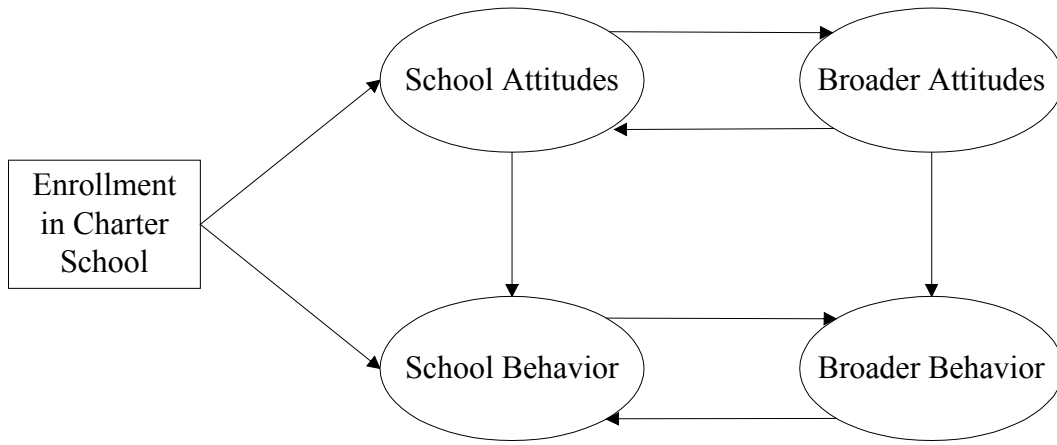
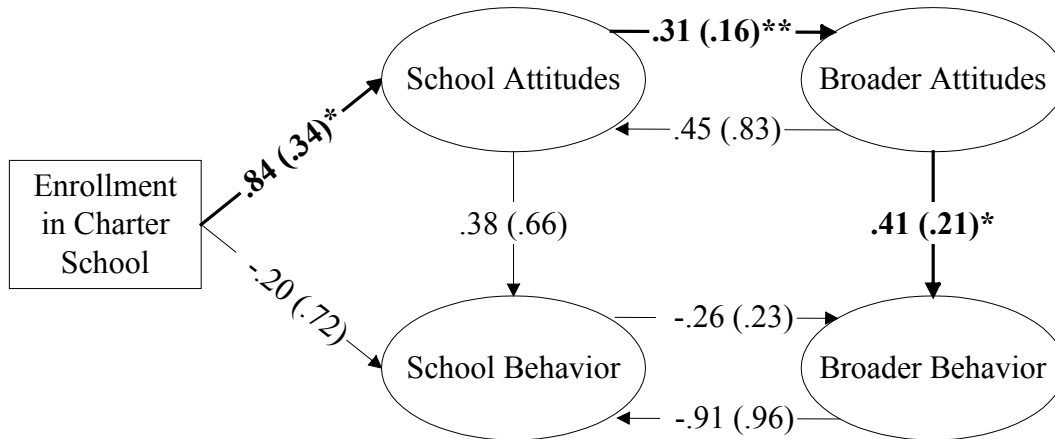


Figure 6: The Charter Effect Spills Over to Broader Domains, Parents Denied

Access to Charter Schools as the Control Group

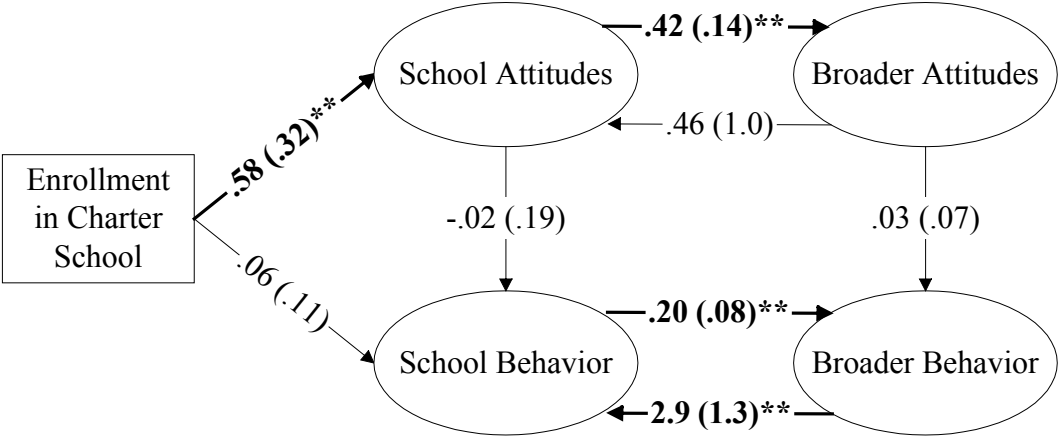


Number of Observations = 624

* significant at .05 level, two-tailed

** significant at .01 level, two-tailed

Figure 7: A Slightly Different Picture, DC Public School Parents as Controls



Number of Observations = 1128

* significant at .05 level, two-tailed

** significant at .01 level, two-tailed

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