Policing the Schoolhouse: Bureaucratic Discretion in School Bullying Policies
Allison Tung

Western Political Science Association
Section 20 – Public Policy
Panel 20.03 – Policymaking & The Citizen
Seattle, WA
April 18, 2014

The digital revolution has introduced new forms of bullying to students' education experience and administrative disciplinary policies. After several tragic focusing events and public debate, school bullying and cyber-bullying are growing concerns among citizens and policymakers. Many states have begun to institute anti-bullying laws and policies, but several states delegate policymaking and implementation authority to districts and schools. This study investigates issues of policy design & bureaucratic discretion in the policy process, focusing on the design feature of street-level bureaucratic discretion. Taking advantage of natural variation in bullying prevention policies across U.S. school districts, this study illuminates the processes by which policy design & bureaucratic discretion impact social policy outcomes. By exploring the challenging and promising roles of communication technologies in social policy, this study has implication for improved policymaking, collaborative implementation, and safer schools.
**Introduction**

Public affairs scholars lack theoretical development in the understanding of how policy design and collaboration among diverse types of actors impact the policy implementation process. Although policy implementation is a heavily used area of policy analysis (Lester & Goggin, 1998), it remains “among the most devilish of wicked problems” (P. deLeon & deLeon, 2002, p. 468). In addition, few scholars have investigated these two factors together in the same study, thereby missing important conjunctive impacts on policy outcomes. Scholars identify several theoretical gaps in the literature on collaborative processes, including unclear causal models, the relative weight of factors in collaborative governance, and anemic connections for practice (Bingham & O'Leary, 2008; Freeman, 1997; Innes & Booher, 2003a, 2003b; Rossi & Freeman, 1993). Researchers have yet to understand how the design and implementation of collaborative governance structures and can improve the provision of local public goods (Bingham, Nabatchi, & O'Leary, 2005; Bingham et al., 2008). Meyers and Vorsanger (cf. B. G. Peters & Pierre, 2007, p. 162) observe theoretical failures “to specify the dimensions of street-level behavior that matter for governance policy achievement, and to identify the ways in which… policy design… and individual-level incentives (such as professional norms and individual beliefs) interact to direct these behaviors.”

Implementation often is a multi-group activity (P. deLeon et al., 2002; T. E. Hall & O’Toole, 2000; L. J. O'Toole, Jr. & Montjoy, 1984), encompassing a dynamic, interactive process similar to a collaboration framework (Bovens, Peters, T'Hart, & Albæk, 2001; Keast, 2011; Kettl, 1993; Mazmanian & Sabatier, 1989; Rhodes, 1996; Roberts, 2011a; Salamon, 1987; Stoker, 1998), which incorporates the community as an informal sector capable of collective action to solve public problems and to create public value (Bingham et al., 2008, p. 57; P. D.
Hall, 1987; Ostrom, 1990; Powell, 2003; Weimer & Vining, 2010). Theories that capture this complexity are well suited to studying social policies, such as education and bullying, where public managers maintain accountability to diverse stakeholders in handling “problems that don’t fit neatly within the boundaries of a single organization” (Behn, 2001; Bovens et al., 2001; Goggin, 1987; Goggin, Bowman, Lester, & O’Toole, 1990; Jayne & Tschirley, 2009; Milward & Provan, 1998, 2006; Roberts, 2011b).

By understanding bullying as a socially constructed group phenomenon, this study can investigate the designed role of bureaucratic discretion in engaging diverse actors to collaboratively implement social policy. Studying bullying policy in an education context also provides theoretical insight to the urban politics literature, as “[e]ducation is the urban policy most likely to be controlled by bureaucratic decision rules and the least likely to be influenced by electoral politics... best left to experts” with bureaucratic discretion” (Kenneth J. Meier, Stewart, & England, 1991, p. 162; Tyack & Benavot, 1985; Zeigler, Jennings, & Peak, 1974). Education policy provides an ideal test for detecting the influences of deliberate bureaucratic discretion and collaborative implementation, later generalizable to other implementation contexts. Given the substantial delegation of policymaking and implementation authority at the district and school level, Colorado’s new state anti-bullying policy allows wide variation in designed bureaucratic discretion and collaboration with diverse stakeholders in the implementation process.

**The Practical Problem of School Bullying:** Bullying situates policy design and collaborative implementation within a social policy context. Bullying is repeated aggression characterized by a “systematic abuse of power” (Hugh-Jones & Smith, 1999; Olweus, 1996, 1997; Sharp & Smith, 2002, p. 2; Smith & Ananiadou, 2003a; Solberg, Olweus, & Endresen, 2007), manifested through physical, verbal, relational, or property-related attacks (Nicolaides,
Concerning citizens, educators, and policymakers (Limber & Small, 2003; Olweus, 1978; Wolke, Woods, Stanford, & Schulz, 2001), bullying negatively impacts individual health and education outcomes (Limber et al., 2003; Nansel, 2003; Nansel, Overpeck, Pilla, Ruan, Simons-Morton, & Scheidt, 2001), as well as school climate, public health and safety, and economic development (Dresler-Hawke & Whitehead, 2009; Limber et al., 2003). School violence tragedies often involve incidents of bullying, suggesting that bullying interventions may help prevent violence (Spivak & Prothrow-Stith, 2001). Developing a more reflective and strategic style of public management presents greater possibilities for successful collaborative governance in the implementation of collectively produced social policies, such as bullying and education.

Olweus (1994, p. 1183) argues that “it is a fundamental democratic right for a child to feel safe in school and to be spared the oppression and repeated, intentional humiliation... [of] bullying.” Victims suffer headaches, stomachaches, bedwetting, anxiety, school refusal, and impaired educational transitions (Boivin, Dodge, & Coie, 1995; Bond, Carlin, Thomas, Rubin, & Patton, 2001; J. M. Brown & Armstrong, 1982; Eslea & Smith, 1998; Forero, McLellan, Rissel, & Bauman, 1999; Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000; Olweus, 1979; Olweus & Alsaker, 1994; Salmon, James, & Smith, 1998; Tattum & Lane, 1989; Topping, 2011; Williams, Chambers, Logan, & Robinson, 1996; Youngman & Lunzer, 1977). Both victims and bullies risk sleep disturbance, truancy, poor educational development, emotional and behavioral disorders, depression, and suicide (Dresler-Hawke et al., 2009; Fekkes, Pijpers, & Verloove-Vanhorick, 2005; Kumpulainen, Räsänen, & Henttonen, 1999; Rigby, 1998; van der Wal, Wit, & Hirasing, 2003). Finally, bullies and bystanders encourage dehumanizing, violent norms (Twemlow, Fonagy, & Sacco, 2004). Long term, school bullying adversely impacts educational

Bullying directly involves about 30% of American children each semester (Limber et al., 2003; Melton, United States Office of Juvenile, & Delinquency, 1998; Nansel et al., 2001), exclusive of the growing, global issue of cyber-bullying (Campbell, 2005; Cassidy, Jackson, & Brown, 2009). Internationally, about 40% of students are bullied (Mynard, Joseph, & Alexander, 2000), with 16-50% of children victimized at least once a week (Campbell, 2005; Rigby & Slee, 1997; Smith & Shu, 2000). Addressing a persistent and pervasive problem (Camodeca & Goossens, 2005; Genta, Menesini, Fonzi, Costabile, & Smith, 1996; Gini, 2006; Moran, Smith, Thompson, & Whitney, 1993; Olweus, 2013), bullying interventions may illuminate U.S. and comparative social policies in education and public health.

Research Question: This study draws from the bullying, policy design, and implementation literatures to investigate how discretionary policy designs impact the extent of collaboration in the implementation process, and how those two factors affect bullying outcomes. Collaborative implementation involves mutual responsibility among multiple stakeholders such as policymakers, public administrators, street-level bureaucrats, students, parents, and community members (Behn, 2001). Multiple jurisdictional and non-state stakeholders can be networked to collaboratively implement school safety policies and decrease bullying behaviors (Bailey & Koney, 1996; Bingham et al., 2008; Milward et al., 2006). This proposal will focus on the research question: How does the policy design element of bureaucratic discretion in school anti-bullying policies influence school bullying outcomes? Through surveys, this study illuminates the collaborative implementation processes by which policy designs and bureaucratic
discretion impact bullying outcomes across American schools. Studying the design and implementation of bullying policies may contribute theoretical insights to social policy and inform bullying prevention practices.

**Background: Influences in School Bullying**

Individual cognitions in bullying participant roles (Bjorkqvist, Osterman, & Kaukiainen, 1992; Carney & Merrell, 2001; Olweus, 2013; Smith, Bowers, Binney, & Cowie, 1993; Smith, Pepler, & Rigby, 2004), family environmental beliefs and cues (Baldry, 2003; Baldry & Farrington, 2000; Duncan, 1999; Smith & Myron-Wilson, 1998), and school social ecological dynamics (Bandura, 1977, 1986, 1993, 2001) all contribute to bullying outcomes (Andreou, Vlachou, & Didaskalou, 2005; Salmivalli, 1999). Anti-bullying policies can affect the environmental conditions and social incentive structures that shape individual bullying behavior by changing awareness, norms, monitoring, and enforcement.

**School Environment:** School climate sets social norms, perceptions of bullying, management and reporting procedures, and intervention programs that encourage or inhibit bullying behavior, sometimes contradicting overt criticism with tacitly encouragement (Andreou et al., 2005; O'Moore, 2000; Olweus, 2013; Sharp et al., 2002; Slee & Rigby, 1998; Tattum, 1993). Collective processes construct bullying participant roles and school climate (Andreou et al., 2005; Camodeca et al., 2005; Dresler-Hawke et al., 2009; Gini, 2006; Harvey, Buckley, Heames, Zinko, Brouer, & Ferris, 2007; Ostrom, 1994, 1996, 1998, 2000). Successful bullying interventions examine the socio-cultural and institutional values, beliefs, and practices that promote bullying behaviors (Boulton & Underwood, 1992; Haselager, 1997; D. G. Perry, Kusel, & Perry, 1988; Rigby & Slee, 1993; Vlachou & Vlachou, 1997). Teachers, administrators, staff, parents, and peers can actively build collaborative networks that address bullying as a “social
problem… in a social context” (Campbell, 2005, p. 72; Drolet, Paquin, & Soutyrine, 2006), designing and implementing anti-bullying policies that support long-term individual and group behavioral change (Dresler-Hawke et al., 2009).

**The History of Anti-Bullying Policies:** Historically, people accept bullying as a “fundamental and normal part of childhood” (Campbell, 2005, p. 68; Limber et al., 2003; Stein, 2003), but schools with clear and fair disciplinary policies exhibit lower levels of violence and bullying (Cohn & Canter, 2003). After the 1999 Columbine bully/victim school shooting (Gibbs & Roche, 1999; Pankratz, 2000), Colorado and other states adopted non-discretionary zero-tolerance policies that “inappropriately… and inconsistently” referred about 100,000 Coloradan children to police for minor school misconduct (Deam & Blume, 2012; Press, 2011; Stein, 2003). Bullying and school violence did not decrease because these reductionist policies neglected social and institutional contributions to aggression (Cassidy, 2005; Deam et al., 2012; Stein, 2003). After tragic focusing events and public debate about unsafe and unhealthy school environments (Dresler-Hawke et al., 2009; Limber et al., 2003), Colorado and other state legislatures began to explore “no-blame interventions [that] work best for face-to-face bullies” (Campbell, 2005, p. 72). Anti-bullying policies incorporating more realistic causal processes and greater bureaucratic discretion may better impact bullying outcomes.

With many legislators and citizens’ desire for local control, several state legislatures delegated policymaking and implementation authority to districts and schools (Engdahl, 2011). Some states have passed school bullying laws, some of which are accompanied by state education department policies, while others have instituted school bullying policies through the state department of education without passing any formal legislation (see Appendix B, Map).
With such decentralized authority, the United States provides ample opportunity to investigate how the policy design element of bureaucratic discretion impacts bullying policy outcomes.

**Traditional Anti-Bullying Programs:** Prior research indicates that individual-oriented anti-bullying policies do not achieve their intended outcomes (Dresler-Hawke et al., 2009), especially as anonymous cyber-bullies are more difficult to target (Barnes, 2013; Cassidy et al., 2009; Patchin & Hinduja, 2006; Posey, 2013; Raskauskas & Stoltz, 2007). Traditional school bullying programs neglect social and developmental dimensions (Boulton, 1999; Boulton, Bucci, & Hawker, 1999; Hodges, Malone, & Perry, 1997) to focus on individual or reactive interventions (Andreou et al., 2005; Egan & Perry, 1998; Pepler, Craig, Ziegler, & Charach, 1994; Rigby et al., 1993; Sharp et al., 2002), with mixed results (Salmivalli, 2001). Traditional school violence programs, especially zero-tolerance policies, negatively exacerbate school violence on other unintended levels (Muschert & Peguero, 2010). Reductionist zero-tolerance policy failures suggest that school violence and anti-bullying policies operate through linkages at multiple levels (Henry, 2009).

These fragmented, micro-analytic frameworks fail to consider multiple macro-level causes of bullying and school violence that involve interrelated educators, family, and community (Henry, 2009). Anti-bullying policies that emphasize group attitudes and norms (Andreou et al., 2005), as well as regular communication and involvement between children, parents, teachers, and health care professionals regarding bullying experiences (Fekkes et al., 2005; Henry, 2009), provide greater impact on behavioral change. Whole-school community bullying interventions suggest that engaging a greater number and diversity of actors in a social ecological framework will improve bullying outcomes (Kickbusch, 2003; Mũkoma & Flisher, 2004).
Behavioral Ecological Model (BEM): The Behavioral Ecological Model (BEM; see Appendix B, Figure 1) suggests that individuals learn behavior through multi-level and bidirectional interactions with the physical and social environment (Hovell, Roussos, Hill, Johnson, Squier, & Gyenes, 2004). Community institutional supports for healthy individual choices emphasize the school as a social ecological system where policies shape individual behavior (Dresler-Hawke et al., 2009; North, 1990; Ostrom, 1990). Since most schoolchildren spend the bulk of their time with peers, teachers, and parents, a systemic anti-bullying policy can target the diverse actors who significantly interact with students. St Leger (1999) found that skills building within a comprehensive, jointly implemented partnership better decreases bullying outcomes. Successful school health and bullying social environment interventions suggest that collaborative implementation engaging more diverse local actors can decrease bullying outcomes (Craig & Pepler, 1995; Genta et al., 1996).

Theory: The Role and Structure of the Policy Environment

The policy cycle describes an iterative framework used to analyze the policy process and connect each stage to policy outcomes (see Appendix B, Table 1), allowing researchers to investigate each policy stage alone or in relation to any other stage, as well as across all policymaking levels (Brewer & DeLeon, 1983; Howlett, 1995; Lasswell, 1971). Anti-bullying policies impact environmental structures that affect bullying decisions and behaviors (Austin & Joseph, 1996; Crick & Grotpeter, 1996; Egan et al., 1998; Eslea et al., 1998), primarily through the policy design and implementation stages of system-level governance (Meyers et al. cf. Peters et al., 2006; see Appendix B, Table 2). In contrast to rigid zero-tolerance policies, discretionary policies may better reduce school violence and bullying behaviors (Blad, 2013; Cassidy, 2005;
Shah, 2013; Stein, 2003). The researcher primarily hypothesizes that policy designs with greater bureaucratic discretion are more likely to reduce bullying.

Additionally, policy defines the community, establishes school priorities, and constrains behaviors through dynamic social systems (Dresler-Hawke et al., 2009; Kuntsche, Pickett, Overpeck, Craig, Boyce, & de Matos, 2006). Individuals more effectively and consistently interact with state institutions and cultural contexts that engage local actors to collaboratively implement a safe, bully-free school environment and social policy (Dresler-Hawke et al., 2009). The researcher secondarily hypothesizes that collaborative implementation is more likely to reduce bullying.

**Policy Design:** Policy designs create and foreclose certain opportunities for action (Meyers et al. cf. Peters et al., 2007). Federalist policy guidance requires translation into local-level policies, which are implemented as daily practices (Northway, Davies, Mansell, & Jenkins, 2007). These structural policies have fundamental effects on the implementation process and policy outcomes of public agencies (Whitford, 2002). Meyers and Vorsanger (cf. Peters et al. 2007, 159) argue that scholars “need to develop more fully integrated theories of how street-level discretion… [is] channel[ed] into specific directions through policy design.”

Scholars find that decentralized authority improves decision-making outcomes in prospecting organizations, which explore new directions and launch new services (Andrews, Boyne, Law, & Walker, 2009; Miles, Snow, Meyer, & Coleman, 1978; Whetten, 1978). Furthermore, Lynn Jr, Heinrich, and Hill (2000) argue that analysts must contextualize governance arrangements within broader social, fiscal, and political circumstances. As a policy design feature, bureaucratic discretion impacts social policy implementation and outcomes (Keiser, Mueser, & Choi, 2004). These findings suggest that greater bureaucratic discretion in
policy design and collaborative strategies in policy implementation can improve bullying
outcomes.

_Bureaucratic Discretion_: Bureaucratic discretion comprises “a series of administrative
judgments that shape the street-level implementation of programs… [that] forms the bounds of
[front-line workers’] positions, rights, and responsibilities” (Davis, 1969, 1971; Whitford, 2002,
p. 7). Although scholars argue whether bureaucratic discretion will result in abuse of power
(Finer, 1941; Friedrich, 1971; Gormley & Gormley, 1989; Knott & Miller, 1987; Von Mises &
Greaves, 1944; West, 1984), researchers observe that discretion is fundamental to policy
implementation and necessary for policy success (Evans & Harris, 2004; Lipsky, 2010; Scholz,
Twombly, & Headrick, 1991; Sowa & Selden, 2003; Whitford, 2002). Scholars identify policy
design as a factor that shapes street-level bureaucratic discretion (Evans et al., 2004; Moe, 1989),
especially a subordinate’s ability to refer conflict upward to superiors in the hierarchy (Boulding,
1964; Buchanan & Tullock, 1965; Downs & Corporation, 1967; Fesler, 1980; Gulick, 1990;

In implementation processes where multiple actors must mutually adapt and jointly
produce policy outcomes, bureaucratic discretion is politically and technically desirable (P.
deLeon et al., 2002; Martin, 1965; L. J. O'Toole, 2011). Within educational governance, vague
policies grant local school districts considerable administrative discretion in formulating and
implementing policy (Huber & Shipan, 2002; Sunderman, 2010). Policymakers often
deliberately grant bureaucratic discretion as the best strategy for achieving desired policy goals,
especially in deference to bureaucratic expertise, or as a means of distancing themselves from the
consequences and lived experiences of policies (Evans et al., 2004; Huber et al., 2002). If
policymakers view nonstatutory factors such as professional norms or institutionalized oversight
as sufficiently reliable, legislatures will be more likely to grant broader levels of bureaucratic discretion in the policy design (Kenneth J. Meier et al., 1991).

As street-level bureaucrats, teachers are “embedded in [an] interacting policy, organizational, professional, community and socio-economic system” (Meyers et al. cf. Peters et al. 2007, 154). The complexity of education and anti-bullying policy increases the difficulty of monitoring bureaucratic actions and the need for bureaucratic discretion, which are in toto the substance of policy (J. Lin, 2010), especially in social policy systems characterized by interagency collaboration (Sandfort, 2000). Policy design influences implementation contexts, especially co-produced policies intended to affect the behavior of relatively powerless target groups such as education and bullying (Ingram, Schneider, & DeLeon, 2007). Policy design affects bureaucratic discretion by determining agency conflict referral rules and required types of interactions (Whitford, 2002; Meyers et al. cf. Peters et al., 2007), discretion design features which may influence policy outcomes.

*Impact of Designed Bureaucratic Discretion on Bullying Outcomes:* Education reforms operate in an institutionalized policy environment with ample room for bureaucratic discretion (North, 1990; Ostrom, 1990; Sunderman, 2010). Even across varying degrees of political control in policy design, bureaucratic discretion is used responsively implement elected politicians’ policy preferences and links to policy outcomes (Huber et al., 2002; B. D. Wood & Theobald, 2003; B. D. Wood & Waterman, 1991; D. J. Wood & Gray, 1991). Bureaucratic discretion is a significant driver of public service delivery distribution and policy outcomes, especially in urban education (Kenneth J. Meier et al., 1991; Mladenka, 1980, 1989; Mladenka, 1978, 1981; Mladenka & Hill, 1978) and vulnerable population anti-violence policies (Northway et al. 2007). Northway et al. (2007, 98) asserts: “Policies don’t protect people, it’s how they are
implemented.” Bureaucratic discretion directly shapes how policies are implemented, suggesting

**Hypothesis 1 (Policy Design Element): Schools with greater bureaucratic discretion as a policy design element will exhibit lower levels of bullying** (see Appendix A, Table 1).

**Implementation via Collaboration:** Multiple, interacting factors influence street-level bureaucrats in complex, contextual implementation processes (Meyers et al. cf. Peters et al., 2007). Practitioners inevitably exercise discretion “in translating policy into practice… even when the practitioner’s role is strongly structured by rules and procedures” (Evans et al. 2004, 888-889). Prior studies show that a higher degree of implementation is associated with a reduced frequency of bullying (Olweus et al., 1994; Roland, 1993; Salmivalli et al., 2005; Veerle Stevens, De Bourdeaudhuij, & Van Oost, 2000; Irene Whitney & Smith, 1993), demonstrating valid relationships logically linking school anti-bullying policies to policy implementation and bullying outcomes (V. Stevens et al., 2001). These findings suggest that contextual factors impact the implementation process, and that the policy implementation process and successful anti-bullying interventions are generalizable to the broader population of school environments.

**Policy Implementation:** Policy implementation is “the carrying out of a basic policy decision” (Mazmanian et al. 1989, p. 20; see Appendix B, Figure 2), which lays out the complexity of joint action, as well as the causal linkages between policy decisions and policy goals (Mazmanian et al., 1989; Pressman & Wildavsky, 1984; P. Sabatier & Mazmanian, 1980). Boundedly rational policymakers cannot generate prescient policies which account for all contingencies (P. deLeon et al., 2002; Simon, 1985, 1991, 1997). Contingency theories adapt the complexity of multiple actors interacting within a participatory policy implementation process (P. deLeon et al., 2002; D. T. Hall, Schneider, & Nygren, 1970; Sirianni, 2009), including policymakers and public managers, local street-level bureaucrats, and the target population.
(Bardach, 1998, 2001; Lipsky, 2010; Mazmanian et al., 1989; Riccucci, 2005). The impact of education policy reforms depends on the implementation context (Sunderman, 2010). Since Colorado state legislators delegated authority to local bureaucrats, the bureaucratic discretion design feature and policy implementation process may significantly impact bullying policy outcomes.

**Collaboration:** Scholars argue that hierarchical conceptions of policy implementation are prone to unrealistic expectations far removed from the target population’s perspective—especially for citizens considered dependent or deviant, such as child bullies—and struggle when encountering contingent complexity in wicked problems and contravenes democratic principles (L. deLeon & Denhardt, 2000; Waldo, 1965, 1980, 2007). In contrast, bottom-up implementation reflects communal relevance and input (Hjern, 1982; Hjern & Hull, 1982; P. A. Sabatier, 2005; Schneider & Ingram, 1997), while joint actors collaboratively produce and legitimate “more realistic and practical” policy decisions (Agranoff & McGuire, 2003; P. deLeon et al., 2002, p. 478; Freeman, 1997; Goggin, 1987; Goggin et al., 1990; Gray & Wood, 1991; Kickert, 1996). Finally, environmental turbulence and wicked problems demand better theories of collaboration and collaborative governance (Ansell & Gash, 2008; Fountain, 2013; Head & Alford, 2008; Rodríguez, Langley, Béland, & Denis, 2007).

Anti-bullying policies fit in a discursive policy implementation framework, which acknowledges that successful implementation hinges on modifying the target population’s behavior (deLeon and deLeon, 2002), and recognizes that institutional structures constrain individual behaviors (Kiser & Ostrom, 1982; North, 1991; Ostrom, 2009). Social policies such as bullying and education represent group phenomena collaboratively produced by diverse actors (Hill & Hupe, 2002; A. C. Lin, 1996) “because street-level bureaucrats must obtain client
compliance with their decisions” (Alford, 2002; Brudney, O'Toole, & Rainey, 2001; Hupe, 1993; Lipsky, 2010, p. 57; J. L. Perry, 1989). In addition, Behn (2001, 126-127) argues that a “compact of mutual, collective responsibility” provides a voluntary institution to “produce what citizens value” that identifies common interests and obligations from all individuals and organizations in the “accountability environment,” including public managers, street-level bureaucrats, policymakers, stakeholders, media, and citizens. Collaboration may improve implementation outcomes.

**Collaborative Governance:** In an environment of complexity and scarcity, collaborative governance can improve policymaking and implementation to address wicked problems (Kamensky, 2007; Roberts, 2011a; Sirianni, 2009) such as bullying, aggressive behaviors emerging from diverse actors’ collective interactions in a school social network (Olweus, 2004; Sharp et al., 2002; Smith et al., 2000; Smith et al., 2003b; Solberg & Olweus, 2003). These interdependent policies involving joint production with citizens increase work variability and unpredictability, as well as the need and opportunity to exercise bureaucratic discretion in the implementation process (Meyers et al. cf. Peters et al. 2007). In the case of anti-bullying policies, the actors are teachers, bullies, victims, peers, parents, administrators, staff, and community members.

Bullying presents a high ambiguity/low conflict situation that calls for recursive, experimental implementation where outcomes “depend largely on which actors are active and most involved… [and] contextual conditions dominate the process” (Matland, 1995, pp. 165-166; P. A. Sabatier & Jenkins-Smith, 1993). Collaborative policy implementation may help balance bureaucratic discretion and the “reciprocal… complexity of joint action” in achieving anti-bullying policy intentions (O'Toole Jr & Meier, 2011, pp. xxv-124; Pressman et al., 1984).
Establishing collaborative relationships can positively impact perceptions of school safety, with school culture playing the deciding factor in school safety policy implementation (Heinen, Webb-Dempsey, Moore, McClellan, & Friebel, 2006).

How Does Collaborative Policy Implementation Impact Bullying Outcomes? Bureaucrats condition their behavior on actor interactions, which “may change the practice of discretion just as structural choices within agencies change discretion” (Whitford 2002, 9). Scholars argue that decentralized authority and contextualized governance arrangements improve decision-making outcomes in prospecting organizations attempting to launch new services (Andrews et al., 2009). With Colorado’s new policy mandate, prospecting schools redirected bullying implementation efforts as a reconfigured service, suggesting that greater decentralization in the forms of more bureaucratic discretion and more diverse actors will decrease bullying outcomes. Educators can collaboratively implement new school anti-bullying policies by engaging diverse actors.

Operationalization of Central Concepts

For the dependent variable, bullying is operationalized as a systematic repetition of aggressive behavior(s) against relatively weaker victims (Andreou et al., 2005; Olweus, 1978; Rigby, 2004). The researcher measured the frequency of bullying through student reports of bullying incidents (See Appendix A, Figure 1). Bullying can take four forms of peer-victimization (Andreou et al., 2005; Rivers & Smith, 1994; Smokowski & Kopasz, 2005). Physical victimization encompasses punching, kicking, hitting, shoving, etc. Verbal victimization encompasses name calling, embarrassing or teasing, swearing, etc. Social manipulation encompasses social isolation, spreading rumors or slander, cyberbullying, making trouble for others with their friends, etc. Attacks on personal property encompasses stealing.
breaking personal things, hiding possessions, etc. After answering questions on all the separate aspects of bullying, students were asked how often they were bullied as an ordinal variable.

For the first independent variable, bureaucratic discretion as a policy design feature is operationalized as the degree of freedom professionals have to make decisions at specific junctures (Lipsky, 1980; Whitford, 2002). Students rated the degree of agreement or disagreement with statements about teacher and school bureaucratic discretion on a Likert scale of 1 strongly agree to 4 strongly disagree. The researcher measured teacher-level bureaucratic discretion by utilizing student perceptions of teachers across four dimensions: there is a caring adult at school; teachers treat students with respect; teachers care about students; and teachers do or say things that make students feel bad about themselves (See Appendix A, Figure 2). School-level bureaucratic discretion was measured by utilizing student perceptions of school rules across five dimensions: everyone knows the rules; rules are fair; everyone receives the same punishment regardless of who they are (personal characteristics or favoritism); rules are strictly enforced; students know the punishments for breaking the rules (See Appendix A, Figure 2).

**Conceptual Relationships:** Designed bureaucratic discretion at the teacher and school levels are crucial because social policies and bullying outcomes are collectively produced by diverse actors who make discretionary decisions including: school district public managers, street-level bureaucrats (school administrators, teachers, and staff) and citizens (students, peers,
BUREAUCRATIC DISCRETION IN US SCHOOL BULLYING POLICIES

parents, community members, and program consultants). Each person who interacts with the school environment jointly impacts a safe, bully-free school climate (see Appendix B, Figure 3). Bullying also bridges multiple agency silos. At the national level, the issue of bullying falls under the jurisdiction of the US Department of Health and Human Services (U. S. Department of Health and Human Services, 2012b). At the state level, many states such as Colorado consider bullying as a school violence prevention policy within the law enforcement jurisdiction of the State Attorney General’s Office (Colorado State Attorney, 2010; U. S. Department of Health and Human Services, 2012a, 2012b). At the local level, schools and districts under state and federal Departments of Education select and implement programs to prevent bullying. Diverse agencies and actors have discretion to collaboratively implement bullying policies. A simplified conceptual model of bullying policy outcomes would take the following form (see Appendix B, Figure 4): Policy Outcomes (Bullying) = f[Policy Design (Bureaucratic Discretion) + Policy Implementation (Diverse Actors)].

Methods: Data Collection and Analysis

Since students can attend either public or private schools, domestically and internationally, this study’s sampling frame encompasses all American public and private schools. The researcher obtained publically available secondary data from the School Crime Supplement, National Crime Victimization Survey 2005-2009. Jointly commissioned by the U.S. Department of Justice and U.S. Department of Education, households across all 50 states were repeatedly surveyed via phone or in-person questionnaires for years 2005, 2007, and 2009. In the presence of an adult for all or part of the survey, household respondents aged 12-18 years old were interviewed by Census Bureau employees regarding their school bullying and crime experiences in the past year. When appropriate, children were also asked to describe detailed
accounts of up to five school bullying or crime incidents. As children have aged and families may have moved in the intervening survey administrations, household-level data may not measure the same individuals over time in a three-year rotating panel design. This resulted in a nationally representative pooled cross-sectional dataset of 31,672 children ages 12-18 years old.

For the quantitative large-n statistical analysis, all quantitative data from the survey was entered into STATA IC 13 for descriptive and regression statistical analysis (Berry, 1993; Fox, 1991; Lewis-Beck, 1980; Singleton & Straits, 2009). Regression models are well-suited to testing complex factors such as policy design and collaboration (Foster & Meinhard, 2002; Huber et al., 2002; Keiser et al., 2004; Schroeder, Sjoquist, & Stephan, 1986; Whitford, 2002). In order to test specification robustness, multivariate regressions were carried out with robust and clustered standard errors, as well as reweighted least squares and probability weights. Where appropriate, data can also be analyzed by geographical area and school community characteristics such as grades/ages served, neighborhood crime rates, demographic composition, and poverty levels (Northway et al., 2007).

Data were clustered by census region (East, Midwest, South, and West), land use type (urban or rural), metropolitan statistical area (MSA) status (size), and school level (elementary, middle, or high school) in order to better understand how different levels of factors impacted bullying outcomes. The bullying bureaucratic discretion model included nine factors of interest, with a teacher-level bureaucratic discretion vector comprised of four variables and a school-level bureaucratic discretion vector comprised of five variables. 52 control factors were broken out into five categories: the individual and family characteristics vector with 21 variables; the social support vector with eight variables; the school facilities vector with nine variables; the school...
characteristics vector with seven variables; and the geographic characteristics vector with five variables.

Results

Within the teacher-level bureaucratic discretion vector, three out of four variables were statistically significant at confidence levels of 95% or higher: student perceptions of teacher respect, teacher caring and talking, and teachers making students feel bad (see Appendix C). Both teacher respect and teacher caring had positive effects on bullying outcomes, indicating that a respectful culture of care helps to model and encourage anti-bullying behavior. However, there is a dark side to teacher discretion. Child perceptions that teachers say or do things to make students feel bad had negative effects on bullying outcomes, indicating that teachers play a significant role in enacting social norms and culture. Whether these teacher actions were intentional or unintentional, students’ perceptions and bullying experiences were negatively impacted by antagonistic teacher interactions. This suggests that teacher discretion in student interactions has a significant impact on bullying norms and policy implementation.

Within the school-level bureaucratic discretion vector, three out of four variables were statistically significant at confidence levels of 95% or higher: students receive same the punishments regardless of who they are, rules are strictly enforced, and students know the punishments for rule-breaking (see Appendix C). Both student knowledge of the punishments for breaking the rules and student perceptions that everyone receives the same punishment regardless of personal characteristics or relationships had positive effects on bullying outcomes, suggesting that school-level treatment of rules and norms can help prevent bullying.

However, school-level discretion is also a double-edged sword. Student perceptions that rules are strictly enforced had negative effects on bullying outcomes, suggesting that rigid zero-
tolerance policies may oppose anti-bullying efforts. It is possible that students negatively react to cookie-cutter, one-size-fits-all policies which treat students as uniform cogs in the school system machine. For example, victimized students may retaliate against their bullies or bring weapons to school in order to feel safe. Strict rule enforcement without approaching children as individuals in context may create a backlash which counterproductively exacerbates bullying. This suggests that school discretion in policy design and implementation has a significant impact on school culture and bullying outcomes.

Among the control factors, ten variables retained robust statistical significance of at least 95% confidence across ten or more regression models. Significant individual and family characteristics included respondent age, whether or not they attended school, homeschool grade equivalence, the head of the household’s race, and whether the referent was Hispanic. Participation in school art and performing arts clubs was also a significant social support factor. The school’s lowest grade and the respondent’s educational attainment were significant variables in the school characteristics vector, while a school safety badge requirement provided a significant school facilities factor. Finally, the population place size was a significant geographic control variable, while urban/rural land use and MSA status were significant in relatively few regression models, suggesting that the latter two factors’ impact on bullying may be correlated with the more robust population size variable. Interestingly, region was not statistically significant in any of the regression models, suggesting that there is a great deal of variation in bullying laws and policies across the United States.

Limitations

There are several limitations that could impact the validity and reliability of the study. First, the sampled schools are all from the United States, threatening generalizability. While
America encompasses a wide range of school and regional characteristics, the researcher will need to take care in checking the statistical sample against the representativeness of the local, district, state, and international education communities. The conceptual definition and operationalization of the bullying outcomes, designed discretion, and collaborative implementation variables pose threats to validity. While they are grounded in literature, these particular concepts have not been studied together in a school system context. However, these measures were applied consistently and the researcher will continue development of these variable dimensions to further support measurement validity.

Confounders also threaten this study’s validity in the forms of prior school anti-bullying policies as an antecedent variable, as well as school culture, engaged stakeholders, demographic and socioeconomic composition, and test performance as endogenous variables. Testing or age effects also threaten the research validity, as participants may respond with more socially desirable answers to better conform or because they have matured (Singleton et al., 2009), especially in the case of longitudinal data (Gerring, 2012). Finally, standard multiple regression models rely on assumptions of linearity and additivity. If the underlying data-generating process is actually nonlinear or multiplicative, regression analysis would be inappropriate (Berry, 1993; King, Keohane, & Verba, 1994). In all cases, the researcher attempted to estimate the degree of measurement error and model fit through statistical controls and regression diagnostics. In future studies, the researcher can compare different sources of available data to validate the findings.

**Conclusion**

**Discussion:** Positive relationships with student perceptions of teacher respect, teacher caring and talking, students receive same punishment regardless of personal characteristics or relationships, and students know the punishments for rule-breaking emphasizes the importance
of teacher-level and school-level bureaucratic discretion in creating effective norms and policies that impact bullying frequency. These positive effects of teacher- and school-level bureaucratic discretion suggest that fair and transparent rules administered by respectful teachers who approach students as individuals in context can significantly reduce school bullying outcomes. On the flip side, negative relationships with student perceptions of teachers making students feel bad and strict rule enforcement emphasizes the significance of teacher-level and school-level bureaucratic discretion in exacerbating bullying norms within the social policy design and implementation process. These negative effects of teacher- and school-level bureaucratic discretion suggest that acrimonious teacher interactions and rigid rule enforcement may promote dehumanizing student experiences which can create a counterproductive backlash that exacerbates school bullying outcomes.

The proposed research has the potential to contribute theoretical, methodological, and practical insights. Theoretically, the study extends current theories of policy design, bureaucratic discretion, and collaborative implementation in social policy. Methodologically, this is the first study to investigate the impacts of policy design and collaborative implementation together on policy outcomes utilizing a large-scale, nationally representative data. Practically, the findings provide a more robust understanding of bullying and school violence prevention efforts, a set of critical, ongoing social issues in modern schools and society. This study has implications for improved policymaking, collaborative implementation, and safer schools.

**Future Research:** For the publically available data, the Census Bureau’s Disclosure Review Board has blanked out any data that may have provided geographic information by inference due to confidentiality concerns. The scrubbed data suppressed school and address codes, including city, district, and state location. The researcher is awaiting federal responses for
the full dataset in order to attempt further empirical studies of bureaucratic discretion by simulating the contributions of multiple levels using hierarchical linear modeling: nested national, state, district, school, and classroom stages. Future directions also include publically available Denver Public Schools (DPS) and Colorado Department of Education (CDE) data, which provides longitudinal panel survey data from all schools in Denver and Colorado, including public, innovation, charter, and private schools.

The researcher finally hopes to explore further the relationship between bureaucratic discretion, collaborative governance, and social policy outcomes. This future study would focus on process-tracing bureaucratic discretion in policy design and collaboration in policy implementation. The researcher would utilize a mixed-methods approach to triangulate data sources in a study of Hypothesis 2 (Collaborative Implementation): Schools which engage more diverse actors in the collaborative implementation of anti-bullying policies will exhibit lower levels of bullying (see Appendix A, Table 1). Due to the devolutionary design of its anti-bullying legislation and strong home-rule values, Colorado schools provide considerable variation on the designed discretion and collaborative implementation independent variables, but hold constant state policy and politics. Multiple measures and multi-estimation methods are fruitful in empirical studies of designed discretion and collaborative implementation (Bloom, Hill, & Riccio, 2001, 2003; B. G. Peters et al., 2007).

For qualitative content analysis, the researcher will utilize a most-different case selection of Colorado districts and schools to code documents across three categories: urban, suburban, and rural; large and small sizes; and school ages (George & Bennett, 2005; Gerring, 2007, 2012; Yin, 2002). The researchers also plan to conduct qualitative semi-structured interviews in the same school districts sampled for school anti-bullying policy documents, as well as other
volunteers based on survey responses, in order to obtain rich data that is still somewhat standardized and comparable across bullying outcomes, designed discretion, and actor diversity as variables of interest, while controlling for the model of decisions makers and school environment (Aberbach & Rockman, 2002; Singleton et al., 2009). For the final quantitative portion, the researcher will reach out to all 1800-2000 Colorado school principals using publically available CDE lists and school websites, requesting permission to send a web-based survey to ascertain administrator, teacher, staff, and parent perspectives of anti-bullying policy design, collaborative implementation, and bullying outcomes as variables of interest, while controlling for the school environment (Folz, 1996; Fowler, 2009).

It is important to obtain the child perspective since students consistently underreport experiences of bullying to adults, even after anti-bullying interventions which students perceive as successful (Campbell, 2005; Eslea et al., 1998; Fekkes et al., 2005; O’Moore, Kirkham, & Smith, 1997; Wolke, Woods, Bloomfield, & Karstadt, 2000), especially indirect, social manipulation (Rivers et al., 1994). Of greater concern, a significant proportion of victims do not tell anyone about their bullying experiences, maintaining a constant rate before and after intervention (Eslea et al., 1998). In order to obtain a more accurate perspective of bullying incidents, the researcher will request permission to administer a web-based survey of children. Hopefully, these studies will contribute productive and practical research to understand better policy design, collaborative implementation, social policies, and education governance.

Appendices

Appendix A: Hypotheses and Concept Maps
Appendix B: Tables and Figures
Appendix C: Results
Appendix D: Bibliography
Appendix A: Hypotheses and Concept Maps

Research Question 1 (Policy Design Element): How does the design element of bureaucratic discretion in school anti-bullying policies influence school-level bullying outcomes?

Research Question 2 (Collaborative Implementation): How does the degree of collaboration in anti-bullying policy implementation influence bullying outcomes in Colorado schools?

| Hypothesis 1 (Policy Design Element): Schools with greater bureaucratic discretion as a policy design element will exhibit lower levels of bullying. |
|---|---|---|---|---|
| **Theoretical Concepts** | **Operational Definition** | **Data Source** | **Theoretical Linkage** | **Operational Linkage** |
| IV (Bureaucratic Discretion): Degree of professional freedom to make decisions at specific junctures (Evans et al., 2004; Lipsky, 2010) | IV: Discretion index of school anti-bullying policy federalist adherence, procedural flexibility, and clarity (Evans et al. 2004; Whitford, 2002; Lipsky, 2010) | IV: Student survey (Department of Justice/Department of Education) | Schools with a higher degree of collaboration in anti-bullying policy implementation will reduce bullying outcomes | Bullying Outcomes |
| DV (Bullying Outcomes): Aggressive behavior characterized by a “systematic abuse of power” (Olweus, 1979, 2004; Sharp et al., 2002, p. 2) | DV (temporal pre/post-law and static cross-school policy design comparisons): Types of bullying; Frequency of bullying; Intensity of bullying (Smith et al., 1993; Smith et al., 2003b) | DV: Student survey (Department of Justice/Department of Education) | Since bullying is a systemic, ongoing, and pervasive problem (Eslea et al., 1998; Olweus, 2013; Salmivalli et al., 2001; Salmivalli et al., 2005), greater participation by diverse actors in the collaborative implementation of school anti-bullying policy will reduce school-level bullying outcomes (Bardach, 1998, 2001) | Policy Design Element |

| Hypothesis 2 (Collaborative Implementation): Schools which engage more diverse actors in the collaborative implementation of anti-bullying policies will exhibit lower levels of bullying. |
|---|---|---|---|---|
| **Theoretical Concepts** | **Operational Definition** | **Data Source** | **Theoretical Linkage** | **Operational Linkage** |
| IV (Diversity of Actors): Systematic participation by diverse actors (Bardach, 1998, 2001) in street-level bureaucrats’ efforts to administer a policy decision (Mazmanian et al., 1989) | IV: # and proportion of diverse intersectoral state and non-state actors engaged in implementing school anti-bullying policy (Bardach, 1998, 2001; Mazmanian et al., 1989) | IV: Document coding (Crawford et al., 1995; Mazmanian et al., 1989; Siddiki et al., 2011); survey staff and students (CDE/PBIS apps); interview staff | Since bullying is a systemic, ongoing, and pervasive problem (Eslea et al., 1998; Olweus, 2013; Salmivalli et al., 2005), greater participation by diverse actors in the collaborative implementation of school anti-bullying policy will reduce school-level bullying outcomes (Bardach, 1998, 2001) | Bullying Outcomes |
| DV (Bullying Outcomes): Aggressive behavior characterized by a “systematic abuse of power” (Olweus, 1979, 2004; Sharp et al., 2002, p. 2) | DV (temporal pre/post-law and static cross-school policy design comparisons): Types of bullying; Frequency of bullying; Intensity of bullying (Smith et al., 1993; Smith et al., 2003b) | DV: Survey staff and students (Olweus, 1996); and Colorado Department of Education and PBIS Apps | Diversity of Actors | Negative linear |
Forms of Peer-Victimization (Andreou et al., 2005; Rivers et al., 1994; Smokowski et al., 2005)
- Physical Victimization: punching, kicking, hitting, shoving, etc.
- Verbal Victimization: name calling, embarrassing/teasing, swearing, etc.
- Social Manipulation: making trouble for others with their friends, social isolation, spreading rumors/slander, cyberbullying, etc.
- Attacks on Property: stealing, breaking personal things, hiding possessions, etc.

Introduction to Standardize the Participant Definition of Bullying (Eslea et al., 1998, pp. 210-211; D. J. Pepler & W. Craig, 1995; D. J. Pepler & W. M. Craig, 1995; Pepler et al., 1994; Pepler et al., 1991; Salmivalli et al., 2005): “We say that a child is being bullied, or picked on, when another child or a group of children say nasty or unpleasant things to him or her. It is also bullying when a child is hit, kicked, threatened, locked inside a room, sent nasty notes, or when no one ever talks to them and things like that. These things can happen frequently, and it is difficult for the child being bullied to defend himself or herself. It is also bullying when a child is teased repeatedly in a nasty way. But it is not bullying when two children of about the same strength have the odd fight or quarrel.”
Overall Potential Confounders

1. Individual Variation: randomly distributed among the population and sample
2. Family Characteristics: randomly distributed among the population and sample
3. Endogenous School Environment/Climate: The researcher will control for pre-law school climate by coding the prior formal, written school anti-bullying policies and surveying teachers about prior informal school anti-bullying norms. Although teacher memories are subject to poor recall, this measure is paired with the static written documents to bolster its validity and stability.
4. Antecedent: prior school (district and state) anti-bullying policies
Map: Map of State Anti-Bullying Laws and Policies

Table 1: The Policy Cycle (Lasswell 1971; Brewer and deLeon 1983; Howlett and Ramesh 1995)
1. Agenda Setting
2. Policy Formation
3. Decision Making
4. Implementation
5. Evaluation

Table 2: The Multiple Governance Framework (Hill and Hupe cf. Peters and Pierre 2006, 23)

<table>
<thead>
<tr>
<th>Scale of Action Situations</th>
<th>Constitutive Governance</th>
<th>Directive Governance</th>
<th>Operational Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>Institutional design</td>
<td>General rule setting</td>
<td>Managing trajectories</td>
</tr>
<tr>
<td>Organization</td>
<td>Designing contextual relations</td>
<td>Context maintenance</td>
<td>Managing relations</td>
</tr>
<tr>
<td>Individual</td>
<td>Developing professional norms</td>
<td>Situation-bound rule application</td>
<td>Managing contacts</td>
</tr>
</tbody>
</table>
Figure 2: Implementation Process (Sabatier and Mazmanian 1980, 542)

Figure 3: Model of Collaborative Governance in Education Policy
Figure 4: Simplified Model of the Education Policy Process
## Appendix C: Results

### Table: Results of Regression Models

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TDiscr: Caring adult</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.004)</td>
<td>(0.001)</td>
<td>(0.004)</td>
<td>(0.006)</td>
<td>(0.000)</td>
<td>(0.004)</td>
<td>(0.001)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>TDiscr: Teacher respect</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.005)</td>
<td>(0.000)</td>
<td>(0.005)</td>
<td>(0.004)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>TDiscr: Teachers care</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.004)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.004)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>TDiscr: St. feel bad</td>
<td>-0.02**</td>
<td>-0.02***</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02**</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02**</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.007)</td>
<td>(0.006)</td>
<td>(0.000)</td>
<td>(0.005)</td>
<td>(0.008)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>SDiscr: All know rules</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.008)</td>
<td>(0.009)</td>
<td>(0.008)</td>
<td>(0.007)</td>
<td>(0.000)</td>
<td>(0.007)</td>
<td>(0.007)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>SDiscr: Rules fair</td>
<td>0.00</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.006)</td>
<td>(0.010)</td>
<td>(0.008)</td>
<td>(0.004)</td>
<td>(0.005)</td>
<td>(0.000)</td>
<td>(0.005)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>SDiscr: Same punishment</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.001)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>SDiscr: Strictly enforce</td>
<td>-0.00</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01**</td>
<td>-0.01</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>SDiscr: St. know punish</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>SFacControl: Safety s. guards</td>
<td>-0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(0.021)</td>
<td>(0.017)</td>
<td>(0.001)</td>
<td>(0.007)</td>
<td>(0.009)</td>
<td>(0.022)</td>
<td>(0.017)</td>
<td>(0.006)</td>
<td>(0.009)</td>
</tr>
<tr>
<td>SFacControl: Safety hallway</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>(0.033)</td>
<td>(0.040)</td>
<td>(0.026)</td>
<td>(0.041)</td>
<td>(0.027)</td>
<td>(0.033)</td>
<td>(0.040)</td>
<td>(0.023)</td>
<td>(0.042)</td>
</tr>
<tr>
<td>SFacControl: Safety m.detect</td>
<td>-0.04</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03**</td>
<td>-0.03</td>
<td>-0.04</td>
<td>-0.04</td>
<td>-0.04</td>
</tr>
<tr>
<td></td>
<td>(0.053)</td>
<td>(0.029)</td>
<td>(0.003)</td>
<td>(0.022)</td>
<td>(0.004)</td>
<td>(0.051)</td>
<td>(0.000)</td>
<td>(0.031)</td>
<td>(0.028)</td>
</tr>
<tr>
<td>SFacControl:</td>
<td>-0.02</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td></td>
<td>(0.027)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.004)</td>
<td>(0.001)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------</td>
<td>------------------------------</td>
<td>----------------------------</td>
<td>----------------------------</td>
<td>-------------------------------</td>
<td>----------------------------------</td>
<td>-------------------------------</td>
<td>----------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td></td>
<td>(0.030)</td>
<td>(0.037)</td>
<td>(0.038)</td>
<td>(0.048)</td>
<td>(0.071)</td>
<td>(0.034)</td>
<td>(0.000)</td>
<td>(0.039)</td>
<td>(0.028)</td>
</tr>
<tr>
<td>SFacControl: Safety camera</td>
<td>-0.02</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>-0.02</td>
<td>-0.02</td>
</tr>
<tr>
<td>SFacControl: Safety badge</td>
<td>0.08**</td>
<td>0.11***</td>
<td>0.11</td>
<td>0.11**</td>
<td>0.11**</td>
<td>0.00</td>
<td>0.08*</td>
<td>0.08*</td>
<td>0.08*</td>
</tr>
<tr>
<td>SFacControl: Safety code</td>
<td>-0.02*</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>SFacControl: Safety code</td>
<td>0.03</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.00</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>SoSuppControl: Club athletics</td>
<td>0.03***</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03**</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>SoSuppControl: Club academics</td>
<td>0.02</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03**</td>
<td>0.03</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>SoSuppControl: Club service</td>
<td>0.00</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>SoSuppControl: Club service</td>
<td>0.00</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>SoSuppControl: Club service</td>
<td>0.03</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02**</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>IndivControl: Respondent age</td>
<td>-0.05**</td>
<td>-0.04***</td>
<td>-0.02*</td>
<td>-0.02**</td>
<td>-0.02**</td>
<td>0.00</td>
<td>-0.05**</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>IndivControl: Attend school</td>
<td>12.58**</td>
<td>0.03**</td>
<td>0.03</td>
<td>0.03**</td>
<td>0.03**</td>
<td>12.58**</td>
<td>12.58**</td>
<td>12.58**</td>
<td>12.58**</td>
</tr>
<tr>
<td>IndivControl: Home-schooled</td>
<td>6.47**</td>
<td>0.18*</td>
<td>0.18</td>
<td>0.18</td>
<td>0.18*</td>
<td>6.47**</td>
<td>6.47**</td>
<td>6.47**</td>
<td>6.47**</td>
</tr>
<tr>
<td>IndivControl: All/some home</td>
<td>5.98**</td>
<td>-0.10</td>
<td>-0.10</td>
<td>-0.10</td>
<td>-0.10</td>
<td>5.98**</td>
<td>5.98**</td>
<td>5.98**</td>
<td>5.98**</td>
</tr>
<tr>
<td>IndivControl: Hmschl grade</td>
<td>0.06*</td>
<td>-0.01**</td>
<td>-0.01</td>
<td>-0.01*</td>
<td>-0.01*</td>
<td>0.06**</td>
<td>0.06**</td>
<td>0.06**</td>
<td>0.06**</td>
</tr>
<tr>
<td>IndivControl: IndivControl</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
</tr>
</tbody>
</table>
## BULLYING PREVENTION POLICIES 35

<table>
<thead>
<tr>
<th>Current grade</th>
<th>(0.001)</th>
<th>(0.002)</th>
<th>(0.002)</th>
<th>(0.002)</th>
<th>(0.002)</th>
<th>(0.001)</th>
<th>(0.001)</th>
<th>(0.001)</th>
<th>(0.001)</th>
<th>(0.001)</th>
<th>(0.001)</th>
<th>(0.002)</th>
<th>(0.001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IndivControl:</td>
<td>-0.03*</td>
<td>-0.02*</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02</td>
<td>-0.02*</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03*</td>
</tr>
<tr>
<td>Ref Hispanic</td>
<td>0.00*</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Race HH head</td>
<td>0.00***</td>
<td>0.00**</td>
<td>0.00*</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Ref #HH &gt; 12yo</td>
<td>-0.07</td>
<td>-0.04</td>
<td>-0.04</td>
<td>-0.04</td>
<td>-0.04</td>
<td>-0.04</td>
<td>-0.07</td>
<td>-0.07</td>
<td>-0.07</td>
<td>-0.07</td>
<td>-0.07</td>
<td>-0.07</td>
<td>-0.07</td>
</tr>
<tr>
<td>Ref #HH &lt; 12yo</td>
<td>0.11</td>
<td>0.05</td>
<td>0.02</td>
<td>0.007</td>
<td>0.000</td>
<td>0.000</td>
<td>0.007</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>IndivControl:</td>
<td>0.06**</td>
<td>0.03*</td>
<td>0.03</td>
<td>0.03**</td>
<td>0.03*</td>
<td>0.03*</td>
<td>0.06*</td>
<td>0.06</td>
<td>0.06*</td>
<td>0.06*</td>
<td>0.06*</td>
<td>0.06*</td>
<td>0.06*</td>
</tr>
<tr>
<td>Months@address</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>IndivControl:</td>
<td>0.01</td>
<td>0.00*</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01*</td>
<td>0.01*</td>
<td>0.01*</td>
<td>0.01*</td>
<td>0.01</td>
</tr>
<tr>
<td>Family structure</td>
<td>0.00</td>
<td>0.00*</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>IndivControl:</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>IndivControl:</td>
<td>0.00*</td>
<td>0.00*</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>IndivControl:</td>
<td>0.05</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>IndivControl:</td>
<td>-0.06</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.00</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td>IndivControl:</td>
<td>0.00</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03*</td>
<td>0.03*</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>IndivControl:</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>IndivControl:</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>SchlControl:</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
</tr>
<tr>
<td>BULLYING PREVENTION POLICIES 36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mo curr.schlbegin</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.005)</td>
<td>(0.006)</td>
<td>(0.005)</td>
<td>(0.000)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.000)</td>
<td>(0.004)</td>
<td>(0.003)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>SchlControl:</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td></td>
</tr>
<tr>
<td>Public/private</td>
<td>(0.015)</td>
<td>(0.016)</td>
<td>(0.010)</td>
<td>(0.013)</td>
<td>(0.008)</td>
<td>(0.020)</td>
<td>(0.000)</td>
<td>(0.012)</td>
<td>(0.004)</td>
<td>(0.007)</td>
<td>(0.010)</td>
<td>(0.004)</td>
<td>(0.015)</td>
</tr>
<tr>
<td>SchlControl:</td>
<td>-0.00</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td></td>
</tr>
<tr>
<td>Assign/choice</td>
<td>(0.004)</td>
<td>(0.005)</td>
<td>(0.007)</td>
<td>(0.006)</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.000)</td>
<td>(0.004)</td>
<td>(0.002)</td>
<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>SchlControl:</td>
<td>0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>-0.03</td>
<td>0.00</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td></td>
</tr>
<tr>
<td>Church-related</td>
<td>(0.039)</td>
<td>(0.039)</td>
<td>(0.034)</td>
<td>(0.053)</td>
<td>(0.056)</td>
<td>(0.027)</td>
<td>(0.000)</td>
<td>(0.058)</td>
<td>(0.085)</td>
<td>(0.038)</td>
<td>(0.078)</td>
<td>(0.088)</td>
<td>(0.039)</td>
</tr>
<tr>
<td>SchlControl:</td>
<td>-0.00***</td>
<td>-0.00**</td>
<td>-0.00*</td>
<td>-0.00**</td>
<td>-0.00*</td>
<td>-0.00**</td>
<td>0.00</td>
<td>-0.00***</td>
<td>-0.00*</td>
<td>-0.00**</td>
<td>-0.00*</td>
<td>-0.00**</td>
<td>-0.00***</td>
</tr>
<tr>
<td>Lowest grade</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td>SchlControl:</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00*</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Highest grade</td>
<td>(0.001)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.001)</td>
</tr>
<tr>
<td>SchlControl:</td>
<td>-0.01</td>
<td>-0.00***</td>
<td>-0.00*</td>
<td>-0.00***</td>
<td>-0.00*</td>
<td>-0.00***</td>
<td>0.00</td>
<td>-0.01***</td>
<td>-0.01*</td>
<td>-0.01***</td>
<td>-0.01*</td>
<td>-0.01***</td>
<td>-0.01**</td>
</tr>
<tr>
<td>Educ attainment</td>
<td>(0.003)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.003)</td>
</tr>
<tr>
<td>GeogControl:</td>
<td>0.07</td>
<td>0.04*</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>0.00</td>
<td>0.07*</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Land use urb/rural</td>
<td>(0.037)</td>
<td>(0.018)</td>
<td>(0.007)</td>
<td>(0.019)</td>
<td>(0.033)</td>
<td>(0.022)</td>
<td>(0.000)</td>
<td>(0.031)</td>
<td>(0.027)</td>
<td>(0.019)</td>
<td>(0.032)</td>
<td>(0.051)</td>
<td>(0.037)</td>
</tr>
<tr>
<td>GeogControl:</td>
<td>0.01*</td>
<td>0.00**</td>
<td>0.00*</td>
<td>0.00***</td>
<td>0.00*</td>
<td>0.00*</td>
<td>0.00</td>
<td>0.01***</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01**</td>
<td>0.01*</td>
<td></td>
</tr>
<tr>
<td>Place size</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.001)</td>
<td>(0.000)</td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>GeogControl:</td>
<td>-0.01</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>-0.00</td>
<td>0.00</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td>-0.01</td>
<td></td>
</tr>
<tr>
<td>Region</td>
<td>(0.014)</td>
<td>(0.005)</td>
<td>(0.006)</td>
<td>(0.005)</td>
<td>(0.006)</td>
<td>(0.008)</td>
<td>(0.000)</td>
<td>(0.009)</td>
<td>(0.011)</td>
<td>(0.008)</td>
<td>(0.010)</td>
<td>(0.012)</td>
<td>(0.014)</td>
</tr>
<tr>
<td>GeogControl:</td>
<td>0.06**</td>
<td>0.03**</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03**</td>
<td>0.00</td>
<td>0.06**</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
<td>0.06**</td>
<td></td>
</tr>
<tr>
<td>MSA status</td>
<td>(0.018)</td>
<td>(0.011)</td>
<td>(0.013)</td>
<td>(0.015)</td>
<td>(0.009)</td>
<td>(0.010)</td>
<td>(0.000)</td>
<td>(0.019)</td>
<td>(0.024)</td>
<td>(0.015)</td>
<td>(0.030)</td>
<td>(0.016)</td>
<td>(0.018)</td>
</tr>
<tr>
<td>GeogControl:</td>
<td>0.01*</td>
<td>0.01*</td>
<td>0.01</td>
<td>0.01*</td>
<td>0.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.01*</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01*</td>
<td>0.01*</td>
<td></td>
</tr>
<tr>
<td>Month allocated</td>
<td>(0.006)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.003)</td>
<td>(0.002)</td>
<td>(0.004)</td>
<td>(0.000)</td>
<td>(0.006)</td>
<td>(0.009)</td>
<td>(0.007)</td>
<td>(0.005)</td>
<td>(0.003)</td>
<td>(0.006)</td>
</tr>
<tr>
<td>Constant</td>
<td>-30.09**</td>
<td>0.98***</td>
<td>0.98</td>
<td>0.98**</td>
<td>0.98***</td>
<td>0.00</td>
<td>-30.09**</td>
<td>-30.09*</td>
<td>-30.09*</td>
<td>-30.09**</td>
<td>-30.09*</td>
<td>-30.09**</td>
<td></td>
</tr>
<tr>
<td>(9.859)</td>
<td>(0.190)</td>
<td>(0.263)</td>
<td>(0.230)</td>
<td>(0.212)</td>
<td>(0.238)</td>
<td>(0.000)</td>
<td>(9.446)</td>
<td>(7.260)</td>
<td>(7.172)</td>
<td>(5.196)</td>
<td>(9.859)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Observations | 18,638 | 31,672 | 31,672 | 31,672 | 31,672 | 31,672 | 23,280 | 18,638 | 18,638 | 18,638 | 18,638 | 18,638 |
| R-squared | 0.04 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| Adj. R-squared | 0.04 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.10 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |

Robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05
Appendix D: Bibliography


BULLYING PREVENTION POLICIES 38


BULLYING PREVENTION POLICIES


BULLYING PREVENTION POLICIES 40


BULLYING PREVENTION POLICIES


Hill, Michael, & Hupe, Dr Peter. (2002). *Implementing Public Policy: Governance in Theory and in Practice*: SAGE.


BULLYING PREVENTION POLICIES 43


BULLYING PREVENTION POLICIES 44


Olweus, Dan. (2013). *Bullying at School: What We Know and What We Can Do:* John Wiley & Sons.


BULLYING PREVENTION POLICIES


BULLYING PREVENTION POLICIES


Smith, Peter K., & Shu, Shu. (2000). What Good Schools can Do About Bullying: Findings from a Survey in English Schools After a Decade of Research and Action. Childhood, 7(2), 193-212. doi: 10.1177/0907568200007002005


BULLYING PREVENTION POLICIES


files/4112/colorado.html


BULLYING PREVENTION POLICIES 49


