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Contents

• VOLUME 5, ISSUE 1

STUDENT RESEARCH

1 **Community Shared Solar in Virginia: Political and Institutional Barriers and Possibilities**
Gilbert Michaud

FACULTY & STUDENT RESEARCH

16 **Students' Opinions about Concealed Firearms on University Campuses**
Sharon D. Eaves
Mark A. Shoemaker
Alexander W. Griego

FACULTY RESEARCH

27 **The Dream Team, Texas Democrats, and Turnout: A County-level Analysis of the 2002 Elections in Texas**
Reed L. Welch
John David Rausch Jr.

Community Shared Solar in Virginia: Political and Institutional Barriers and Possibilities

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abstract: *Solar photovoltaic (PV) energy has provoked intense policy debate at the state level in the United States. Electric utility providers and other interests have fought to scale back or cut favorable state policies as grid-connected solar PV installations have increased. One innovative approach to dealing with these challenges is to permit community net energy metering (NEM) or "shared solar" that allows multiple electric utility customers to share the costs and benefits of ownership in a local solar PV facility. This has stimulated the development of off-site shared solar arrays, or solar gardens, and increased access to PV technology. In Virginia, however, no rules exist that require electric utilities to permit community shared solar through NEM. This article utilizes the punctuated equilibrium theory (PET) framework and a historical institutionalism methodology to examine the political forces that shape state policy and to analyze why Virginia has dismissed community solar legislation multiple times. Such an approach is useful in understanding how other historically laggard states may adopt community shared solar legislation in the future.*

Introduction

Community shared solar is generally defined as projects "with multiple individual owners living in geographic proximity to [a] solar project, and sharing the costs and benefits of ownership of the solar project" (Farrell, 2010, p. 2). Also referred to as "solar farms" or "solar gardens," these installations are gaining popularity as consumers' desire to lower their energy costs and to reduce their carbon footprint grow. This article examines the forces that shape state solar policy in Virginia and why the legislature has failed to pass laws that would create community shared solar energy. Virginia serves as a case study proxy for other laggard states without community shared solar policy that make slow progress or are reluctant to adopt new policies. No previous literature has addressed community solar mechanisms in the regulatory context of Virginia specifically. Hence, further research is needed into the barriers and possibilities for community shared solar in order to determine the best path(s) forward given Virginia's unique regulatory landscape. The main research questions of this study seek to determine what forces shape state-level solar policy in Virginia, and why community shared solar legislation has not passed despite multiple attempts. This approach is useful in understanding how other historically laggard states may adopt community shared solar legislation in the future.

This research focuses on off-site shared solar that allows "customers [to] enjoy advantages of solar energy without having to install a system on their own residential or commercial property" (National Renewable Energy Laboratory, 2015, para. 1). This differentiates it from other shared-type solar approaches such as community group purchasing, on-site shared solar like solar PV on a multi-unit building, or community-driven financial models such as "Solarize" programs. The article looks at the political processes and forces that shape community shared solar using Baumgartner and Jones' (1993) punctuated equilibrium theory (PET), as this framework illuminates the determinants of policy change and stability. The following section reviews the current status of community shared solar policies throughout the United States in general and Virginia in particular; following that, the article examines results from prior research on these policies. The article then discusses the methodology and results from the subsequent analysis, reflecting on policy implications for Virginia and other states looking to adopt community shared solar legislation.

Background

Though oil and gas energy resources continue to dominate in today's industrialized world, to an extent their importance is already declining (Burkett, 2011). With the overall rising cost of energy, governments increasingly place greater emphasis on conservation and the pursuit of alternative energy sources such as wind, biomass, and

OBM and Cholla Energy
Ex. 1024
Page 6 of 41

solar photovoltaics (PVs). Solar PV systems are one of the most practical ways for businesses and homeowners alike to capture solar energy and provide electricity to a building. Reports indicate that solar PV deployment in the United States has incresed significantly in recent years. Solar PV made up roughly 40% of all new installed electric capacity in 2014, outpacing all other generation sources such as coal, natural gas, wind, etc. (Solar Energy Industries Association, 2015). Solar PV deployment grew particularly for commercial and residential or non-utility PV systems, also known as "distributed PV" (DPV).[1] Since 2010, installed U.S. solar PV capacity increased 418%, with over half of this increase from DPV alone (U.S. Energy Information Administration, 2014). In 2013, grid-connected DPV reached nearly 6,000 MW of total installed solar PV capacity (U.S. Energy Information Administration, 2014), and this number continues to grow each year.

Virginia had 13.57 MW of installed net-metered DPV capacity as of December 2014 (State Corporation Commission, 2014b). This is enough to power well over 1,000 homes. According to December 2015 data, this figure increased to 21.86 MW. However, this capacity is far less than the smaller, adjoining state of Maryland, which had 92 MW of net-metered DPV capacity at the end of 2014 (Maryland Energy Administration, 2014). Differences in state policy to encourage DPV may explain this disparity in installed capacity. For unlike Virginia, Maryland has a mandatory Renewable Portfolio Standard (RPS) requiring electric utility providers to deliver a proportion of their power from renewable sources like solar. Maryland also has a superior net energy metering (NEM) policy compared to Virginia, and offers state tax credits for DPV investment.

States such as California, Colorado, Hawaii, and Massachusetts also have greater installed capacity in part due to their allowance for community shared solar arrangements. Currently 14 states and the District of Columbia have enacted formal community shared solar measures, while six other states, including Virginia, have proposed such legislation (see Table 1). Though Virginia may lag behind some of its counterparts in terms of solar PV policy and installed capacity, it remains a state with copious solar potential due to its sun resource availability and relatively robust economic base. However, community shared solar legislation has not passed to date.

Despite this potential, key institutional players in the DPV discussion in Virginia have exerted increasing pressure. Currently 41 states, including Virginia, have adopted some form of NEM legislation allowing owners of DPV systems to sell excess electricity generated back to their electric utilities (Inskeep, Kennerly, & Proudlove, 2015). However, such legislation has not emerged without debate. Certain non-governmental organizations have pushed for increased infiltration of solar as this often aligns with their environmental sensitivity mission statements. Solar firms that manufacture and install systems hold a largely parallel vision and they desire continued interest in DPV to facilitate revenue generation. Yet, large, investor-owned utilities (IOUs) are often reluctant to see legislation that encourages DPV as it can undercut their revenues, among other reasons. Ultimately, the political environment is one where key players in this policy arena are all pursuing their own, concentrated interests.

Beyond traditional NEM arrangements, one noted provision that Virginia does not allow is the ability for customers to utilize a community NEM arrangement. Community NEM allows for the establishment of community shared solar gardens, as well as the remunerations of a solar project to be realized by multiple users in proportion to their respective ownership stake in the shared system. It also allows for increased access to solar PV technology, particularly for those who could not house such systems on their home or business. With these implications of community shared solar, examining why Virginia does not allow community NEM and shared solar despite several attempts to pass such legislation is of significant interest.

Literature Review

Net energy metering allows electric utility customers with PV systems connected to the electricity grid to receive credits for the energy delivered back to the grid (Doris, Busche, & Hockett, 2009). These credits allow customers to offset electric bills or to receive outright payment in the event that they generate more than they consume (Hughes & Bell, 2006). Selling leftover electricity back to the grid significantly enhances a renewable energy system's economic viability, particularly if it collects the full retail rate. Such is the case in Virginia (Database of State Incentives for Renewables and Efficiency, 2015).

NEM has greatly facilitated the expansion of renewable energy through on-site generation. However, great divergence exists in NEM policies among U.S. states, particularly with regard to terminology, capacity limits, and eligible technology. For instance, while Virginia does allow NEM, it has a relatively modest capacity limit of 1 MW for commercial and 20 kW for residential systems,

Table 1. Summary of Community Shared Solar Legislation in the United States

State	Policy Name	Status	Year
California	Virtual Net Metering / Senate Bill 43	Enacted	2013
Colorado	House Bill 1342*	Enacted	2010
Connecticut	Senate Bill 928	Enacted	2015
Delaware	Community Net Metering Provisions (Order 7946)	Enacted	2010
District of Columbia	Community Renewables Energy Act	Enacted	2013
Hawaii	Senate Bill 1050 / House Bill 484	Enacted	2015
Maine	Net Energy Billing to Allow Shared Ownership	Enacted	2009
Maryland	House Bill 1087 / Senate Bill 481	Enacted	2015
Massachusetts	Virtual Net Metering / Senate Bill 2768	Enacted	2008
Minnesota	Solar Energy Jobs Act (HF 729)	Enacted	2013
New Hampshire	Group Net Metering / Senate Bill 98	Enacted	2013
New York	Community Net Metering / CASE 15-E-0082	Enacted	2015
Oregon	House Bill 2941	Enacted	2015
Vermont	Group Net Metering	Enacted	2006
Washington	Community Renewables Enabling Act (HB 1301)	Enacted	2013
Georgia	House Bill 657	Tabled	2014
Iowa	Senate File 2107	Tabled	2014
Michigan	House Bill 4878	Postponed	2015
Nebraska	Legislative Bill 557	Tabled	2013
New Mexico	Senate Bill 394	Tabled	2013
Virginia	House Bill No. 618**	Postponed	2016

The data on state community shared solar legislation are adapted from the Shared Renewables HQ (2016) website.
*Colorado passed House Bill 1284 in 2015 to expand participation in community solar gardens.
**Indicates most recent bill(s) proposed (Legislative Information System, 2016c).

with a limit on overall enrollment cap of 1% of a utility's peak capacity (Database of State Incentives for Renewables and Efficiency, 2015). Other states have much higher NEM capacity limits (e.g., Oregon has 2 MW for commercial and 25 kW for residential), while some states like New Jersey have no limits whatsoever. *Freeing the Grid*, an annual report published by the Interstate Renewable Energy Council and The Vote Solar Initiative that investigates each state's interconnection and NEM policies, awarded Virginia's most recent NEM policy a C on an A–F scale (up from a D the prior year), ranking it among the bottom third of U.S. states (Freeing the Grid, 2016).

Though Virginia has actually been successful at implementing NEM, one advancement on the policy that the state currently lacks is community NEM. Community NEM and shared solar arrays have been emerging in the United States in recent years as a means to overcome various barriers to entry regarding solar technologies. These developments are due in part to the inability of certain grid-connected customers to own a generating system because of site shading, roof orientation, zoning laws, roof or system size, lack of property ownership, etc. Beyond the up-front costs of financing DPV systems, such barriers are the central impediments to more widespread deployment.

Several academic, professional, and technical studies specifically investigate the potential advantages of community shared solar. Weinrub (2010) concluded that community shared solar permits higher local control over energy. Others have demonstrated how community solar can provide financial benefits and mitigate concerns about climate change and rising energy costs (Bomberg

OBM and Cholla Energy
Ex. 1024
Page 8 of 41

& McEwan, 2012), as well as allowing for solar economies of scale and ideal project locations (Coughlin et al. 2012). Community solar may also contribute to collaborative emissions reductions goals, as well as overall community cohesion (Hoffman & High-Pippert, 2010). In fact, communal collaboration and unity are often cited as key to bringing civic members together for a shared goal (Austin Energy, 2012; Bollinger & Gillingham, 2012; Bomberg & McEwan, 2012). Often education and cooperation toward such a goal is established by way of social interactions (Irvine, Sawyer, & Grove, 2012). Community NEM is the key policy initiative enabling community shared solar, particularly by eliminating inequities in the market and allowing customers to aggregate their meters onto a solar array (Sun Farm Network, 2008).

Despite the various benefits associated with community shared solar arrangements, there remain several key barriers to entry into the PV market. Farrell (2010, p. 1) discussed barriers toward and complications around community shared solar deployment, including a "lack of access to federal tax incentives" and "onerous securities regulations of community solar entities." Findings showed that community shared solar does not have a standardized model or approach, yet projects throughout the United States have found ways to overcome significant challenges to raising capital and utilizing various solar PV incentives (Farrell, 2010).

Some reports investigated options for overcoming other professional or technical barriers to community shared solar projects. For instance, the National Renewable Energy Laboratory (2014) discussed barriers such as "rules that limit project size or prohibit residential customers from obtaining credits" (p. 4), suggesting that adjustments to state interconnection and NEM policies were the best approach to dealing with these obstacles. Feldman, Brockway, Ulrich, and Margolis (2015) also focused on alterations to state policy, claiming that virtual NEM, community NEM, value of solar provisions, and other shared solar PV programs were the best approach to overcoming existing barriers. They argued that this is even more important considering a majority of community shared solar projects are located in states with enabling legislation (Feldman et al., 2015).

Without provisions that allow for community NEM, Virginia makes it largely unmanageable for residents and investors to purchase solar energy or shares in a solar generation project without installing it at their own site. Lack of utility-level support for community solar development is also often seen as a key obstacle (Austin Energy, 2012).

Methodology

In light of the preceding, further research is necessary to comprehend the political forces at play that have hindered the potential development of community NEM and shared solar arrangements in Virginia. Such analysis can be executed using Baumgartner and Jones' (1993) Punctuated Equilibrium Theory (PET). PET helps explain how change occurs in intricate social and political systems (Baumgartner & Jones, 1993). It argues that key actors attempt to control policy directions tactically through rhetoric and actions that favor their political goals. Historically, key negative focusing events in the energy realm have forced sympathetic policy actors in certain directions, sometimes toward renewable energy. However, decision makers only adopt radical change once the pressure for change becomes overwhelming. Long periods of stasis often endure until such events occur. Several scholars have utilized PET to illuminate better the determinants of policy change and stability (e.g., Breunig & Koski, 2006; Givel, 2006; Mortensen, 2005; Walgrave & Varone, 2008). PET is also a powerful framework in the way it uses developments, shifts, institutional strategies, and political environments to determine policy directions and potential changes.

The main research question can be studied by a historical institutionalism methodology that utilizes institutional structures to find sequences of social and political behaviors and change over time. The historical institutionalism methodology is a valuable approach in the PET framework for understanding the social elements that shape the goals and strategies of institutional players. Investigating goals and strategies is helpful in understanding when and why change takes place. This method is based on the assumption that institutional constraints, rules, and objectives guide the behavior of actors throughout the policymaking process. This path-dependency model also contends that previous decisions, events, and the institutional structures that have emerged may determine subsequent decisions (Kay, 2005).

In order to implement this methodology, this research uses archival records such as government documents and mass media to identify how institutions related to solar policy have formed in the United States and Virginia. This unobtrusive data collection method helped shed light on the goals, objectives, and actions of key players, particularly with regard to the potential formulation of community shared solar policy. Broad content analyses helped pinpoint trends in institutional actions and the effects of certain decisions or strategies. More specifically,

a historical analysis of why institutional actors formed is outlined, followed by discussion of the current environment in which they act.

This methodology is not without limits. It is most often prone to researcher error in interpretation. Further, content analyses are simply a descriptive method, working to uncover trends, yet may not reveal all of the motives for such patterns. Despite these limitations, this methodology is a powerful tool when combined with the use of archival records, and the retrieval of meaningful information from such documents. It is reliable and suitable for analyzing historical material and documenting trends over time.

Results and Discussion

Historical Analysis

Energy consumption in the United States has historically been through non-renewable forms of energy like oil, coal, and natural gas. Powerful industrial forces began to grow as key actors in the first third of the 20th century. At this time, vehicles entered mass production and the birth of the modern oil industry began with a discovery in Texas's Spindletop oil field (Mody, Gerrard, & Goodson, 2013). Simultenously, the development of large IOUs occurred providing a new commodity—electricity—to Americans. In 1935, President Franklin D. Roosevelt's Rural Electrification Act further expanded infrastructure and electric services throughout the country (Emmons, 1993), setting the stage for the electricity providers and markets seen today.

Over the next few decades, NGOs began to grow as key players because from the 1940s on there was an increasing concern about nuclear energy technologies by the greater population as a byproduct of World War II (Morrone, Basta, & Somerville, 2012). Over the next three decades, nuclear anxieties continued, as did those concerning fossil fuel usage, as fossil fuel smog was blamed for several illnesses and deaths (Berkowitz, 2006). The theory of peak oil also arose during this time (Brecha, 2012). New organizations like Greenpeace formed in the late 1960s to combat environmental concerns and advocate for a greener earth (Berkowitz, 2006).

As a result of various crises in the 1970s, the federal government began to take a more prominent role in energy matters. The 1969 Santa Barbara oil spill, coupled with growing environmental concerns, spurred the federal government to intervene. The U.S. Environmental Protection Agency was established in 1970 to focus on damage to the environment resulting from energy harvesting (Suter, 2008). Making matters more complex, the 1970s also saw oil shortages, and the 1973 and 1979 oil crises. To mitigate the effect of such crises, the federal government established several commissions to regulate and develop alternative energy sources (Berkowitz, 2006). Interestingly, in 1976 Congress authorized a committee to examine the potential for the development of electric vehicles (Masood & Bouwmans, 2015), and the federal government also became involved in wind energy.

As demand for foreign oil fell, the Organization of the Petroleum Exporting Countries cut oil prices, and diplomacy with Middle Eastern nations helped to reestablish the supply of imported oil for the United States and Europe (Barsky & Kilian, 2004). The U.S. Department of Energy formed in 1977 to deal with energy policies and safety in handling nuclear materials (Fehner & Holl, 1994). President Carter at the time felt the need to consolidate national energy policy. Consolidated agencies included the Federal Energy Administration, the Energy Research and Development Administration, the Federal Power Commission (Elliot & Ali, 1984) and the Solar Energy Research Institute (Ciment, 2006). The latter became the National Renewable Energy Laboratory of the Department of Energy.

Another key focusing event occurred in 1979 when a nuclear radiation leak at the Three Mile Island nuclear power plant in Harrisburg, PA forced it to shut down (Walker, 2004). Similarly, the 1986 Chernobyl event in the Soviet Union also led to the relative decline of the nuclear power industry (Berkowitz, 2006). The 1980s and 1990s saw an increased focus on sources of renewable energy such as wind, hydrogen, and solar PV. The Exxon Valdez oil spill in 1989 added to the increasing pressures away from oil and gas technologies. While they were still viable resources, more people were becoming attuned to the exploration of alternative energy resources (Laird & Stefes, 2009).

President Reagan's deregulatory policies of the 1980s gave way to the rise of New Federalism, signifying a comprehensive return of powers to state governmental institutions (Tobin, 1986). Reagan's policies set the stage for the growth of solar deployment in the 1990s, and ultimately, the growing power of state governments in the solar energy policy discussion. Over the past few decades, U.S. states have explicitly taken initiative by addressing issues of energy production and consumption through legislation, taxation, energy conservation standards, subsidies, and other incentives (Byrne, Huhges, Rickerson, & Kurdgelashvili, 2007; Carley, 2011).

Specialists on the matter claim that federal attempts to create national solar PV standards have proven much

OBM and Cholla Energy
Ex. 1024
Page 10 of 41

too partisan and, thus, unsuccessful. Additionally, federal solar would require many square miles of panels and would create line loss (Teng, Yat-Sen, Luan, Lee, & Huang, 2012) in which electricity would literally be lost by traveling through the intricate and expansive set of power lines this solution would require. Among other reasons, this pushed solar PV policy to state legislatures, initiating a huge shift in how energy policy was enacted in the United States. By the 2000s, NEM and RPS laws had emerged in several states. Other key focusing events during this timeframe such as the 2008 coal-ash spill in Kingston, TN, and the 2010 BP oil spill, added to the growing cultural and political push for solar PV and other renewable energy technologies (Valentine, 2011).

Clearly, history and critical focusing events played a key function in the development of institutional players in the solar PV policy domain. The role of fundamental actors such as state legislatures, industry, and NGOs has gained steam over the past century or so, and they are now the most crucial actors with regard to state DPV policy. Analyzing these historical events provides necessary context for outlining the current institutional framework and environment in Virginia.

Key Institutional Players

Based on the methodology described above, governmental and voluntary institutions represent the main focal categories in the state solar PV policy environment. The former are institutions or policy venues such as the legislature and the executive that enact policy on the public's behalf. These two specifically have the ability to steer governing actions in terms of solar energy policy by way of enacting, amending, and repealing laws. Another set of governmental institutions is the legal system, consisting of courts and judges, whose role is to explain, interpret, and apply energy-related laws. Governmental agencies also play a key part in this process as an institutional player through the oversight and administration of solar policy. In Virginia, agencies such as the State Corporation Commission (SCC) that regulates electric utilities, the Department of Mines, Minerals and Energy (DMME), and the Department of Environmental Quality (DEQ), come to mind.

The latter category of institutions present when looking at state solar PV policy are organizations established for a specific purpose, such as profit or advocacy. For instance, the media plays a role in transmitting state solar policy information to the public. In addition, investor-owned utilities and solar firms serve as prominent actors in this area by influencing public policymaking by lobbying. NGOs also play a role by facilitating awareness and organizing the public. Groups such as think tanks, advocacy groups, charitable organizations, and political parties work to influence solar policy enacted by governmental institutions. In Virginia, groups such as Appalachian Voices, the Chesapeake Climate Action Network, and the Virginia Chapter of the Sierra Club appear as relevant organizations.

Institutional Environment

With new liberation from the federal government since the 1980s, state governmental institutions have taken on many new responsibilities in the policymaking arena. This profound shift is unequivocally central in understanding current solar policies implemented by state legislatures. In Virginia, this system allows the state legislature, or General Assembly, to have immense power regarding state DPV policy.

With this framework in mind, it should be noted that there have been recent, increasing pressures from IOUs, NGOs, and the solar industry in the DPV discussion in Virginia. This can be attributed largely to incentives such as the federal Investment Tax Credit that made solar technologies more cost equivalent to other types of energy resources (Barbose, Darghouth, & Wiser, 2012). The physical prices of PV panels have dropped drastically in recent years due to technology amelioration (Feldman, Barbose, Margolis, Wiser, Darghouth, & Goodrich, 2012), and installation costs are becoming more economical as contractors become more familiar with systems (Barbose, Weaver, & Darghouth, 2014). State and local governments have streamlined permitting processes as well, making it considerably easier than ever before to set up a DPV system (Goodrich, James, & Woodhouse, 2012).

While NEM and DPV may assist Virginia in meeting RPS requirements, mandated greenhouse gas regulations, economic development targets, and overall grid reliability (Pitt & Michaud, 2014), there remains great debate surrounding NEM. NEM is a low cost to government policy that was originally enacted to enhance a pricey market in its infancy, yet as hard costs of materials continue to plummet due to technological advancements and economies of scale (Stanfield, Schroeder, & Culley, 2012), IOUs in Virginia have been pushing back on the NEM issue. Firms such as Dominion Virginia Power and Appalachian Power Company assert that NEM undercuts utility revenues by allowing customers to rid the fixed costs that apply since such customers still have to be connected to the grid (Pitt & Michaud, 2014). These IOUs also often argue that expanded solar deployment

may cause technical problems for the transmission and distribution grids (Pitt & Michaud, 2014).

Hence, IOUs have been pursuing monthly "stand-by charges" for solar PV owners using NEM, as a way to help pay for the existing generation infrastructure they need for upkeep. For instance, the Virginia General Assembly adopted House Bill (HB) 1983 in 2011 that enabled Virginia utilities to pursue stand-by charges. The Virginia SCC subsequently approved Dominion's request for a $4.19/kW monthly stand-by charge for owners of net-metered systems larger than 10 kW (Shapiro, 2011). Appalachian Power Company, Virginia's second largest electric utility provider after Dominion, also recently received Virginia SCC approval for a similar stand-by charge (State Corporation Commission, 2014a). Similar policies have passed or been considered in Arizona, Georgia, Idaho, Maine, Oklahoma, Vermont, and Wisconsin (North Carolina Clean Energy Technology Center, 2014).

Addressing some of these concerns, the Virginia SCC prepared reports on the effects of NEM and DPV to utilities in 2011 and 2012. A 2011 Virginia SCC NEM study found that at existing levels of market penetration, "customer generators impose a very small net cost on Virginia's utilities in total, and such cost results in an 'immaterial' average annual bill impact on non-net metering customers" (State Corporation Commission, 2012, p. 8). The study also found that under a fully subscribed program, in which installed capacity reached 1% of peak demand in each utility's service area, the average residential electric bill would only increase by $6.73/year (State Corporation Commission, 2012). Further, reaching this capacity would require about a 50-fold increase over 2011 DPV levels, indicating the multitude of installations that would need to occur even to reach that level.

Still, solar energy advocates, installation firms, and others claim that the utilities' arguments and the Virginia SCC's conclusions are speculative and that Virginia should continue to allow and push for favorable NEM incentives. Solar supporters point to the environmental, public health, and economic development benefits that DPV provides, as it reduces air pollution from conventional power plants and creates job opportunities (Perez, Norris & Hoff, 2012). They also argue that it provides value for utilities by reducing the need for conventional generation fuels, avoiding new generation capacity, and reducing the tension on existing transmission and distribution infrastructure (Beach & McGuire, 2013).

Arguing that Virginia's electric rate structure currently causes all customers to pay for distribution in an amount proportional to their electricity consumption, advocates have also sought to repeal stand-by charge legislation such as SB 582, 2012 and SB 1025, 2013. Therefore, they assert it is unfair to set apart the owners of DPV systems, when any patron who consumes electricity at a below-average rate places the same distribution burden on utilities. They contend that utility stand-by charges create a sizable financial hindrance for customers with DPV systems, yet do not generate adequate revenue to justify the expense of administering the program (Pitt & Michaud, 2014).

Virginia's Department of Environmental Quality and Department of Mines, Minerals, and Energy convened in 2014 and facilitated a Distributed Solar Generation and Net Metering Stakeholder Group in response to Senate Resolution 47 (Legislative Information System, 2014). Comprised of representatives from utilities, the solar industry, local governments, environmental advocacy groups, and academia, the stakeholder group was tasked with studying the costs and benefits of DPV and NEM in Virginia (i.e., not community NEM), and to recommend a method for evaluating such data (Legislative Information System, 2014). However, all of the Virginia utility representatives formally withdrew from the group (Pierobon, 2014), exemplifying the political and ideological struggles getting these key institutional actors to collaborate.

Again, what is seen is an environment wherein these institutional actors pursue their own interests and agendas. This resilient conflict has come to a boiling point in recent years, with players on both sides wanting to voice their claims. In Virginia, legislative proposals to expand NEM to community NEM arrangements have encountered much counterattack and criticism from utility providers, particularly the IOUs. These IOUs often have access to state officials and policymakers, using their financial influence and lobbyists to advocate their points of view. Though public officeholders have the political authority to make and carry out public policy decisions, they are frequently and habitually coerced by those with financial resources who have a self-interested motivation to get involved in the policy process (Nichols & McChesney, 2013). In the arena of state-level solar policy, those with the largest financial resources are the IOUs.

Prior Community Shared Solar Legislative Proposals in Virginia

In 2012 Virginia Delegates Scott Surovell and Kaye Kory proposed HB 672 entitled *Distributed Electric Generation; Community Solar Gardens*. This bill would have autho-

OBM and Cholla Energy
Ex. 1024
Page 12 of 41

rized the establishment of community shared solar gardens in Virginia for projects with at least 10 subscribers for any retail customer of a utility and for those smaller than 2 MW (Legiscan, 2012). Under the proposal, a special purpose entity or nonprofit organization would have controlled the subscribers and would have been responsible for owning and operating the community shared solar garden. The individual subscribers would have received credits on their respective utility bills from the energy generated at the shared solar garden based on their ownership percentage. Such credits would have to be purchased by the utility provider through NEM. If these NEM credits exceeded the owner's bill in a given period, they could be rolled over to future ones. Crucially, the bill also mandated that "if the electricity output of the community solar garden is not fully subscribed, the utility is required to purchase the unsubscribed renewable energy at a rate equal to the utility's average hourly incremental cost of electricity supply over the immediately preceding calendar year" (Legiscan, 2012, para. 1).

HB 672 was referred to the Commerce and Labor Committee, and then relegated to a special Subcommittee on Energy (Legiscan, 2012). After minimal debate, the House unanimously voted to table the bill[2] and it was left in the Commerce and Labor Committee on February 14, 2012 (Legiscan, 2012), meaning that the bill could emerge again, if necessary.

In January 2014 the bill reemerged, this time as HB 1158. It had the same title as the previous version, and most likely rematerialized due to the shift in political winds caused by the 2013 gubernatorial election in Virginia that brought Democrat Terry McAuliffe into office (Gabriel, 2013). Delegates Surovell and Kory presented HB 1158 again with identical text to the 2012 version (HB 672). However, HB 1158 was also referred to a special Subcommittee on Energy in Commerce and Labor, ultimately being tabled and left in this committee in February 2014 (Legiscan, 2014).

The 2015 legislative session saw yet another community shared solar bill materialize, this time by Delegate Richard C. Sullivan Jr. This bill went through the same process and was again tabled (Legiscan, 2015). Another bill, HB 1636, titled *Net Energy Metering; Program for Community Subscriber Organizations*, was proposed by Delegate J. Randall Minchew during the 2015 legislative session. The bill was more explicit about community NEM, and would have allowed "community subscribers and community subscriber organizations" (Legislative Information System, 2015, para. 1) to participate. Like similar bills, HB 1636 was referred to the Committee on Commerce and Labor and its special Subcommittee on Energy, and it too was tabled (Legislative Information System, 2015).

The 2016 legislative session in Virginia saw still another relevant bill proposed, indicating a dedicated commitment to get a community shared solar bill passed in the state, as no other state has proposed as many related bills. This version, HB 618, *Community Solar Gardens*, proposed by Delegates Paul Krizek and Vivian Watts, also included language to enable community solar gardens (Legislative Information System, 2016c). However, this bill included language that would have allowed utilities to levy a "reasonable charge" to cover associated costs with administering the program. Regardless, once again, the bill was referred to the Commerce and Labor Committee, and then to the special Subcommittee on Energy. On February 9, 2016, the Energy Subcommittee recommended to continue this bill to 2017 by voice vote (Legislative Information System, 2016c).

Lastly, two other bills proposed during Virginia's 2016 legislative session would have helped the state expand community energy programs. HB 1286's language contained a provision to authorize community energy programs under the net metering aspect of the bill, whereas HB 1285 authorized, but did not mandate, Virginia's IOUs and electric cooperatives to establish community energy programs (Main, 2016). Like all of the other community energy or solar bills in Virginia, however, neither bill passed after being sent to the Energy Subcommittee. In February, both bills that were similar to HB 618 were recommended to continue to 2017 (Legislative Information System, 2016a; Legislative Information System, 2016b). The Subcommittee on Energy is often regarded as utility-friendly (Main, 2015), and the frequent tabling and postponing of bills related to community NEM and shared solar suggests that future bills will have great difficulty gaining enough support to become law.

Analysis

This research suggests that prior community shared solar legislative proposals failed to pass in Virginia due to escalating stresses from IOUs, the solar industry, and NGOs. Electric utilities in the state lobbied the Virginia General Assembly to table all of these bills, and were successful with money and corporate dominance in this state-level political process. Dominion Virginia Power lobbied vigorously against the bill in defense of oligopolistic controls on their market prices. All 10 delegates from the Repub-

lican Party who opposed HB 1158 collectively received over $45,000 in campaign contributions from Dominion in 2013 alone (Virginia Public Access Project, 2014a).

Dominion is the single largest contributor to Virginia candidates' election campaigns in the state besides the Republican and Democratic parties. In 2013, the utility disbursed well over $800,000 to influence Virginia state elections (Elsner, 2014). Terry Kilgore, the chairman of the special Energy Subcommittee, received $23,500 from Dominion in 2013 (Virginia Public Access Project, 2014b), and $31,000 in 2011 (National Institute on Money in State Politics, 2014a) for reelection efforts, making the utility his largest campaign contributor in these elections. As recent lobbying expense documents show, "Dominion spent $299,753 from May 2012 through April 2013 lobbying the state legislature, and had at least eight lobbyists as employees and four additional lobbyists as contractors" (Elsner, 2014, para. 5). Dominion also contributed $7,000 and $3,000 to the respective campaigns of Delegates Surovell and Kory (National Institute on Money in State Politics, 2014b; National Institute on Money in State Politics, 2014c), possibly swaying the direction of the community shared solar legislation in Virginia.

Dominion essentially has an interest in preserving its supremacy in Virginia's electricity market and thwarting the growth of DPV, especially considering the threat it may pose to corporate profits. A recent report published on behalf of the utilities trade group Edison Electric Institute outlined the hazard that DPV presents to the customary business model of generating and selling electricity from centralized and fossil-fuel burning power plants (Kind, 2013). In fact, in 2013, Virginia utilities collectively generated electricity primarily from large power plants using nuclear technology (38%), coal (28%), and natural gas (29%), while only 4% was attributed to renewable sources (American Coalition for Clean Coal Electricity, 2014). It should also be noted that Virginia utilities were successful in defeating three related solar bills in 2014 (SB 350, HB 879, and HB 906) that would have permitted multi-family housing community dwellers such as condominium owners to aggregate their meters through NEM (Main, 2014). These bills were also left in Commerce and Labor early in 2014. Additional solar related bills thwarted by Dominion that did not pass in 2015 include HB 1925 and SB 1160, which would have expanded third-party power purchase agreements.

The solar industry and the solar-advocating NGOs also play a key role in influencing state solar policy in Virginia, yet do not often have the money power that large IOUs such as Dominion have. A comprehensive review of National Institute on Money in State Politics data supports this claim. While these IOUs often have power in money and access, the solar industry and NGOs do possess power in numbers and organizing ability, representing another key input toward Virginia legislative decisions. Several NGOs are publicly known to lobby the General Assembly on the environment, climate change, and DPV. These include Appalachian Voices, Community Power Network, Environment Virginia, Maryland/DC/Virginia Solar Energy Industries Association, Piedmont Environmental Council, Virginia Chapter of the Sierra Club, and the Virginia Conservation Network. The Chesapeake Climate Action Network has a webpage with a petition to take action on unlocking Virginia's solar power potential (Chesapeake Climate Action Network, 2014). Among other policy decisions, the petition focuses on the legalization of community shared solar. The solar industry also has a key role in pushing for DPV and community solar, and a sizeable network of installers in Virginia. However, these groups often have a difficult time competing with the large IOUs in influencing energy policy decisions.

In Virginia, the General Assembly, the governor, and the SCC are the three key parties responsible for the electric rates, regulation of utilities, and the latter's processes. This system of state control allows the legislature to have significant authority and control in policymaking, albeit not without the input of the noted key actors. Through money, access, and lobbying, Virginia's IOUs have been able to maintain considerable control over policies they disfavor and guide public outcomes, despite the fact that they are regulated by the Virginia SCC. Conversely, the legal system and the media are not sufficiently involved in this policy process. Through the PET framework, HBs 672, 1158, 1636, and 618 did not pass in Virginia due to the long-existing stickiness concerning shared solar and community NEM, bounded rationality of legislators (i.e., they are too busy and, thus, must focus on their agenda), and the influence of money and corporate dominance in politics. In fact, Virginia solar policy decisions do not often pass without the influence of focusing events that trigger shifts in the equilibrium.

To illustrate, individual consumer NEM legislation did not pass in Virginia until 2000 (Database of State Incentives for Renewables and Efficiency, 2015), as a distant byproduct of the key negative focusing events that had occurred in the energy industry decades before (e.g., 1970s oil crises, nuclear disasters), among other reasons. The Three Mile Island and Chernobyl nuclear disasters,

OBM and Cholla Energy
Ex. 1024
Page 14 of 41

coupled with the local nuclear reactor accident in Surry, Virginia in 1988, started to raise awareness and alter public cognition of some of these energy and environmental issues. Other nuclear accidents, oil spills, and coal mine disasters throughout the 1990s such as the South Mountain No. 3 Mine Explosion in Norton, Virginia continued to push public perceptions away from these dirty energy sources and toward cleaner ones. Virginia's IOUs did not fight as hard against NEM legislation at the time due to negligible market penetration figures. However, Virginia's solar policy marketplace has been relatively motionless since the new millennium, due to the lack of key events that drive public perceptions toward solar PV and renewables, as well as the influence of key lobbying groups increasingly combatting these technologies.

Referencing Baumgartner and Jones' (1993) PET framework, Virginia policymakers are restricted on the community NEM issue by bounded rationality and disproportionate attention (i.e., overall lack of consideration). Large IOUs frame and help set an agenda that embraces the status quo, ultimately hindering the expansion of alternative solutions like community NEM. Such stasis in terms of state solar policy forms what Baumgartner and Jones (1993) term "policy monopolies" (p. 5). These monopolies often solve problems on the same terms as previous ones, many times with the intent of dismissing alternative policy mechanisms that may exist (Baumgartner & Jones, 1993).

According to Baumgartner and Jones (1993), venue shopping may be a way to alleviate such circumstances. However, since solar policy must pass through central legislation, other audiences such as the courts or other levels of government simply do not have as much authority as Virginia's General Assembly. This is to say, policy changes, such as the adoption of community NEM and shared solar in Virginia, will only occur once the vested interests and the overall "stickiness" of such a culture are punctuated by large shifts in the state's utilities and legislature's attitude to allow for increased deployment of DPV. Increased attention and public participation may also assist in altering the existing equilibrium.

Other than a trifling alteration to Virginia's NEM policy that increased its residential capacity limit from 10 kW to 20 kW because of HB 1983 (Cosby, 2011), Virginians are in another long period of stasis regarding NEM. While in 2013 the General Assembly did pass HB 1695 to permit this kind of NEM to eligible agricultural customers (i.e., they allow farmers to aggregate their house meters with their barn) (Database of State Incentives for Renewables and Efficiency, 2015), Virginia's laws remain antiquated relative to other states with more advanced community-oriented solar policy.

Conclusions and Policy Implications

While community NEM and shared solar gardens have been developing throughout the United States, Virginia still lags behind as a result of the legislative decisions noted above. The tabling or postponing of HBs 672, 1158, 1636, and 618 has made it unmanageable for residents and investors in Virginia to purchase solar energy or shares in a solar generation project without installing it at their own site. While community NEM would have allowed for the expansion of shared solar gardens, bounded rationality, disproportionate attention, and the overall stickiness of Virginia's state political and policymaking culture has hindered the passing of such a bill. The influence of money power and corporate dominance in politics through lobbying has continues to be extremely effective as well. Community NEM and the allowing of shared solar gardens may never pass in Virginia without a sizeable shift in the current equilibrium, possibly though one or a series of focusing events or a change in the political culture. Minimizing corporate dominance in politics would also make a difference. If such shifts or changes occur, Virginia could utilize favorable state solar policy to promote a powerful DPV future, regardless of customer class or geographic distance.

Virginia needs to undergo such a shift to tap into the benefits community shared solar may bring. The passing of HBs 672, 1158, 1636, and 618 would have allowed community-scale solar to develop, providing solar energy to a diverse customer base. Investors and installers could have worked collectively to choose the best site for community solar gardens, making for a better investment. Economies of scale relative to house-sited solar PV could have been realized, reducing risk due to the greater flexibility of the model. Ultimately, the passing of community NEM and shared solar gardens in Virginia would have expanded opportunities for consumers, even for non-homeowners who may have wished to invest in solar.

The evidence presented here suggests that state-level solar policy is not created without much input from parties who have a vested interest in influencing such decisions. Public choice theorists often term this political capture due to the fact that officeholders do not have profit to direct their behavior, the missions of interest groups capture them. Adding to the existing PET, this

analysis shows that lobbyists from various organizations help set the agenda in Virginia by financially supporting political officials who advocate their views, in turn making it more attractive for the latter to pass legislation. The respective motivations, manipulations, and overall infiltration of those seeking political power incomparably shapes policy formulation.

While a number of states have passed formal community shared solar policy, other states actively continue to discuss such policy. California has been an exemplary leader in community shared solar, and has particularly encouraged solar installations on low-income, multi-unit housing properties through virtual net metering. This strategy allows multifamily affordable building owners to install a single solar PV system, and the utility allocates the kilowatt hours produced by the PV system to the building owners' and tenants' individual utility accounts. Often states that have been successful at passing some form of community shared solar legislation have eased electric utilities' minds by focusing on group billing arrangements or virtual net metering policies. Colorado, Delaware, Massachusetts, and California have relied on virtual NEM to distribute economic benefits of shared PV systems, among several other states. This has allowed them to be successful in passing such legislation.

Since prior proposed community solar legislation in Virginia focused on the specific establishment of community solar gardens, perhaps the best path forward is for future legislative proposals to focus more narrowly on group billing and virtual net metering policies. This would allow a customer with multiple meters to distribute credits to different accounts, such as renters in a multi-unit building. More narrowly focusing the bill language would also allow legislators to utilize best practices from other states that have successfully passed these types of policies, easing electric utility providers into the community shared solar idea.

This article provides evidence that the relationship between community shared solar legislation in Virginia and the relevant forces at play are complex. The results of this study indicate that the tabling of the four legislative measures that would have allowed for community shared solar, viewed through a PET framework and historical institutionalism methodology, seems predictable considering Virginia's political climate and frequent opposition to solar by its IOUs. Regardless of evidence that outlines the benefits of community shared solar, Virginia policymakers will have to continue to navigate this institutional climate when considering future policy decisions in the state.

Overall, understanding the perspectives on NEM and community shared solar, as well as the policymaking culture in the state, has helped explain why Virginia has been unsuccessful at passing such legislation despite multiple attempts. Such an analysis is useful in understanding these processes as a proxy for other historically laggard states when it comes to energy policy, helping to discern the future of community NEM and shared solar policy throughout the United States. It is certain that key challenges and prospects exist for a wider implementation of community shared solar policy, which may only be possible through a pervasive policy change event or a punctuated equilibrium.

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OBM and Choice Energy
Ex. 1024
Page 16 of 41

Endnotes

1. "Distributed photovoltaics" is used to distinguish smaller-scale photovoltaic systems from larger utility-scale photovoltaic systems.
2. The tally was 13 votes Yes, 0 votes No/No vote.

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OBM and Choice Energy
Ex. 1024
Page 18 of 41

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OBM and Choice Energy
Ex. 1024
Page 20 of 41

Students' Opinions about Concealed Firearms on University Campuses[1]

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abstract: *Texas Senate Bill 11 passed and will become law in August 2016. The legislation allows individuals with concealed firearms licenses to carry their handguns on all public university campuses in Texas. Prior research indicated that most students do not support such a law (Cavanaugh, Bouffard, Wells, & Nobles, 2012; Thompson et al. 2013). In two experiments we examine if university students' opinions can be altered by the framing of the questions on the survey and how different beliefs and knowledge about school violence and Second Amendment rights relate to feelings about Texas Senate Bill 11. Results showed that framing did have a small influence on approval of a law like Texas Senate Bill 11. Overall, more students disliked the law than those that liked the law. Males and Republicans were most likely to support the law.*

In August 2016 Texas Senate Bill 11 will go into effect allowing anyone with a concealed handgun license to carry firearms on college and university campuses in Texas. Opponents of this law argue that allowing students to carry firearms could increase the chance of risky behavior leading to injury or death. However, proponents believe that allowing students to carry concealed weapons could also discourage a person with the intent to use a weapon on campus from harming students. Proponents often argue that the overall rate of homicide is much higher for the general population than for college campuses (U.S. Department of Education, n.d.; U.S. Department of Justice, 2011). With the current prohibition of firearms on campuses, it is unclear whether the lower rate of homicide is due to the prohibition or due to other factors that differ between college students and the general population.

The goal of the current study was to examine if framing the discussion about Texas Senate Bill 11 would affect students' acceptance of the law and how different characteristics or beliefs held by students might have influenced their acceptance of Texas Senate Bill 11. A few studies have examined college students' perceptions of laws such as Texas Senate Bill 11. Thompson et al. (2013) selected 15 midwestern public universities from which to draw a large sample (N=1649). The instrument used to collect students' opinions was a 48-item survey. Survey results indicated that 78% of participants were unsupportive of allowing students, faculty, and visitors to carry concealed handguns on campus. The demographic characteristics of a person most likely to support a law like Texas Senate Bill 11 was a male, whose party affiliation was other than Democratic, who had been a victim of crime, and who had experience with guns (Thompson et al., 2013).

Cavanaugh, Bouffard, Wells, and Nobles's (2012) study also asked university students about a law like Senate Bill 11. Their participants were drawn from two public universities, one in southeastern Texas and the other in eastern Washington State. The results indicated that students from Texas and Washington were uncomfortable with allowing students to carry concealed handguns on campus. In both states, more than a 2:1 ratio of students reported being uncomfortable with concealed carry on campuses. Odds ratios indicated that gender, political party, being a victim of crime, carrying a firearm, and following news concerning violent events were associated with comfort with laws like Senate Bill 11 (Cavanaugh et al., 2012).

Although many students have strong opinions about Senate Bill 11, researchers found that opinions about some policy issues can be affected by framing (i.e. providing additional context which may sway opinion before participants consider the main issue). Haider-Markel and Joslyn (2001) used framing to ask adult Kansas residents about their feelings toward concealed handgun laws. The researchers contacted participants by phone and asked how they felt about a concealed handgun law after framing the issue with either an individual rights frame or a public safety frame. They found that there was more

OBM and Cholla Energy
Ex. 1024
Page 21 of 41

support for concealed handguns in the individual rights frame than the public safety frame. They also found that male gun owners were more likely to support the law. Finally, Republicans, Independent voters, and participants with less political knowledge showed greater difference in support based on the frame they received (Haider-Markel & Joslyn, 2001).

In two experiments, we asked undergraduate students to answer several questions about their acceptance of aspects of Senate Bill 11 and their knowledge and beliefs about related issues, specifically, school violence and Second Amendment rights. In Experiment 1 we hypothesized that by framing the questions about Senate Bill 11 with questions priming them to think about Second Amendment rights or school shootings that participants would be more or less (respectively) supportive of concealed handguns on campus. In Experiment 2 we expanded our sample size and utilized an online version of the control survey used in Experiment 1. This provided more power to find relationships between feelings about Senate Bill 11 and the aforementioned related issues.

Experiment 1

Method

Participants. Ninety-six undergraduate students (53 female and 42 male; mean age =20.42; *SD*=2.91 years) attending Stephen F. Austin State University participated in the survey. Of participants, 49 reported their race or ethnicity as White, 31 reported as African American/Black, 11 reported as Hispanic/Latino, 1 reported as Asian, and 4 reported multiple ethnicities. Thirty-seven participants reported their political affiliation as Republican, 28 reported as Democratic, 10 reported as Independent, 7 reported as Libertarian, and 14 reported a different party or no party affiliation. One participant was excluded from all analyses because they did not complete any of the demographic questions. In return for participation, students received course credit in the form of extra credit.

Materials. The study included three survey forms. The three survey types consisted of the same questions, but the questions were presented in a different order on each. There were 14 school shooting questions (1 open-ended), 14 Second Amendment questions (1 open-ended), and 10 target questions concerning concealed carry on university campus laws. Three of the target questions were identified as the primary dependent variables:

1. How would you feel about individuals who possess a concealed firearm license being able to legally bring their firearms to the SFASU campus?
2. How would you feel about faculty and staff who possess a concealed firearm license being able to legally bring their firearms to the SFASU campus?
3. How would you feel about students who possess a concealed firearm license being able to legally bring their firearms to the SFASU campus?

Survey A presented the Second Amendment questions at the beginning, followed by the target questions, and then the school shooting questions. Survey B presented the school shooting questions at the beginning, followed by the target questions, and then the Second Amendment questions. Survey C was a control version and presented the target questions in the beginning, followed by the Second Amendment questions, and then the school shooting questions. Ten demographic questions were at the end of each survey.

Design and Procedure. The experiment was a between-subjects design, containing one independent variable with three levels. Two of the groups were primed and one was not. The participants in the primed groups saw either the Second Amendment questions first or the school shooting questions first. The answers to most of the survey questions were arranged on a Likert scale; some questions were open-ended, had yes or no options, or were demographic questions. Each participant signed a consent form before completing the pencil and paper survey. Participants were randomly assigned to receive one of the three survey forms. Thirty participants completed Survey A, 34 participants completed Survey B, and 32 participants completed Survey C.

Results and Discussion

Of primary interest in this experiment was whether the framing used with questions concerning school shootings or Second Amendment rights would affect participants' feelings about a law like Senate Bill 11. The secondary analyses concerned how political party and other beliefs might have affected the participants' feelings about a law like Senate Bill 11.

Figure 1 displays the percentages of participants' responses to Target Question 1. The mean for responses on Target Question 1 for Survey A was 2.27 (*SD*=1.39), for Survey B it was 2.79 (*SD*=1.27), and for Survey C it was 2.25 (*SD*=1.16). Although Survey A and C show similar means, the distribution showed a higher percentage of "Strongly Dislike" for the School Shooting frame

OBM and Choia Energy
Ex. 1024
Page 22 of 41

Figure 1. The Distribution of Responses to Target Question 1 Based on Survey Form (Exp. 1)

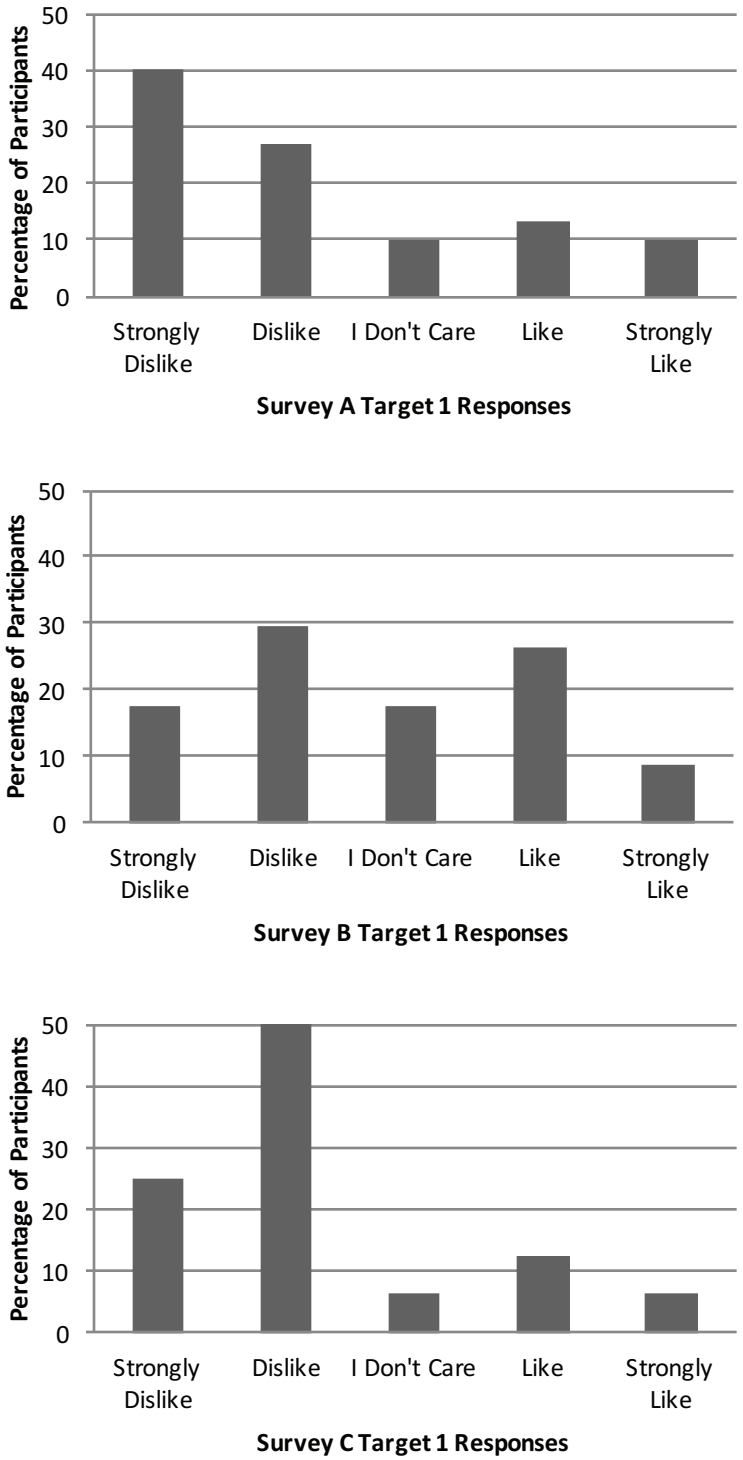
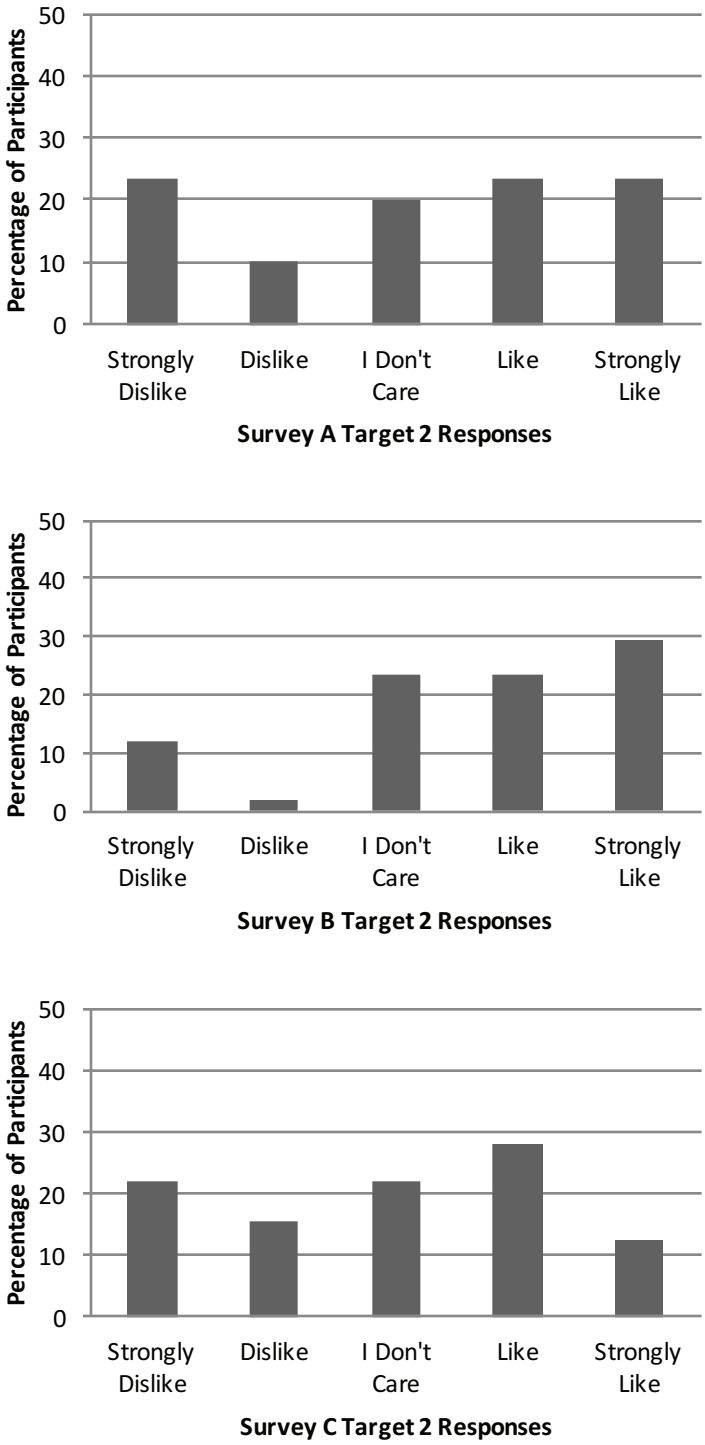


Figure 2. The Distribution of Responses to Target Question 2 Based on Survey Form (Exp. 1)



OBM and Choice Energy
Ex. 1024
Page 24 of 41

Table 1. Mean Approval Rates in Experiment 1 for Target Question 1 based on gender and political party

	Men	Women
Democratic	1.67 (.99) *n*=12	2.13 (.89) *n*=16
Republican	3.44 (1.50) *n*=16	2.71 (1.42) *n*=21

SD in parentheses and number in each group below the mean

(Survey A) than for the Control (Survey C) for which "Dislike" was the modal response. Survey B showed the highest mean, indicating the greatest approval of Senate Bill 11 for those that received the Second Amendment rights frame. This frame also showed the more traditional bimodal distribution for this issue (Haider-Markel & Joslyn, 2001).

Figure 2 displays the percentages of participants' responses to Target Question 2. This question differed from Target Question 1 in that it asked about faculty and staff carrying concealed firearms rather than the generic "individuals" in Target Question 1. The mean for responses on Target Question 2 for Survey A was 3.13 (SD=1.50), for Survey B it was 3.47 (SD=1.35), and for Survey C it was 2.94 (SD=1.37). Unlike the responses to Target Question 1, the distribution of responses to Target Question 2 does not appear to differ very much regardless of framing. Additionally, the means are much higher for Target Question 2 than for Target Question 1, indicating that participants were more accepting of faculty or staff carrying concealed firearms compared to individuals. Target Question 3, which considered "students" carrying firearms, did not show much difference from Target Question 1 so those distributions were not included. The mean for responses on Target Question 3 for Survey A was 2.37 (SD=1.40), for Survey B it was 2.76 (SD=1.21), and for Survey C it was 2.19 (SD=1.33).

As prior research has shown that male Republicans tend to be the most supportive of laws like Senate Bill 11 (Cavanaugh et al. 2012; Thompson et al. 2013), we analyzed the data using a 2 × 2 between-groups Analysis of Variance (ANOVA) with gender and political party as the independent variables and with Target Question 1 responses as the dependent variable. In this analysis, participants who identified a party affiliation other than Democratic or Republican (N=31) were excluded, which left 28 males and 37 females. There was a significant main effect of political party, F (1, 61)=13.74, p<.01. Republicans (M=3.03, SD=1.48) were significantly more approving of individuals carrying concealed firearms on campus than Democrats (M= 1.93, SD=0.94). There was not a significant main effect of gender, F<1. However, there was a marginally significant interaction of political party and gender, F (1, 61)=3.44, p=.068. This interaction indicated that male Republicans had the highest approval of any other group and male Democrats had the lowest approval than any other group. Table 1 shows the means for each of the groups.

Overall, Experiment 1 results supported prior findings. Evidence of priming similar to Haider-Markel and Joslyn (2001) was found. More participants disliked or strongly disliked laws similar to Senate Bill 11 than liked or strongly liked them overall. However, when asked a series of questions regarding Second Amendment rights, more participants liked Senate Bill 11. The school shootings framing had a less dramatic effect on the distribution of preference but did result in more "strong dislikes" than "dislikes" compared to the control survey. Importantly, the framing did not matter as much as demographic characteristics (political party affiliation) and overall approval increased when the group of individuals that were allowed to carry concealed firearms was limited to faculty and staff. Finally, we found that Republican men supported Senate Bill 11 more than Republican women or Democrats, supporting Thompson et al. (2013) and Cavanaugh et al. (2012). However, with such a small sample size, it was unreasonable to perform a larger scale investigation of the results. In Experiment 2, we decided to focus on how the issues involved in the frames (school shootings and Second Amendment rights) were related to approval of Senate Bill 11 by university students.

Experiment 2

Method

Participants. Three hundred and fifty undergraduate students at Stephen F. Austin State University completed the survey online through Qualtrics Online Survey Software. There were 87 male participants and 261 female participants (2 did not indicate gender). The mean age was 19.54 (SD=2.30) and 42 participants did not report age. One hundred and ninety-one participants reported their race or ethnicity as White (54%), 71 reported as African American/Black (20%), 42 reported as Hispanic/Latino (12%), 8 reported as Asian, three reported as American Indian/Native American, 28 reported two or

Table 2. Correlations between Target Questions

	1	2	3	4	5	6	7	8	9	10
1) Target1	—									
2) Target2	.75** (350)	—								
3) Target3	.84** (350)	.76** (350)	—							
4) CFObtain	.42** (349)	.44** (349)	.44** (349)	—						
5) CFViolence	-.58** (345)	-.58** (345)	-.57** (345)	-.04 (345)	—					
6) CFFatal	.53** (346)	.61** (346)	.56** (346)	.46** (345)	-.48** (344)	—				
7) 2ndAmImport	.33** (349)	.43** (349)	.36** (349)	.40** (348)	-.23** (344)	.43** (345)	—			
8) WitnessViolent	.05 (343)	.04 (349)	.07 (343)	.10 (342)	.00 (399)	.07 (340)	.04 (342)	—		
9) ShootKnow	.02 (350)	.10 (350)	.01 (350)	.08 (349)	-.04 (345)	.12* (349)	.20** (349)	.03 (343)	—	
10) ShootPrevent	.20** (348)	.23** (348)	.26** (348)	.12* (347)	-.13* (343)	.18** (344)	.22** (347)	.09 (342)	.09 (342)	1

*$p < .05$ ** $p < 0.01$
The number of participants is indicated in parentheses.

more ethnicities, and seven did not report ethnicity. The Texas Comptroller's Office reported that in 2006 48.3% of Texans were White, 35.7% were Hispanic, 11.4% were Black, and 4.6% reported "other" as their ethnicity (Combs, 2008). Our sample over-represented White and Black participants, but under-represented Hispanic participants as compared to Texans as a whole population.

One hundred and forty-nine participants (42.5%) reported their political affiliation as Republican, 102 (29.14%) reported as Democratic, 38 reported as Independent, 25 reported as Libertarian, and 36 reported a different party or no party affiliation. A Gallup Poll (2008) found that 43.4% of Texans were Democrats or Democratic-leaning Independents and 41% of Texans were Republicans or Republican-leaning Independents. Our sample had a similar percentage of Republicans as the population of Texas but many fewer Democrats than the population.

Seventy-five participants started the survey but either left more than 25% of the questions unanswered or completed the survey in less than three minutes and they were not included in this sample. In return for participating, students received course credit in the form of extra credit.

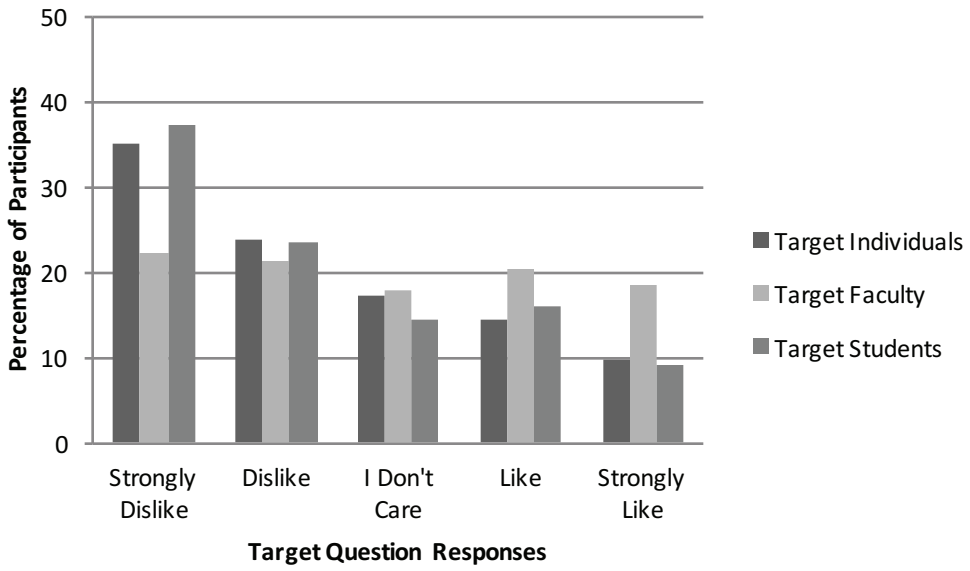
Materials and Procedure. The control survey form C was administered to all participants in this study. This survey was changed to exclude four open-ended questions from the school shooting, Second Amendment rights, and demographic sections. Participants clicked on a link to the survey and were immediately redirected to the consent form. If they gave consent, then they would start with the target questions, then proceed to the Second Amendment rights questions, followed by the school shooting questions, and then finally to the demographic questions. In this experiment, we focused on several of the questions in addition to the three target questions used as the dependent variables in Experiment 1. The Appendix lists the additional questions, as well as the abbreviated name for each question.

Results and Discussion

With a larger sample size, we were able to conduct a more thorough examination of the data. We began by examining some additional demographic characteristics

OBM and Choice Energy
Ex. 1024
Page 26 of 41

Figure 3. The Distribution of Responses to All 3 Target Questions in Experiment 2



and the frequencies of some key variables. We followed that step by examining how some of the Second Amendment beliefs and school shooting knowledge and beliefs correlated with our three target questions. Finally, we analyzed the effect that political party affiliation and gender had on feelings about a law like Senate Bill 11. This analysis was mirrored from the 2 (political party) × 2 (gender) ANOVA conducted on the data from Experiment 1.

Additional Demographics. We wanted to ensure that our sample was representative of the larger Texas population, so we asked the students if they considered themselves Texans and if they were raised in a country or city environment. The vast majority (90.9%) of students did consider themselves Texans. Most students were raised in a city environment (61.4%) but a large minority was raised in the country (38%). Combs (2008) reported that 86% of Texans lived in urban settings, and 14% lived in rural settings. Our sample did over-represent students from rural settings. We also considered how many own or have owned a firearm and found that 30.3% owned a firearm. Kalesan, Villarreal, Keyes, and Galea (2015) reported that the rate of gun ownership in Texas was 35.7% in 2013. We also asked participants how likely it would be that they would obtain a concealed firearm license in the future. Almost half (46.8%) of the participants indicated that they were likely or strongly likely to obtain the license, 33.1% were unsure if they would, and 19.7% were unlikely or very unlikely to obtain a license. Figure 3 contains the distribution of participants' approval of the three target questions. This distribution is overall very similar to Survey A from Experiment 1, with the largest group of participants indicating a strong dislike for "individuals" or "students" carrying concealed handguns on campus. The means for approval for Target Question 1 was 2.40 (SD=1.35), for Target Question 2 was 2.91 (SD=1.43), and for Target Question 3 was 2.37 (SD=1.36).

Correlation Analyses. We conducted a series of Pearson's r correlations on the three target questions, listed in the Materials subsection of Experiment 1, and several additional questions, listed in the Appendix. We selected these questions to understand better how beliefs about Second Amendment rights, beliefs and knowledge about school shootings, and approval of Senate Bill 11 would relate to one another. See Table 2 for all of the correlations between these issues.

The three target questions had strong positive relationships, showing high reliability between them. The questions that showed a significant positive relation with the target questions were those concerning an armed student or professor reducing fatalities during a school shooting, the likelihood that the participant would obtain a concealed handgun license, the rated importance of the Second Amendment in the Bill of Rights, and the belief that school shootings are preventable. The ques-

Table 3. Mean Approval Rates in Experiment 2 for Target Question 1 based on gender and political party

	Republican	Democratic	Libertarian	Independent	Other
Men	3.64 (1.25) *n*=33	2.35 (1.37) *n*=17	3.57 (1.27) *n*=12	2.32 (1.38) *n*=19	2.36 (1.36) *n*=11
Women	2.58 (1.40) *n*=115	1.81 (1.05) *n*=84	2.28 (1.23) *n*=18	1.89 (1.15) *n*=19	2.04 (1.02) *n*=25

SD in parentheses and number in each group below the mean.

tion that showed a strong negative relation dealt with the belief that Senate Bill 11 would lead to a greater number of violent incidents.

Some questions did not show a significant relation with the target questions: the three questions that asked if the participant had witnessed violence and the three questions that asked how much the participant knew about recent, highly publicized shootings, two of which were school shootings. The non-significant correlations for these questions were reported due to previous findings. Cavanaugh et al. (2012) and Thompson et al. (2013) found that being a victim of a gun-related crime was related to feelings about concealed handguns. Cavanaugh et al. (2012) and Haider-Markel and Joslyn (2001) found that participants who followed news media about gun violence or had greater knowledge of political issues were less likely to support laws allowing concealed handguns.

Gender and Partisanship. We conducted a 2 (gender) × 5 (political party) between-groups ANOVA with Target Question 1 as the dependent variable. Bonferroni corrections were made for multiple comparisons. There was a main effect of gender, $F(1, 338)=5.51$, $p<0.05$, with men ($M=2.93$, $SD=1.44$) reporting more approval for Senate Bill 11 than women ($M=2.21$, $SD=1.27$). There was also a main effect of political party, $F(4, 338)=9.28$, $p<0.05$. Republicans reported significantly more support for Senate Bill 11 than Democrats, Independents, or Other Political Affiliations but were not significantly different from Libertarians. Libertarians were not significantly different than any other group. There was not a significant interaction, $F(4, 338)=1.09$, $p>0.05$. Table 3 contains the means for the different gender and political party groups.

Although our participants were recruited from a single university in Texas, this sample was similar in many ways to the general Texas population. Because of the similarity in demographic characteristics, it is likely that the other results would be generalizable to a larger population. Of particular importance though is that these participants are most likely to be directly influenced by Texas Senate Bill 11 since they will spend more time on a university campus than other Texans in the next few years. Overall, the results once again demonstrated that most participants did not support Senate Bill 11.

The correlational analyses found that several issues were positively related to approval of Senate Bill 11. Participants who approved of Senate Bill 11 were more likely view the 2nd Amendment as a particularly important one. They were also more likely to see mass shootings as preventable (perhaps through the greater frequency of normal citizens carrying firearms) and they believed that if students or faculty members were allowed to carry concealed firearms on campus, then the number of fatalities from an active shooter would be reduced. This correlation also indicated that for those participants who did not approve of Senate Bill 11, they did not value the Second Amendment as much and were less likely to view mass shootings as preventable by a concealed firearm carrier.

When we examined how gender and partisanship affected approval of a law like Senate Bill 11, we found that Republicans were more likely to support the law than participants with different party affiliations (except Libertarians) and male Republicans showed the greatest approval. Unlike Experiment 1, male Democrats were more likely to support the law than female Democrats. For all of the political affiliations, men showed greater support than women.

Conclusion

In two experiments, we explored university students' approval of a law like Texas Senate Bill 11. In both experiments, the majority of students indicated that they strongly disliked or disliked the law. In Experiment 1, we found that the theme of the questions before the target

OBM and Choice Energy
Ex. 1024
Page 28 of 41

questions concerning a law like Senate Bill 11 had an effect on the distributions of participants' approval rates. When participants were asked questions about Second Amendment rights first, more participants approved of Senate Bill 11. When participants were asked questions about school shootings and experiencing violence before the target questions, more participants "strongly disliked" Senate Bill 11. In Experiment 2, the distribution was more similar to the school shooting frame than the control version, even though all participants took the control version of the survey.

This finding of similarity between Experiment 1 and 2 on approval of Senate Bill 11 conflicted with the findings of Wells, Cavanaugh, Bouffard, and Nobles (2012). They found that a group of participants that completed a concealed firearms survey online showed greater support for concealed firearms on campus than the group of participants that completed the same survey in a classroom setting. One difference between Wells et al. (2012) and the current study was in participant recruitment. They utilized students in a classroom setting for one group but then emailed all registered students, faculty members and staff asking for volunteers to complete the survey. In our study, students in Experiment 1 participated in a classroom environment but they were able to complete extra credit through research participation in addition to completing the current survey, and participants in Experiment 2 were students seeking course credit and chose to complete this survey online for that extra credit. Thus, our participants in the two experiments were likely more similar than the participants in the two different conditions of Wells et al. (2012).

The results did support the findings of Thompson et al. (2013) and Cavanaugh et al. (2012) in several aspects. The majority of our participants did not support a law like Senate Bill 11, although our participants were more evenly divided between non-support and support than in either Thompson et al. (2013) or Cavanaugh et al. (2012). It is likely that our sample included a larger percentage of rural participants (leading to more experience with firearms) and Republican participants than either of those two studies. Like those two studies, we found that males in general showed greater support of Senate Bill 11. In two aspects, our results did not support the findings of Thompson et al. (2013) and Cavanaugh et al. (2012). We did not find a relation in Experiment 2 between experience of violence and (non)support for Senate Bill 11, nor did we find a relation between knowledge of violent events and support for Senate Bill 11.

There were several limitations of this study. In Experiment 1, the sample was too small to be able to examine the correlations between beliefs and knowledge and support for Senate Bill 11. In Experiment 2, we only examined correlations and did not use framing as a variable. Ideally, in the future, a large enough sample could be obtained to use the different framing versions and still examine the relations between beliefs. Additionally, we did not ask any faculty or staff members to take the survey. They are also greatly affected by Senate Bill 11 and their opinions should also be taken into account. One aspect of Senate Bill 11 that has not been studied is the ability of the higher administration of the universities to determine any areas on campus exempt from the concealed firearm law.[2] Given that students are not supportive of other students' carrying firearms, perhaps classrooms or residential halls will be selected as no-firearm areas.

Although many students dislike Senate Bill 11, almost half of the participants from Experiment 2 stated that they intended to obtain a concealed firearm license at some point in the future. Those participants that do support Senate Bill 11 are largely Republican men and they are more likely to believe that more concealed firearms on campus can prevent fatalities in an active shooter situation. Unfortunately, research has yet to support this belief. Research that asked students if they support a law like Senate Bill 11 has overwhelming found that the majority of students do not want more firearms on campus (Cavanaugh et al., 2012; Thompson et al., 2013).

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Notes

1. This study originated as a collaborative research project created by and the students in Experimental Methodology in Psychology during Fall 2013.
2. Although the intent of the law is to allow licensed concealed firearm holders to carry their guns on campus, some areas can still be deemed as no firearm areas.

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OBM and Choice Energy
Ex. 1024
Page 30 of 41

Appendix

List of Target Questions for Experiment 2

Abbreviated Name	Question Wording
CFLaw	How familiar are you with Texas' current concealed firearm laws?
CFObtain	How likely would it be that you will obtain a concealed firearm license in the future?
CFViolence	Do you believe that if students/professors were allowed to carry firearms on SFASU campus that it would lead to greater number of violent incidents?
CFFatal	Do you believe that an armed student/professor could reduce the number of fatalities from a person committing a shooting at SFASU?
2ndAmImport	Do you believe that the Second Amendment is an important right in the Bill of Rights?
WitnessViolent	Sum of yes/no responses to 3 questions: Have you witnessed (school violence/domestic violence/firearm violence) that caused serious injury or death?
ShootKnow	Average of Likert scale responses to 3 questions: Are you familiar with the shooting at (Sandy Hook Elementary School/Virginia Tech University/Aurora Colorado at a movie theatre)?
ShootPrevent	Do you believe that any or all of these shootings could have been prevented?

The Dream Team, Texas Democrats, and Turnout: A County-level Analysis of the 2002 Elections in Texas

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abstract: *In the 2002 statewide election Texas Democrats assembled the Dream Team, a racially diverse set of candidates consisting of Tony Sanchez, the first Hispanic candidate for governor; Ron Kirk, the first African-American candidate for U.S. Senator; and John Sharp, an experienced White candidate for Lieutenant Governor. Democrats hoped that the Dream Team would increase voter turnout among minorities in a state with a rapidly growing Hispanic population. Yet the hoped for turnout did not materialize and the Democrats were shut out of statewide races for the second consecutive gubernatorial election. Using county-level data, this article examines the effect the Dream Team had on voter turnout, especially among Hispanics, and how it affected the election results.*

The 1990s began with great promise for Texas Democrats. After the 1990 election, Democrats controlled all but six of the 27 statewide elected offices, including the most visible ones, and had comfortable majorities in both houses of the state legislature. Party fortunes quickly changed, though. By the end of the decade Republicans won all 29 statewide offices handily, were the majority party in the state Senate, and were closing in on capturing the House of Representatives.

The Democrats hoped that the 2002 election would be different. Their plan to reverse the Republican winning streak was to change the electoral dynamics by running a racially diverse set of candidates that came to be known as the Dream Team. The Dream Team featured Tony Sanchez, the first Mexican-American to run for governor; Ron Kirk, the first African-American candidate for U.S. Senate; and John Sharp, a Caucasian who was a well-known fixture in Texas politics, to run for lieutenant governor. Democrats hoped that a Black and a Hispanic candidate at the top of the state Democratic ticket would excite the party faithful and mobilize the state's large minority population, particularly the burgeoning Hispanic population, which votes primarily for the Democratic Party. Their hopes were buoyed by Sanchez's promise to spend whatever money of his personal fortune was necessary to secure the gubernatorial election, thus alleviating Democrats' fears of not being able to compete financially with Republicans. The 2002 election also seemed more winnable for Democrats because, unlike 1994 and 1998, George W. Bush was not heading the Republican ticket as governor, and the Republican candidates appeared less formidable than the candidates who ran four years earlier.

The Democrats' dreams and well-laid plans were all for naught, however. The 2002 election was a Republican rout. The troika of Sanchez, Kirk, and Sharp failed miserably, and Republicans won every statewide race easily. In the races featuring the Dream Team members, incumbent governor Rick Perry handily defeated Sanchez with 58% of the vote to Sanchez's 40%, Cornyn won 55% to Kirk's 43%, and in the closest statewide election of the year, Dewhurst defeated Sharp 52% to 46%.

Because the Dream Team was an experiment that had never before been tried in Texas, this article examines the effect of the Dream Team on the 2002 election. It briefly highlights how Texas had become a Republican state by the 2002 election, discusses the efforts the parties made that year to increase voter turnout, and explains the importance of race in elections and the role it played in the 2002 election. The article specifically looks at how successful the Dream Team was in accomplishing the goal of mobilizing the Democratic base and the traditionally dormant Hispanic population, and also examines the effect of the Dream Team on how Hispanics and Whites voted.

From Democratic to Republican State

The fortunes of the Republican Party in Texas changed dramatically in a relatively short time. For most of the 20th century the Democratic Party dominated Texas

OBM and Cholla Energy
Ex. 1024
Page 32 of 41

politics and the Republican Party struggled to survive. Indeed, the political battles in Texas for most of its history were not between Republicans and Democrats but rather between Democrats and other Democrats.

Despite the difficulty the Republican Party has traditionally had in Texas, by the late 1970s and early 1980s, the political landscape began changing and the Republican Party in Texas began to grow. One source of Republican growth in Texas was from the flood of people moving to Texas with Republican predilections. Republicans also benefited from the changes in the Democratic Party that made the Democrats less appealing to conservative Whites—the backbone of the Democratic Party in Texas. With the growth of the civil rights movement and the increase in minority suffrage, the liberal wing of the Democratic Party gained more power and the conservative White Democrats in Texas felt increasingly displaced and their positions in the party threatened. They began looking to the Republican Party as an alternative (Cunningham, 2010; Gibson & Robison, 2013; Maxwell, Crain, & Santos 2014).

Although the Republican Party enjoyed modest but noticeable gains in the 1970s and 1980s, few expected the dramatic transformation that took place in state politics in the 1990s. In 1993, after a special election to replace Democrat Lloyd Bentsen as United States Senator, both Texas Senators were Republican. In 1994 George W. Bush defeated a popular Democratic incumbent, Ann Richards, and Republicans captured four other statewide offices, marking the most statewide gains by Republicans in any single election since Reconstruction. In 1996 Republicans captured all 10 offices of the statewide general election ballot and became the majority party in the state Senate for the first time since Reconstruction. Two years later Bush trounced his Democratic challenger with 68% of the vote and, more demoralizing for the Democrats, Republicans gained control of all 29 statewide elected offices. In 2000 Texas voted for the Republican candidate for the sixth straight presidential election, and in 2002 Republicans easily won all statewide elections and became the majority party in the Texas House of Representatives for the first time since Reconstruction (Maxwell, Crain, & Santos, 2014).

Voter Turnout

Despite the success of the Republican Party in Texas in the 1990s, the tremendous growth of the Hispanic population in Texas posed an apparent threat to Republican dominance and provided an opportunity for a Democratic resurgence in 2002. In 1990 Anglos composed 60.7% of the Texas population and the Hispanic population 25.6%. However, by 2002 51.5% of the Texas population was Anglo and 33.4% of the population was Hispanic, with Blacks staying about the same throughout this period with just under 12% of the population (Texas Department of State Health Services, 2011). These demographic changes were politically significant because White and minority voters exhibit different voting patterns. Blacks and Hispanics now largely identify with the Democratic Party and vote overwhelmingly for Democratic candidates. Whites, on the other hand, vote Republican and identify more with the Republican Party than the Democratic Party (DeSipio, 1996; Bardes & Oldendick, 2000; Wayne, 2012; Erikson & Tedin, 2011).

Although the Democratic Party enjoys widespread support from Blacks and Hispanics, the problem for Democrats is that these groups, especially Hispanics, have a lower voter turnout than whites (Cassel, 2002; Citrin & Highton, 2002). By running Hispanic and Black candidates at the top of the ticket, Democrats hoped that minority voters would take more interest in the election and be more motivated to vote. To make this happen the Democratic Party went to unprecedented lengths to register new voters and mobilize them to vote. The Every Texan Foundation planned to register 500,000 new voters with Spanish surnames, and the Democrats, particularly Sanchez, spent considerable resources registering and encouraging minorities to vote (Ratcliffe & Williams, 2002b; Sylvester, 2002). Not to be outdone, Republicans also aggressively sought out new voters, promising that 400,000 new Republican voters would be registered for the election (Richter, 2002).

Both parties also worked to get their people out to the polls. The Republicans had people going door to door in 40 counties and had hundreds of phone lines dedicated to getting people out to vote. John Sharp said Democrats spent $10 million on getting out the vote statewide, and Sanchez's campaign manager said Democrats spent three or four times more than ever before and organized in every part of the state (McNeely, 2000c). Sanchez said that on one weekend his workers canvassed 1.1 million doors across the state. In Houston a force of 1,200 people, most of whom were paid, went to 600,000 households in the three weekends leading up to the election. Sanchez said, "What we are doing has never been done in any state in the nation" (Gwynne, 2002).

The Democrats were hopeful that the Dream Team would appeal to minorities so they would register and

vote. They saw their path to victory was to take advantage of the state's growing minority population and to try to change the makeup of voting public. However, efforts to appeal to minority voters created a conundrum for the Democratic Party. If candidates or parties actively court and design a campaign around appealing to minority voters, candidates and parties risk alienating the White population (see Sonenshein, 1990; Petrow, 2010). Despite the growing Hispanic population, Whites were still the majority in Texas in 2002 and made up an even greater percentage of voters; Democrats could not afford to disregard the White vote. Democrats estimated they needed to win about 35% of the White vote and thus needed to appeal to independent and moderate White voters. Yet if they focused their message to appeal to White voters, they feared they would not be able to mobilize minority voters, and the purpose of the Dream Team would be negated. Indeed, many Democrats worried that the Dream Team, especially Kirk, sounded too Republican and would not energize the Democratic and minority bases (Williams, 2002).

Race in the Campaign

Despite Sanchez claiming "I'm not running as a Hispanic," or Kirk contending that "the fact that I'm African-American is irrelevant" (Kiely, 2002), race was, of course, a factor in the campaign (Casey 2002; Fikac, 2002; Robison, 2002; Russell, 2002). Columnist Dave McNeely (2002a) contends that "Race has always been at least a background factor in Texas politics." In 2002 the Democratic party guaranteed that race would be more than a "background factor," however, by designing a ticket whose main appeal to the party was that it was racially diverse. Indeed, one of the reasons Democrats were excited about Sanchez and Kirk was their race and their hoped for appeal to the minority population in the state. Republicans reacted by attempting to keep that appeal to a minimum and both parties battled to define the Dream Team on their terms—the Democrats portraying the Dream Team as racially inclusive and the Republicans portraying it as racially divisive (McNeely, 2002a). Moreover, both Republicans and Democrats talked of race in calculating turnout and the percentage of votes each side needed to win among Whites, Hispanics, and Blacks. As Paul Burka (2002) wrote in the *Washington Post*, "This election is all about fundamental politics: race, party, turnout."

Race was a factor early in the campaign season, beginning in the Democratic primary. In the senatorial race Ron Kirk ran against two other challengers that were considered to have a chance of winning. One was White (Ken Bentsen) and the other was Hispanic (Victor Morales). Although it was a tight, three-way race and race was likely a factor in the vote, the candidates themselves did not make race an issue.

The same could not be said about the Democratic primary for governor. This race pitted Tony Sanchez against Dan Morales, a two-term, former attorney general of Texas, who at the last minute surprised the party hierarchy and political pundits by seeking the nomination for governor. With an unexpected challenge from a well-known Hispanic candidate, Sanchez felt compelled to distinguish himself from Morales by focusing on Sanchez's Hispanic heritage. Morales reacted bitterly and accused Sanchez of running a "race-based" campaign (Ratcliffe, 2002a), and charged that Sanchez was running for "governor of Mexico" (Balz, 2002).

Both candidates agreed to a debate in Spanish, the first debate for a major statewide office in which the questions and answers were to be solely in Spanish. Sanchez saw this as an opportunity to show that he was the true Hispanic by contrasting his fluid Spanish with Morales's more pedestrian Spanish language skills. In the debate Morales decided to appeal to White Democratic voters by translating his answers into English, arguing "that the vast majority of the citizens of our state speak English" (Ratcliffe, 2002a). Sanchez responded by speaking Spanish throughout the debate and accused Morales of being ashamed of his Hispanic heritage (Fikac & Castillo, 2002).

Sanchez's efforts to stress his Hispanic roots led to a high turnout in the primary among Hispanics, and he easily outperformed Morales to win the nomination. Yet Sanchez's strategy may have been damaging to his chances in the general election. The Spanish-only debate, Sanchez's brandishing of his Hispanic heritage, and his ardent support of affirmative action made race more of an issue than it might have otherwise been. Although such an approach may have appealed to Hispanics, it also might have turned off many Whites (Ratcliffe, 2002b). Republicans wanted to make sure that it did.

Once the Democrats had settled on the Dream Team, the Republicans quickly moved to infuse race into the campaign and to define the Dream Team on Republican terms. The day after Kirk won the Democratic senatorial nomination in a runoff and all three members of the Dream Team were set, Dave Beckwith, spokesperson for Kirk's Republican opponent John Cornyn, said, "This dream ticket is cynical. It is based on a racial quota system. In the end, it will not work because most people

OBM and Choice Energy
Ex. 1024
Page 34 of 41

vote on issues and philosophy, not on race" (Falkenberg, 2002). Cornyn reprimanded Beckwith for his comments and promised the campaign would be "run solely on the issues and not based on any inappropriate considerations like race" (Copelin & Susswein, 2002). Despite Cornyn's assurances, though, Republicans continued to press the race button. Phil Gramm, the retiring senator whose seat Cornyn and Kirk were vying to fill, portrayed the Dream Team as a racially divisive tactic by the Democrats. At the state Republican Party convention he said "the Democrats believe that they can divide Texas based on race. That is their dream, and that is their vision. This election is about rejecting that dream and vision once and for all." He also characterized the Spanish-language debate between Sanchez and Morales as racist, an attempt "to sever the bonds that bind us together." Gramm said "we are first, last, always and forever Texans and Americans – and we're damn proud of it. Let me give the Democrats a message. We look different. Some of us talk different. Our skins are not the same color. Our ethnic origins are not the same. But what's important as a Texan and American is not the color of your skin and not where your grandfather came from but what is in your heart" (Rushing, 2002).

The Democrats reacted strongly to Gramm's words. Mark Sanders, Sanchez's press aide said "this is outrageously insulting. If this is an effort by Rick Perry and Phil Gramm to play the race card, they should be ashamed of themselves. This is a shameful political tactic to divide this state." Molly Beth Malcolm, the state Democratic chair, said the Republicans "chose to play the race card" because "they didn't want to talk about their right-wing platform. By misrepresenting the Democratic ticket as a quota-driven appeal to race, the Republicans have launched a very cynical attack of division that essentially tells Texans that a qualified African-American is not fit to run for the Senate, that a qualified Hispanic is not fit to run for governor" (Ratcliffe and Williams, 2002a).

Both parties and the candidates tried to shape how the public viewed the Dream Team and reacted to Black and Hispanic candidates at the top of the ticket. It was with good reason: race matters in American politics. Many studies show that a candidate's race affects voters' attitudes towards a candidate. People view Black candidates differently from White candidates (Williams, 1990; Sigelman, Sigelman, Walkosz, & Nitz, 1995; Sears, Van Laar, Carillo, & Kosterman, 1997). Voters stereotype Black and Hispanic candidates as "highly attuned to black and Hispanic interests" (Sigelman et al., 1995, 261; Williams, 1990; McDermott, 1998) and voters' perceptions of minority candidates align with ethnic stereotypes (Sigelman et al., 1995, 261). Indeed, Sigelman et al. argue that "a candidate's race-ethnicity . . . in interaction with his stands on issues influences how voters perceive him and whether they will likely vote for him" (1995, 258). As examples research has found that racial attitudes have played a significant role in mayoral elections and city politics (Kinder & Sears, 1981; Kleppner, 1985; Browning, Marshall, & Tabb, 1990; Perry, 1996; Jennings, 1997), statewide elections (Sonenshein, 1990; Perry, 1996), Jesse Jackson's presidential candidacy (Reed, 1986; Sears, Citrin, & Kosterman, 1987; Barker & Walters, 1989; Abramowitz, 1994), Barack Obama's presidential candidacy (Fraser 2009, Mas, & Moretti, 2009; Schaffer, 2011; Redlawsk, Tolbert, & Franko, 2014) and in campaigns where White candidates have been accused of playing the "race card" (Kuzenski, Bullock, & Gaddie, 1995; Kinder & Sanders, 1996; Mendelberg, 1997).

Method

The effect of the Dream Team on voter turnout and the level of support that the Dream Team received from different groups is examined using aggregate data collected at the county level. The official canvassed election returns were obtained from the Texas Secretary of State's webpage (http://www.sos.state.tx.us). Demographic data were collected from the Texas State Data Center and the Office of the State Demographer (http://txsdc.tamu.edu).[1]

Support for the Dream Team is measured using the percentage of voters in each of Texas' counties who cast a ballot for Tony Sanchez. This was chosen because of the strong correlation of support for Sanchez with that of Kirk and Sharp. The correlation coefficient between the Sanchez vote and the Kirk vote is .968 (p=.0001), between the Sanchez vote and the Sharp vote is .893 (p=.0001), and between the Kirk vote and the Sharp vote is .928 (p=.0001). A factor analysis conducted on the three votes revealed one factor with a reliability of .9732. For the sake of parsimony, we can examine just the vote for Sanchez and reach similar conclusions about the votes of the other members of the Democratic Party's Dream Team.[2] Turnout is measured as the percentage of each county's registered voters who actually voted.

We also include other variables that have been shown to affect whether people vote and how they vote: socioeconomic status, race, partisanship, and fluidity of county population (Verba & Nie, 1972; Wolfinger & Rosenstone, 1980; Squire, Wolfinger, & Glass, 1987; Teixeira, 1987; Leighley & Nagler, 1992a; Verba, Schlozman, & Brady,

1995; Leighley, 2001). Socioeconomic status is measured by calculating the percentage of college graduates and per capita income, and race is measured using the percentage of Anglo and Hispanic population. Because Texas voter registration does not record the party identification of voters, partisanship is measured by using the percent of the vote received by Democrat John Sharp in the 1998 Lieutenant Governor's election. This was the most recent statewide election of significance with two quality candidates and a narrow vote margin separating the Democratic and Republican candidates. The supposition is that Democrats turned out for Sharp and Republicans backed the Republican candidate Rick Perry. Each county's population change from 1990 to 2000 is also included as a variable because it is expected that rapidly growing counties with many new residents will lack a sense of community and tend to have lower voter turnout.

Analysis

To win elections candidates and parties not only have to get people to support them but they must also get their supporters to vote. In the 2002 Texas election turnout was less predictable than usual because of the Democratic Party's aggressive attempt to mobilize minorities to register and vote Democratic. However, Table 1 indicates that these efforts did not pay off in the way the Democrats had hoped. Although by historical standards the 81% of the voting age population that registered to vote in 2002 was very high, it was less than it was in the previous gubernatorial election in 1998.

More importantly, however, was the turnout, which was lower than both parties expected. The 4,553,979 votes was 10% lower than the five million the secretary of state had predicted before the election and 25% less than the Democrats had hoped for (McNeely, 2002b). Although the turnout was higher than the one in 1998, it is considerably lower than what was expected and lower than many previous gubernatorial elections. It is also more understandable that the 1998 election had a low turnout. It offered a popular governor who did not face a serious challenge from the Democratic nominee and did not have a U.S. Senate seat up for election. The 2002 election, on the other hand, featured an open U.S. Senate seat, a more competitive gubernatorial race, and the most expensive election in state history with millions of dollars funneled toward increasing turnout. It seemed that the setting was ripe for a good turnout.

Compounding the problem of low voter turnout for Democrats is that the hoped for Hispanic turnout did not materialize. Table 2 shows a negative correlation between the Hispanic population and voting, while the Anglo population was positively correlated with turnout. While Table 2 shows that Hispanics strongly supported Sanchez, it also shows that Sanchez had the least support in counties with large Anglo populations, verifying that Democratic fears of the Dream Team's inability to tap into the Anglo vote were legitimate. In other words, the group that had a low turnout was also the group on which the Democrats had rested their election hopes. Although Hispanics voted for Sanchez, their low turnout made the effect minimal. Moreover, as Table 3 indicates, Democrats did not get any more of a boost from the Dream Team than they would have had anyway. Table 3 shows that the Democratic support explains most of the vote for Sanchez. In short, the Dream Team was able to keep Democratic voters in the fold but added nothing to their vote tally by running the Dream Team and trying to attract Hispanic voters.

Conclusion

The Dream Team was a big story because of the candidates' race. Although the candidates lost, it is unlikely they lost because of their race. By the end of the 1990s Texas had become a solidly Republican state and continues to be; the 2002 election was just another manifestation of Republican dominance.

Part of the reason for Republican success in the 2002 election was that they did not sit idly, willing to concede minority voters to the Democrats (Balz, 2002; Jacoby, 2002; Schneider, 2002; Williams, 2002). Republican leaders in Texas were just as aware of the demographic changes in Texas as Democratic leaders were, and Republicans in the 1990s courted the Hispanic population. Although they did not win a large percentage of the minority vote in 2002, it was more than offset by the poor Democratic showing among White voters. Indeed, the Democratic strategy of selecting the Dream Team was ineffective and perhaps even counterproductive. The voters who voted for Sanchez and Kirk (liberals and minorities) likely would have voted for any Democrat. By having Sanchez and Kirk at the top of the ticket and making race an issue, Democrats had a tougher time appealing to independent and moderate white voters (see Petrow 2010). Despite the demographic changes in Texas that have resulted in Whites becoming today less than half of the

OBM and Choma Energy
Ex. 1024
Page 36 of 41

Table 1. Voter Registration and Turnout in Texas Gubernatorial Elections (1974–2002)

	2002	1998	1994	1990	1986	1982	1978	1974
Percentage of VAP Registered	80.9	81.9	66.09	61.48	61.51	59.95	60.63	64.61
Percent of Turnout to RVs	36.2	32.4	50.87	50.55	47.23	49.74	41.71	30.94
Percent of Turnout to VAP	29.3	26.53	33.62	31.08	29.05	29.82	25.29	19.99

Table 2. Correlations

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
(a) Sanchez Vote (%)	1							
(b) Turnout (%)	-.460**	1						
(c) Population Change 1990–2000 (%)	-.058	-.073	1					
(d) Anglo Population (%)	-.724**	.412**	.076	1				
(e) Hispanic Population (%)	.639**	-.309**	-.125*	-.943**	1			
(f) Sharp in '98 (%)	.849**	-.353**	-.149*	-.503**	.414**	1		
(g) College Grads (%)	-.327**	.169**	.419**	.229**	-.222**	-.470**	1	
(h) Per Capita Income ($)	-.486**	.169**	.429**	.530**	-.527**	-.484**	.722**	1
(i) Population over 18 (%)	-.350**	.289**	.073	.581**	-.618**	-.103	.085	.290**

* Correlation is significant at the 0.05 level (2-tailed) ** Correlation is significant at the 0.01 level (2-tailed)

Table 3. OLS Regression of County Vote for Sanchez (N=254)

	Sanchez Vote	
	Beta	p
Turnout	-.075	.009
Population Change 1990–2000	.047	.091
Anglo Population	-.291	.001
Hispanic Population	.005	.954
Sharp in 1998	.697	.000
College Graduates	.104	.008
Per Capita Income	-.051	.245
Population over 18	-.082	.011

R^2=.925 Adj. R^2=.856 p=.0001

Source: Computed by authors using data from the Texas State Data Center and the Texas Secretary of State.

population, the majority of voters in the state still remain White. Democrats won the minority vote, but there are many more White voters than minority voters.

The main problem the Democrats faced in 2002 with courting and relying on minority turnout is that minorities have a long history of not participating in Texas electoral politics. The 2002 election shows that having minority candidates run for office is not enough to increase minority turnout in Texas. Indeed, a statewide poll commissioned by the *Houston Chronicle* and KHOU-TV in September 2002 showed a decided lack of interest in the campaign among minorities. Even with two minorities at the top of the Democratic ticket, the poll showed that 54% of Hispanics and 59% of Blacks were interested in the election compared to 76% of Whites (Rodriguez, 2002). Perhaps what was needed were issues that were salient or antagonized the minority population. In California, for example, Proposition 187, the initiative to reduce services for undocumented immigrants, was voted on in 1994. This issue was salient to Hispanics and other minorities and led to a 9% increase in turnout among Hispanics from the 1990 election (Citrin & Highton, 2002). But there have been no such issues in Texas that have grabbed the attention of minority voters and spurred minority turnout.

Unlike some election years, Democrats could not blame the lack of funding for their poor showing in 2002. Sanchez in particular had enough money to get his message across and in fact set records for campaign spending in Texas. Sanchez spent millions of dollars on advertisements and began running commercials, including negative advertisements against Governor Perry, in the spring for the general election that took place in the fall. By early summer, Governor Perry responded in kind. In a campaign that was banking on increased turnout among minorities, this was perhaps the wrong strategy to follow. There is the possibility that the early negative campaigning turned off potential voters, particularly those who usually do not participate. As it was, Sanchez spent millions of dollars attacking Perry but perhaps never gave voters a reason to vote for Sanchez.

Although the Dream Team was a first in Texas, it was likely a precursor to a time that is approaching in Texas when having a Hispanic gubernatorial candidate will no longer be the exception. With the changing demographics, more and more Hispanics will run for high elected office in Texas. Given the dominance of the Republican Party and the dormant Hispanic population, however, in the near future a Hispanic candidate has a better chance of winning by running as a Republican than by running as a Democrat and hoping to mobilize the Hispanic population.

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OBM and Choma Energy
Ex. 1024
Page 38 of 41

Endnotes

1. Demographic data could have been obtained from the United States Bureau of the Census, but the data at the Texas State Data Center were presented in a manner that made importing it into an SPSS data file much easier. Please recall that Texas has 254 counties.
2. These coefficients also indicate that analysis before the election suggesting that Hispanic voters would vote for the Hispanic candidate but not for the black candidate was unfounded (Jacoby 2002; Meyerson 2002; Rodriguez 2002).

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OBM and Choma Energy
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Page 40 of 41

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