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IS HOW YOU SAY IT MORE IMPORTANT THAN WHAT YOU SAY? ISSUE FRAMING
IN CONTROVERSIAL PUBLIC POLICY DISCOURSE: THE CASES OF NEEDLE
EXCHANGE AND STEM CELL RESEARCH IN NEW JERSEY

by

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ABSTRACT OF THE DISSERTATION

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Framing an issue often sets the parameters of any public policy debate, including healthcare, and Issue Framing may predetermine the outcome. Can Issue Framing explain why New Jersey, a traditionally activist state, played a leading role on Stem Cell Research while lagging behind on Needle Exchange programs? It is hypothesized that Issue Framing will play a large role in explaining this legislative dichotomy. This hypothesis was found to be partially correct after analyzing both primary and secondary sources. Issue Framing was found to play a role in the debate phase of the policy process, but other factors also contributed to the different paths of Needle Exchange and Stem Cell Research in New Jersey.

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I. Problem Statement/Issue Review

Purpose: This chapter will briefly discuss the specific question proposed for study; the hypothesized outcome and other potential outcomes. It will also explain why New Jersey was chosen for the case study; provide a legislative history and explanation of needle exchange; and review the Stem Cell Research issue.

As most practitioners know, the comfortable truism about epidemiology that public health schools teach their graduate students – that epidemiology is the basic science of public health – is not actually true. It may be closer to the reality to say that politics is the basic science of public health. (Moss 2000)

Politics and public health have been intertwined since people began living together in groups. As diseases spread, discussion ensued regarding healing the sick and ending the contagion. In the United States, these debates have occurred at least as early as 1793, when the fledgling country was facing a yellow fever crisis (Moss 2000). This clash between political will and science often involves value driven or morally driven arguments that come to characterize the debate in the public, as well as the political, realm.

Yet it is exactly this concept of debate that serves as the cornerstone of our policy process. From the founding fathers to the present day, differing opinions and debate about issues and the ability to freely discuss these differences, provides the foundations for our democracy. Rosenthal et al (2003) assert that conflict and difference are actually great assets for a democratic polity and point out that the crafters of the Constitution missed few opportunities to inject conflict into the American political structure.

Policy debates focus on specific problems or issues including health questions. Possible solutions are discussed and debated in a public forum

comprised of various participants. The act of converting conditions to problems in the public policy arena includes two related activities: agenda setting and issue framing. Agenda setting includes introducing an issue into a public setting to get people to take notice. A problem, once placed in the realm of policy debate, can be defined and redefined at various points during the discourse.

This process of defining/redefining is also known as issue framing. Nelson and Oxley (1999) define issue framing as: "...alternative definitions, constructions or depictions of a policy problem." Groups with different views seek to characterize issues in terms that will convince others to support their position. These "others" include a variety of actors, all of whom have a direct impact on the policy process: the press, the general public, policymakers and advocates.

In the public policy arena, different groups supporting various initiatives are vying for attention. They strive to focus attention on a problem the group considers to be important; they also seek to define the problem, or frame the issue, in a way that best advances their views. This "explanation" then becomes an accepted version as it is repeated by the media and introduced to the general public. "Framing effects are powerful and different frames produce widespread changes in the ways that people respond to a single issue" (Jacoby 2000). The use of words, language and images are key in crafting an effective message frame.

Morality Policies: The Role of Science in Health Care Issues.

While policies may be adopted for a number of different reasons, and while the

policy process is institutionalized to generally follow a similar pathway regardless of issue type, the factors that influence morality policies do differ from other policies.

Mooney and Lee (1995) define morality policies as “Policies...that seek to regulate social norms or which evoke strong moral responses from citizens [very often] resulting in an uncompromising clash of values”. The abortion issue is one of many morally charged political situations which often involve health care policies; other examples include the related Stem Cell Research issue as well as treatment for HIV/AIDS. Morally-charged subjects often become surrounded by unique political debates. For example:

The abortion debate makes many social scientists squirm. The issue does not seem to fit the normal logic of American politics – wheeling and dealing, logrolling and compromise. As one analyst ruefully put it, fertility issues seem to be more about morality than policy analysis. That may not look like politics as usual, but it reflects what might just be our oldest political legacy. The really big battles are rarely about compromising differences or fine tuning policies. Instead, they define who we are – often by invoking visions of good and evil (Morone 2003).

The Puzzle. Framing is inherent in the concept of a “moral” crusade, a frequent tool used during health discussions: “[Participants in the needle exchange debate] condense policy into two-word slogans, aim at the emotions rather than the intellect and sometimes work by invoking guilt or fear...” (Moss 2000). This paper examines the factors that can alter a public policy debate centered around two health issues which have often evoked value-driven discussions, Needle Exchange and Stem Cell Research. Given the politically moderate reputation of New Jersey, why has Stem Cell Research received quicker legislative action while Needle Exchange lagged behind?

Stem Cell Research has been a relatively new public health issue. By allocating millions of dollars for research, New Jersey became a national leader on Stem Cell Research despite opposition from the pro-life community and scientific uncertainty that the research will be successful. Additionally, this issue received support from the Governor, legislature and, ultimately, the public.

The relatively quick rally to support Stem Cell Research stands in contrast to the decade-long struggle to create a Needle Exchange program in New Jersey. Despite a number of studies supporting Needle Exchange as part of a comprehensive AIDS strategy and the fact that the 49 other states allow some type of Needle Exchange program, what took New Jersey so long? Traditionally a moderate state, why would New Jersey provide leadership in one scientifically uncertain area of Stem Cell Research while falling so far behind the curve on Needle Exchange, where much of the literature indicates success?

I hypothesize that the success of the Stem Cell Research and the stagnation of Needle Exchange may well be at least partly explained by issue framing theory. Stem Cell Research involves mobilization around deeply rooted, often clashing values: the protection of early human life on one hand and solidarity with the sick on the other (Banchoff 2005). By presenting Stem Cell Research as benefiting a wide range of people who suffer from debilitating illnesses, supporters were able to make this issue palatable for the mainstream, despite protests by anti-abortion activists and unproven results. Additionally, the

lack of conclusive research worked to the advantage of advocates who could hold out the “possibility” of success stories.

On the other hand, Needle Exchange programs have been touted as encouraging drug use and identified with poor, sick people. While a majority of research points to the benefits of these programs when used as part of a comprehensive approach to combating HIV, some argue the opposite. The existence of contradictory information in the political arena forces participants to take sides and often the debate becomes characterized by misinformation.

“Yet it is inevitable that scientists and players in the political arena will pursue different missions and speak different languages... Research findings do not always carry the day, but very often frame the context in which issues are discussed” (Collins and Coates 2000).

Case Studies: Needle Exchange and Stem Cell Research –

Controversial Health Issues in New Jersey. The public policy process, in encouraging discussion and debate, tends to generate controversy over certain issues involving public health. These policies may be particularly contentious because: a) health issues affect every citizen; b) expenditures may be large; c) illness, or the threat of it, looms; and d) value judgments are strong. Particularly

when decisions impact morals and values, diverse views will be held and promoted.

Indeed, the ongoing ‘competition’ between varying presentations of social problems and issues may well be one of the most important dynamics underlying modern political conflict” (Jacoby 2000).

Two public health problems - the spread of HIV/AIDs and Stem Cell Research – have spawned different solutions in New Jersey. Since the federal government had long been prohibited from active involvement in either of these issues, states

have been creatively filling the void. In 2000, the federal government was prohibited from funding research into Needle Exchange programs. In 2001, President Bush limited federal Stem Cell Research to “existing lines.” His successor, President Obama, reversed this policy in 2009.

Sample Selection: New Jersey. These limitations on the federal level left a vacuum for potential state action, particularly for an “activist” state such as New Jersey. Considering two issues within the same state also allows for holding other factors constant during the analysis phase, such as population differences; ethnic variations; age and socioeconomic differences.

As a politically moderate state, New Jersey boasts a large number of “Independent” voters. The State Supreme Court has a liberal tradition on many social issues, such as equalizing school spending and affordable housing. A relatively pro-choice state, the Garden State has taken the lead in the Stem Cell Research race. What is unusual is that New Jersey was the last state to authorize a Needle Exchange program, even in the larger context of a comprehensive HIV/AIDS policy. To begin to explore how and why this dichotomy exists, a brief background of each issue will follow.

Needle Exchange: A Difficult Problem, No Easy Solution. Why should New Jerseyans care about Needle Exchange? HIV/AIDS is a major public health problem in the state. New Jersey has the highest rate of HIV infection among women, who make up 36% of the cases among those over 13. It has

the third highest rate of infection among children; and 41% of all HIV cases resulted from injection drug use (Editorial, *Herald News*, 6/6/06).

What is Needle Exchange? Generally, Needle Exchange programs allow addicts to exchange dirty needles for clean ones. This exchange attempts to prevent the sharing of injection equipment and the accompanying risk of contracting HIV and other blood-borne diseases. Research suggests that such programs – as part of a comprehensive HIV prevention strategy – help to reduce new HIV infections without increasing drug use (Editorial, *New Jersey Lawyer*, 10/16/06).

A related issue includes prohibiting pharmacies from selling syringes without a prescription, in an effort to limit addicts' access to needles. Legislation to loosen this prohibition was introduced as a companion bill to a Needle Exchange pilot program, but was later dropped from consideration.

Legislative history. Needle Exchange policy has had a complicated history in New Jersey. Nearly every legislative session since 1993 saw a bill introduced allowing drug users to exchange used needles for clean ones. In 1996, then-Governor Christie Whitman, a republican who opposed Needle Exchange, appointed an Advisory Committee on AIDS to examine the issue. The chair of the committee had no prior experience with HIV/AIDS nor a medical background. After conducting its own research and interviews, that panel submitted a report in favor of Needle Exchange programs.

The Governor rejected her committee's findings and, since the Republican-led legislature was not interested in moving the legislation, Needle Exchange continued to flounder. Even when the democrats regained control in 2002, Needle Exchange failed to pass.

In late 2004, interest in these programs was re-ignited through Governor Jim McGreevey's executive order allowing for a pilot program in three cities. By declaring a public health emergency, he was able to authorize a syringe exchange program in Camden, Atlantic City and one other unnamed city. His order, however, was immediately challenged in court by a bi-partisan group of state legislators, including Senators Ron Rice (D), Tom Keane, Jr. (R) and Assemblymen Pennacchio (R) and Munoz (R). They claimed that no emergency existed and that the Governor did not have the right to bypass the legislature.

McGreevey's order lapsed on December 31, 2004, before any programs were implemented. As the lawsuit continued to work its way through the courts, the Appellate division sided with the legislators in June, 2005 and stayed the Executive Order. The lawsuit was finally withdrawn in January, 2006. Developments during 2006 increased the prospect of passage of some type of Needle Exchange program. Democratic Senator Nia Gill, an African-American woman representing Essex County, challenged Senator Rice's continued opposition.

Senator Rice had effectively used race to counter Needle Exchange initiatives, likening Needle Exchange programs to the Tuskegee syphilis

experiments, believing that making needles more accessible will only enable the cycle of drug use in the black community, not provide help to addicts who seek to end their drug dependency (Rice, "Advocates of Needle Exchange are Missing the Point" *The Star Ledger* 10/4/06).

The Reverend Reginald Jackson of the Black Ministers Council responded:

'That may be his intention,' the Rev. Reginald Jackson of the Black Ministers Council said. 'But the argument that needle exchange is a conspiracy to keep blacks on drugs is really ridiculous. The majority of people in the black community favor needle exchanges. Its overwhelming' (Moran, "Big Changes in Trenton When Pols Get Personal" *Star Ledger*, 9/20/06).

In September, 2006, the Senate Health Committee passed a bill, sponsored by Senator Gill, that would allow up to six cities or towns to apply to the State Health Department to begin Needle Exchange demonstration programs. The legislation also allocated \$10 million for drug treatment programs. In December, 2006, both the Senate and Assembly passed a Needle Exchange bill and Governor Corzine signed it, completing the arduous process of New Jersey's joining the ranks of the other 49 states with some form of Needle Exchange policy.

Supporters and Detractors. A cross section of scientific and medical organizations support Needle Exchange, such as the National Institute of Health (NIH); the American Medical Association (AMA); the Centers for Disease Control (CDC); various public health organizations and the American Academy of Pediatrics; and the New Jersey Hospital Association.

Political supporters included Assembly Speaker Joe Roberts and Senate President Richard Codey, as well as Governor Corzine. Opposition has come

from mostly law enforcement, republican legislators and, interestingly, one very vocal democrat, Senator Ron Rice, an African-American legislator from Newark. Arguments for the opposition include: a) Drug use is illegal and nothing should be done that even appears to condone it; b) Easy availability of needles could encourage drug use; c) The difficulty with creating certain areas where syringe possession is legal while in the surrounding communities it is not; and d) Community opposition may make it difficult to find a location for a Needle Exchange program. (Sullivan 9/18/06 "HIV Needle Bill Set For Showdown" NJL 9/18/06).

Stem Cell Research – A Counterpoint to Needle Exchange.

Senator Rice, while opposing Needle Exchange, strongly supported expanding drug treatment programs, in part because they were "proven" to help drug users break their habits. In an article featured in the Star Ledger in October, 2006, he highlighted a difference between Stem Cell Research and HIV/AIDS treatment:

I don't understand why we can approve millions of dollars for stem cell research without knowing what the outcome of that research will be. We know that drug treatment works, and yet we have only one residential long term care HIV/AIDS treatment facility. (*Star Ledger*, 10/4/06 "Advocates of Needle Exchange are Missing the Point")

Stem Cell Research has a shorter, yet no less contentious, history. Since the first embryonic stem cells were isolated in a lab in Madison, Wisconsin in 1998, a fierce debate has ensued along the lines of what, if any, type of research is morally and ethically acceptable (Rust and Gallagher, *Milwaukee Journal Sentinel* 4/25/06).

What is Stem Cell Research? The two major types of stem cells include embryonic and adult. Some researchers consider cells from umbilical cord blood to be a third type, but others classify cord blood cells as a subset of adult stem cells.

Many scientists believe that embryonic stem cells hold the most promise for research. Human cells derived from embryos have the capacity to divide and develop into a wide range of tissue types. This flexibility creates the potential for generating replacement tissue for people suffering from a plethora of diseases – such as Parkinson’s and diabetes (Mooney 2005). Embryonic stem cells have two particular benefits: They can divide for long periods of time in the lab to produce more stem cells; and, they can transform themselves into any of the cells present in the human body, such as skin, liver or heart cells.

Stem cells can also be extracted from adult tissue. These, however, may be difficult to remove and are severely limited in quantity. Many researchers believe that adult stem cells have limited usefulness -- that they can be used to produce only a few of the 220 types of cells in the human body. However, some evidence is emerging that indicates that adult cells may be more flexible than has previously been believed (www.religioustolerance.org).

Why is it controversial? While embryonic Stem Cell Research is considered the “gold standard,” it remains controversial. A majority of pro-life organizations object to the use of embryos in research. They feel that a few-

days-old embryo is a human person. Extracting its stem cells kills the embryo -- an act that they consider to be murder.

Research using adult stem cells, while not as promising, elicits less criticism. In May, 2006, Catholic hospitals expressed their support of adult Stem Cell Research. Some see this as the "compromise" on Stem Cell Research, since no "moral" qualms exist about the use of adult stem cells.

Initially, the public appeared wary about Stem Cell Research. These misgivings included fears of human cloning and pro-life claims that destroying embryos was tantamount to murder. As more information emerged, public support moved in favor of research, with the belief that stem cells could hold the key for treating various illnesses.

The role of the business community. Stem Cell Research not only has scientific implications but also business and economic potential for states.

States...are taking a leading role in stem cell funding...as a result, some states are racing to fund stem cell research in hope of luring scientists and companies wishing to get in on this new field of study (Karlin, "Science Stirs a Political Debate" *The Times Union of Albany*, 2/9/06).

Hoping to jump ahead of the curve, California, led by a republican Governor, became the first state to pass a bond issue regarding stem cells in 2004. Other states soon followed, including Maryland, Connecticut, Ohio, Illonios.

At first, many states seemed headed toward restrictive policies, but then the academic and business communities threw their weight behind research they believe could ultimately lead to new therapies and possibly new companies to exploit the findings... (Editorial, *New York Times*, 3/31/06)

New Jersey was close behind. In 2005, Acting Governor Codey designated \$10 million for Stem Cell Research. He also supported construction

of a Stem Cell Research institute in New Brunswick as well as a ballot measure for \$325 million in bonds for Stem Cell Research; neither received much attention at the time. The next year, then - Senate President Cody reintroduced both bills, amending the construction bill to include funding for research in Camden and Newark, as well as New Brunswick.

Seeing the potential for New Jersey to become a leader in this arena, Assemblyman Neil Cohen (D-Union) told the Philadelphia Inquirer: "...[2006] is our year, our golden opportunity before we fall in the wake of other states" (Gurney, *The Philadelphia Inquirer*, 3/7/06).

In fact, a construction bill authorizing \$270 million passed both houses of the state legislature in December, 2006 and was signed by Governor Corzine. Ground was broken in October, 2007 for the Stem Cell Research Institute of New Jersey's Christopher Reeve Pavillion. Capitalizing on the momentum of the construction bill, a ballot initiative for \$450 million for Stem Cell Research was included as Question Number Two on Election day, November 6, 2007. This initiative failed. Presented more as a fiscal issue than a health care issue, those opposing the initiative tapped into the popular feeling for fiscal restraint and framed the provision as and an expenditure that the state could just not afford. The fiscal restraint frame resonated with the voters.

So why was the initial policy process smoother for Stem Cell Research than for Needle Exchange? Both are policies with moral implications and most

policies, especially those with moral implications, follow certain dynamics in the public policy arena.

The debate over morality policy tends to be 'more ideological, moral, more directly derived from fundamental values, polarizing and less prone to compromise' (Mooney and Lee, 1995).

Policy formulation usually follows a basic process: agenda setting, debate, outcome. The next chapter explains these three areas and introduces the theory of issue framing as possible explanation for the different considerations of these policies in the public arena.

II. Literature Review: The Policy Process in General and Three Theoretical Constructs for Policy Formation.

Purpose: This section will cover two related concepts: the mechanics of the policy process; and policy formulation and adoption. The policy process review will include: agenda setting, debate and outcome. The theory of issue framing will be introduced and discussed as the suggested reason why Stem Cell Research proceeded on a quicker path toward adoption than Needle Exchange.

Policy Process.

Agenda Setting: Why do some issues, like Stem Cell research and Needle Exchange, reach the public policy agenda while other important issues are ignored? Theodoulou (1995) suggests that the chances of an issue proceeding to the agenda depends on how it is generally perceived within the political system.

If an issue is thought to be a conflict or a crisis, if an issue is advocated by a visible interest group, or if an issue is backed by the bureaucracy, there is a good chance that the issue will move on to the agenda (p. 88).

Generally, decisionmakers must first recognize a problem, feel the need for government to address it and begin to seek solutions.

Kingdon (1984) further explains agenda setting through the interaction of three policy concepts: problems, politics and visible participants.

Problem recognition is critical to agenda setting. The chances of a given proposal or subject rising on the agenda are markedly enhanced if it is connected to an important problem. Some problems are seen as so pressing that they set agendas all by themselves. ... so policy entrepreneurs invest considerable resources bringing their conception of problems to officials' attention and trying to convince them to see problems their way. *The recognition and definition of problems affect outcomes significantly.* (p. 106-107)

The second factor identified by Kingdon is politics, or developments in the political sphere of the policy arena. Influences here include politicians, interest groups, ideological beliefs and national mood swings. Contributing to agenda setting as well are visible as well as powerful participants, specifically the Executive (while Kingdon refers to the President, is also applicable to Governor),

Congress, media and political staff. While Kingdon doesn't specifically mention interest groups, they also play a role.

For Kingdon, issues that are likely to be discussed *and* acted upon fulfill the criteria of combining three similar, but distinct parts of the process: problems, policy and politics (2003). Likening each part to a "stream," Kingdon asserts that the linkage of these three streams will catapult an issue onto a *decision agenda*. Once on this specific agenda, there is a real chance that the issue will be discussed and a solution voted on.

An alternative possibility is that an issue will rise to the *government agenda*, where government officials are paying attention to certain topics. What the government agenda lacks, however, is the joining of each of the three streams. Without this linkage, it is unlikely that issues from the government agenda will reach any level of serious decisionmaking.

In the public policy arena, the group that sets the agenda achieves two important goals: 1) They focus public attention on a problem they consider to be important; and 2) They get to define the problem, or frame the issue, in a way that best advances their views. This "explanation" then becomes an accepted version as it is repeated by the media and introduced to the general public.

Debate.

If policymaking is a struggle over alternative realities, then language is the medium that reflects advances and interprets these alternatives (Callaghan and Schnell 2001).

While the second phase in the policy process is the debate, it is important to note that both agenda setting and debate can occur simultaneously. It is clear that the framers of the Constitution embraced the idea of deliberation and conflict in creating their new government; indeed, conflict permeates the policy process. At the meta-level, debate is fostered through a checks and balances system that ensures that no one government branch consistently reigns supreme. At the grassroots level, citizens can use the ballot box to oust those they disagree with. A third venue, interest groups, combines both elite and citizen participation to advocate for conflicting viewpoints. The latter features activists supporting different, often opposing points on an issue continuum: workers and business owners; consumers and insurance companies; environmentalists and oil companies.

Public policy formation and adoption may be viewed through the prism of conflict definition. Defining a conflict delineates the problems, or issues, that form the core of public policy debates: "...at the root of all politics...is the universal language of conflict...politics is the socialization of conflict" (Schattschneider 1975). Several factors contribute to defining a conflict, or problem, in the policy arena. They include, among other things: the power to define the issue (Schattschneider 1975); communication (Callaghan and Schnell 2001, Riker 1986, Gutman and Thompson 2004); and message crafting/ framing (Kuklinski 2000, Zaller 1991, Nelson and Oxley, 1999).

People with different views seek to characterize, or frame, issues in terms that will convince others to support their position, or to help them achieve their preferred outcome. The use of words, language and images are key in crafting an effective message frame.

Outcome.

We see things differently because words, phrases, expressions and objects are interpreted differently according to our frame of reference. [I] ... recognize the inherent localized specificity and untranslatability of systems of meaning...no system of meaning can ever fully understand another. It can merely search for ways of opening windows on what it means to see things differently (Healy, 1993).

Healy's quote epitomizes the belief in the discursive roots of a policy debate. Focusing on the process is useful for a just outcome in a policy discussion, where many players are involved and often, the goal, or policy to be created, is nebulous. However, debate in the real world is often more complicated and difficult.

[P]olitical systems have a different logic than instrumental rationality – they seek inclusiveness and broad support for policy, for example, rather than the single best answer (Willson, 2003).

Participants in the process often have a narrower outcome in mind: interest groups (to further their cause); the media (to sell papers or for espousing personal views); politicians or government officials (for personal or institutional reasons.) For this research, outcome refers to the final action on a legislative initiative. While both Needle Exchange and Stem Cell Research ultimately had positive outcomes – becoming law - the paths each bill took were quite different and marked by the drawn out process in Needle Exchange compared with a much quicker process for Stem Cell Research.

Examining outcomes, Willson (2003) studied transportation planning in San Francisco. Goals and objectives were enhanced through communicative rationality where the discussion allowed simultaneous consideration of means and ends, helping to solve the real problems, not initial perceptions of the problems. Willson's research showed that, when outcomes or goals were not preset, that the discursive process to problem solving may work.

While Willson presents a "successful" attempt to create a positive outcome through discussion, Barbara Gray (2004) recounts a failed one. In this environmental case study, Gray found that participants were unable to "collaborate" through a deliberative problem-solving process like in the Willson example:

How the stakeholders construed their own identities in the conflict, how they constructed the problems or opportunities that linked them, as well as the frames they held about how the conflict should be resolved, all worked to prevent collaboration(p. 166).

In Gray's study, the participants couldn't "let go" of their preconceived outcomes and identities.

Lastly, certain issues may be more amenable to specific outcomes than others. The research suggests that issues with moral or value laden aspects are less likely to be resolved through deliberative means. Burns (2005) studying the abortion issue, posited that a set outcome (such as passage of a stem cell bill) may be achieved creating a narrow argument as opposed to a broader deliberation.

How Are Policies Crafted? Theories of Policy Formation and Adoption.

Different methods exist to achieve outcomes in a public policy debate. A “positive outcome” in the public policy arena holds many forms and is influenced by a number of participants including interest groups, the media, the public and legislators. A positive outcome here is defined as a legislative victory, specifically, passage of Needle Exchange or Stem Cell Research legislation. Three theories will be examined to attempt to explain why Stem Cell Research has so quickly and successfully moved in the legislative arena and why Needle Exchange lagged behind. Each theory looks at a different facet of policymaking. First, I will explore national values as a component of national policymaking and apply this concept to the state level. Next, I will explain the Policy Diffusion Theory for state level policies. Last, issue framing will be considered as a non-governmental based policymaking theory.

It must be noted, however, that these theories may not be mutually exclusive.

National Values. The National Values theory may be a prime motivator in policy formulation and adoption. The uniqueness of shared values and ideologies by the people of a certain country influences how problems are perceived. Cultural conditions and cultural factors contribute to the creation and fine-tuning of policies (Weir 1988). Particular American values include: 1) a focus on the individual; 2) general support for policies empowering the

individual; and 3) a mistrust of large government interventions. Even Piven and Cloward (1993), who do not support this theory, still acknowledge the importance of National Values in crafting the beliefs of a population.

In comparing the differences in the development of the welfare state in the United States with four other countries, Anthony King concludes that the “American pattern” of policymaking displays facets that are distinctly American: “It is our contention that the pattern of American policy is what it is ... because American believe things that other people do not believe and make assumptions that other people do not make” (King 1973). Hugh Heclo (1986) also emphasizes the importance of national values regarding poverty policy, “...the administration’s proposals simply assumed those traditional norms and unhesitatingly sought to enforce them.”

The National Values Theory has strong components, particularly when applied to policies like poverty and public health. However, David Ellwood (1988) describes the conundrums inherent in many of the foundational tenets of our national values such as supporting those less fortunate while also valuing individualism and “pulling yourself up by the bootstraps.” It is these conflicting beliefs which may weaken the power of the national values theory to explain differences in policy outcomes.

Political ideology contributes to determining values at the state level. States with Republican majorities, where conservative ideologies dominate, may be less likely to support a Needle Exchange program than a state with a

Democratic majority or a more moderate to liberal base (Navarro-Rivera, 2007). This concept may also apply to Stem Cell Research. In examining the polling results from the Eagleton Poll Archive annually from March, 1990 – October, 2006, a higher percentage of New Jerseyans considered themselves either Democrats or Independents than Republicans.

Nineteen ninety one, 1992 and 1997 represent the years with the smallest gaps between respondents who considered themselves Democrats or Republicans (27% D to 25% R; 29% D to 28% R and 22% D to 20% R, respectively) while Independents held constant at 33% for 1991 and 1992 but jumped to 44% in 1997. The largest gaps occurred in 1994 (37% D to 24% R with 27 % Independent) and 2001 (36% D to 22% R with 24% Independent). In general, public support should have been behind both Stem Cell Research and Needle Exchange given the democratically-leaning public.

Interestingly, the poll results did not consistently break out that way. An April, 2006 Quinnipiac Poll showed that in New Jersey, more people supported Stem Cell Research than Needle Exchange, with 73% expressing support and 15% in opposition of Stem Cell Research and 47% supporting and 46% opposing Needle Exchange . Furthermore, nearly 2/3 of people identifying as Republicans supported Stem Cell Research compared to 79% of support coming from Democrats. In the short term, support for Stem Cell Research seemed to be increasing somewhat over time, with 68% supporting it in January, 2005. However, when the question became support for legislation to spend up to \$ 250

million on Stem Cell Research in New Jersey, support fell to 53% with 37% opposing such legislation.

While Needle Exchange totals were split pretty evenly, with 47% in support and 46% in opposition, Republicans showed stronger disagreement (34% supporting, 60% opposing) than Democrats (50% supporting and 40% opposing).

Policy Diffusion Theory. Policy diffusion involves studying the geographic and temporal patterns of the spread of a given policy (Mooney and Lee, 1995). Walker (1969) emphasized the role of decisionmakers in the policy process and found that a state is more likely to adopt a new program if other states have already adopted the idea. He cited the role of social learning and information gathering, especially from peers outside a specific state, as an important influence on the policy adoption process and pointed to the “regionalization” of policies. Building upon this “domino theory,” Gray (1973) furthered Walker’s ideas by theorizing that one or two states become “leaders” in policy innovations while other states wait to witness the outcome of these policy adoptions. Additionally, Gray, like Walker, found that political and economic explanations were useful in determining which states are the first to adopt certain laws. Boehmke and Witmer (2004) also examined the roles of social learning and economic competition as causes of diffusion, while Ingle et al. posited that often “... diffusion pressures alone are insufficient for policy adoption” (2007).

Berry and Berry (1990) showed that both internal and regional influences on a state's likelihood of innovation may be predicted. Their study regarding lottery adoption emphasized the linkage of external and state specific concepts, implying that ideas may not be mutually exclusive and can work together to influence policy adoption. Other studies furthered the potential influence of internal factors as a contributor to the diffusion process, notably, the role of public opinion and interest groups (Beamer and Ferraiolo, 2004; Mooney and Lee, 1995) as well as the importance of both internal and external policy networks (Mintrom and Vergari, 1998). Strang and Soule (1998) comprehensively refer to diffusion as a process of:

... [a] flow or movement from a source to an adopter, paradigmatically via communication and influence...Diffusion is the most general and abstract term we have for this process, embracing contagion, mimicry, social learning, organized dissemination... (p. 266).

There are few studies involving Policy Diffusion that focus on health issues. An all-encompassing approach was furthered by Mooney and Lee (1995), studying abortion regulation reform pre-Roe v. Wade, from 1966-1972. In exploring the distinctness of the politics of morality policy adoption versus economic policies, they found that public opinion, interest group strength and electoral security were stronger predictive variables than socioeconomic variables. Generally, however, they concluded that "...even distinct policies [morality vs. economically based policies] share similar politics, andthe adoption process can be influenced in different ways by the type of policy under consideration."

DeJarlais et al (2006) discussed the role of Policy Diffusion when looking at the DARE program and syringe exchange programs. He notes:

In classic diffusion theory, there should be a relatively straightforward association between the relative advantage/effectiveness of an innovation and the diffusion of that innovation.

The experiences of both Stem Cell Research and Needle Exchange run counter to this concept, for different reasons. In the case of Stem Cell Research, a number of states designated state dollars to funding a program on the basis of what *could* happen in the future – little scientific evidence points to the proven success of embryonic Stem Cell Research. Thus, the idea of Policy Diffusion, based on the effectiveness of a particular innovation, seems not to apply here, allowing for other factors to explain why Stem Cell funding moved quickly in New Jersey. Additionally, New Jersey was the first state to approve funding, providing leadership on the issue, not following the pack in approving a policy.

Regarding Needle Exchange, the opposite trajectory is true. Despite many studies showing the effectiveness of such programs in stopping the spread of HIV and, given that all its neighbors had already supported these initiatives in some way, New Jersey rejected adopting a Needle Exchange policy for many years. Again, there must be an alternative explanation as to why, despite proof of the effectiveness of the program, and the pattern of regional adoption, New Jersey continued to refuse a Needle Exchange program.

Examining the adoption patterns of various states regarding Stem Cell Research, Walker's "regionalization" of diffusion shows weak patterns. Legislation outlawing Stem Cell Research (often linked with cloning) occurred

first in Michigan (1998) followed by Louisiana (2000), Arkansas, Indiana and North Dakota (2003 - 4). Countering the trend, California legalized research in 2001.

While there was a spurt of activity, the next phase was comprised of supporting funding for Stem Cell Research. New Jersey was the first state in 2004, followed by California, Connecticut, Illinois, Maryland, Wisconsin and Missouri (2004-6). While these states may show a small trend in diffusion, the spread focused on a different policy and a small number of states. One aspect of Diffusion Theory says that one or two states will be policy leaders, but this was applicable mainly to Stem Cell Research, not Needle Exchange.

Another component of Policy Diffusion Theory centers on economic forces from competition between nearby states for business and tax dollars (Boehmke and Witmer, 2004). While economic factors may have played a role in the adoption of Stem Cell Research, a regional spread was not applicable as Connecticut and Maryland were the only east coast states to support Stem Cell Research following passage in New Jersey.

Diffusion Theory takes a broad approach to policy formation and adoption between states; however, it comprehensively fails to explain why New Jersey was the last state in the nation to support Needle Exchange programs. Additionally, it does not fully explain why New Jersey was at the forefront of Stem Cell Research. Des Jarlais et al (2010) in examining Needle Exchange programs, suggests three possible theories for changing behaviors for those at

high risk of HIV. While not specifically addressing legislative policy changes, they discuss innovation theories, contingency management and framing of decisions, referring to how policy makers frame HIV prevention. They conclude, "...we suggest that contingency management and framing the issue in community health-economic terms might be the most useful for immediate policy change..." (DeJarlais et al, 2010).

Issue Framing. Once an issue overcomes the hurdle of making it onto the political agenda, it can be revised at any point during the policymaking process (Palmer 1999, Baumgartner and Jones 1993, Zaller 1991). Jacoby (2000) explains: "...framing occur[s] when different presentations of an issue generate different reactions among those who are exposed to that issue." Ideas are the key factor in the policy debate, and issue framing plays a large role in the differentiation of ideas and information. The process of framing also includes a variety of actors - the press, the public, advocates and policymakers - all of whom have a direct impact on the policy process.

Knowledge contributes to the exercise of power and information is a scarce and valuable political resource (Pierson 1994). Political participants - including the media, interest groups and politicians - purposely strive to limit the range of policy information and alternatives, and therefore attempt to craft public opinion (Callaghan and Schnell 2001).

Words are important tools in the policy war (Callaghan and Schnell 2001) and rhetoric is an essential component in influencing public opinion, with the use of some terms and the rejection of others seen as a political win or loss.

Through framing, communicators seek to establish a dominant definition or construction of an issue ... similar to issue characterization: a declaration of what a policy dispute is really all about and what it has nothing to do with ... carries perceptual and inferential implication, guiding how their recipients ponder and resolve issue dilemmas...frames influence opinion by suggesting which of many possibly conflicting considerations should predominate (Nelson and Oxley 1999.)

Within the policy realm, framing effects show up in nearly all sectors:

political campaigns; public opinion - relatedly, as a tool of policy makers;

influencing political ideology; within the media; as part of social movements.

Additionally, the role of issue framing has been emphasized in non-policy areas, such as in advertising.

Research has shown that framing effects impact the way that people respond to an issue (Burns 2005, Shen 2004, Joselyn and Haider-Markel 2002, Jacoby 2000, Kuklinski 2000).

Writings on social construction may also provide clues about framing.

Schneider and Ingram (1993) discuss the social construction of target populations as "...portraying groups in positive or negative terms through symbolic language, metaphors and stories" (p. 334). They add, "Social constructions become embedded in policy as messages that are absorbed by citizens and affect their orientations and participation patterns."

A traditional application of issue framing focuses on the role of the media and views about poverty. Shanto Iyengar (1990) found two frames for poverty: the "thematic" or general trend, more abstract and impersonal; and the "episodic" frame which targeted personal experiences of groups or individuals. Iyengar concluded that frames matter in the process of shifting public opinion

about poverty, both in the ways that the media portray the issue and how survey questions are structured.

These results are especially striking given that poverty is a familiar issue that is closely intertwined with mainstream values such as self-reliance and the work ethic...American culture thus provides ample cues concerning responsibility for poverty...That framing effects can emerge in the face of such long-term learning influences is indeed striking (p. 35).

Following Iyengar's research, Jacoby (2000) compared Democratic and Republican views on government spending. He concludes:

...framing effects can be generated simply by varying the presentation of an issue...[T]hus, issue framing effects appear at the individual level; they do not merely affect the aggregate contours of public opinion...Indeed, the ongoing 'competition' between varying presentations of social problems and issues may well be one of the most important dynamics underlying modern political conflict (p.763).

Callaghan and Schnell (2001) showed how the media directly impacted the gun control debate by creating its own frame on the Brady Bill, separate from the "spins" advanced by politicians and interest groups. Another social issue, tolerance for the Ku Klux Klan (KKK), was examined by presenting two distinct frames: one as a free speech issue; and the other as a disruption of public order (Nelson, Clawson and Oxley, 1997). They concluded that those exposed to the free speech frame showed more tolerance for the KKK than those exposed to the other frame. Explaining the use of imagery in framing, this study showed that:

Public debate over such controversial issues as tolerance for hate groups takes place within a specific 'symbolic environment' consisting of images, slogans, stereotypes and other devices that anchor and illuminate different positions (p.577).

Another issue that generates cantankerous discussion is health policy. People often hold strong views about topics such as abortion, Stem Cell Research and AIDS programs. The arguments surrounding these issues contains strong moral or value-laden overtones which help set the terms of the debate:

...(I)t makes a difference if access to health care is seen as a right...framing is everything...or at least terribly important if this incomplete coverage is seen as an ethical issue, then the uneven access to health care is not simply unfortunate, sad or inconvenient, it is wrong and immoral. The framing of the issue changes the debate significantly" (Kingdon 2002).

When Kingdon refers to the ethics of the coverage issue, he emphasizes the influence of morality policies and the difficulties in reconciling two opposing viewpoints. This challenge has led to certain ideas about how to successfully frame an issue.

Different types of Framing. Morality/Beliefs. Some research has shown that framing effects are greater on issues evoking strong moral feelings (Joselyn and Haider-Markel 2002). On a more partisan level, George Lakoff (2002) describes his Conceptual Metaphor framing theory, which uses family metaphors and often national values as the moral parameters in framing policy debates. Views are framed and understood through the preset outcome of either the Strict Father (SF) or Nurturant Parent (NP) models. For example, welfare is seen as giving useless aid to the "weak;" female-headed families are looked down upon; welfare recipients are believed to be lazy.

Limited / Focused. In reviewing the histories of two hot button issues, birth control and abortion, Gene Burns (2005) found that "limiting" or more focused frames, as opposed to comprehensive "moral worldviews" led to more positive outcomes in the policy arena (such as the passage or defeat of a bill.) "Within a complex society, trying to forge comprehensive moral consensus is generally self-defeating" (p. 21.) Following Burns' research, a set outcome, such as the defeat of a strict birth control bill, would be advocated by a limited

argument – such as letting the doctors prescribe medication for women. This strategy bypasses a deliberation regarding the broad issue — such as giving women the right to control their own bodies.

Information Impact/Source Credibility Framework. How information is framed to the public by elites and the origin of that information can guide the development of a policy. Zavestoski (2004) found that public officials produced a coordinated plan regarding environmental contamination and its risks: “...framing was part of a concerted effort to socially construct the risks surrounding the contamination and thereby manage the public response.”

Druckman (2001) believes that people turn to elites for guidance and information. He further posits that the public only believes frames from sources they deem credible. His study suggests that perceived source credibility is a prerequisite for successful framing.

Pursuing a different spin on the information issue, Kuklinski (2000) posits that politicians or other elites may present information that is in some sense biased. This does not mean they constantly, or purposely, distort facts or lie. Rather, they frame, or “spin” the information to present it in a certain way. He further questions how people can make informed decisions if they have the wrong information.

Issue Framing provides a strong theoretical framework for examining the different outcomes in the Needle Exchange and Stem Cell Research discussion.

The next chapter will discuss the methodologies used to examine the hypothesis that issue framing is a key theoretical construct in explaining why Stem Cell Research achieved a quicker positive outcome whereas Needle Exchange languished in the legislature for many years.

III. Methodology

Purpose: A qualitative case study method is proposed to examine the frames used by a variety of participants in the policy process. This method will draw on a number of varied sources based on four groups of participants: advocates/stakeholders; media; the public and legislators/staff. Data collection will include primary sources and secondary sources and are organized into four basic themes: Moral, Scientific, Political and Other.

This paper will compare controversial public health policies – Stem Cell Research and Needle Exchange – and examine why their legislative journeys varied so greatly. The hypothesis points to issue framing as a key theoretical construct in the decisionmaking process to explain the difference. To examine this hypothesis, four embedded units of participants, or sources, in the policy arena will be analyzed: 1) advocates/stakeholders; 2) media/newspaper stories; 3) experts; and 4) policymakers.

These four units of analysis represent different facets of a public policy debate and each contributes ultimately to the policy process. A number of variables will be examined, including themes of language used, the use of science, political leadership and strength of advocacy groups. Each unit represents a separate source of data regarding these policy discussions, providing triangulation of the data.

Sample Selection – New Jersey. The public policy process in the state of New Jersey will serve as the overall unit of analysis. New Jersey provides a fertile backdrop for this study since it has traditionally been considered a moderate and activist state. Additionally, comparing two public policies within one state allows for holding the “process” constant; while there

may be some natural changes within the legislative participants, the institutional sector and much of the political factors remain constant. This consistency allows for a more in-depth focus on the theoretical constructs that may influence the decisionmaking process.

Key Points. This study seeks to isolate, describe and understand the frames as crafted and held by the four major participants in the policy process regarding Stem Cell Research and Needle Exchange. To do this analysis, the following steps will be taken:

- A. *Defining the Frames.* The frames used in the discussions surrounding Needle Exchange and Stem Cell Research will be isolated and analyzed. Policymakers' recognition and/or acknowledgement of the frames will be discussed. These frames will likely be created primarily by advocates/stakeholders. Frames are grouped into the following categories: Moral, Science, Political, Other.
- B. *Examining the Role of the Media.* How did the media participate in crafting and forwarding certain frames?
- C. *Examining the Role of Advocates.* It is likely that frames will be created primarily by advocates/stakeholders.
- D. *Examining the Role of Experts.* What was the role of science, if any, in the policymaking process?

Data Collection. Primary and secondary sources of data will be utilized.

Primary sources include key informant interviews with four groups of policy participants and are qualitative:

- A. Interviews with interest group elites/stakeholders including representatives from each side of the Stem Cell Research and Needle Exchange debates.
- B. Interviews with key researchers or “experts” on stem cells and Needle Exchange.
- C. Interviews with key policymakers and/or their staffs who were involved in these policy discussions.
- D. Interviews with media representatives who covered or have knowledge of the Needle Exchange and stem cell debates.

a) Advocates/stakeholders will be asked a standard set of questions. The questionnaire will include queries regarding, but not limited to: the goals and objectives of the organizations, their specific roles in the stem cell or Needle Exchange debate, how they crafted their message and strategies, specifically, any efforts made to introduced specific frames; what factors they emphasized and why, what words or images were chosen and why, use of scientific information and/or research, if developments in other states impacted their strategies, how they utilized supporters and public opinion, and what they thought were the positives and negatives of their respective messages/strategies.

b) Experts will be asked a standard set of questions, including but not limited to: the nature of the evidence used in the legislative discussions and the use of science in the debate; any efforts made to introduce specific frames; the impact their research had in the political community and on the policy

process; the interaction between politics and science. Particularly regarding the stem cell debate, experts will be asked about the economic as well as medical incentives as factors in the discussion. For Needle Exchange, experts will be queried if there were any “outside” forces involved in the discussions and framing, similar to the economic argument in Stem Cell Research.

c) Policymakers and/or staff will be asked a standard set of questions.

Their questionnaire will include queries regarding, but not limited to: their views on Stem Cell Research and Needle Exchange programs, feelings on other “controversial” health issues (to identify political views on a scale from liberal to conservative), use of certain words or images, input from in state and out of state colleagues, role of constituents views and the factors that contributed to legislators’ votes on the issues, the role, if any, of advocacy groups and the role of scientific information/research. Policymakers will be further queried regarding which experts they found useful in the process and where they turned for science-based information. Additional questions include any detection of particular frames during the discussion, who forwarded these frames and the usefulness of this information.

d) Media representatives will be asked a standard set of questions.

Their questionnaire will include queries regarding, but not limited to: sources of information regarding Needle Exchange or stem cell issues, use of public opinion polls, views on the framing process, usefulness of “sound bites” in presenting a story.

Sample Selection – Primary Sources. This study utilizes key informant interviews. There are a limited number of advocates and stakeholders that are appropriate to interview in New Jersey. To ensure a diversity of opinion, advocates will be chosen based on their position on the issues: pro and con. Initial interviews may lead to a snowball sample.

Key informant interviews will also be used for experts. Names will be gathered through reviewing legislative testimony or through legislative staff, newspaper or journal articles.

Policymakers and staff with leadership roles in these two debates will be chosen for key informant interviews. Only a limited number policymakers exist whose participation in the Needle Exchange and stem cell debates make their viewpoints useful for this research. Officials will be interviewed who both supported and opposed these health policies. Some of these interviewees will be former leaders, particularly regarding the Needle Exchange issue, since much legislative activity took place in the 1990's.

Sample size. Thirty two interviews were conducted (Appendix, p. 167) with participants from each of the four subcategories: advocates, researchers, policymakers and reporters. All side of the issue were considered. Journalists will be chosen based on the content of their stories and from recommendations through key informants.

Table 3a. Secondary Sources, Sample Size.

	Issue Papers	Newspaper Articles	Testimony
Needle Exchange Pro	2		2
Needle Exchange Con	2		2
Stem Cell Research Pro	2		2
Stem Cell Research Con	2		2
Needle Exchange Neutral		20	
Stem Cell Research Neutral		20	

Sample Selection – Secondary Sources. This study utilizes issue papers, newspaper articles and legislative testimony for Needle Exchange and Stem Cell Research as a basis for analysis of secondary sources. Regarding issue papers, four were identified for each topic (two pro and two con) while twenty newspaper articles for both Needle Exchange and Stem Cell Research were analyzed.

a. Issue papers. Needle Exchange: Computer searches identified organizations both in support of and in opposition to Needle Exchange and Stem Cell Research. Examination of these websites yielded a sampling of two pro-Needle Exchange papers and two in opposition to Needle Exchange. Stem Cell Research: Website analysis yielded two pro stem cell papers and two against embryonic stem cell research.

b. Newspaper articles. Needle Exchange. To ensure random selection of articles for a total of 20, a search in Nexus was conducted using the terms "Needle Exchange and New Jersey" and "syringe exchange and New Jersey." Articles were found beginning in 1995 – 2009. A separate search for each calendar year, beginning with 1995, yielded varying numbers of articles per year. To achieve a stratified random sample, the 3rd article was chosen on each list, with an additional 6th article chosen for years with larger numbers of articles.

Stem Cells: A search in Nexus was conducted using the terms "Stem Cell Research and New Jersey." Articles were found beginning in 1999 – 2009. A separate search for each calendar year, beginning with 1999, yielded varying numbers of articles per year. To ensure random selection of articles for a total of 20, every third and 6th article was chosen from the list for a given year.

c. Legislative testimony will be reviewed through recommendation by the New Jersey legislature's Office of Legislative Services (OLS) and from referrals through interviews . OLS staff provided testimony from a hearing on Needle Exchange dated September 18, 2006. Needle Exchange: Testimony supporting Needle Exchange was presented by: Drug Policy Alliance of New Jersey represented by Roseanne Scotti. Additional testimony was provided by Walter Kalman from the National Association of Social Workers, New Jersey Chapter. Viewpoints opposing Needle Exchange legislation included: The New Jersey Catholic Conference presented by Marlene Lao-Collins and George Corwell.

Additional testimony was provided by Carl Crowe from the American Family Association of New Jersey.

Stem Cell Research: Testimony supporting Stem Cell Research was presented by: Christopher Reeve, testifying in support of S. 1909 on November 25, 2002. Additional testimony was provided for the same bill by Michael Werner on behalf of the Biotechnology Industry Organization on November 4, 2002. Viewpoints opposing Stem Cell Research included: The New Jersey Family Policy Council represented by Len Deo, testifying against A 2828 before the Assembly Appropriations Committee, October 10, 2006. Additional testimony was provided by The New Jersey Catholic Conference for the February 3, 2003 meeting.

Data Analysis. To analyze the data from this case study, I will use qualitative techniques including content analysis of these primary and secondary sources.

The four units of analysis will be operationalized through direct interview questions for the advocates/stakeholders, policymakers, media representatives and experts; the frequency and manner of press reports and issue papers about the two policies (what words are used, what phrases are included, etc...); and testimony by advocates.

Salient themes, recurring ideas or language and patterns of beliefs that link the data together were identified into four categories: Moral, Scientific, Political and Other. Pattern matching, which compares an empirically-based pattern with a predictive one, will be utilized. If the patterns coincide, the results can help

strengthen the internal validity of the study. Words and images function as important operational components in this analysis.

The final analysis will qualitatively correlate patterns and trends among the four units of analysis: how advocates and stakeholders discussed and debated Needle Exchange and Stem Cell Research; how the media reported the issues and what frames they used; which frames the public responded to; and which frames policymakers reacted to in the final outcome. These multiple sources of data will help to triangulate the findings, aiding in the construct validity.

IV. FINDINGS

A. VIEWS BY PARTICIPANTS IN THE POLICY PROCESS – Content Based Interviews

This section analyzes primary sources. Thirty two interviews were conducted in four categories: Media, Experts, Advocates and Policymakers. First, the media will be analyzed. Then, the interviews will be divided by Needle Exchange Supporters, Needle Exchange Opponents; then Stem Cell Research Supporters, Stem Cell Research Opponents. Strategies of the two sides are examined for evidence of framing using qualitative and quantitative data.

1. Needle Exchange

a. Primary Sources – Content Neutral

Media. Three reporters were interviewed by phone, two newspaper print reporters and one television reporter. The television reporter, Michael Aron, was a political reporter for New Jersey Network and noted that the station had a separate science reporter, so he did not report or research an issue from a scientific perspective. The print reporters, Tom Moran and Susan Livio, each worked for the *Star Ledger* in New Jersey.

Framing. While two reporters acknowledged framing as a useful tool, one disliked the concept,: “The Media must use buzzwords and framing whether it wants to or not.” (Tom Moran, Personal Communication, September 28, 2009). He perceived the media as having to use terms created by others, that these frames were sometimes the news themselves (an example was “death panels” coined by Sara Palin). Interestingly, he believed that the media was not the entity that always created the frames, but rather had to use them. The other print reporter viewed framing differently, saying “Framing is a useful tool” and this sentiment was echoed by the TV reporter “[Framing] is very useful. Imagery

is also important in visual media. It is a powerful tool across the board for both [Needle Exchange and stem cell research]." (Michael Aron, Personal Communication, March 5, 2010). Not surprisingly, the idea of a visual frame, as well as a written word frame, was discussed by TV reporter who gave an example for Needle Exchange "a needle in an arm" and for Stem Cell Research "Chris Reeve in a wheelchair."

Regarding the use of sound bites to help frame the issue, these media representatives had mixed views. Sound bites, a component of issue framing, are a few words or phrases that explain or describe an often complicated subject. One explained that sound bites both advance and dilute the importance of an issue, by engaging the public but losing the nuances of the complexity of an issue. However he acknowledged that sound bites are "the common currency of public debate." (Michael Arons, Personal Communication, March 5, 2010). Another interviewee agreed that "it depends" - sound bites can either help forward the importance of an issue or dilute its importance.

In framing the Needle Exchange issue, two out of the three reporters agreed that a key player was the Drug Policy Alliance (DPA). "It all came together when the DPA came in to organize" commented one reporter. "DPA repackaged the advocacy efforts" and use three major frames – first, by providing organization; next, utilizing a *Political* frame by working with politicians; then, bringing in academics to talk about the issue, forwarding a *Science* theme; and finally, "reframing the Needle Exchange debate [in a *Moral*

way] by making opponents look like the 'fringe'." (Susan Livio, Personal Communication, March 20, 2009)

Ultimately, each reporter agreed that opponents to Needle Exchange initially had an easier time framing the issue in *Moral* terms – the perception at least that policy supports drug users; that the public was uncomfortable with the Needle Exchange constituency; and that this was a “street issue” and that people were HIV positive through their “own fault.” A reporter commented on the “lack of imagination” when the middle class refused to aid in supporting this issue, since addicts also existed in the middle class. She further commented that “there was no middle ground” in the Needle Exchange issue making any compromise difficult. (Susan Livio, Personal Communication, March 20, 2009).

Over time, the *Political* frame and *Science* ideas helped move the issue forward. With the introduction of the Drug Policy Alliance to coordinate the effort, one reporter believed that “Courageous [legislative] leadership finally turned the tide” specifically citing Sen. Joe Vitale, Chairman of the Senate Health Committee (D-Middlesex) as a key player in working with Senator Ron Rice, a major opponent of Needle Exchange. While the interviewee acknowledged and understood Senator Rice’s hard line opposition to the policy, he felt that “...Rice’s opposition did not lead to good public policymaking.” (Tom Moran, Personal Communication, September 28, 2009).

Although she agreed that politics played a large role in the final movement of Needle Exchange, Susan Livio credited the role of the Governor instead of the legislature,

The Needle Exchange story turned political once McGreevey issued his Executive order...the role of the Governor was key. NJ has a weak legislature and strong Governor so nothing was ever going to happen with Needle Exchange until the Governor supported it. Whitman didn't; Codey was lukewarm; McGreevey gave it his parting support; Corzine did support it and that's why something finally happened.

The *Science* frame also helped move Needle Exchange, according to the reporters. One reporter, acknowledging the emotional pull of this issue on both sides, attempted to find out the scientific facts for herself. Describing the dual nature of the science of Needle Exchange, she said:

The Needle Exchange issue became more complicated as people used more and more scientific studies to prove their point on both sides. The science made the argument different and added new dimensions (Susan Livio, Personal Communication, March 20, 2009).

To find out for herself, she covered the CHAI project, an organization that handed out clean needles to addicts, where she observed the staff, witnessed how they cared for their clients and how they were committed to stopping the spread of HIV. She noted that the outreach workers also provided them with information about a drug treatment. Susan concluded that this made a positive impression on her, showing her that some of the studies were correct in showing the effectiveness of Needle Exchange programs.

Seeing the policy outcome in a positive light was a personal experience for this interviewee. Another reporter, while not experiencing the program firsthand, credited the *Science* frame as a reason for the eventual movement of Needle Exchange. "The record [on the effectiveness of Needle Exchange

programs] changed over time as the data became clearer. Scientific evidence came to the fore that the programs were successful” (Tom Moran, Personal Communication, September 28, 2009). As more and more studies surfaced in favor of the policy, the *Science* and *Political* frames were able to overlap and push back the *Moral* framework.

b. Needle Exchange – Primary Sources - Opponents

Advocates. Two advocates were interviewed by phone – Dr. George Corwell, Director of the Office of Education, New Jersey Catholic Conference; and Mr. Len Deo, President of the New Jersey Family Policy Council.

The Role of Science. Mr. Deo stated that his group opposes Needle Exchange programs under all circumstances. Explaining that his group’s emphasis focuses on getting addicts into drug rehabilitation programs, providing them with clean needles ran counter to this philosophy, thus supporting the *Other* frame of access to drug treatment. He served on the Governor’s Council on AIDS and he supported the use of scientific information to bolster his group’s position.

Focusing on what he termed ‘quality of life’ issues, or a *Moral* frame of a broad impact on society, Dr. Corwell’s group also opposed Needle Exchange under all circumstances. He mentioned studies showing the failures of these programs from other states, exemplifying the overlap of many frames - use of *Science* through studies to bolster a *Moral* or quality of life viewpoint while seeking information from *Political* sources, or other states. Specifically citing a

study from Philadelphia, he explained how this initiative succeeded only in destroying the quality of life within this community:

...Neighbors saw dirty needles in the school yards, (which was near the program site) including the parish priest. The local priest also said that instead of a 1 to 1 exchange of dirty needles to clean ones, it was 1 dirty needle to 5 or so clean ones. Neighbors also complained that the program brought in drug dealers...the community had spent much time trying to rid the neighborhood of these addicts and dealers and this program brought them back (George Corwell, Personal Communication, September 14, 2009).

Interestingly , Dr. Corwell acknowledged that science can be used by both sides in the policy realm, specifically addressing his experiences with Needle Exchange:

The other side also had studies showing the effectiveness of needle exchange programs while we [those arguing against it] cited studies showing these programs as not quite as effective . (Personal Communication, 9/14/09).

Mr. Deo was a bit more critical of the “other side” of the science argument. He described a “suspect presentation” that he heard as part of the Governor’s Council. The speaker was actually Don DeJarlais, who was interviewed for this paper as an expert in Needle Exchange. Mr. Deo questioned the high success rate as presented by Dr. DeJarlais,

His data was based on different cohorts of people – [both DeJarlais and I] though differently. DeJarlais meant one cohort but I was looking at it another way” (Len Deo, Personal Communication, March 11, 2010).

Science, while important, Mr. Deo seemed to say, can be interpreted differently by those examining the studies.

Targeting the role of science in the policy process, Mr. Deo agreed that although it was an important factor, science limited use to the public and was better suited to be useful to policymakers:

...[the] public doesn't always have the time to recognize/understand the scientific argument. These arguments are best tailored to the lawmakers who will ultimately decide on the policy (Len Deo, Personal Communication, March 11, 2010).

Framing. "Groups have to find a succinct statement that explains their views on the issue and framing helps with that" (Len Deo, Personal Communication, March 11, 2010). Although he described framing as "very useful" he also acknowledged that "we lose personal stories" because "we live in a sound bite world." Further commenting on the connection of science with sound bites and framing, he said:

Scientific arguments are complicated, [they] don't play into framing and sound bites. Yet, we must use framing and sound bites in the policy arena. So the science is not so much focused for the public but more for the policymakers...sound bites are targeted to the sector of our culture, to the people in general, while the more specific information is useful to policymakers (Len Deo, Personal Communication, March 11, 2010.)

Agreeing with Mr. Deo about the importance of framing or soundbites in furthering a message in the political realm, Dr. Corwin commented that "...framing can be useful in helping people understand the bigger message" (George Corwin, Personal Communication, September 14, 2009). While previously mentioning the focus of his *Moral* frame – the quality of life argument - he listed two frames used by Needle Exchange supporters that he found particularly effective: First, the argument that: "New Jersey was the last state to enact a program [a *Political* frame] – nobody wants to be seen as the straggler or the last to act on something that might be good" and second, the use of Needle Exchange programs to fight HIV [a *Science* frame] (Personal Communication, 9/14/09). Dr. Corwin indicated that neither of these frames was strong enough to make him change his strategy, "...[we] did manage to

keep things from happening for a long time, drawing out the process” (Personal Communication, 9/14/09).

Mr. Deo also presented some frames from his opponents that he thought were effective, including stopping the spread of HIV and looking at the studies showing the effectiveness of Needle Exchange programs, both part of a *Science* theme . To bolster his group’s *Other* frame regarding the need for rehab for drug users, the buzzwords “not empowering drug users” were employed to encourage opposition to Needle Exchange policies. Other frames he used included: the ‘multiple problem’ concept, or the fact that “...a drug addict has more than one problem that needs to be addressed, giving him clean needles won’t help” (Len Deo, Personal Communication, March 11, 2010); and ‘unproven results’ in using studies that show Needle Exchange has not succeeded in decreasing the spread of HIV nor have these programs provided comprehensive help to addicts. Imagery also played a role for Mr. Deo, as his group used a picture of a needle – not in the arm, just the needle - to further their cause.

When asked if the argument regarding Needle Exchange had changed over time, Mr. Deo said no, and reiterated his belief that the these programs had not been proven successful:

[The arguments] stayed about the same, did not really change. It was a very controversial issue all along. The statistics/data showed little to point to conclusive evidence that Needle Exchange was successful (Len Deo, Personal communication, March 11, 2010).

Interestingly, while Dr. Corwin did not comment on the argument changing over time, he did state that he believed the success of Needle Exchange

programs was “preordained because of the money behind the other side” (George Corwin, Personal Communication, September 14, 2009).

It should be noted here the variation in outcome focus. Proponents focused on HIV prevention, the *Other* and *Science* frames; opponents focused on the rehabilitation, *Other* frame; or quality of life issues, the *Moral* frame. Ultimately science won out, with the opposition also acknowledging that science was important and did play an important role in the debate.

b. Needle Exchange – Primary Sources – Opponents, continued

Policymakers. Two policymakers were interviewed by phone – Renee Trabert, Chief of Staff for Senator Tom Keane Jr. and Senator Pennacchio.

Role of Science. Ms. Trabert indicated that science was “not much of a factor” in the Needle Exchange debate while she found that a focus on public safety (or a *Moral* frame of having a broad impact on society) was a more appropriate them. She explained:

The science behind the Needle Exchange argument was not that compelling, [opponents] saw it more of a public safety issue than as a health issue. Of course, people supported doing things to stop the spread of HIV but this issue also impacted drug addicts so that was not a group that aroused much sympathy (Renee Traber, Personal Communication, April 15, 2010).

Interestingly, Senator Pennacchio, while initially taking a different approach, ultimately came to the same conclusion of emphasizing the *Moral* focus. While Ms. Trabert downplayed the role of science, the Senator supported this policy tool:

Science was paramount. Needle Exchange cannot happen in a vaccum. [Programs where] thousands of needles were distributed, only a few were returned. This is enabling drug addicts to continue to use drugs. These results were similar to a study done in Toronto...drug addicts more commonly die from drug overdoses than HIV so

giving them needles is only enabling them (Senator Pennacchio, Personal Communication, May 13, 2010).

Framing. For Senator Keane, said Ms. Trabert, the issue was more of a public safety policy debate than a healthcare question. Pitting the public safety *Moral* frame against a *Scientific* frame, Renee recounted an incident shared by a priest regarding a Needle Exchange program in his parish:

He told of every morning having to get a volunteer group of parents to clear the discarded needles from the perimeter of the school area before the kids came in ... this really illustrates the public safety "frame" used for this issue. Anecdotes like these are effective and important (Personal Communication, April 15, 2010).

Although he did not specifically address framing the Needle Exchange issue, Senator Pennacchio couched the argument in moral terms, using science to support his view. Incorporating a *Political* theme based on laws, he explained:

Obedying laws is important – the laws have to be good ones and Needle Exchange has some lacking moral issues, based on personal moral beliefs as well as studies that showed that Needle Exchange didn't work, the needles didn't come back (Personal Communication, May 13, 2010).

Following the Senator's views on these programs, when questioned about frames that were not effective, Ms. Trabert mentioned the relationship between clean needles and improving the drug situation. She didn't agree with decreasing drug use by providing clean needles:

While decreasing the spread of HIV through needles was a compelling argument that you could support, the bottom line with this issue was that the people accessing the needles were still drug users and giving them clean needles only was perpetuating drug use (Personal Communication, 4/15/10).

One frame that she did find effective was the argument set forth by the Diabetes Association – opposing free needle distribution for addicts. Those using needles for illegal purposes should not receive free needles when diabetic people with a legitimate medical need did not receive them for free.

Finally, in combining the many frames used in debating Needle Exchange – the *Political*, *Scientific* and *Moral* – Senator Pennacchio concluded:

The State cannot extract ourselves from the morality of this issue ... but they have an obligation to stop drug addicts and addiction ... Needle Exchange does not do that, it could only contribute to it (Personal Communication, May 13, 2010).

c. Needle Exchange – Primary Sources – Supporters

Advocates. Three advocates were interviewed regarding Needle Exchange, two in person, one by phone. These include: Roseanne Scotti, Drug Policy Alliance, via phone; Ricki Jacobs, Hyacinth Foundation, in person; and Jeannine LaRue, interviewed in person, who previously worked as an aide to Governor Jon Corzine as well as an administrator for St. Barnabus Health Care Systems.

Role of Science. Roseanne Scotti from the Drug Policy Alliance was credited by many supporters of Needle Exchange with changing the course of the policy debate. She noted that this issue provided a good case study of research, science and politics, noting the overlapping frames discussed throughout this paper.

The research clearly supported that Needle Exchange worked. If politicians were basing their decisions [regarding this issue] on only science, we would have had this years ago. The bottom line was public perception ... drug users are demonized, no one wants to 'own them' (Personal Communication, Roseanne Scotti, January 28, 2009).

However, Ms. Scotti also acknowledged that sometimes people don't understand the research. The Drug Policy Alliance prepared fact sheets and other information that focused on the scientific evidence. "[We] wanted to legitimize the issue, so we used scientific information and worked with other groups that supported Needle Exchange to bolster its legitimacy (Personal Communication, 1/28/09)."

Approaching the *Science* frame from a different perspective, Jeannine LaRue acknowledged that Needle Exchange was a tough battle, noting the public view from the *Moral* frame of enabling drug addicts. Ultimately, she viewed, and advocated, a policy based on the *Science* frame of public health principles of protecting healthy people from diseases:

Obviously, people are opposed to encouraging substance abuse. Do we encourage drug addiction by creating methadone clinics? Aren't clean needle programs similar to methadone clinics [However] if needle exchange programs can save one life, it is the right thing to do from the public policy perspective (Jeannine LaRue, Personal Communication, October 2, 2009).

Commenting on the use of scientific research at the beginning of the policy debate, during the Whitman administration, Rikki Jacobs noted that:

[Supporters] tried using scientific information at the beginning but it didn't work – was not useful. They [legislators] did not want to hear it. It became a thorn in Governor Whitman's side. They didn't want to listen to the research (Rikki Jacobs, Personal Communication, January 14, 2009).

Framing. The Scientific frame provided strong arguments for Needle Exchange, according to Roseanne Scotti, but "...it wasn't the whole story....

Science was a necessary component...but the evidence-based component was only a piece [to winning the argument]... We had to tamp down the fear factor and make it a human issue. We took legislators to see Needle Exchange programs...reporters also went to see the Philadelphia program (Personal Communication, January 28, 2009).

"Humanizing" the issue to a personal level was a key approach for Ms. Scotti.

She focused on bringing personal stories to the fore to help reverse the stigma of the drug user and the perception that "some lives are not worth saving...

People talked about sending the wrong message if you opposed Needle Exchange. They would say – the message is that 'everyone's life has value and is worth saving. Do some lives not matter?' That is what you communicate with opposing Needle Exchange – that some lives do not matter (Personal Communication, 1/28/09).

This public health concept of saving lives fits into a *Moral* framework of Needle Exchange's impact on society in general and was echoed by Jeannine LaRue.

While some advocates separated the concepts of drug addiction and HIV prevention, Ms. LaRue combined them to discuss Needle Exchange as a healthcare issue to protect people's health.

If policymakers could just 'catch' any corner of drug addiction, that would make a difference. Needle Exchange was not a cure for drug abuse but at least we know we have done something – from a policy perspective – to help stop the spread of disease [such as HIV] (Personal Communication, 10/2/09).

Continuing the use of a *Moral* theme, Ms. LaRue noted that Needle Exchange programs help protect unborn children, specifically women who were pregnant and HIV positive. Ms. Scotti also complemented this frame as used by Senator Nia Gill who "found a [successful] frame through the innocent women and children. New Jersey has a high prevalence of HIV for women and children" (Personal Communication, 1/28/09).

Presenting a different approach to framing, Rikki Jacobs described the personal dialogues she had with legislators, as she "framed" discussions based on their individual concerns:

I asked them what their objection was and took it from there. I dealt with each legislator differently, I personalized it for them. I used [framing] to create a lot of trust...finding out what specifically they objected to regarding Needle Exchange and addressing those concerns on a one-to-one basis. This is where framing came in, to help address these one-on-one concerns (Personal Communication, 1/14/09).

This individualized strategy was also mentioned by Roseanne Scotti as a strategy she also utilized.

Political Influences. Individual politicians played various roles in the Needle Exchange debate, based on the views of these advocates, furthering the importance of the *Political* frame. Ms. LaRue and Ms. Jacobs mentioned Senator Wynona Lipman's support for these programs, a particularly key endorsement

since Senator Lipman was African-American and this issue was somewhat polarizing to that community; Ms. LaRue also discussed Senator Ron Rice's opposition to Needle Exchange legislation:

His background was law enforcement and many times law enforcement opposes Needle Exchange because they think it does not stop the drug problem, it only reinforces it (Personal Communication, 10/2/09).

She also credited the Black Ministers Council and Reverend Jackson (its leader) as playing an important role in the passage of Needle Exchange, bringing the African-American community in to support the policy. Regarding the issue of race, Ms. Scotti thought that at first, people didn't see it from a racial angle, but "...as time went on, the minorities came to support it" (Personal Communication, 1/28/09). She also credited Senator Gill for helping to move the bill by focusing on women and children.

Speaking to the role of the Governor in the policy debate, and furthering the *Political* frame, Ms. Jacobs contrasted Governor Whitman's dismissal of her Commission's findings in support of Needle Exchange with the support years later of Governor Corzine "It helped that Corzine wanted [a Needle Exchange law]" (Personal Communication, 1/14/09).

Another part of the *Political* frame – the policy process – encompassed part of the strategy in passing Needle Exchange legislation. By using a "local" angle, Ms. Scotti initially worked to pass local ordinances allowing these pilot programs, such as in urban centers like Camden and Atlantic City. This local focus paid off in some ways, with community agreement over the need for a

Needle Exchange program, as well as support from people of faith and law enforcement. Although they didn't always pass, she noted that they were often:

...supported by a coalition of ministers, police but were [sometimes] shot down. Joe Roberts [from Camden] saw this and it directly impacted him, and he got involved (Roseanne Scotti, Personal Communication, 1/28/09).

Helping to tip the scales was the role that the media played in covering Needle Exchange by both reporting on it from these local initiatives and later, helping to put a human face on the problem. With visits coordinated by Ms. Scotti, reporters viewed a program in Philadelphia, talking to participants and:

...seeing the vans, doctors, the need for these services, the relationships... the press helped frame the issue by seeing that the addicts were often 'regular people' (Roseanne Scotti, Personal Communication, 1/28/09).

c. Needle Exchange – Primary Sources – Supporters, continued

Policymakers . Three policymakers were interviewed for this section including Rich Lee, former Deputy Director of Communications for Governor Jim McGreevey, interviewed by phone; Laurie Candelosi, Legislative Director for Senator Joe Vitale, Chairman of the New Jersey Senate Health Committee, interviewed by phone; and Pete Cammarano, Chief of Staff to Senator and former Acting Governor Richard Codey, interviewed in person.

The Role of Science. Each interviewee agreed that Science played a large role in the Needle Exchange debate and the *Scientific* frame was a useful one, but each policymaker interpreted the impact of the Scientific frame differently. Ms. Candelosi noted that it is important to remember that the science alone was not compelling unless it was presented in a way that people could understand it could be communicated well. Rich Lee found scientific

information “useful in finding common ground...all of the Needle Exchange arguments used scientific information, at least people quoted statistics on AIDS rates in arguing their point” (Rich Lee, Personal Communication, May 29, 2009).

However, Mr. Cammarano pointed out that the importance of this frame did change over time, becoming stronger as more people became educated about these programs and the *Moral* frame of enabling drug addicts became less popular:

At first, legislators did not pay attention to the scientific studies supporting Needle Exchange. It was viewed, by the public and legislators, as enabling drug use. Science eventually came to play a role as people became more educated and the ‘frames’ changed. They went from ‘enabling drug users’ to ‘stopping the spread of HIV’ (Pete Cammarano, Personal Communication, December 22, 2008).

Framing. Initially, the frame that was most effective in this debate was the *Moral* frame of enabling drug use. As Mr. Cammarano noted, “Legislators were generally afraid of this issue – there was no sympathetic base constituency and the public was against the issue” (Pete Cammarano, Personal Communication, December 22, 2008). Laurie Candelosi agreed, adding,

An effective frame was the opposition ideology that these people [benefitting from Needle Exchange] were ‘drug users’ and bottom feeders with the theory of, why should we help them? (Laurie Candelosi, Personal Communication, February 17, 2010).

Additionally, Ms. Candelosi discussed another *Moral* frame that was successful early in the debate, the law enforcement theme:

[I remember] Senator Rice telling stories about when he was a policeman, the ‘war on drugs’ was in full swing and law enforcement couldn’t support handing out needles to drug addicts... also, [I remember] law enforcement representatives talking about the fear of needle pricks and how again, they couldn’t support handing out free needles (Personal Communication, 2/17/10).

Rich Lee believed that effective arguments against Needle Exchange included the *Moral* frames of enabling drug users and the public safety argument. He also reiterated the importance of the *Political* frame:

Everyone sees value in clean needles but people also see Needle Exchange programs as condoning illegal activity...while science had an impact on the policy formation, politics is more powerful (Rich Lee, Personal Communication, May 29, 2009).

Further discussing the *Political* frame, Mr. Cammarano described how one-on-one peer discussions helped move this issue over time within the legislature. This personal technique was also mentioned by some advocates as an effective method for their efforts. Since Needle Exchange lacked a strong and organized key constituency group, it took personal discussions and education to build support for this issue within the policy process.

Advocacy and framing changed over time. Key was [the] persistence of a group of legislators who were tenacious over time and provided education to their peers. Education was done by legislators to their peers – one on one conversations. The idea was 'What do we have to lose?' by supporting/trying these policies (Pete Cammarano, Personal Communication, December 22, 2008).

In an effort to build a supportive foundation in the legislature, Ms. Candelosi credited Roseanne Scotti, Executive Director of the Drug Policy Alliance, who brought in interested legislators to see a successful Needle Exchange program in Philadelphia.

[The program] was very helpful to see how it worked and what exactly happened and how a program was set up. It was very helpful in solidifying support for Needle Exchange but not many legislators took advantage of this (Laurie Candelosi, Personal Communication, February 10, 2010).

Ultimately, the *Scientific* theme of reducing HIV/AIDS through Needle Exchange became a successful frame over time. As advocates worked within and outside the legislative institution, the *Scientific* framework of studies

showing the success of Needle Exchange gained a foothold over the initially important *Moral* theme of enabling drug addict.

c. Needle Exchange – Primary Sources – Supporters, continued

Experts. Three experts were interviewed by phone on the topic of Needle Exchange – Peter Lurie, Deputy Director of Public Citizen’s Health Research Group; Don DeJarlais, Director of Research, Rothschild Chemical Dependency Institute; and Robert Heimer, Professor of Epidemiology and Pharmacology, Yale School of Medicine.

Role of Public Health/Science. Mr. Lurie stated at the outset of his interview that he approaches this topic from a public health practitioner viewpoint, “The focus in public health is to provide services to all who need them, regardless of judgment” (Peter Lurie, Personal Communication, March 25, 2009). In describing the programs, Mr. Lurie explains that the success comes from the natural demand for the services - giving participants something they want and value, which is a clean needle. He further stated:

The program is about meeting people where they are at...must acknowledge that the basis of the program is for clients to shoot up, you won’t stop them from doing that. Providing them with clean needles is a benefit to them, it is something they want, that they may voluntarily seek out and this behavior will help stop the public health problem of HIV infection (Personal Communication, March 25, 2009).

Dr. Heimer used similar terminology in explaining how he:

... worked to provide [public health activists] with what they needed, including evaluations, fact sheets/information and research to help them create programs that would benefit drug users. During these interactions, the activists found that the [target population] was open. When focusing on harm reduction measures, you need to ‘meet people where they are at’ and the advocates of course understood this (Robert Heimer, Personal Communication, February 13, 2009).

Further discussing the role that public health and ultimately science can play in making policy, Dr. DesJarlais added to Dr. Heimer's description of the role that activists played early in debate:

A favorable climate is needed that values science and research...Sometimes it is out of the researcher's control. In the U.S., activists went out and did it, provided needle exchange programs, often without government support or scientific input (Don DeJarlais, Personal Correspondence, February 18, 2009).

All three experts agreed that these public health activists were the front line in the Needle Exchange debate, often functioning outside of government oversight. Both Dr. Heimer and Dr. DesJarlais cited Connecticut as a specific example of how the role of science can impact on politics. The Mayor of New Haven, CT began as an opponent of Needle Exchange, eventually becoming a supporter as he saw how the program worked and understood the *Scientific* frame of how it was successful.

Often, when people saw the program in operation, those who initially may have had concerns changed their views. Seeing the impact directly of HIV has helped people change their views on Needle Exchange...After visiting the pediatric HIV ward and seeing the HIV positive babies, the Mayor of New Haven became a supporter...There are a few things that happen to change people's views [on this issue]: They need to see that the program is not a threat and they must stop demonizing drug users (Robert Heimer, Personal Communication, February 13, 2009).

Dr. Heimer's views support a shift in a *Moral* frame, changing the way society views drug users, as well as understanding the *Scientific* frame of the success of Needle Exchange programs to encourage any change in policy. Dr. DeJarlais believed that the policy shift from Connecticut led to a change in policy in New York (a *Political* frame, policy diffusion) and eventually helped change things in New Jersey.

Legislative leadership. A major factor in the eventual passage of Needle Exchange legislation, according to all three researchers, included the *Political* frame of legislative leadership. When asked why Needle Exchange languished in New Jersey, Mr. Lurie noted: "Important individuals politically who were obstructive" such as Governor Whitman. (Personal Communication, 3/25/09).

Dr. DeJarlais concurred:

In New Jersey, we needed a new Governor, not Whitman who opposed the program. To implement the program in this state, we needed a change in leadership...that is what eventually happened with McGreevey as Governor and a new attitude about Needle Exchange programs (Personal Communication, 2/18/09).

Agreeing with his colleagues, Dr. Heimer also emphasized the importance of legislative support in addition to the executive branch:

What works? Having two or more advocates in legislators who make this an important issue for them. You must have some legislative supporters...Behind the scenes, science may be presented. It is most effective to use research at the committee level but you must have legislative supporters/leaders advocating for the issue. You have to WANT to use the science. (Personal Communication, 2/13/09).

Although legislative leadership was important, there is always a linkage with the public perception: "There is a connection between how the public sees the issue and how the legislature deals with it – they want to be re-elected so they will respond to the public" (Don DeJarlais, Personal Communication, February 18, 2009).

Framing. The role of Science was a touchstone for all three experts, although each acknowledged that it took some time for this frame to gather strength in policy realm in New Jersey. In general, most of the data showed that Needle Exchange programs worked to slow the spread of HIV within the injection

drug using population, but the public and legislators were slow to embrace these studies.

At the beginning, people believed 'on faith' that Needle Exchange would be effective. After science proved that, the only argument is that it sent the wrong message. Left with that idea that the message does change, opponents stuck with the same assertion that in the end was proven inaccurate by the science (Robert Heimer, Personal Communication, February 13, 2009).

Dr. DeJarlais discussed the perception that as Needle Exchange expanded, it would encourage drug use. This, however, was not proven to be the case.

Most opposition came from an emotional reaction, not from the science. The belief that Needle Exchange sends the wrong message cannot be scientifically tested (Don DeJarlais, Personal Communication, February 18, 2009).

This emotional reaction formed the basis of the *Moral* frame and was used effectively by those opposing Needle Exchange programs. Dr. DeJarlais explained: "Words like 'drug use' and things related to that scare people and [the opposition] was effective in doing this." (Personal Communication, 2/18/09).

Mr. Lurie took a more hands – on approach. From the public health perspective, he backed the science and research showing the effectiveness of these programs in slowing the spread of HIV within the drug using community. Based on these findings, he asserted that

A message is irrelevant if it is not borne by changes in behavior in the world of public health. It is what happens in practice that counts, not the message that is theoretical (Peter Lurie, Personal Communication, March 25, 2009).

When asked if he believed there were any effective frames surrounding the Needle Exchange debate, Mr. Lurie, unlike some of his colleagues, focused on imagery. He described a particular scenario that he used when testifying before

a legislative committee that included a drug user about to stick a needle in his arm:

...[W]as it a clean needle? This image is effective, it conveyed the immediacy of the problem. It presented the idea of choice in a stark way. It works to show [that] people will inject, you have to accept that – unless you want to give up, you must look at what you have to work with, at least you can impact what they will use to inject, like a clean needle (Personal Communication, 3/25/09).

He knew that this was an effective scenario when the next day a news article about the hearing carried a major quote from him and described the drug user sticking the needle in his arm. Visual imagery was not solely the domain of those supporting Needle Exchange programs, as Mr. Lurie credited his opponents with a effectively using the imagery of excessive discarded syringes as a byproduct of these programs.

Further utilizing the *Mora*/frame of drug use on society, Dr. DeJarlais noted a few themes used by the opposition that struck a chord with the public and legislators in the beginning of the debate, the idea that Needle Exchange programs would increase drug use as well as the low social status of the beneficiaries of these policies:

Drug use scares the public more than HIV and this is an emotional argument and fear. There are components also of the perception that it predominantly impacts poor, minority communities and this also scares people. It is a problem in rural areas, too (Don DeJarlais, Personal Communication, February 18, 2009).

Another factor mentioned by Dr. DeJarlais was the “competing frames” on the local level and the federal level. Preventing the spread of HIV was the focus of the local level, clearly set by those supporting Needle Exchange programs, whereas on the federal level, opponents of these programs took the lead by

pushing an agenda of avoiding increases in drug use. "On the ground" noted Dr. DeJarlais:

the science won out... The frame that Needle Exchange increases drug use was shown to be not true in the data. On the Congressional level, the programs had to be shown to be safe and effective, must decrease the spread of HIV plus not increase drug use (Personal Communication, 2/18/09).

Yet a different spin on framing this issue was discussed by Dr. Heimer.

Co-opting a theme usually used by Needle Exchange opponents, he recounted how a supportive police chief in New Haven, CT helped bolster the positive points of these programs. While challengers of these programs often include law enforcement who believed *Moral* frame of increases in drug use and crime, the New Haven chief:

He followed the idea of 'order' or of making syringes a 'commodity' and regulating them, which helped keep order and the streets clean. Here, the cops saw NE as a way to keep needles off the street. The program actually helped decrease the public discarding of used needles (Robert Heimer, Personal Communication, February 13, 2009).

Although each of the experts presented different views on framing, each one believed that framing certainly played a role in the Needle Exchange debate. Dr. Heimer had one final comment about framing in the real world: "The role of personal stories is always political and can override the science" (Heimer, 2/13/09).

The role of timing. Dr. DeJarlais emphasized how the arguments surrounding Needle Exchange changed over time. Dating back to the 1980's, he said, crack cocaine was a huge drug problem, especially in the inner cities, so this was front and center on the minds of people:

Over time, the impact of crack cocaine and other drugs decreased somewhat ... opposition within the minority community to Needle Exchange began to decrease ...as

the crack epidemic receded. Also over time, the scientific evidence supporting Needle Exchange increased as well. (Don DeJarlais, Personal Communication, February 18, 2009).

Furthermore, he acknowledged that initially, Needle Exchange programs were accompanied by increased drug activity in minority neighborhoods, so the idea that these programs may have increased drug use was understandable. As this threat in the minority communities waned, more began to support Needle Exchange.

The importance of timing was echoed by Mr. Lurie. Over time, he asserted, Needle Exchange became less controversial:

The drug wars of the early 1990's [receded over time] are not as big news now. People seem to be more used to these drug issues now. Additionally, the 'predicted disasters of increased drug use' due to Needle Exchange programs didn't happen. The data did not support this fear. People have gotten used to the idea of Needle Exchange over time as they became more familiar with the program (Personal Communication, March 25, 2009).

He also felt that more emphasis had been placed on the HIV problem over the years and stopping the spread of AIDS and less so on the drug war from the 1990's. HIV is much better understood now and these programs, Mr. Lurie explained, had time to prove their effectiveness.

2. *Stem Cell Research*

a. Primary Sources – Content Neutral

Media. Three reporters were interviewed by phone, two newspaper print reporters and one television reporter. The television reporter, Michael Aron, was a political reporter for New Jersey Network and noted that the station had a separate science reporter, so he did not report or research an issue

from a scientific perspective. The print reporters, Tom Moran and Susan Livio, each worked for the *Star Ledger* in New Jersey.

The majority of media representatives agreed that the Stem Cell Research issue provided more positive framing opportunities than the Needle Exchange issue. Described as “more popular”; “a feel good issue” and “better framing opportunities through addicts versus celebrities”, a key factor in delineating the differences in the issues lay in the target audience. While the Needle Exchange issue provided “no political capital for addicts” with Stem Cell Research, “everyone knows someone with a disease [that may benefit from this research]” (Susan Livio, Personal Communication, March 20, 2009).

Additionally, Needle Exchange focused largely on the cities, where there were many perceived problems but not on the suburbs where there are many voters. Ms. Livio continued that there was a racial component in Needle Exchange that didn’t exist with Stem Cell Research –many addicts are non-white, urban dwellers. Although there were white people using the Needle Exchange programs, they were not as “visible” or on the street like other addicts.

According to these media representatives, no one frame for Stem Cell Research resonated individually; the frames overlapped and mutually reinforced each other. Mr. Arons used a *Scientific* frame – actually a sound bite - to describe the public perception of the issue: “Saving Lives; Resolving health problems.” When asked to describe useful frames, he mentioned “Cures diseases like” for Stem Cell supporters and listed a *Moral* frame for

opponents: "Abortion, Religion, Fetus..." (Michael Arons, Personal Communication, March 5, 2010). Mr. Moran commented that another *Scientific* frame – that of the promise, or hope, for a cure through this research - resonated well for supporters. He also noted a *Political* frame:

The Stem Cell issue was political in that it was a very democratically based issue. Many legislators during re-election, including the Governor's race, talked about support for Stem Cell Research (Tom Moran, Personal Communication, September 28, 2009).

Continuing the role of multiple frames, he noted that he saw Stem Cell Research as a "surrogate for the Pro-Choice movement" alluding to the question of when life begins, or a *Moral* frame.

The overlap of frames was also described by Ms. Livio. When asked which factors she thought contributed to the movement of Stem Cell Research, she listed: celebrity spokespeople (a *Political* frame); the economic element (an *Other* theme) and personal connections where illnesses that could benefit from this research were identifiable to most people (a *Science* frame). A final thought from this print reporter regarding why Stem Cell Research was able to move at a quicker legislative pace was based on a *Science* frame – that there was room for a compromise with Stem Cells that didn't exist with Needle

Exchange:

The real argument was against using embryonic stem cells, not stem cell research in all facets. People could agree to focus on other types of stem cells, like adult. There was no middle ground on Needle Exchange" (Susan Livio, personal communication, March 20, 2009).

b. Stem Cell Research – Primary Sources - Opponents

Advocates. Three advocates were interviewed by phone – Jennifer Ruggiero from the Diocese of Metuchen, Director, Office of Respect for Life; Pat Brannigan, Executive Director of the New Jersey Catholic Conference and Dr. George Corwell, Director of the Office of Education, N.J. Catholic Conference.

Framing. Ms. Ruggiero believed that framing was a useful advocacy tool:

You focus on one or two message and that is useful. Stem Cell Research is a complicated issue and the church strived to reach a lot of people. The Church strategy focused on educating through the differentiation of the types of research...Issue framing allowed [us] to focus on two points: There are a few different types of Stem Cell Research, embryonic and adult and the Church supports adult. (Personal Communication, July 8, 2009).

Furthermore, she stated that framing does not decrease the importance of the research when it condensed into sound bites, but instead acknowledged that this is the society that we live in and that people are used to the concept of sound bites. Dr. Corwin agreed that he also will use sound bites when appropriate, and Mr. Brannigan added that sound bites can be good but cautioned that they must be used appropriately.

...sometimes [sound bites] help people understand complicated things better, such as the example of 'adult stem cells' a term that is easier to remember and explain than 'pluripotent cells.' This also helps us delineate between embryonic and other cells (Dr. George Corwin, Personal Communication, September 14, 2009).

The concept of delineation between adult and embryonic stem cells is very important to these advocates. As Mr. Brannigan explained: "Embryonic stem cell proponents always use the term 'stem cells' and don't differentiate between adult and embryonic" (Pat Brannigan, Personal Communication, September 14, 2009). Ms. Ruggiero also supported this idea of differentiation –

[Our] strategy focused on educating through the differentiation of the types of research – one was o.k. and one was not. The one the church supported used science to back itself up – adult stem cells have been used in research for a number of decades now and has shown some success while embryonic cells have not shown any successes while being morally and ethically wrong (Personal Communication, July 8, 2009).

This differentiation is the key to the views of the Catholic Conference, where their position on Stem Cell Research exemplifies the overlap between a *Scientific* and *Moral* frame:

The Catholic Conference has always opposed embryonic stem cell research based upon a number of grounds including the destruction of life, the absence of any scientific evidence of the effectiveness of embryonic stem cells to treat illness and the availability of a large array of effective treatments utilizing adult cells (Dr. George Corwell, Personal Communication, September 14, 2009).

The Diocese of Metuchen further bolsters this use of both a *Moral* frame and *Science* frame to lay out their position:

The Catholic Church opposes embryonic stem cell research and supports adult stem cells. Embryonic stem cell research involves destroying embryos which the church believes is morally and ethically wrong ...Science has shown that advances have been with adult stem cells but nothing with embryonic. Science shows that adult cells are the way to go, they are providing cures now (Jennifer Ruggiero, Personal Communication, July 8, 2009).

These advocates used both the *Moral* theme and the *Science* theme to further their support for adult stem cells while opposing embryonic.

We are fond of saying that as people of Faith we say follow the science and some scientists say – have faith in us. We enthusiastically support adult stem cell research and treatments (Pat Brannigan, Personal Communication, September 14, 2009).

While supporting adult cell research, these groups acknowledged framing challenges from the supporters of embryonic research. Using personal stories and visuals of patients in wheelchairs suffering from diseases such as Parkinsons, Ms. Ruggiero admitted that it was difficult to oppose the pleas of the afflicted people. She explained that, to counter this *Political* frame, she used a *Scientific*

argument by providing examples of the proven effectiveness of adult stem cell treatments. Another challenge discussed by Mr. Brannigan was the general use of “stem cells” by those supporting embryonic research. Those groups, he explained, did not differentiate like the opposition groups:

The general use of ‘stem cells’ was effective because it lead to confusion in [the public] – where they referring to embryonic or adult? This was very different than how the Catholic Conference people framed the debate (Personal Communication, September 14, 2009.)

Another critique leveled by Ms. Ruggerio against supporters of Stem Cell Research including using “false hopes about the potential of embryonic stem cells.” The emerging possibility of tweaking adult cells could make embryonic research obsolete, showing a “positive use of science without the negative moral connotations” (Personal Communication, July 8, 2009).

Scientific framing played an important role for advocates opposing Stem Cell Research. However, “Science alone is not what is driving the debate” stated Jennifer Ruggerio.

Other frames. Ms. Ruggerio mentioned frames other than *Scientific* that impacted the Stem Cell Research debate, including the economic argument that this research – particularly embryonic with its hope and potential - could help create jobs and grow the economy (the *Other* frame) as well as a *Political* argument that “politics helped to blind the science” meaning that political ramifications were overshadowing the evidence that science supported adult cell funding instead of embryonic. If dollars weren’t diverted to embryonic research but instead funneled to adult research, perhaps we would have more positive

developments already (Jennifer Ruggerio, Personal Communication, July 8, 2009). Referring to the potential for economic development, Mr. Brannigan commented that "...this turned out to be a fiction" as the economic boom never took off with embryonic research.

An important *Political* frame discussed by Mr. Brannigan included "getting a champion" particularly in the legislative and executive branches.

From a pure observation perspective, legislation that moves rapidly through the process usually has one or more influential champions in the legislature and legislation that "languishes" has one or more influential opponents." (Personal Communication, September 14, 2009).

He believed that the supporters of embryonic research had other champions, at least initially, in the business world such as drug companies and universities.

b. Stem Cell Research – Primary Sources – Opponents, continued

Policymakers. Two policymakers who opposed Stem Cell Research were interviewed by phone. They included Renee Trebert, Chief of Staff for New Jersey State Senator Tom Keane, Jr. and New Jersey State Senator Pennacchio.

Framing. Ms. Trebert saw the importance of Stem Cell Research wrapped in a *Scientific* frame:

Stem Cell Research had a more public debate because so many more people were impacted by it...[this research] could reach many members of the public who might have family members who could potentially be helped by more research (Renee Trabert, Personal Communication, April 15, 2010).

She further commented "In the end, science was a fair determinant in Stem Cell Research" (Personal Communication, April 15, 2010).

Senator Pennacchio agreed with the assessment that the *Scientific* frame played a large role in the Stem Cell debate. In making a decision to support or

oppose this issue, he believed it was important to look at what works, not what MAY work:

That is the problem with embryonic research. [I] believe that you should proceed with proven studies, not studies that only may help. This is why science is important to [my] decisionmaking... Lawmakers are wasting time on embryonic [research] ...there were at least 70 'cures' or uses for adult stem cells and zero for embryonic cells (Senator Pennacchio, Personal Communication, 5/13/10).

Both Ms. Trabert and Senator Pennacchio were quick to note the differences between embryonic research and adult Stem Cell Research. Each voiced concerns about embryonic but supported adult Stem Cell Research, furthering the role of the *Scientific* frame in explaining the difference:

Science is everything and now with the adult cells believed to be used more diversely, embryonic stem cell research may become a 'moot point.' The embryonic argument is mainly *political* while the adult [stem cell research] argument was based on *science* as in, there were proven uses for adult cells but only the promise or hope for embryonic treatments (Senator Pennacchio, Personal Communication, 5/13/10).

Economic issues through the *Other* frame also became important arguments.

Financial discussion is what turned the corner on this. The discussions got 'muddy' regarding state investment in stem cell research regarding the ethical deliberations. The issue ... could be broken down into two parts: the grant piece and the physical research center, or the bricks and mortar (Renee Trebert, Personal Communication, April 15, 2010).

State spending, part of the *Political* frame, overlapped with economic and *Moral* (ethical) considerations . Ultimately, Ms. Trabert expanded on the role of the *Other* frame to include the concept of "race to the finish" with New Jersey moving quickly on Stem Cell Research to compete with other states such as California to entice researchers and scientists, increasing the economic impact of

the research in the state. This race to the finish existed due to the lack of policy on the federal level leaving a policy vacuum for the states to fill.

Senator Pennacchio believed there was a lot of 'misinformation from politicians' about embryonic research and he clearly opposed this research.

Emphasizing what he termed as the *Political* framing of the issue to benefit embryonic research, and ultimately its state funding, he commented:

[I] could never win the argument because the funding questions [on the Institutes that would provide embryonic research] were filled with "political" science. People didn't want to hear the basic problems with embryonic research and stick with proven adult stem cells (Personal Communication, 5/13/10).

Furthermore, he indicated that the argument of a positive economic impact, or the *Other* frame, was "clearly a political one set out by those who support embryonic research to justify spending the money on the Institutes that were supposed to be created in New Jersey" (Personal Communication, 5/13/10).

Role of Science. Although science played an important role in the debate, the *Moral* frame also greatly impacted the discussion. Ms. Trabert mentioned the conflict within the data presented on Stem Cell Research on both sides of the issue, adding to the complication. Combining both the *Moral* and *Science* frame, she believed that, ultimately, Stem Cell Research focused on bioethical issues:

Here, we have questions like, Does Stem Cell Research hold the key to finding treatment for [a number of] diseases? Also, there are questions about adult vs. embryonic cells. Other questions including state investments... Bioethics challenged this state investment as questioning embryonic research, the manipulation of science and cloning...the flip side of this was the promise of embryonic stem cells as finding cures for diseases that impact nearly every family (Renee Trabert, Personal Communication, April 15, 2010).

It should be noted that neither Sen. Pennacchio, nor Ms. Trabert used the *Moral* argument of the death of embryos as an argument to oppose embryonic

research. In fact, Sen. Pennacchio didn't mention the "life" issue at all in our discussion. Both policymakers did delineate between embryonic and adult cells and Senator Pennacchio used the *Science* frame to argue against the former - by asserting that proven uses of adult cells supercedes the hope and promises of embryonic research.

c. Stem Cell Research – Primary Sources - Supporters

Advocates. Two advocates supporting Stem Cell Research were interviewed in person. Carl Van Horn served as Chairman of the Economic Development Authority which had a role in the preliminary planning of the Stem Cell Institute of New Jersey. Jeannine LaRue worked for the Corzine administration and for St. Barnabus Health Care Systems.

Framing. Ms. LaRue noted that framing in general was a useful tool in the policymaking process. She favored a personal, one-on-one approach to dealing with legislators and found public opinion polls useful in helping her craft a general strategy in dealing with the legislature. Commenting specifically about the failed Bond issue in 2007, Ms. LaRue mentioned the role of a *Moral* frame working more successfully than a *Scientific* theme:

People underestimated the religious stronghold ... there were so many diseases that could be impacted in a positive way by stem cell research but 'people believe what they believe' (Jeannine LaRue, Personal Communication, October 2, 2009).

Ms. LaRue discussed the complexity of the Stem Cell issue and how frames overlapped. She felt that the research divided people – embryonic research was pitted against religious views in a *Science* vs. *Moral* frame:

[People] agonized if [Stem Cell Research] was 'right'. There were many questions about the science; experiments had unclear outcomes and sometimes the science made people uncomfortable. Many folks were in the middle, it wasn't clearcut. (Personal Communication, October 2, 2009).

Dr. Van Horn, due to his role in the NJEDA, saw things from the scientific perspective as they received and gave out information from the technical side – engineering and architecture as well as input from the researchers themselves regarding what they need in a research facility.

c. Stem Cell Research – Primary Sources – Supporters, continued

Policymakers. Three policymakers were interviewed for this section, including Rich Lee, former Deputy Director of Communications for Governor Jim McGreevey, interviewed by phone; Laurie Candelosi, Legislative Director for Senator Joe Vitale, Chairman of the New Jersey Senate Health Committee, interviewed by phone; and Pete Cammarano, Chief of Staff to Senator and former Acting Governor Richard Codey, interviewed in person.

Framing. Mr. Cammarano believed that framing was important, particularly the visuals with Christopher Reeve, children in wheelchairs, accident victims – the key was giving people hope.

With Stem Cell Research, the constituency was important – that people supported it. People had relatives who would be impacted by [this research]. The public perceived it as being beneficial, and it energized the democratic base in a 'safe' way (Pete Cammarano, Personal Communication, 12/22/08).

This *Science* frame was successful, or at least the perception of "hope" resonated with the public. Mr. Cammarano credits the media for playing a significant roll in "selling" this issue, given the lack of hard studies regarding the benefits of embryonic Stem Cell Research. He commented on the strong media,

supportive constituency, successful advocacy and weak (proven) science surrounding this issue.

Also supporting the *Science* frame was Ms. Candelosi. She found the scientific information very useful, particularly "...explaining what has been done already and the potential for hope in the future. Personal cases helped, too" (Laurie Candelosi, Personal Correspondence, 2/17/10). As an aside, Laurie mentioned that she wished the researchers reached out more and shared more information with the legislative offices. The third interviewee, Rich Lee, agreed that

...all, or at least most, of the Stem Cell arguments used scientific information ... which was useful. The benefits provided by the science were easy to show – potential benefits showed wide ranging benefits to people (Rich Lee, Personal Correspondence, 5/29/09).

Mr. Lee also discussed the successful *Science* frames that talked about "hope" and "promise" and the belief that over time, these promises would come to fruition. "People are suffering, dying and here is the hope for a potential answer to their suffering (Personal Correspondence, 5/29/09). He agreed with Mr. Cammarano's assessment of the importance of visuals for spokespersons, specifically commenting on Chris Reeve as being a good "face of the issue to the public."

Interestingly, one frame that Ms. Candelosi found compelling was a *Political* theme that she thought might have broad appeal – that by funding Stem Cell Research, the government can regulate it. She thought this was a great message and a novel way to present the issue, although it didn't appear that the

legislature shared this view since this particular frame was not emphasized in the media, nor does it appear that legislators followed this concept.

Another theme that resonated with Ms. Candelosi was the *Other* frame, focusing on job creation in the biotechnology industry, and her comment shows the overlap with a *Political* frame as well:

Another message specific to New Jersey was that New Jersey should continue to maintain its edge as a drug research/biotech leader and by supporting Stem Cell Research the state could continue this trend. [Using this issue] during a campaign year, the use of Stem Cell Research as a campaign issue [could allow] democrats to be in front and 'own' it and spin it the way they want to (Personal Communication, 2/17/10).

However, to Rich Lee, "The economic impact [*Other* frame] played a role but not a major one. People used it as a frame but it was not as good as the health care benefits [*Science*] frame" (Personal Communication, 5/29/09). Mr. Lee did credit a successful anti Stem Cell frame as the *Moral* pro-life theme, even though "Often, the state tends to be more moderate leaning. This group was very vocal even though they may have been in the minority" (Personal Communication, 5/29/09).

c. Stem Cell Research – Primary Sources – Supporters, continued

Experts. Three experts were interviewed by phone regarding stem cell research. Two worked directly in the field while one focused more on media coverage. Dr. Martin Grumet is affiliated with the Keck Center at Rutgers and the Stem Cell Institute at Rutgers. Dr. Rick Cohen is the Director of the Stem Cell Research Center at Rutgers. Dr. Montague Kern is an Associate Professor, Journalism and Media Studies, at Rutgers University. She was chosen

to interview due to her participation in a Stem Cell Conference at Rutgers in 2007 which focused on Stem Cell Research and the Media.

Framing. All three interviewees agreed that framing was an important part of the debate but that supporters of Stem Cell Research fell short in successfully framing the issue. Dr. Kern commented:

Framing was especially important after [President] Bush ended federal funding for Stem Cell Research. Most of the frames were pro-life frames, they were effective and they did have an impact on public opinion. Two reasons explain why – the consistent use of the frame and the lack of public knowledge of the issue from a scientific perspective (Dr. Montague Kern, Personal Communication, May 26, 2009).

Dr. Kern's beliefs indicate a lack of a strong *Science* frame on the part of Stem Cell Researchers, which allowed opponents to insert a *Moral* theme to bolster their opposition. Agreeing with these viewpoints, Dr. Grumet further discussed the role of framing during the Stem Cell discussion and how the lack of a strong *Scientific* explanation fostered the *Moral* embryonic argument: "[Supporters] were not effective in explaining what Stem Cell Research is all about" and he mentioned how each side focused on embryos, "...taking embryos to help save lives; or from the negative side, destroying embryos destroys a living being" (Dr. Martin Grumet, Personal Communication, May 27, 2009). This comment exemplifies how opponents were able to reach the public by framing the issue from a *Moral* (or embryonic) perspective and force Stem Cell supporters to answer to their *Moral* viewpoint.

Dr. Kern felt that scientists did not have a good, consistent approach to Stem Cell Research as far as the public was concerned.

While their research may be a good thing, scientists just assumed that the public saw it that way. Researchers themselves did not do a good job in reaching the public and explaining what they were doing and the benefits of the research. The scientific community should have and could have done a much better job and thus set the groundwork for a better, more positive frame (Dr. Montague Kern, Personal Communication, May 26, 2009).

As if to bolster this assertion, Dr. Grumet independently commented that

"...[m]ost people do not need to be convinced of the positive aspects of Stem Cell Research... Once you explain things to people, they usually support the idea behind the research" (Personal Communication, May 27, 2009). Interestingly, he mentioned the role of the media in framing and suggested that maybe

"...[t] here is almost 'too much hype' by the media regarding the potential of the research, especially if you are suffering from an end-stage disease and you look forward to the promise of stem cells, but that still remains only a promise of help for your disease" (Dr. Martin Grumet, Personal Communication, May 27, 2009).

Dr. Cohen believed that no memorable frames were used in support of the Stem Cell Research debate and he felt that legislators did a poor job of explaining and supporting the issue. He also noted that opponents did "...a better job of framing the issue through the right to life argument". Dr. Cohen was disappointed that the *Science* frame was not stronger and felt that politicians "should have turned more to science to rebut this [the *Moral* right to life] frame" (Dr. Rick Cohen, Personal Communication, February 17, 2010).

While Dr. Cohen was critical of politicians not promoting a stronger frame in support of Stem Cell Research, he did not suggest that perhaps his colleagues could have provided more information or background to them to help the legislators bolster the argument.

These experts specifically discussed the weak framing by scientists and legislators, and supporters of Stem Cell Research, utilizing a *Moral* and or *Science* frame. The *Other* theme, highlight economic issues, was mentioned only by Dr. Cohen. He discussed, initially through a *Political* frame, how this research was moving quickly and New Jersey was falling behind the curve, requiring more funding. Cost effectiveness was a key to this research, he added, mentioning how biotech companies would purchase research being done by state researchers and create private sector jobs – but initially scientists needed sufficient start-up dollars:

Policymakers should listen to the researchers who can prove how cost effective the research is. The research can lead to taking adult stem cells and reprogramming them to be like embryonic stem cells. Stem Cell Research can generate jobs, technological developments and all this is good for the economy... but the scientists need the initial funding that is now getting taken away (Dr. Rick Cohen, Private Correspondence, February 7, 2010.)

Dr. Cohen ironically commented how politicians used economic reasons NOT to fund Stem Cell Research but they could have better used the economic argument to support it. “In general, people had a mistrust of government and government funds so legislators were hesitant to provide sufficient funds” (Personal Correspondence, February 7, 2010) although the potential benefits to the economy could serve as a counterargument to this legislative stand.

Role of Science. Dr. Kern was tough on scientists:

Scientists assume science is respected, this is not always the case. [Regarding Stem Cell Research], scientists have not done effective outreach, nor have they interacted well with the media. Advocacy groups did a better job than scientists themselves. (Dr. Montague Kern, Personal Communication, May 26, 2009).

Dr. Cohen believed that science played a small role but it should have been larger.

It should be noted that all three experts discussed the use by the opposition of the pro- life or Moral frame. They did not always, however, distinguish between embryonic and adult cell research and did not discuss fully the idea of delineating between the two.

B. Secondary Sources.

For both Needle Exchange and Stem Cell Research, three secondary sources – news articles, testimony and issue papers – were analyzed for evidence of framing using four major themes or frames: Moral, Scientific, Political and Other. Each frame had at least two subthemes. Commonalities and differences between issues and frames are discussed.

1. *News Articles.* A total of 40 articles were examined, 20 Needle Exchange and 20 Stem Cell Research. To ensure random selection of articles for a total of 20, a search in Nexus was conducted using the terms “Needle Exchange and New Jersey” and “syringe exchange and New Jersey.” Articles were found for the period spanning 1995 – 2009. A separate search for each calendar year, beginning with 1995, yielded varying numbers of articles per year. Additionally, a search in Nexus was conducted using the terms “Stem Cell Research and New Jersey.” Articles were found for the period spanning 1999 – 2009. A separate search for each calendar year, beginning with 1999, yielded varying numbers of articles per year.

Analysis. Both sets of articles were analyzed and coded following the theme-based rubric described in the Methodology Chapter. The four main themes included: *Moral, Science, Political, Other*. Although the themes were the same for Needle Exchange and Stem Cell Research articles, some of the subthemes varied with relevancy to that specific issue. Tables 4.1 and 4.2 describe the themes and subthemes for each issue.

Table 4.1. Description of Categories for Analysis
Needle Exchange

THEMES	Moral	Scientific	Political	Other
Subthemes	Broad impact on society	Studies cited	Other states	HIV/Health specific
	Enabling/Increasing access for drug addicts	Health facts	Evoking public opinion	Access to drug treatment
			Questioning integrity of opponents' arguments	
			Mention of legislative process, policy process	
			Use of taxpayer dollars	

Table 4.2. Description of Categories for Analysis
Stem Cell Research

THEMES	Moral	Scientific	Political	Other
Subthemes	Broad impact on society	Studies cited	Evoking public opinion	Economic Incentives
	"Life" issues – beginning at conception/embryo	Health facts	Questioning integrity of opponents' arguments	Job creation
		Adult vs. Embryonic outcomes	Mention of legislative process, policy process	
			Use of taxpayer dollars	

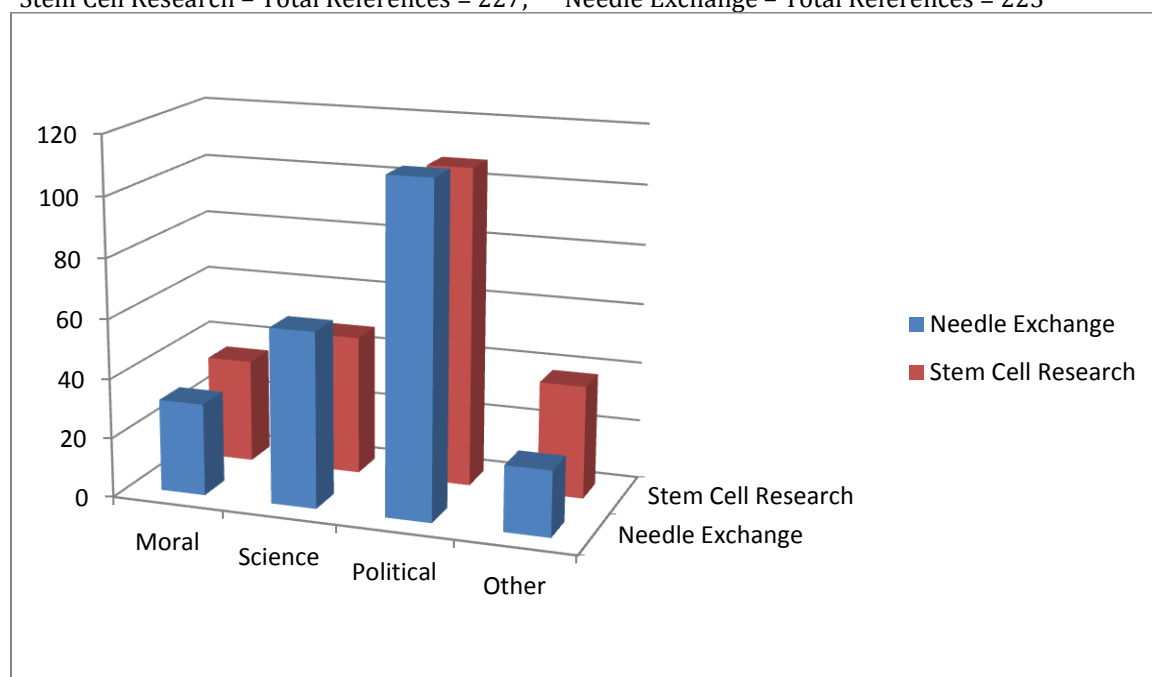
Most articles contained multiple themes and references, reflecting the complexity of these two issues. It was sometimes difficult to parse out specific themes as they often overlapped. In the analysis of the news articles, Needle Exchange and Stem Cell Research shared some similar traits and also showed factors unique to each topic.

The most common theme for both Needle Exchange and Stem Cell Research was *Political* (Chart B1). Words or phrases within an article received this designation if they dealt with or mentioned at least one of the following topics: public opinion, the legislative process, an opponent's argument or taxpayer dollars. An additional subtheme, mention of the policy in other states, was included with Needle Exchange.

The *Political* frame had 111 references out of a total of 223 (nearly 50%) for Needle Exchange and 107 *Political* references out of a total of 227 (47%) for Stem Cells. The majority of *Political* references for both topics dealt with a particular bill or the policy process overall.

CHART B1 - References Per Frame, Newspapers

Stem Cell Research – Total References = 227; Needle Exchange – Total References = 223



Needle Exchange. *a. Political Frame*. References to the political process comprised about 49% of the *Political* theme. During the early stages of the legislative Needle Exchange discussion, Governor Whitman was prominently mentioned in some articles. The Governor opposed Needle Exchange while the AIDS Advisory Council appointed by her supported the program. " [Members of the AIDS Advisory Council] hoped that the Governor was reconsidering her stand..." (Scott, "Whitman Takes Another Look at Needle Exchange" *Star Ledger*, 5/1/96). Many of the articles discussed in this section come from the *Star Ledger* which, it should be noted, is known as a moderate to liberal leaning publication.

This dichotomy provided good fodder for the media. The Chairman of the AIDS Advisory Council, David Troast, said he was initially opposed to Needle Exchange but was persuaded "...after visiting a similar program in the Bronx and by recent studies showing that easier access to clean needles slows the spread of the virus that causes AIDS" (Preston, "Whitman AIDS Panel Urges Needle Exchange Programs" *The New York Times*, 4/4/96). This change of heart for the Council Chairman could prove to foreshadow the eventual turnaround that Needle Exchange policy experienced in the state. Over time, more and more evidence supported the effectiveness of these programs, perhaps slowly eroding the initial negative public perception.

However, it is unusual for a Council that is appointed by the Governor to make a recommendation that counters the Governor's public position. In

response to the surprising position taken by her AIDS Advisory Council, a spokeswoman for Whitman acknowledged that, while some evidence did exist that clean needles may aid in slowing the spread of HIV, the Governor

...feels that she has a much broader responsibility to not only prevent AIDS, but to prevent crime and promote public safety...Illegal drug use is at odds with those goals. (Preston, "Whitman AIDS Panel Urges Needle Exchange Programs" *The New York Times*, 4/4/96).

This concept illustrates the complicated message surrounding Needle Exchange, utilizing a *Science* theme as well as a *Moral* theme. For the purposes of this analysis, the *Science* theme includes specific references to completed studies, or, in this case, a health fact, such as Needle Exchange helping to slow the spread of HIV. The *Moral* theme encompasses words or phrases that describe a broad impact on society such as the need to prevent crime and promote public safety; or phrases that depict enabling drug addicts.

Political Leadership. Three years later, Governor Whitman remained opposed to the program. Gubernatorial leadership seemed an important component (albeit certainly not the only one) in the success or failure of a Needle Exchange program. "Lawmakers had no reason to risk alienating some constituents by passing a bill on Needle Exchange" wrote Maia Davis in *The Record*, "because they know that Whitman would veto any measure" (2002). In an article from the *Star Ledger* which presented the multiple frames of Needle Exchange, reporter Jesse Drucker quotes Chris Lanier, from the Harm Reduction Coalition, a group supporting Needle Exchange, who acknowledges the importance of the Governor's role in this issue: "The conventional wisdom is that nothing will

happen until Whitman leaves, but if no one does anything until she leaves, then it will take years longer to pass" (1999).

Once James McGreevey was elected Governor in 2001, the Needle Exchange debate as reflected in news accounts, took a different path. Writing that "...[I]n New Jersey, the topic (of needle exchange) has been cold, and dead" Maia Davis of *The Record* acknowledges that ..."[T]he debate may stir back to life...Governor-elect McGreevey announced ...that he wants to start a pilot hospital-based program that would exchange addicts dirty needles for sterile ones" (2002).

News stories reflected that as the Governor took a more active role on Needle Exchange, the legislature began to push back. With McGreevey setting in motion a Needle Exchange policy through his Executive Order in 2004, Acting Governor Codey continued support of the policy. While legislators supporting Needle Exchange under Governor Whitman organized into weak opposition, those opposing the policy under the democratic Governors took strong action. Four state legislators filed a lawsuit to stop the Needle Exchange pilot created by Governor McGreevey, reported Pete McAleer, from *The Press of Atlantic City*. "This is not government by fiat" said Senator Kean, [one of the four to participate in the suit]. "Its too important for one man's opinion to prevail without the checks and balances of the constitution"" (2004). Evidence of support for Needle Exchange in the Executive branch and carryover into the legislature by

the mid 2000's was discussed in the *Star Ledger* in a commentary by Tom

Moran:

Governor Corzine got involved, pressing recalcitrant Democrats. So did Senate President Cody, who hammered out a compromise with Senator Vitale, the Health Committee Chair (2006).

While the Governor certainly played an important role in the Needle

Exchange debate, legislators also contributed greatly to the dynamic. Another

factor that was well documented by various news accounts that impacted the

legislative debate was the issue of Race, introduced into the legislative debate by

Senator Ron Rice and covered by the *Star Ledger*:

The Needle Exchange program has faced stiff opposition from state Senator Ron Rice, an African-American who represents Newark in the Legislature. Rice argues that the exchange program will only encourage drug use, in turn allowing other crimes to occur" (Wang, 2007)

During the prior year, another legislator, Senator Nia Gill, a fellow

democrat and African American woman, began to chip away at Senator Rice's

longstanding opposition to the program:

[Senator] Gill was tired of hearing Rice present himself as the champion of African-Americans on [this issue]...Debate dragged on, in part because Rice so effectively invoked the issue of race, which can quickly paralyze the discussions in Trenton. (Moran, "Big Changes in Trenton When Pols. Get Personal" *Star Ledger*, 9/20/06).

Moran's commentary continued to document the different views within the

African American community,

Rev. Jackson of the Black Ministers Council said 'But the argument that needle exchange is a conspiracy to keep blacks on drugs [as forwarded by Senator Rice] is really ridiculous. The majority of people in the black community favor needle exchange. It's overwhelming.' Senator Gill continued, 'Your message [opposing needle exchange] was rejected' she told Rice (Ibid).

That injection-related AIDS predominantly affected a mainly urban, minority

population was detailed by the media:

Injection related AIDS among African Americans and Latinos in New Jersey and the nation have created a 'health emergency' according to a new demographic study... (American Health Line: "Statelines" 11/10/98).

and

New Jersey ranks first among all states in proportion of AIDS cases related to injection drug use...Newark and Jersey City AIDS statistics rank these cities among the nation's five worst AIDS epidemics (Scott, "Whitman Takes Another Look at Needle Exchange" *Star Ledger*, 5/1/96).

Furthermore, a plethora of news articles including Op-Ed pieces cited the *Scientific* information that Needle Exchange programs have been proven successful in helping to stop the spread of HIV. This overlap of *Political* and *Science* frames helped bolster the argument in favor of Needle Exchange programs by providing facts on which legislators can base policy.

It's been proven nationwide that a Needle Exchange program, coupled with awareness and treatment, will significantly reduce the spread of AIDS and other diseases' Newark Mayor Cory Booker said (Wang, "Newark on the Verge of Clean Needle Exchange..." *Star Ledger*, 5/16/07).

and

Needle Exchange programs are supported by the CDC, National Academy of Sciences, the American Medical Association, the American Bar Association and the American Public Health Association (Sharpe, "A Needle Exchange is Sound Public Policy" *Star Ledger*, 11/24/03).

Given this support, the media asked a key question: "If the medical profession is telling us that Needle Exchange is important to save lives, why do we ignore the medical advice in this area?" (American Health Lines: "Statelines", 1998). The answer was summarized in an Op-Ed piece by John McLaughlin in the *Star Ledger*: "The real message New Jersey has been sending all these years is not 'Drugs are dangerous so don't do them.' It's more like: 'You shoot up? We don't care if you live or die.'" (2003)

Or finally, as Robert Sharpe of the *Star Ledger* explained “When politics trumps science, people die” (2003).

Questioning opponents statements. Overall, the role of the *Political* theme helped frame many of the news stories, whether the focus was on the political process or the integrity of the opponent’s statements. In analyzing the news articles, the second most frequently used group of words or phrases referred to a counter argument about Needle Exchange. This idea of questioning an opponent’s statements was recorded 30 times out of 111 *Political* references, encompassing 27% of all *Political* references. *Star Ledger* staff writer John McLaughlin, in 1998, particularly took issue with many of the counter arguments to Needle Exchange,

The Governor [Whitman] has zero tolerance for anybody who argues that these programs help stop the spread of AIDS, hepatitis and other diseases...despite the righteousness of our message, we’re closing in on 20,000 AIDS deaths ... (1998)

The next month, upon release of a study indicating that injection related AIDS among minorities in NJ was creating a “health emergency,” state officials remained unmoved. “The Health Department spokesperson...agreed that AIDS in NJ is ‘an epidemic’ but refused to call it an ‘emergency’” (American Health Line, “Statelines” 1998).

Both Governor Whitman and Senator Rice focused on the drug addiction aspect of Needle Exchange as the primary concern. While this is certainly a large piece of the problem, many media accounts noted that there needs to be consideration of a second piece of the problem – the spread of HIV through dirty needle sharing.

"The Governor [Whitman] feels very strongly that the government should not be condoning illegal drug use by providing hypodermic needles. On one hand, we can't send the message to children that drug use is harmful and then on the other, hand out needles...Rice said, 'No one would argue that a clean needle would not spread HIV and other diseases as well. That's not the issue. The selling and use of drugs is'" (Drucker, "Project Aims to Cut Spread of HIV" *Star Ledger*, 8/8/99).

Through the "Reader Forum" section of the *Star Ledger*, a gentleman from Camden added his two cents:

A new kind of Tuskegee experiment is taking place in New Jersey. This time, the disease is HIV infection. The people being deprived of an effective health strategy that could save their lives are drug users, their sex partners and their unborn children. The strategy is clean syringe availability..." (Fulbrook, 1997).

The press wrote stories discussing and criticizing both those who support and oppose Needle Exchange. A legislative assault on Needle Exchange programs was carried out by Republican New Jersey State Senator Jerry Cardinale, from suburban Bergen County, citing a study that found high risk sex, not needle sharing, to be a factor in HIV infection in IV drug users. The newspaper that ran this article was *The Washington Times*, known for its right leaning political views:

"It turns out that many of the assumptions of Needle Exchange proponents have been wrong...frequency of drug use and sex are behaviors most likely to cause addicts to become infected... A lot of Democrats and some Republicans who are gullible and politically correct will undoubtedly go for the plan [Governor McGreevey's plan] supporting a Needle Exchange program.'" (Price, 2002).

Other States. A third *Political* reference examines how neighboring states' policies play a role in influencing passage in other states. This idea of policy diffusion, while not referenced often (12% of all *Political* references) provided an interesting view on New Jersey's lack of a Needle Exchange program, since many neighboring states had a policy – "Both New York and Connecticut allow needle exchange programs..." (Preston, "Whitman AIDS Panel Urges Needle Exchange

Programs" *New York Times*, 4/4/96). A similar point is made two years later, "Forty one other states authorize over the counter sales of needles and none has an IV drug or AIDS problem remotely close to ours" (McLaughlin, "Whitman Just Doesn't Get the Point on Needle Exchange" *Star Ledger*, 11/18/98) and the point is further emphasized in 2003 "New Jersey is one of just two states that prohibit Needle Exchange programs" (Sharpe, "A Needle Exchange is Sound Public Policy" *Star Ledger*, 11/24/03).

b. Scientific Frame. The *Scientific* theme (59 total references out of 223, or 26%) for Needle Exchange, was second to *Political*, with almost half the number of *Political* references. Words or phrases within an article received this designation if they dealt with or mentioned the following topics: data regarding health facts or citing specific studies. From the beginning of the legislative process until final passage of a bill, many of the media accounts of the Needle Exchange debate commented on scientific evidence of the success of Needle Exchange programs.

There exists a large body of evidence demonstrating the syringe exchange and distribution programs have the capacity to protect significant numbers of people engaging in risk behavior (Preston, "Whitman AIDS Panel Urges Needle Exchange Programs" *New York Times*, 4/4/96).

Furthermore, "The CDC and other organizations have concluded that Needle Exchange programs reduce the spread of HIV without increasing drug use." (Stewart, "Newark Council Kills Needle Exchange Plan" *Star Ledger*, 12/22/99). A few years later, John McLaughlin wrote in the *Star Ledger* on December 12, 2003:

...studies show that [Needle Exchange programs] result in fewer cases of AIDS, that they do not lead to an increase in the number of users and that they save public money and that fewer children are born infected (McLaughlin, 2003).

c. Moral Frame. A third major theme, or frame, for Needle Exchange was the *Moral* view and these concepts comprised about 14% of the total number of references analyzed (Chart B1). The *Moral* argument regarding these health issues appeals to an emotional belief as opposed to a more rational scientific belief. Phrases that discussed a broad impact on society were considered a *Moral* frame; also concepts that examined enabling or increasing access for drug addicts were classified as a *Moral* argument. A strong argument that was used by opponents and picked up in the media focused on societal fear of enabling drug addicts:

"It's counterproductive for government to be facilitating injection drug use ... best program is to tell people, when they are young and in grammar school, that drugs are destructive and stupid behavior" (Price, "NJ Senator to Fight State's Needle Plan..." *Washington Times*, 7/19/02).

Although many of the *Moral* frames written about in the media emphasized the negative aspects of Needle Exchange programs, supporters also used these *Moral* concepts to their advantage. A flip side of the *Moral* argument stressed the broad positive impact these programs may have on society,

'It [Needle Exchange programs] can be controversial but its good public health policy...we are hoping to save lives here, that's the goal' said Senator Joe Vitale, Chair of the Senate Health Committee (Davis, "Needle Exchange Proposal Receives Another Chance..." *The Record*, 1/10/02).

Often, *Moral* arguments overlapped with *Political*.

Even though the scientific evidence was on the side of Needle Exchange programs, early in the process under the Whitman administration, the *Moral* arguments played a role in keeping Needle Exchange legislation from moving

forward. The press continually focused on the Governor's *Moral* opposition to the program: " 'The government should not in any way condone the use of illegal drugs... [Governor Whitman] does not believe that encouraging illegal drug use is the answer'" (Wiggins, " AIDS Protest at State House..." *The Record*, 10/22/97). Governor Whitman opposed the program because it "...sends a confusing message to children about drug abuse." (Metro Brief, *New York Times*, 12/18/98). Whitman was not alone in her views. Senator Rice, the most vocal opponent of Needle Exchange programs in the Senate, echoed her views on how Needle Exchange may enable addicts: " 'When you start giving out free needles, you're encouraging people to stay on drugs and not get off drugs. You give them a free needle, you are compounding the problem' " (Drucker, "Project Aims to Cut Spread of HIV" *Star Ledger*, 8/8/99).

This framing of "enabling" addicts through the use of *Moral* references, forwarded by those who opposed Needle Exchange programs, proved a difficult one to overcome, particularly as it became an accepted argument in the political debate over the program:

Some praise it as a humane way to reduce the harm drug users cause themselves and society. Others dismiss it as a wrong headed notion that enables addicts to continue along the path to self destruction.... [Harm reduction] is good public health...But because it is for drug users, it is controversial. (Davis, "Harm Reduction: Good Therapy or Bad Idea" *The Record*, 8/12/01).

John McLaughlin, in an Op-Ed piece from the *Star Ledger*, further showed how the *Moral* and the *Political* can meld together:

The converts to rationality [in supporting Needle Exchange policies] include New York, Connecticut and Rhode Island, all northeastern states with electorates much like New Jersey's but with legislators more willing to accept a minor risk – the risk that some opponent will take their support for needle exchange and distort it in such a way that they can be charged with begin soft on drugs. (McLaughlin, 12/10/03)

Eventually the *Moral* opposition gave way to public policy based on *Science*.

"When it comes to drug policy, far too many elected officials continue to put politics before public health. Shameless tough on drugs politicians have built careers confusing the drug war's collateral damage with drugs themselves." (Editorial, "A Needle Exchange is Sound Public Policy" *Star Ledger*, 11/24/03).

d. Other Frame. Supplementing the three main frames was a fourth category, *Other*. *Other* frames included references to Needle Exchange in only HIV-specific terms or regarding access to drug treatment programs. These concepts comprised 10% (22 out of 223) of the total number of references of phrases in the Needle Exchange analysis (Chart B1). As depicted in the press, this frame was used mostly by supporters of the policy to illustrate how drug treatment programs could work symbiotically with Needle Exchange: Commented a staff member, Donald Grove, from the Lower East Side Harm Reduction Center in Manhattan: "Needle exchange...is a logical entrypoint for [drug] treatment" (Scott, "Whitman Takes Another Look at Needle Exchange" *Star Ledger*, 5/1/96). The concept continued to surface through the debate, emphasized seven years later by an Op-Ed piece in the *Star Ledger*: "Needle Exchange programs serve as a bridge to drug treatment especially for the hard to reach population" (Sharpe, 2003).

The overlap between the themes continued as *Political*, *Science* and *Other* coalesced in this statement from a Councilwoman in Newark whose main concern regarding Needle Exchange was ensuring access to drug treatment:

Councilwoman Mamie Bridgeforth ... who chairs the council's Health Committee, said she thought that the research on needle exchange was 'relatively accurate' but said she had not decided whether to support it. 'If we do not have the ability in our communities to provide the beds for detox and all of the types of support that people need, I question

how effective (needle exchange) will be' (Drucker, "Project Aims to Cut Spread of HIV" *Star Ledger*, 8/8/99).

Stem Cell Research. Looking at the trajectory of Stem Cell research through newspaper articles, some similarities emerge with Needle Exchange, such as the emphasis on the *Political* theme, here with 47% of all references followed by *Scientific* with 27% (Chart B1) . The criteria used to analyze and code these phrases was similar to Needle Exchange (Tables 1a and 1b). Unlike Needle Exchange, with the *Moral* theme in third place, Stem Cell Research had more references in the *Other* category with 38 out of 227, or 17 % of all references . For Stem Cell Research, the *Other* frame has a focus on phrases or concepts which discussed job creation or economic incentives. The fourth theme, *Moral*, followed closely with 35 references out of 227 or 15 % (Chart B1).

a. Science. Although the Science frame was not the most commonly used frame for Stem Cell Research, it provided perhaps the most polarizing issue for this topic - the debate over embryonic and adult cells. This many-faceted debate includes morals, science and politics, themes that were reflected in the media coverage of this issue. Many scientists believe embryonic cells provide more research promise than adult cells. "...[F]ederal researchers said embryonic cells can develop into all types of cells and tissue, a flexibility that may be lacking in adult stem cells" (Stiles, "Shundler, McGreevey Split over Stem Cells" *The Record*, 7/20/01). Some also hold strong religious beliefs that life begins at conception, with an embryo representing a potential human life, thus, using cells from this entity would be tantamount to murder. Others see the argument from

the scientific viewpoint, with the use of embryonic cells as the most promising and exciting avenue to helping those with a myriad of diseases. Joyce H. Price, in an article from the *Washington Times*, explained it succinctly:

The [political] fight will pit pro-lifers against medical groups like the Cancer Society, Juvenile Diabetes and the Parkinson Association, all part of the coalition supporting human embryonic stem cell research (Price, 1999).

The push and pull between adult and embryonic cells continued to characterize the debate, with scientists initially emphasizing embryonic, while still acknowledging that adult cells, too, had research potential.

"For many scientists, the question remains open as to whether experiments with embryonic or adult cells holds greater promise. 'Like most things in science, the answer is, it depends' said Harvard professor Dr. Robinson... Dr. Black from UMDNJ believes embryonic cells constitute the gold standard because of their purity and versatility. He acknowledged it is a young field and our areas of ignorance are far greater than our areas of knowledge" (Pearce, "Entering a Brave New World, Warily" *New York Times*, 1/16/04).

Further compounding the debate is the tendency of the media, legislature and public to speak of "Stem Cell Research" in general and not always delineate embryonic or adult.

Of course, there are many other examples of the press using the *Science* theme on its own, as this was the second most common framing device. An article from 1999 stated "Scientists say embryonic research hold promise for treating – perhaps even curing – many life threatening diseases" (Price, "Pro Lifers Gear Up..." *Washington Times*, 5/30/99). Four years later, the excitement had not worn off, "Researchers believed they [stem cells] have the potential to transform medicine..." (Kocieniewski, "Bill Allowing Stem Cell Work Clears New

Jersey Assembly" *New York Times*, 12/13/03). There is, of course, a flip side to this "hope" – that little scientific breakthrough will actually materialize.

'Supporters of stem cell laws have probably overemphasized the potential for a great leap forward with one research worried about the hype. 'People may start to get impatient for cures.' commented Dr. Walter Robinson, Associate Director of the Division of Medical Ethics at Harvard Law School. (Pearce, "Entering a Brave New World, Warily" *New York Times* 1/16/04).

The media continued to use the *Science* frame that focused on the hope factor that Stem Cell Research could provide huge benefits to a number of patients:

'In their earliest stages, stem cells have the ability to change into any cells in the human body' said U.S. Senator Arlen Specter (R-PA). 'If researchers are correct...it is this remarkable adaptability that leads scientists to believe these cells...could be transplanted...to replace [diseased] tissue' (Price, "Pro Lifers Gear Up..." *Washington Times*, 5/30/99).

Those benefitting from Stem Cell Research included a group that was vast and diverse. Nearly everyone has a friend or relative who has been touched by one of these diseases:

Supporters said research using embryonic stem cells could produce cures for a variety of ailments including Parkinsons, Alzheimers, spinal cord injuries and cancer. (Schwaneberg, "Bill Advances to Bring Jersey Closer to Stem Cell Research" *Star Ledger*, 12/17/02).

Seven years later, reporters were discussing the potentials of the research instead of solid evidence:

In New Jersey, some worry the reduction in funding threatens the state's status as one of the early leaders in stem cell research, a field advocates say could lead to treatments for spinal cord injuries, multiple sclerosis and Parkinson's disease (Lu, "Budget Cuts Endanger Stem Cell Research in New Jersey" *The Philadelphia Inquirer*, 3/4/09).

One key factor picked up by the media the interplay between the *Politics* and *Science* themes of Stem Cell Research. As the legislative debate continued over the issue, few answers came to the fore:

Yet New Jersey's endorsement of embryonic stem-cell research does little to resolve the increasingly complex tangle of science and politics. Beyond the official fanfare, even its supporters concede that it is a law without financing that is based on scientific projection. (Pearce, "Entering a Brave New World, Warily" *New York Times* 1/16/04).

Acknowledging the interaction between *Science* and *Politics* on this issue, New Jersey awarded a small number of grants to stem cell researchers. This funding may have been one of the first examples of a state using public dollars for this type of research. Acting Governor Codey commented,

'The grants we have awarded today are based on science, not politics, and have been conceived by some of the brightest minds and best institutions in our state.' (Chen, "New Jersey Awards \$5 Million in Grants for Stem Cell Research" *New York Times*, 12/17/05).

A few months later, the press was still referring to this development: "In December, NJ became the first state to award Stem Cell Research grants, divvying up \$ 5 million among 17 researchers" (Gurney, "Codey Still Bullish on Stem Cell Research Bill" *Philadelphia Inquirer*, 3/7/06).

This funding was likely to represent the beginning of New Jersey's efforts to establish itself as a leader in Stem Cell Research. Covering both bases, the grants "...would fund research using embryonic stem cells from humans and mice, as well as adult stem cells" (Chen, "New Jersey Awards \$5 Million in Grants for Stem Cell Research" *New York Times*, 12/17/05). In 2006, the media reports frequently mentioned the next step in New Jersey's bid to become a major player in Stem Cell Research – legislation allowing bond money to fund research centers in three locations in New Jersey, " 'We are all committed to doing this as soon as possible' said Senator Codey. 'This is about finally sending the message that we want to be a leader, not a laggard, in finding cures'"

(Gurney, "Codey Still Bullish on Stem Cell Research Bill" *Philadelphia Inquirer*, 3/7/06).

b. Political. Initially, news articles, using a *Political* frame, focusing on the federal ban on Stem Cell Research rather than individual state initiatives:

Most NJ Democrats were pleased that Bush did not agree to a ban on federal funding for [stem cell] research. But many said the president's conditions – were too limiting. (Geraghty, "Stem Cell Policy Gets Mixed Reactions" *The Record*, 8/11/01).

Even within New Jersey, politicians were at first focusing on the national debate, "The two candidates for Governor have opposite positions on federal funding for Stem Cell Research. McGreevey supports federal funding while Schundler opposes it" (Stile, "Schundler, McGreevey Split Over Stem Cells" *The Record*, 7/20/01). Stile further explained in his article:

Schundler, a staunch foe of abortion, sided with opponents of federal funding for stem cell research who say the harvesting of these cells destroys embryos, which they regard as human life (Stile 2001).

The next year, state initiatives began to permeate the debate with many articles still focusing on the *Political* theme, this time containing references to the *Process*. This subcategory within the *Political* frame includes phrases that discuss the legislative process: "It [the N.J. Stem Cell bill] mirrors a law in California – the only state to depart from President Bush's decision to limit Stem Cell Research supported by the federal government" (Editorial, "Stem Cell Research: How NJ Could Be at the Forefront" *The Record*, 12/8/02). The *Political* focus on the states continued in the media over the next few years, often including the *Other* frame of job creation and economic incentives:

Scrambling to reassert New Jersey's position at the forefront of Stem Cell Research, acting Governor Richard Codey is expected to announce an investment of about \$400

million Tuesday to encourage local discoveries in the increasingly competitive field (Gurney, "Codey to Set Up Stem Cell Funding" *The Philadelphia Inquirer*, 1/9/05).

With the Bush administration prohibiting federal funds for research on new stem cells "lines," states continued to take the initiative to fill the national void:

Maryland joins California, New Jersey and Connecticut in recognizing that the federal government's abdication of support for embryonic stem cell research has effectively shifted the issue to the states. (Editorial, "The States Confront Stem Cells" *New York Times*, 3/31/06).

and the news articles continued to focus on the developments in the varying states, "Stem Cell Research is flourishing...in Pennsylvania and New Jersey despite radically different political climates in the two states" (McCullough and Goldstein, "Stem Cell Research Flourishes" *The Philadelphia Inquirer*, 6/13/06).

As the issue continued to take hold and expand on the state level, Stem Cell Research began to draw attention early on as prominent supporters came forward. These references continued to contribute to the broad *Political* theme in the articles:

Actor Chris Reeve has been an outspoken supporter of stem cell research...Former first lady Nancy Reagan has also taken the unusual step of quiet lobbying for an overhaul of the Bush policy... (Editorial, "Stem Cell Research: How NJ Could Be at the Forefront" *The Record*, 12/8/02).

"Celebrity" supporters of Stem Cell Research helped focus media attention on the promise of Stem Cell Research. From a *Scientific* frame, this focus was important because, unlike Needle Exchange, where data was available from programs already implemented and studied, Stem Cell Research was a longer and more complex process with no clear results. Having celebrity supporters as diverse as Christopher Reeve and Nancy Reagan also addressed the *Political*

framing as exemplified in press accounts of the issue as traditionally a democratic and republican split and was shown to be the case during New Jersey's 2001 gubernatorial election. Mrs. Reagan's backing may have allowed other republicans to express their support of the issue:

Since [President Bush's funding restrictions], several prominent Republicans have come out in favor of limited stem cell research, including United States Senators Orrin Hatch of Utah and John McCain of Arizona, as well as Nancy Reagan, the former first lady. (Kocieniewski, "Bill Allowing Stem Cell Work Clears New Jersey Assembly" *New York Times*, 12/13/03).

c. Moral Frame. Additionally, such discussion propels the *Moral* frame of Stem Cell Research as an issue that can benefit society as a whole, people from all walks of life. The *Moral* theme comprises phrases or concepts that refer to either a broad impact on society or specific "life" issues, such as embryos viewed as living beings and the question of when life begins – similar to the abortion debate. This frame was used the least by the media of the four themes, although it often overlapped with *Political*. The *Moral* component of the debate received media focus most regularly early in the discussion. An article in the Commentary section of *The Washington Times*, a conservative newspaper, from 2000, represented the opposition argument in strong language. While asserting that the National Institutes of Health Guidelines for Research Using Human Pluripotent Stem Cells "falls prey to several ethical fallacies" the author continues:

Human embryos ought not be the subjects of experimental research ...Human embryos are just that – human...However, even if these embryos were destined to die, we would still not be justified in killing them – our most vulnerable citizens – for the sake of improving or saving the lives of other citizens...Those who destroy the embryos are guilty of homicide [there's nothing else to call it] (Mitchell, 2000).

Emphasizing the potential benefits to this research that would reach people from all walks of life, supporters continue to push for further exploration that would have to be done on the state level and would hopefully encompass private investment. Often, supporters using a broad *Moral* frame would include a *Political* or *Scientific* component into their explanation. Opponents were more likely to focus solely on “life” issues. For example, using a *Moral* argument with a *Science* twist, journalist Jeremy Pearce of the *New York Times* described the aftermath of Governor McGreevey’s signature on a research bill, with “...supporters celebrat[ing] what they believed would create a life-saving wave of biotechnical innovation for New Jersey’s scientists to pass on to the world.” This was followed by a *Moral* and *Political* coupling, quoting a legislator

This has got to be the right thing to do’ said Assemblyman Fraguella, Democrat of Union City and a former Republican who formally broke ties with the party last month when he voted in favor of the stem cell bill. ‘I listened to the debates, all of the debates ... and I decided to cast my vote for humanity” (Pearce, 2004).

In another example combining the *Moral* and *Science* theme, Senator Codey commented following the passage of Stem Cell Research bill: “ This is a fantastic opportunity for New Jersey to show the rest of the world that we intend to promote medical progress rather than stifle it...In the end, truth and science have prevailed” (Kocieniewski, “Bill Allowing Stem Cell Work Clears New Jersey Assembly” *New York Times*, 12/13/03).

d. Other Frame. The fourth frame utilized by the press was classified as the *Other* category, comprised of phrases or references about economic incentives and jobs created by Stem Cell Research. While the politics may have

encouraged scientists to look to investors: "Scientists are hoping private capital will spur stem cell research after President Bush said he would limit funding" (Clarke, 2001). The science helped drive the investment initiative: "By permitting stem cell research, NJ would allow its pharmaceutical companies and research labs to remain at the forefront of biomedical science" ((Kocieniewski, "Bill Allowing Stem Cell Work Clears New Jersey Assembly" *New York Times*, 12/13/03). In addition to the existence of strong biomedical facilities already in New Jersey, the state's proximity to New York City also had its advantages in the stem cell race:

In Albany, several legislators are advocating proposals for state support of embryonic stem cell research, although others want to join a handful of other states that ban embryonic research altogether. Dr. Wise Young of Rutgers ...mentioned the possibility of poaching scientists from New York. 'Right in the middle of Manhattan is the highest concentration of scientists anywhere in the world in biology and life sciences. New York will be well advised to start a program, or else they will start moving' he said. (Mansnerus, "NJ Faces Tough Competition for Stem Cell Scientists" *New York Times*, 1/17/05).

The lack of federal policy allowed states to develop their own programs and vie for the best facilities and researchers creating a competitive environment which hopefully would push medical advances forward. In discussing a California law that supported embryonic research, the *United Press International* reported:

While dollars in California from the state would likely not be enough to fund the research fully, it would provide a conducive environment for the research which might be just as important... two Harvard stem cell researchers came to California because of the new law ...California found creating a stem cell friendly environment attracted research and grants from private foundations. (UPI, 2003).

The *New York Times* detailed how governors were attempting to take advantage of the potential economic incentives available through Stem Cell Research:

Governors around the country are moving aggressively to push the research forward, spending millions seeking to lure top scientists to their states and planning state of the art research facilities...((Mansnerus, "NJ Faces Tough Competition for Stem Cell Scientists" *New York Times*, 1/17/05).

With many states competing for a breakthrough, New Jersey seemed like a natural place for investment that would create research opportunities and new jobs due to its concentration of many pharmaceutical companies. The state is home a large number of pharmaceutical headquarters, a fact not lost to the media. "[The Stem Cell bill sponsored by Senator Codey] is good science and good politics in a state chockablock in pharmaceutical research firms." (Author Unknown, "Stem Cells: Give Us the Cures, Spare Us the Sermon" *Star Ledger*, 12/22/02). Since so much medical research was already present in New Jersey , promoting this research through private means seemed like a good complement to the biomedical field already existing here.

'There has been a fairly continuous private funding of this space'...said an executive of a company preparing to invest in a small stem cell company in New Jersey 'I think the venture capital world and private investors do have some appetite for this kind of company' (Clarke, "Private Capital Seen As Aid to Stem Cell Research" *Reuters Health Medical News*, 10/15/01).

The competition for private dollars increased as more states relaxed Stem Cell Research prohibitions, although some states passed laws prohibiting or greatly limiting this research. An editorial from the *New York Times* in 2006 offered this commentary regarding how the federal government's lack of support for embryonic research has effectively shifted the issue to the states, allowing some to potentially benefit economically from an open and welcoming environment:

Privately financed research is an option but the government makes that difficult at sites where scientists work with federally financed equipment...At first, many

states seemed headed toward restrictive policies, but then the academic and business communities threw their weight behind research they believe could ultimately lead to new therapies...and to new companies to exploit the findings (Editorial, "The States Confront Stem Cells" *New York Times*, 3/31/06).

2. *Testimony.* A second source of secondary information

came from legislative testimony. Divided into pro and con for each topic, two papers are analyzed for each section with eight papers examined overall. All papers were analyzed and coded following the theme-based rubric with the main themes of *Moral*, *Science*, *Political* and *Other*. As shown in Chart B2, the *Moral* frame was the strongest for those opposing Needle Exchange programs. While supporters also utilized the *Moral* frame, the *Political* theme was a close second.

a. Needle Exchange, Con. The *Moral* frame played a large role in the Testimony. The total number of *Moral* references were more than double any other theme, with 19 out of 33 (58%) total references. *Political* themes were a far second, with 7 out of 33 (21%) for Testimony. *Science* and *Other* themes were very low, combined for 7 out of 33 (21%) references (Chart B2). The *Moral* frame focused on the negative repercussions of drug addiction and asserted that Needle Exchange programs send the wrong message to society:

We vehemently oppose needle exchange because it sends the wrong message. It says to the addict that addiction is o.k. Has it become so permissible to society that we are not going to provide addicts with the implements of their own destruction?...It does not benefit society to encourage drug addiction...Because addiction is definitely harmful to society as a whole... (American Family Association of New Jersey, 2006)

These arguments tended to use *Scientific* evidence infrequently. However, The New Jersey Catholic Conference took a different approach. In addition to arguing that these programs send a wrong message to society, they also asserted a *Science* viewpoint that drug use would particularly harm pregnant women and their babies, although they drew a specious connection between the Needle Exchange program and pregnant women using drugs:

We are particularly concerned with the harmful and possibly deadly consequences of injection drug use on women who are pregnant, their babies in utero and on developing children...The only way to stop the abuse of children is to stop the abuse of drugs. Providing clean needles to addicts does neither... The distribution of sterile needles and syringes sends the message that intravenous drug use can be made safe...In an attempt to eliminate the spread of HIV and save the life of the addict, the provisions of the bill place other members of the community in harm's way... (New Jersey Catholic Conference, 2006).

b. Needle Exchange, Pro. While the *Moral* frame, appealing to the public's emotions and fears was heavily utilized by opponents, supporters of Needle Exchange programs found support in both the *Moral* and *Science* arguments. Nearly equal in numbers of references, the *Moral* theme (50 %, or 9 references out of 18 total) referenced so frequently by opponents, was used slightly less often by proponents who also used *Science* arguments (8 references out of 18, or 44%) more frequently than those opposing Needle Exchange programs. Supporters also used the *Political* frame only once in 18 references (Chart B2).

The *Moral* themes used by supporters emphasized the public health benefits to communities:

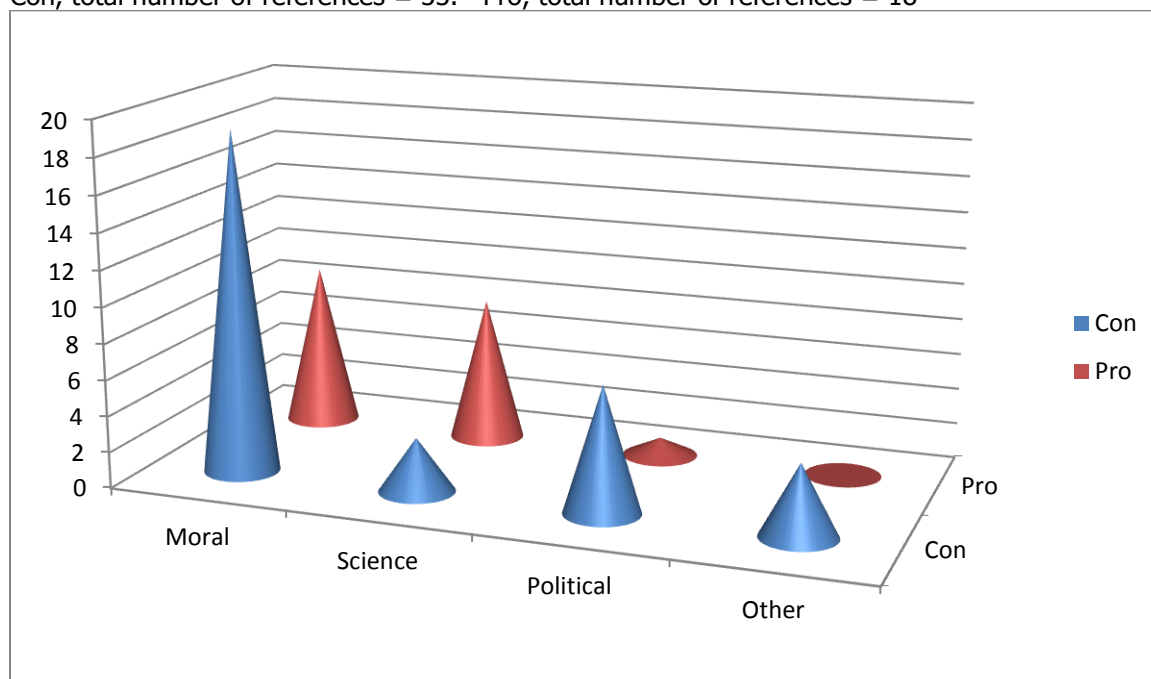
There is no policy you could implement that would do more to protect the health and safety of New Jersey families and communities than syringe access programs. [We] commend the decision to put the health and safety of the people of New Jersey first with the posting of these bills... (National Association of Social Workers, 2006).

The Drug Policy Alliance of New Jersey focused on the benefits of Needle Exchange for HIV prevention in the community, using *Scientific* frames:

The evidence supporting the effectiveness of sterile syringe access in reducing the spread of HIV and hepatitis C is overwhelming and conclusive. The opinion of the medical and public health community is unanimous. Access to sterile syringes is supported by the most prestigious and respected medical and scientific organizations in the nation...(Drug Policy Alliance, 2006).

Chart B2 - TESTIMONY - REFERENCES PER FRAME, NEEDLE EXCHANGE

Con, total number of references = 33. Pro, total number of references = 18



c. Stem Cells, Con. Similar to Needle Exchange opponents, the challengers to Stem Cell Research also used the *Moral* theme most often (11 references out of 27, or 41%). However, as Chart B3 shows, unlike those opposing Needle Exchange, these groups also used *Scientific* (7 references out of 27, or 26%) and *Political* (also 26%) frames relatively frequently as well. *Other* topics, jobs and economics, were mentioned once each (4%).

The *Moral* frame focused on embryonic versus adult research and the ethical questions encompassing when life begins:

Polls do in fact show support for stem cell research. However, most people do not support embryonic stem cell research, once they understand the difference between embryonic and adult cells...Once the people of New Jersey realize that adult stem cell research is currently saving lives without destroying life in the process, public opinion will shift...(New Jersey Family Policy Council, 2006)

Continuing the idea of differentiating between embryonic and adult, references to the *Science* theme discussed the successes that adult Stem Cell Research has produced, in contrast embryonic research:

Adult stem cells have helped hundreds of thousands of patients, and new clinical uses expand almost weekly. By contrast, embryonic stem cells have not helped a single human patient or demonstrated any therapeutic benefit (New Jersey Catholic Conference, 2003).

Supporting the proven benefits for adult research as compared to the untested field of embryonic research, those in opposition to the latter sought to prohibit government funds going to what they considered a morally questionable science:

We believe that this legislation poses profound moral questions, not the least of which is whether State government should subsidize and force morally opposed taxpayers to subsidize research that requires the destruction of innocent human life (New Jersey Catholic Conference, 2003).

d. Stem Cells, Pro. No one frame dominated the references by supporters of Stem Cell Research (Chart B3). The Moral (27%) Scientific (27%) and Political (33%) totals were nearly the same (6 out of 22 for Moral and Scientific; 7 out of 22 for Political). The *Other* category received 3 out of 22 references for 14%.

Proponents of Stem Cell Research indicated their support for both embryonic and adult research. They also acknowledge the *Moral*/reservation

that some people held about embryonic research, yet continued to point out the positive outcomes that embryonic research may provide:

[The Biotechnology Industry] is committed to socially responsible use of biotechnology to save or improve lives... [the industry] recognizes the moral and ethical concerns surrounding embryonic stem cell research. (Biotech Industry Organization, 2002)

and

The subject of stem cells and their potential to cure a wide variety of diseases and disabilities is clouded by contradictions and misinformation... Opponents have successfully argued that [embryonic] research is immoral. ...If anything is immoral, it is to deny scientists access to unwanted embryos. (Christopher Reeve, 2002)

On the *Science* front, supporters of Stem Cell Research focused on the promise of embryonic cells as opposed to the proven successes with adult cells. While making it clear that adult cells had a role to play, these testimony stressed need for further research and the hope that embryonic cells will move discoveries to another level:

The fact is that stem cells from fertilized eggs have the ability to grow into any type of cell or organ in the body. Adult tissue stem cells appear to have a much more restricted path for development, limiting their usefulness in therapies for diseases. (Christopher Reeve, 2002).

The Biotechnology Industry also discussed the promise of embryonic cells:

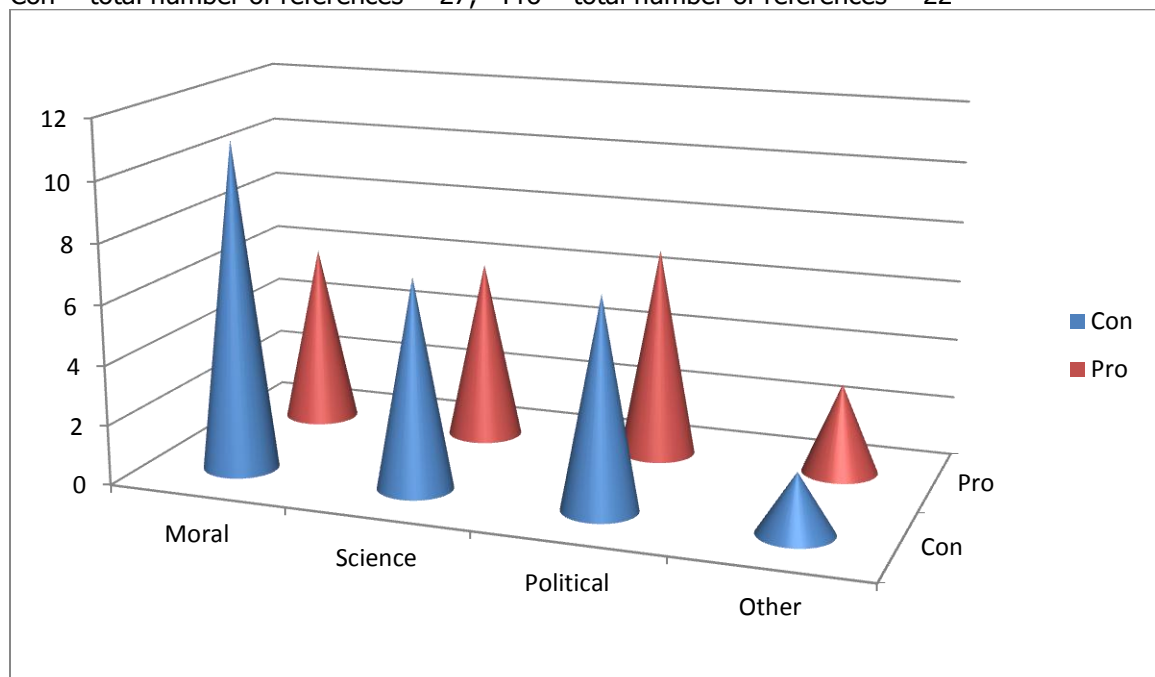
According to the National Institutes of Health and the National Academies of Science, human embryonic stem cells have shown incredible promise toward developing breakthrough treatments for a variety of intractable diseases...(Biotechnology Industry Organization, 2002).

Not surprisingly, the testimony from the Biotechnology Industry also mentioned the *Other* theme, the economic role that Stem Cell Research could play in New Jersey. This theme also overlapped with the *Political* references:

New Jersey's position as a center of excellence for biotechnology research is beyond the reach of many states. However, there are states that are aggressively pursuing legislation to attract biotechnology companies... Passage of this legislation in New Jersey will further cement the state's reputation as preeminent world leader in biomedicine and biotechnology (Biotechnology Industry Organization, 2002.)

Chart B3: REFERENCES PER FRAME, TESTIMONY – STEM CELL RESEARCH

Con - total number of references = 27; Pro - total number of references = 22



3. Issue Papers. The third source of secondary information came from Issue Papers, divided into pro and con sections, with two papers analyzed for each section. All eight issue papers were analyzed and coded following a theme based rubric. The four main themes included: *Moral*, *Scientific*, *Political* and *Other*.

a. Needle Exchange, Con. As shown in Chart B4, these sources focused mostly on the *Moral* theme, which was more than double any other theme with 15 references out of a total of 24, or nearly two-thirds of all references (63%). *Political* frames were a far second, 6 out of 24 or one quarter of all references. *Science* and *Other* themes were very low, at 13% combined or 3 out of 24 total references.

The *Moral* theme emphasized that the message sent by implementing a Needle Exchange program would be the “wrong” one or present confusing ideas to society in general:

[Our organization] deals with moral issues confronting our country. Needle exchange is one of those issues. We vehemently oppose needle exchange because it sends the wrong message. It says to the addict that addiction is o.k. Has it become so permissible to society that we are going to provide addicts with the implements of their own destruction? (American Family Association of New Jersey, 2006).

A piece written a few years earlier by a member of the Governor’s Advisory Council on AIDS restated the *Moral* frame with Needle Exchange and continued to play on people’s emotions and fears:

Whenever we allow for a compromise of what is right, even in a time of crisis (for example, the unjust internment of Japanese citizens during WWII) we diminish our ethical resolve and moral authority. We effectively send ‘mixed messages’ that confuse the most vulnerable among us, especially our children who are in the process of moral development. (Orsi, 1998).

The *Scientific* argument was based on refuting the existing data that supported the success of Needle Exchange programs:

The statistical data have revealed numerous discrepancies...The statistics used to promote needle exchange are questionable since they are based on behavioral assumptions as the basis for probability projections...Also, there was an over-reliance on self-reported behavior by addicts, who are notoriously unreliable. (Orsi, 1998).

HIV prevention was also a factor in the *Scientific* frames, emphasizing that a major impetus in the spread of HIV through needle sharing is drugs and that increasing access to needles would only add to the AIDS epidemic.

Taxpayer dollars was a source of framing within the *Political* theme for those writing against Needle Exchange, overlapping with the *Moral* in questioning why government should fund an activity that some considered morally problematic:

Providing free needle only encourages drug addiction. You shouldn't be spending taxpayers good money for something that only encourages something that is definitely reprehensible. If the craze is to spend money, why not spend it on useful programs that help addicts kick the habit and become self-respecting benefits to society. (American Family Association of New Jersey, 2006).

b. Needle Exchange Pro. In contrast to Needle Exchange opponents, those supporting Needle Exchange did not use a *Moral* theme frequently. The Moral frame had the fewest references, only 2 out of 22 or 9%, while the *Political* frame had the most references at 41% (9 out of 22). *Science* (27 % of the total references) and *Other* themes (23%) were used somewhat less than the *Political* but more than the *Moral* frames (Chart B4). The *Political*, *Science* and *Other* frames overlapped as references mentioned HIV prevention and drug treatment as proven benefits to existing Needle Exchange programs:

A syringe access program is in the unique position of begin able to reach a population of drug users that may not otherwise seek assistance for their addiction. These bills provide the necessary bridge to drug treatment for these drug users by providing participants with information, referrals, access to drug treatment... (National Coalition on Alcoholism and Drug Dependence, 2006-07)

In using the *Science* theme to explain the benefits of the program, supporters cited studies and research to bolster their argument:

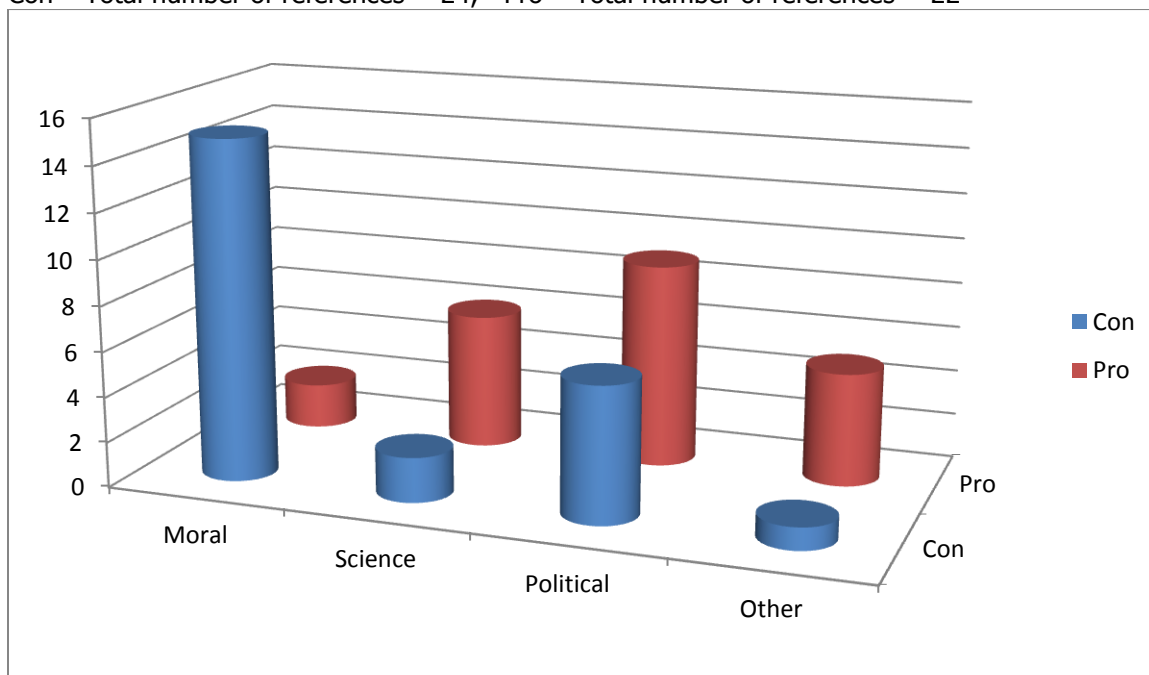
Syringe access programs are the most effective, evidence based intervention for people who use drugs, their families and communities. Seven federally funded research studies, and scores of scientific evidence confirm that syringe access programs are a valuable resources to prevent the spread of HIV, hepatitis C and other blood-borne diseases. Across the nation, people who inject drugs have reversed the course of the AIDS epidemic by using sterile syringes and harm reduction practices (Harm Reduction Coalition, 2008).

Instead of using the *Moral* theme to play up the public's fear of drug addicts and the spread of HIV, the advocates continued to focus on the *Science* behind the programs that, in a majority of cases, showed Needle Exchange to be successful in slowing the spread of HIV and helping addicts who seek it, get treatment.

Has the time finally arrived for evidence-based science to prevail over moral debates around the issue of providing clean syringes for safer injection? (Harm Reduction Coalition, 2008).

CHART B 4: TOTAL REFERENCES PER FRAME, ISSUE PAPERS, NEEDLE EXCHANGE

Con – Total number of references = 24; Pro – Total number of references = 22



c. Stem Cell Con. While the Needle Exchange opponents used *Moral* frames to frequently express their views, those opposing Stem Cell Research were just as likely to make a *Political* reference as a *Moral* one. As Chart B5 shows, Stem Cell opponents had the same number of references in their Issue Papers for *Moral* and *Political* (6 out of 16 each, or 38%). *Scientific* was second with 19% of all references (3 out of 16) while *Other* had only 1 reference to economic incentives (6%).

The *Moral* references delineated embryonic versus adult cells and discussed the issue in terms of destroying life. Although acknowledging the supporter's view of the promise of hope in embryonic research, opponents

argued that to save a life, one must not destroy a life. At times, these concepts overlapped with the *Scientific* theme:

Advances in science, medicine and technology may hold promise of improved health and well-being but may also devalue human life and human dignity. Stem cells....and other new technologies need to be evaluated carefully within both a scientific and ethical framework. (Family Research Council, 2009).

Another argument forwarded by opponents followed a *Political* frame.

Since a 2007 ballot initiative to provide funding for Stem Cell Institutes failed (see Background section), Lifenews.com claimed that the public did not support Stem Cell Research and that efforts to provide government funds for this program were going against the will of New Jerseyans, although public opinion polling data did not support this claim.

We will urge opposition to this [funding for stem cell research] and any other stealth effort to circumvent the will of the people unless there is a guarantee expressly written into the legislation that this proposal shall never include funding for embryonic stem cell research...[this proposal] sets the foundation to later enact an end-run around the voters to fund embryonic stem cell research (Ertelt, 2008)

This group also used the *Other* theme, in conjunction with a *Moral* frame, to discuss a potentially negative financial situation that could arise from government support of Stem Cell Research. It remains unclear, however, if the failure of the Ballot Initiative was due to the fiscal constraints on the state budget or public opposition to Stem Cell Research. Opponents were quick to capitalize on both of these frames:

'The impractical, immoral and unsafe nature of embryonic stem cell research will ensure a default on loans, guaranteeing tax credits to the financial institutions which, in turn, will be transferred onto the backs of the hard working citizens of New Jersey through higher taxes' (Ertelt, 2008).

d. Stem Cell Pro. While opponents were using *Moral* and *Political* frames to advocate against Stem Cell Research, supporters used *Science* based

arguments. The *Scientific* frame far outnumbered any other category with 71%, or 10 out of 14 references (Chart B5). The majority of these references were in the adult vs. embryonic outcomes section. The Reeve Foundation emphasized the “promise” of embryonic discoveries while stating its support for both adult and embryonic research:

These cells could be the ‘missing link’ needed to cure some of the world’s most deadly diseases....Most scientists believe and studies show that embryonic stem cells will likely be more effective in curing diseases because they can grow and differentiate into any of the body’s cells and tissues and thus into different organs. (Reeve Foundation, 2009).

Further support for the potential of embryonic research was described by The New Yorkers for the Advancement for Medical Research:

Human embryonic stem cells are thought to have much greater developmental potential than adult stem cells. This means that embryonic stem cells may be pluripotent – that is, able to give rise to cells found in all tissues of the embryo...(New Yorkers for the Advancement of Medical Research, 2009).

These issue papers for the most part focused on the science behind the issue, or at least the “hope” that many scientists put in embryonic Stem Cell Research. Both groups support using adult and embryonic cells but each paper discusses the belief that embryonic cells could prove to be more flexible. The New Yorkers for the Advancement of Medical Research cited the National Institutes of Health as a basis for their information.

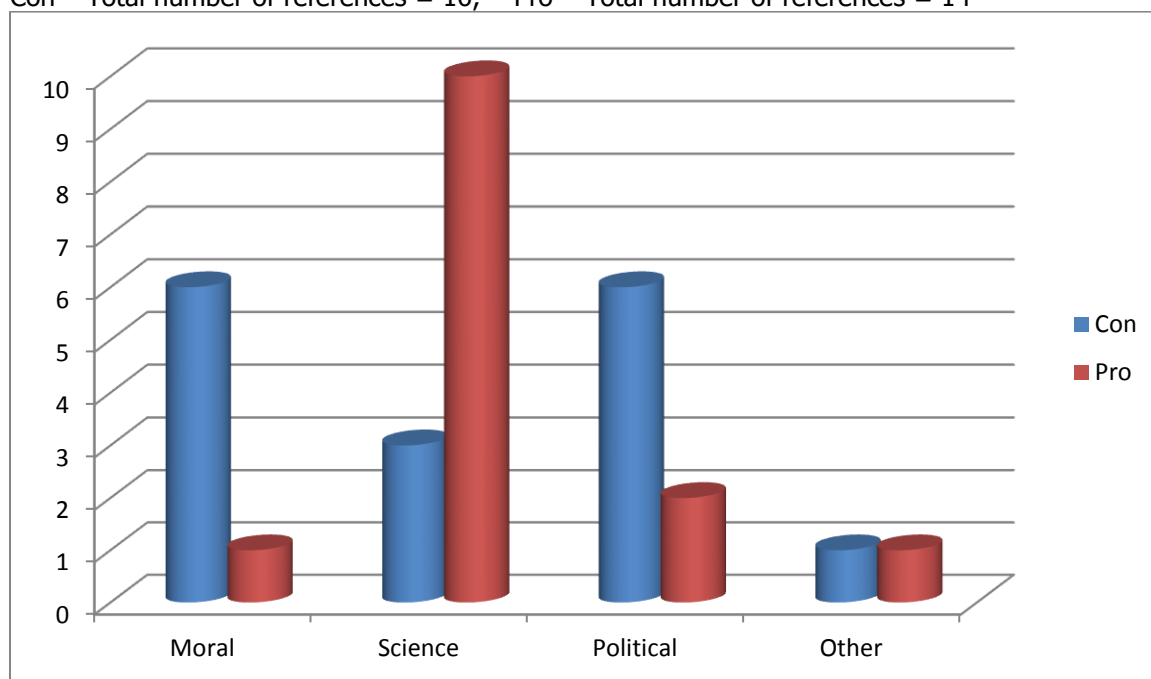
In addition to a heavy focus on the *Science* theme, The Reeve Foundation also used a *Political* frame as well as an *Other* reference. The *Political* frame included a public opinion poll supporting this research as well as a brief explanation of the federal legislation (or lack thereof). Another non-Science

reference mentioned potential job creation opportunities in states that welcomed embryonic Stem Cell Research:

State governments that pass anti-stem cell and therapeutic cloning legislation, such as Iowa, force researchers to flee to states like New Jersey and California, which provide more positive environments (Reeve Foundation, 2009).

CHART B5: REFERENCES PER FRAME – ISSUE PAPERS, STEM CELL RESEARCH

Con – Total number of references = 16; Pro – Total number of references = 14



V. Discussion : Issue Framing in the Decisionmaking Process.

This section will discuss the policy stories of Needle Exchange and Stem Cell Research legislation in New Jersey and if framing contributed to the resolution of these issues. Next, the application of the issue framing theory will be discussed. Finally, the implications from this study will be presented and suggestions for the future will be made.

Needle Exchange and Stem Cell Research: Revisiting these policies

through the lens of Issue Framing. Legislative debate and discussion, particularly regarding controversial issues, are cornerstones of our democratic process. What factors contribute to different outcomes from these policy discussions? This paper examines the role that Issue Framing may have played in the policymaking process by focusing on two controversial issues – each with its own moral component - within the New Jersey legislature, Needle Exchange and Stem Cell Research. The latter policy moved more quickly through the process while the former languished for years. To what extent, and how, does Issue Framing theory explain the outcome of these debates?

To examine this question, a qualitative, retrospective study was done utilizing primary and secondary sources for each issue. The secondary analysis examined forty newspaper articles, twenty per topic, in addition to issue papers and legislative testimony. The primary data consisted of a content analysis of 32 interviews from four different groups of participants in the policymaking process: the media, policymakers, advocates and experts.

In an attempt to isolate factors affecting outcomes, an effort was made to measure a constant set of factors related to the two policies. For example, the

policy analysis focus on New Jersey keeps an important set of institutional factors constant; they were considered in an approximately similar timeframe; each issue is a controversial, health based intervention. In some cases, the interviewees had worked on both issues and thus could directly speak to the paths to the different outcomes.

Although a brief legislative history of each issue is set out in Chapter I, this information is revisited using the data culled from the primary and secondary sources with an eye toward identifying factors that influenced the different outcomes of these two issues.

Generally, it appears that Issue Framing did play a role in explaining the outcomes of Stem Cell Research and Needle Exchange legislation, but it was not the only factor. The literature suggests that framing as a policymaking theory can make a difference and this study supports that finding. When identifying important factors in the lawmaking process, both Stem Cell and Needle Exchange interviewees named "Framing" as one of the top factors. Another policymaking theory, Policy Diffusion, played a small role. Other forces in the lawmaking process impacted the debate, including interest groups and executive/legislative leadership.

This chapter recaps how Needle Exchange and Stem Cell Research progressed through the legislative process in New Jersey, draws inferences from the data discussed in prior chapters for the applicability of Issue Framing theory

to the policy process in general using these case studies and identifies how this analysis informs applying Issue Framing to other issues.

Jacoby (2000) explains: "...framing occur[s] when different presentations of an issue generate different reactions among those who are exposed to that issue." Each of the four main groups examined here as primary sources – experts, advocates, policymakers and media – expressed some different and some similar reactions and explanations regarding the various frames for Needle Exchange and Stem Cell Research. Various reactions were also recorded through the study of secondary sources – the newspaper articles registered differing frames, and subthemes within frames, while the testimony and issue papers exemplified varying presentations of these themes. One advocate interviewed succinctly stated "...framing can be useful in helping people understand the bigger message" (George Corwin, Personal Communication, 9/14/09). Four major frames were identified during the Needle Exchange and Stem Cell Research policy debates – Moral, Science, Political and Other – which help define and construct each issue in various ways. These different constructs contribute to the understanding of each policy topic by different targeted populations throughout the lawmaking process.

Needle Exchange. Timing played role in the initial discussions surrounding Needle Exchange. When it was first introduced in 1993, the northeast was still reeling from the crack cocaine epidemic that surfaced in the late 1980's. Particularly in the inner cities and among minorities, crack was a

major public health challenge and the idea of drug use scared the public more than the threat of spreading HIV. Initial arguments against Needle Exchange were based on fear and emotion and those opposing this intervention were successful in playing on the insecurities of the public. They asserted that drug use would increase under Needle Exchange programs and that this intervention was ineffective. A handful of studies seemed to support this argument (Mangham 2007, Kall et al 2007, Menta et al 2006.)

Opponents of Needle Exchange had a relatively easy time initially keeping this bill off the legislative agenda. Using a *Moral* frame to challenge the policy, they focused on the negatives associated with Needle Exchange - dirty needles, decreasing quality of life, an undesirable target population.

An effective frame was the opposition ideology that these people [benefitting from Needle Exchange] were 'drug users' and bottom feeders with the theory of, why should we help them? (Laurie Candelosi, Personal Communication, February 17, 2010).

Studies were also presented showing that giving needles to addicts only worked to enable their addictions, raising Needle Exchange as a public safety issue. While a few studies did show this was true in the beginning, the vast majority of studies indicated the opposite and as the crack epidemic began to recede, scientific evidence supporting Needle Exchange increased as well (Wodak and Cooney 2005, Huo and Ouellet 2007, Drucker et al 1998.)

On the political front, opponents had a key supporter in Governor Whitman, who opposed Needle Exchange. Support by the chief executive is important because New Jersey has one of the most powerful governors in the nation. This is, as Alan Rosenthal explains, "...because only the governor, and

most recently the lieutenant governor, are elected statewide and because of the executive's authority to make appointments" (2009). An important component in the policymaking process (Table 4d), legislative support and leadership must exist for a bill to move through the legislature. As Dr. Heimer commented:

What works? Having two or more advocates in the legislature who make this an important issue for them. You must have some legislative supporters..." (Personal Communication, February 13, 2009).

In addition to the opposition by the governor, Senator Ron Rice provided a bulwark of resistance in the legislature. Rice, an African-American, long-time senator representing Newark, was known to be a power broker who argued vociferously against Needle Exchange. Often intoning the specter of race as well as public safety in his arguments, few legislators were willing to take on Senator Rice over this issue. Although many in the public health field believed that Needle Exchange was an effective way to halt the spread of HIV without increasing drug use, the evidence was not convincingly presented to the public or others in the legislature.

In spite of this formidable opposition, proponents of Needle Exchange managed to keep the issue on the political agenda. In 1996, Governor Whitman appointed a panel to examine the science behind Needle Exchange. The group came out in support of these programs. Still, the governor ignored the findings of her own panel and continued to oppose Needle Exchange.

Change surrounding this policy came slowly but permeated the many different facets of the issue. On the legislative front, a democratic governor, Jim McGreevey, followed republican Governor Whitman and in 2002 signaled support

for Needle Exchange. Democrats also controlled the legislature, another encouraging sign for supporters of this issue. The switch in the executive branch offered encouragement to Needle Exchange followers for leadership; in fact, Governor McGreevey issued an Executive Order in 2004 creating a pilot program for Needle Exchange. But legislative opposition was not completely removed as an effort to halt the Order was led by Ron Rice and republican Senators.

A second shift occurred as advocates supporting the bill gained a foothold in the policy process. "It all came together when the DPA (Drug Policy Alliance) came in to organize" commented Susan Livio, a Star Ledger reporter. They repackaged the advocacy efforts using a combination of themes – drawing in legislators, using evidence of the changing scientific studies, portraying beneficiaries of these programs as real people. By bringing both legislators and reporters to see these programs in action, DPA Executive Director Roseanne Scotti was able to humanize the issue on a personal level. She focused on the individual stories of the beneficiaries of these programs, showing them as real individuals, differentiating them from the stereotype of "drug addict" or "low income criminal."

Ms. Scotti knew she had her work cut out for her, but her efforts were acknowledged by both members of the press and policymakers. Pushing the role of science further into the debate, the Drug Policy Alliance (DPA) also had the benefit of an increasing arsenal of studies quantifying the benefits of Needle Exchange as time passed.

At first, legislators did not pay attention to the scientific studies supporting Needle Exchange. It was viewed, by the public and legislators, as enabling drug use. Science eventually came to play a role as people became more educated and the 'frames' changed. They went from 'enabling drug users' to 'stopping the spread of HIV' (Pete Cammarano, Personal Communication, December 22, 2008).

This change in focus by advocates worked with the data that was surfacing showing the efficacy of Needle Exchange programs in slowing the spread of HIV. By shifting this focus in policy outcomes - from helping drug users continue to access drugs to aiding in cutting the spread of a deadly infectious disease - advocates were able to draw more positive attention to the issue and shift the frame of the debate. Additionally, the science was supporting advocates' arguments.

A key tool used by advocates was the role of personal stories and one-on-one lobbying relationships. This device helped overcome the fact that the constituency group benefitting from this policy was unpopular with the public and unorganized. Roseanne Scotti of the DPA commented on the problems with advocating on behalf of a population of drug addicts:

The research clearly supported that Needle Exchange worked. If politicians were basing their decisions [regarding this issue] on only science, we would have had this years ago. The bottom line was public perception ... drug users are demonized, no one wants to 'own them' (Personal Communication, Roseanne Scotti, January 28, 2009).

The nature of the addiction and the disease associated with Needle Exchange – HIV/AIDS – coupled with its disproportionate concentration in minority and urban communities – also worked to foster opposition bolstered by the *Moral* frame.

The shift on Needle Exchange continued to expand. In addition to a change in political leadership, and the entrance of a strong advocacy effort, the

influence of science began to impact the argument. As advocates worked within and outside the legislative process, in the case of Needle Exchange, the *Scientific* frame became a key factor, but this occurred only over a period of time. “On the ground, the science won out...The frame that Needle Exchange increases drug use was shown to be not true in the data.” (Don DeJarlais, Personal Communication, 2/18/09.)

A revealing example of this shift in strength from weak science to stronger science frame was borne out in the press. Articles supported the effectiveness of these programs in stopping the spread of HIV, perhaps slowly eroding the initial negative public perception that the *Moral* frame put forth and altering the focus from drug addiction to HIV prevention. The press also began to utilize the *Political* frame, as 50% of the articles (Chart B1, Chapter 4) contained a *Political* frame, including mention of legislative leadership.

‘The conventional wisdom is that nothing will happen until Whitman leaves, but if no one does anything until she leaves, then it will take years longer [for Needle Exchange] to pass (Drucker, *Star Ledger*, 1999).

According to a commentary from the *Star Ledger* by Tom Moran, key legislators ultimately were persuaded by the scientific argument - “[Senator] Gill wrote the Needle Exchange bill based on the rock-hard fact that these programs save lives”. The role of Senator Gill was an important development. As an African-American woman representing an urban area, she was able to stand face to face with Senator Ron Rice to help neutralize his opposition to the bill. Over time, the media stories reflected the increase in scientific evidence, beginning with a change in the Governor’s office and stronger advocates in the legislature.

This interaction between the *Scientific* factors and *Political* factors exemplify the relationships between frames and that the science-based framing of Needle Exchange may have ultimately helped turn the legislative tide.

Initially presented with a Governor who opposed the program, over time, the Executive Branch became populated with officials who expressed support – Governors McGreevey, Codey and Corzine. Following the Governor’s office, the legislature experienced changes in those supporting and opposing the initiative. Stalwart opposition by Senator Ron Rice also injected racial overtones into the Needle Exchange debate, although the bill was also supported initially by African-American State Senator Wynona Lipman. Continuing to neutralize race as an issue was the presence of Senator Gill later in the debate. *Star Ledger* reporter Tom Moran also credited Senator Joe Vitale, Chairman of the Health Committee, with providing “Courageous legislative leadership which finally turned the tide” (Personal Communication, September 28, 2009).

A combination of overlapping themes provided the strongest argument for Needle Exchange: the *Moral* theme of focusing on the drug addicts, the *Scientific* view of stopping the spread of HIV and the *Political* trend that New Jersey was the last state to support some type of Needle Exchange program:

It was this linkage [with treatment options for drug users] that eventually brought Ron Rice to support the Needle Exchange bill, that money was put in for drug treatment is the piece that he saw as important ... research continued to prove useful as time went on. Studies of success stories about Needle Exchange programs in other areas helped to make a stronger case for one in New Jersey (Laurie Candelosi., Personal Communication, 2/17/10).

A final factor that likely contributed to the finally passage of Needle Exchange was that New Jersey was the only state lacking any sort of policy: "What changed? For one, New Jersey has become the last holdout in the nation, the only state in the country where a drug addict cannot legally obtain a clean needle" (Moran 2006). Even a participant opposing Needle Exchange acknowledged this factor: "New Jersey was the last state to enact a program...nobody wants to be seen as the straggler or the last to act on something that might be good" (George Corwin, Personal Communication, September 14, 2009). This concept of Policy Diffusion, which acknowledges that states will look to their neighbors and be influenced by their policies, played a role in finally developing Needle Exchange policy in New Jersey. Ultimately, strong political leadership and an increased focus on the *Science* aspect of Needle Exchange policies, helped push the idea forward, while the counterpressure of race and the *Moral* arguments helped to slow down the progress.

The role of framing as a policy tool was certainly utilized during the extended debate regarding Needle Exchange in New Jersey. The most effective framing occurred as themes overlapped. However, framing alone is not a sufficient explanation regarding the journey of this issue. Other factors played a role including the institutional power of New Jersey's chief executive, legislative leadership, the strength of advocates, the changing role of science in the debate

and the possible encouragement to join the other 49 states in adopting some type of Needle Exchange policy.

Stem Cell Research. While Needle Exchange experienced a laborious path through the legislative process, Stem Cell Research moved relatively quickly. Both issues shared similarities - a medical issue framed from a *Science* and/or *Moral* focus - but each developed in a different manner. From the beginning, Stem Cell Research was described as “more popular”; “a feel good issue” and “better framing opportunities through addicts versus celebrities” when compared to Needle Exchange. A key factor in delineating the differences in policies lay in the target audience. While Needle Exchange provided “no political capital for addicts” with Stem Cell Research, “everyone knows someone with a disease [that may benefit from this research]” (Susan Livio, Personal Communication, March 20, 2009). The broader target audience allowed supporters to reach a larger group of people in a positive way.

One way the press and advocates on both sides of the issue presented information to the public and target audiences was through sound bites. Playing a role in the policymaking process, sound bites help people understand complicated concepts. As part of the framing process, sound bites, when used effectively, can be a powerful medium of communication. Stem Cell Research involves complicated scientific information. Framing, through sound bites, allows a target audience to more easily understand components, such as the promise of a cure or providing comfort to many. This positive framing was likely one factor

in garnering support for this policy. Stem Cell Research was an easier sell as it had a broader target audience and more positive public reception than Needle Exchange. Pete Cammarano, former chief of staff to Governor Richard Codey, was involved with both issues and described how constituency played an important role in moving Stem Cell Research. Initially:

[L]egislators were generally afraid of the issue [Needle Exchange, as there was] no sympathetic base constituency and the public was against the issue...With Stem Cell Research, the constituency was important ... people had relatives who would be impacted...the public perceived it as being beneficial..." (Personal Communication, December 22, 2008).

The media was a tool in encouraging this "easier sell" from the beginning. Although Dr. Grumet, a Stem Cell researcher at Rutgers, criticized the media for hyping the hope of this issue, perhaps the media focus promoted a more positive public reaction to this issue. News articles aided in spreading the word about the benefits of this policy that tended to reach nearly everyone, as many people have family or friends touched by a disease that may be helped by Stem Cell Research. The broader concepts of promise and hope for Stem Cell Research resonated well with the general public, certainly better than with Needle Exchange. "People are suffering, dying and here is the hope for a potential answer to their suffering" (Rich Lee, Personal Correspondence, 5/29/09).

The public perception was that Stem Cell Research was successful, although in reality there was little concrete evidence to bolster this view. Potential and optimism overshadowed the lack of hard data shown by this research; to be fair, research studies take many years and this initiative was still

relatively new. So supporters had little choice but to focus on the possibilities brought about by Stem Cell Research.

This initiative also received support from high profile people, such as Christopher Reeve and Nancy Reagan, who were able to capture positive media and political attention as well as public sympathy. A spokesperson that can be trusted can go a long way in improving public perception. Rich Lee, deputy communications director for Governor McGreevey, acknowledged the benefit of Christopher Reeve putting a face and support behind Stem Cell Research as a good “face of the issue to the public” (Personal Communication, May 29, 2009).

One example of how public perception can help influence the policymaking process can be seen through the opposition framing of the Stem Cell debate. The differentiation between embryonic research and adult cell research is key to the views of those who oppose Stem Cell Research on religious or *Moral* grounds. Many believe that Stem Cell Research holds great potential for generating new tissue for people suffering from a plethora of debilitating diseases that currently lack strong treatment options, such as Parkinson’s, Alzheimer’s and spinal cord injuries. Many scientists believe that human cells derived from embryos have the capacity to divide and develop into a wide range of tissue types. Researchers hope to use this flexibility to create fresh tissues to replace diseased ones for many patients.

On the surface, creating healthy tissue to replace diseased ones seems extraordinary and a major breakthrough. The controversy exists because of the

duality inherent in this research. Stem cells can be extracted from embryos or from adult cells. Many scientists believe that embryonic cells hold the most promise for research as adult cells, though useful, are thought to lack the comprehensive properties of embryonic cells. However, extracting cells from embryos destroys the embryo. Pro-life groups oppose embryonic Stem Cell Research as they consider a days-old embryo a potential human life, thus believing that destruction of that life is murder. Groups that oppose embryonic cell research, however, support research with adult cells. As far as delineating their position, only those opposing embryonic research are clear in specifying which type of cells are discussed.

The general use of 'stem cells' was effective because it lead to confusion in [the public] – where they referring to embryonic or adult? This was very different than how the Catholic Conference people framed the debate (Pat Brannigan, Personal Communication, September 14, 2009.)

Stem Cell Research provided the public with optimism for curing many chronic and debilitating diseases. Although a *Science*-based frame was named as a top theme by Stem Cell interviewees, (Tables 4a, 4c) the data for Stem Cell Research was based more on the hope and promise potential for the future than current facts. By contrast, Needle Exchange interviewees also recognized the *Science* frame but the data supported the intervention. The *Science* frame for Stem Cell research had a different quality than for Needle Exchange. One reason for this may be the duality when discussing Stem Cell Research. Opponents of Stem Cell Research made clear to delineate between embryonic – which, they

argued, lacked proof of success – and adult – which already has shown some successes.

That is the problem with embryonic research. [I] believe that you should proceed with proven studies, not studies that only may help. This is why science is important to [my] decisionmaking... Lawmakers are wasting time on embryonic [research] ...there were at least 70 'cures' or uses for adult stem cells and zero for embryonic cells (Senator Pennacchio, Personal Communication, 5/13/10).

While the duality of research potential could create a confusing presentation of the issue, it did not limit its legislative development. The public and policymakers continued to support a comprehensive view of Stem Cell Research and did not “buy into” the framing set out by those opposing embryonic research.

Interestingly, many interviewees found the *Science* frame strong for Stem Cell Research but the expert group in general believed that it could have been stronger. While agreeing that framing was an important part of the debate, each of the experts interviewed felt that advocates did a poor job in framing the issue from the scientific perspective, allowing a *Moral* frame pressed by the opposition to shape the debate: “While their research may be a good thing, scientists just assumed that the public saw it that way” (Dr. Montague Kern, Personal Communication, May 26, 2009).

According to Dr. Kern, an associate professor of journalism at Rutgers, the pro-life frames were effective, as they had an impact on public opinion, a target audience, for two reasons: “...the consistent use of the frame and the lack of public knowledge of the issue from a scientific perspective” (Personal Communication, May 26, 2009). It is likely that this lack of science knowledge is

exactly what the opposition was hoping for by pushing the morally based adult versus embryonic argument:

Embryonic stem cell research involves destroying embryos which the church believes is morally and ethically wrong ...Science has shown that advances have been with adult stem cells but nothing with embryonic. Science shows that adult cells are the way to go, they are providing cures now (Jennifer Ruggerio, Personal Communication, July 8, 2009).

The political aspects of Stem Cell Research differed from Needle Exchange. President Bush ended federal funding for Stem Cell Research in the early 2000's, allowing states to jump in to fill the vacuum. This action fostered competition between the states as well as bringing the *Other* theme of job creation to the fore. The idea of a "race to the finish" propelled legislators to move to compete more efficiently with states like California to entice researchers and scientists to New Jersey. Assemblyman Neil Cohen told the press in 2006, "[this] is our year, [New Jersey's] golden opportunity before we fall in the wake of other states' " (Gurney, *The Philadelphia Inquirer*, 3/7/06).

Particularly resonating in New Jersey was this idea that the state should continue to maintain its edge as a biotech leader by encouraging Stem Cell Research and providing a welcoming environment. In 2005, Acting Governor Codey appropriated \$10 million for Stem Cell Research in New Jersey. The next year, a \$270 million construction bill for research facilities passed the legislature and was signed by Governor Corzine.

Focusing on state initiatives likely played a role in encouraging the development of Stem Cell Research in New Jersey. The concept of Policy Diffusion, when one state looks to its neighbor for innovative initiatives, existed

in the economic sense as states competed with one another to create cutting edge institutions to lead the research effort as well as to attract top researchers in the field. Funding is a key component in research efforts and New Jersey attempted to create a welcoming research environment by financing research and infrastructure. Newspaper articles added to this environment by reporting on funding initiatives undertaken by other states and analyzing the efforts to push forward Stem Cell Research given the federal void.

General Policy Diffusion theory contains a component of regionalization, however, which was not prevalent in the Stem Cell debate. While New Jersey was one of a handful of leaders in this initiative, the only neighboring state that followed suit was Connecticut. A few states in the middle of the country, including Illinois, Wisconsin and Missouri, provided the core of state initiatives for Stem Cell Research.

Similar to Needle Exchange, legislative leaders played a large role in moving Stem Cell Research forward. Unlike Needle Exchange, however, this policy had a number of key legislators who initially supported the policy, such as Senator Vitale and Senator Codey, as well as executive branch support from Acting Governor Codey and Governor Corzine.

Opponents of Stem Cell Research also discussed the importance of getting a champion in the legislative and executive branches explaining that legislation that moves usually has one or more influential champions while legislation that languishes has one or more influential opponents (Pat Brannigan,

Personal Communication, September 14, 2009). Since Stem Cell Research enjoyed more broad based support in the legislature, those opposing the initiative had a tougher job. Unlike Needle Exchange, Stem Cell Research had the support initially of Acting Governor Codey who quickly designated funds for this initiative, as well as sponsoring bills for research facilities when he returned to the Senate. With legislative support, as well as later support from Governor Corzine, Stem Cell Research had a much easier path legislatively than Needle Exchange.

Providing state funding for these programs provided another *Political* frame for Stem Cell Research. A secondary piece of this financial support may be seen from the *Other* frame of jobs/economic incentives stemming from investments in this research. With its broad appeal, promise of a cure and job creation potential, the positive frames in the news articles seemed to outweigh the *Moral* theme of destruction of life in encouraging state funding for this scientific pursuit.

While the *Science* frame was effectively used in Stem Cell Research, it was broader in scope than Needle Exchange (Table 4c). The idea of promise and hope resonated well for this issue as did the overlapping frames of *Politics* and *Other*. The broader target audience and larger universe of beneficiaries also contributed to the easier sell of Stem Cell Research.

The role of framing as a policy tool was certainly important in explaining why Stem Cell Research moved more quickly through the legislative process. As

with Needle Exchange, the most effective framing occurred as themes overlapped. However, framing alone does not explain the legislative success of this issue versus the drawn out debate of Needle Exchange. Overall, Stem Cell Research resonated better with the public. Factors playing a role include target audience, media influence, the role of science, economic considerations and executive/legislative leadership.

Theoretical Implications. Based on the examples of Needle Exchange and Stem Cell Research, Issue Framing does appear to play a role in the policymaking process (Tables 4d and 4e), but often works in conjunction with other factors. Evidence of the role of framing may be seen through a content analysis of the 32 interviews. The top 15 factors that can impact the policy process, as presented by at least two groups, are tabulated in Table 4a. Of these themes cited most often by interviewees, the four major frames topped the list as important tools in the lawmaking process. So while framing does play a role in the policymaking process, at what level is it most effective? This section examines three components of policy development – agenda setting, debate and outcome – and the impact that framing has on each level.

Role of Framing in the policymaking process – at which level is it most effective? Agenda setting. Also described as problem recognition (Kingdon 1984) agenda setting often occurs through the interaction of three policy concepts: problems, politics and visible participants. Kingdon later (2003) connects agenda setting and framing by explaining that the group that sets the

agenda can focus public attention on a problem while they are able to define the problem in a way that best advances their views.

This study begins with both Needle Exchange and Stem Cell Research already on the legislative agenda, so the impact of Issue Framing on this phase of the policy process was not fully examined. Further research needs to be done in this area.

Debate. Often described as the second phase of the lawmaking process, debate may also occur concurrently with agenda setting. Each of the four groups in the study participated in debates over issues. The media portrayed both Needle Exchange and Stem Cell Research from a primarily *Political* perspective (Chart B1). While the experts explained their conclusions based on certain studies, other researchers presented contrasting science. Policymakers came down on both sides of the issues, often relying on support and information from various advocates.

Defining a conflict delineates the problems, or issues, that form the core of public policy debates: "...at the root of all politics...is the universal language of conflict...politics is the socialization of conflict" (Schattschneider 1975). Several factors contribute to debate in the policy arena. They include, among other things: the power to define the issue (Schattschneider 1975); communication (Callaghan and Schnell 2001, Riker 1986, Gutman and Thompson 2004); and message crafting/ framing (Kuklinski 2000, Zaller 1991, Nelson and Oxley, 1999). These factors are all components of Issue Framing.

People with different views seek to characterize, or frame, issues in terms that will convince others to support their position, or to help them achieve their preferred outcome. The use of words, language and images are key in crafting an effective message frame.

At least one concept unites the different themes and sources, however. Words, the foundation of framing, are important tools in the policy war (Callaghan and Schnell 2001) and rhetoric is an essential component in influencing public opinion, with the use of some terms and the rejection of others seen as a political win or loss.

Through framing, communicators seek to establish a dominant definition or construction of an issue ... similar to issue characterization: a declaration of what a policy dispute is really all about and what it has nothing to do with ... carries perceptual and inferential implication, guiding how their recipients ponder and resolve issue dilemmas...frames influence opinion by suggesting which of many possibly conflicting considerations should predominate (Nelson and Oxley 1999.)

This concept of conflicting considerations makes Issue Framing a good fit for the debate phase of policymaking. Joselyn and Haider-Markel (2002) found that framing effects are greater on issues evoking strong moral feelings, providing fertile conditions for the application of Issue Framing. This study provides some evidence supporting this hypothesis. Needle Exchange and Stem Cell Research were portrayed in a moral context through both primary and secondary sources. Primary sources acknowledge both issues, especially Needle Exchange, within a *Moral* frame (Table 4a) and secondary sources also showed each issue portrayed through *Moral* frames (Charts B1-B5).

Effective framing also appeared to work in concert with constituencies or target populations. Schneider and Ingram (1993) discuss the social construction of target populations as "...portraying groups in positive or negative terms through symbolic language, metaphors and stories" (p. 334). They add, "Social constructions become embedded in policy as messages that are absorbed by citizens affect their orientations and participation patterns."

The role of target populations as an important factor within the framing process is evidenced by triangulation from various sources. Highlighted as one of the top 15 themes by Stem Cell Research interviewees (Table 4a), the role of target populations in terms of framing was additionally emphasized in terms of "constituency" as a major factor in the comparison for framing of Needle Exchange and Stem Cell Research (Table 4f).

Considering "strength of interest groups" as a proxy term for target populations bolsters this factor's role in the framing process. As Tables 4d and 4e show, the term, "strength of interest groups" was one of the strongest factors across both issues as influencing the lawmaking process. Since interest groups represent the beneficiaries of various public policies, they may be considered one of many target populations for an initiative. In the policy realm, "target population" has more than one meaning. It could refer to the groups being served by the policy, or, when discussing framing, it could refer to the groups making a judgment about a policy.

Stem Cell Research's target groups including high profile beneficiaries as well as the average everyday person, with the debate focusing on the medical benefits provided by Stem Cell Research. This argument was countered by the *Moral* considerations of destroying embryos. Beneficiaries of the Needle Exchange program included a small target group of predominantly low income, minority drug addicts. A con advocate of Needle Exchange explained how during the debate over an issue, communication strategies may change as information becomes targeted to different segments of participants in the policy process and how framing aids in this transition:

Scientific arguments are complicated, [they] don't play into framing and sound bites. Yet, we must use framing and sound bites in the policy arena. So the science is not so much focused for the public but more for the policymakers...sound bites are targeted to the sector of our culture, to the people in general, while the more specific information is useful to policymakers (Len Deo, Personal Communication, 3/11/10.)

The different approaches by advocacy groups exemplify the complicated interplay between framing and target populations during the debate stage. Particularly in Needle Exchange, interest groups were able to impact the debate by reframing the issue from one of enabling drug addicts to HIV prevention. The Drug Policy Alliance (DPA) and Roseanne Scotti, its Executive Director, were credited by various participants in the Needle Exchange debate with turning the tide : "It all came together when the DPA came in to organize ... [they] repackaged the advocacy efforts..." (Susan Livio, Personal Communication, March 20, 2009).

The *Moral* frame was also used by opponents who focused on the “undeserving” beneficiaries of this program – drug addicts. These frames were particularly reflected in the Issue Papers and Testimony (Charts B2 – B5, Chapter 4) where opponents focused on the *Moral* arguments. This use of the *Moral* frame also held true for the Testimony Con section. The *Moral* argument appears to best reflect the arguments of those challenging Needle Exchange.

In testifying against Stem Cell Research, opponents used a combination of frames, unlike Needle Exchange opponents who mostly focused on a *Moral* frame. The delineation between embryonic and adult was a key component of their argument during the debate phase of discussion. Challengers expressed their support for research involving adult cells and the conclusive benefits this science has provided, while opposing the morally questionable and unproven embryonic research. Supporters encouraged both adult and embryonic exploration, focusing on the promise that the latter may hold, and the potential benefits in pursuing embryonic research.

COMMONLY CITED THEMES

Frames and other factors that may impact the policymaking process

Needle Exchange and Stem Cell Summary and Comparison

Table 4a.

THEMES: NEEDLE EXCHANGE AND STEM CELL RESEARCH	GROUPS NAMING THIS AS A TOP THEME, NEEDLE EXCHANGE	GROUPS NAMING THIS AS TOP THEME, STEM CELL RESEARCH
Science frame	Con Advocates, Con Policymakers Pro Advocates Pro Policymakers Experts	Con Advocates Con Policymakers Pro Advocates Pro Policymakers Experts
Moral frame	Con Advocates Con Policymakers Pro Advocates Pro Policymakers Media	Pro Policymakers Experts
Political frame	Con Policymakers Pro Advocates Pro Policymakers Media	Con Advocates Con Policymakers
Other frame of economics /job creation		Con Advocates Con Policymakers Pro Policymakers Experts
Advocates	Pro Advocates Experts Media	
Sound Bites	Media	Con Advocates
Personal stories	Con Advocates Experts	Con Advocates Pro Policymakers
Law enforcement	Con Policymakers Experts	
One on one lobbying	Pro Advocates	Pro Advocates

	Pro Policymakers	
Media		Experts
Visuals/Imagery	Con Advocates Experts Media	Con Advocates Pro Policymakers
Public Health View	Con Policymakers Experts	
Law Enforcement/ Drug Wars Needle Exchange Only	Con Policymakers Experts	
Delineation of embryonic and adult – Stem Cell Research only		Con Advocates Con Policymakers
Target audience		Pro Policymakers Media

Outcomes. Outcomes within the policy process may be subjective, as they vary based on which group is describing them. For example, advocates strive to expand the number of supporters for their cause, either targeting legislators or the public making broadened audiences one outcome, while the media could define outcome as increasing readership/viewership. Policymakers can view outcome in terms of legislative successes and experts can define outcome as publishing data used in a policy debate. For the purposes of this study, outcome refers to the final action on a legislative initiative. While both Needle Exchange and Stem Cell Research ultimately had positive outcomes – becoming law – the paths each took were different.

In examining how Issue Framing influenced outcomes, from an institutional perspective, only the policymakers have a direct role as they are the only ones who can vote for or against a bill. However, Issue Framing still can

have an impact at this level. Reviewing the histories of two hot button issues, birth control and abortion, Gene Burns (2005) found that “limiting” or more focused frames, as opposed to comprehensive “moral worldviews” led to more positive outcomes in the policy arena (such as the passage or defeat of a bill.) “Within a complex society, trying to forge comprehensive moral consensus is generally self-defeating” (p. 21.)

In examining a broad versus narrow framework for controversial issues, this study showed that, in general, the interviewees were mixed in their preference, with Needle Exchange participants naming a narrow frame as the most effective (Stopping the spread of HIV) while Stem Cell Research interviewees preferred the broader concept of “Showing promise” (Tables 4b and 4c). While *Science* was a useful frame, it was applied differently in each case. Clearly, Issue Framing application will differ between issues.

Tables 4b and 4c rank the most effective frames for Needle Exchange and Stem Cell Research as defined by the interviewees. For Needle Exchange, the top three frames were similar in efficacy. Two of the top three frames, “Success in stopping/slowng HIV” and “Useful entryptoint into healthcare system” are narrower in focus, while the third was broader – “Programs increase drug use and enable addicts”. Applying Burns’ theory, the narrower focus worked for framing Needle Exchange.

Burn’s theory appears less effective when applied to Stem Cell Research. The frame named as “very effective” by a majority of groups was a

theme that was broad in scope, "Most Stem Cell Research shows promise."

Interestingly, those opposing embryonic Stem Cell Research attempted to promote a narrower frame by focusing solely on adult cells. This differentiation never caught on in the larger debate on this issue, furthering the idea that just as each issue requires different legislative strategies throughout the process, perhaps it is more difficult than Burns suggests to make broad theories regarding the "best" way to frame an issue.

Another study examined how debate can alter (or not) participants views on an issue and their hoped-for outcomes in a policy discussion. Barbara Gray's 2004 study recounts, through an environmental case study, how participants could not "let go" of their preconceived ideas about outcomes and identities regardless of how the debate was presented. This appears not to be true with Needle Exchange, where the debate was able to alter stakeholder views and ultimately the outcome. Gray's study focused primarily on a small, targeted group who directly participated only in the issue discussion while this study examined the long term debate over Needle Exchange, which included the public as well as legislators.

These different results between studies and topics may reflect the uniqueness of each policy and the institutions that serve as sounding boards for legislative debates. Ultimately, given the three areas of the policy process, the debate phase provides the most accessibility and best opportunities for Issue Framing.

Effectiveness of Framing – theory and practice. Theory. In reviewing theories regarding Issue Framing, it is clear that the topic is very broad as different concepts focus on the component parts of Framing. These models include a focus on the individual, morality and source credibility.

Jacoby (2000) concluded that framing can have an impact on an individual level and can have a strong influence on public policymaking:

...[I]ssue framing effects appear at the individual level; they do not merely affect the aggregate contours of public opinion...Indeed, the ongoing 'competition' between varying presentations of social problems and issues may well be one of the most important dynamics underlying modern political conflict (p. 763.)

This concept of individual impact is supported in part by the interviewees for this study. Table 4a lists important themes in the policymaking process and diverse groups of interviewees named the role of one on one lobbying and personal stories as important factors.

Individual participant groups in the policy process may also impact a policy debate by creating their own presentation of the issue. Callaghan and Schnell (2001) showed how the media directly impacted the gun control debate by creating a specific frame for the Brady Bill, separate from those views advanced by policymakers and interest groups. The role of the Drug Policy Alliance (DPA) in New Jersey's Needle Exchange debate provides an example how participant groups in this study provided a specific presentation unique to that organization.

A second model for Issue Framing focuses on morality. While research has shown that framing effects are greater on issues evoking strong moral

feelings (Joselyn and Haider-Markel, 2002) this study did not specifically test that hypothesis but makes that assumption. Taking it to the next level, Lackoff (2002) explains his Conceptual Metaphor theory, using family metaphors and other values as a moral parameter in framing policy debates. In the cases of Needle Exchange and Stem Cell Research, the applicability of this theory fits with the Needle Exchange debate. Initially described by opponents as enabling drug addicts and targeted to the “undeserving” of society, this morality based frame certainly aided in the push back against the program. It is possible that as the focus began to shift to HIV prevention, individual stories and public health benefits, as well as studies indicating that Needle Exchange did not increase drug use, Lackoff’s frame began to lose its strength. Evidence of this may be found in Table 4b, as the most effective frame for Needle Exchange was “Success in stopping/slowng HIV” indicating a shift to the focus on HIV prevention.

Druckman (2001) and Zavestoski (2004) discuss the role of source credibility and information presentation. By turning to elites for guidance and information, Druckman suggests that public trust of the source of the information is the prerequisite for successful framing. Following this reasoning, Zavestoski found that elected officials used framing to construct an explanation and response to an environmental problem.

Source credibility may have played a role in in the movement of Stem Cell Research. Initially based more on science, or at least the promise of science, than Needle Exchange, support for Stem Cell Research came from

widespread sources including the media, policymakers, experts, celebrity spokespersons.

Issue Framing remains a complex concept that may be applied to many policy debates. It appears that, while some overall broad themes may apply (for examples, the themes espoused by Schattsneider and Jacoby), other theories may only relate under certain circumstances or with certain issues.

Effectiveness of framing - Practice. The literature suggests that Issue Framing does play a role in the policymaking process and this study indicates some support for that hypothesis. However, framing effects were most effective when used in conjunction with multiple frames and other factors. In examining the cases of Needle Exchange and Stem Cell Research, it appears that these issues both share factors that influenced the debates in the lawmaking process as well as exhibiting issue specific variables, suggesting that framing effects can vary between issues. While a particular frame may resonate at a given time over the course of the policy debate, ultimately it was a combination of frames, the interaction of various participants and other factors that provided the most effective tools in achieving passage of a bill.

Participants from both groups agreed that the *Science* frame was the frame having the most impact on the policymaking process (Table 4a). Yet the *Political* frame was most often used by newspapers when covering both issues, while Testimony and Issue Papers tended to focus on *Moral* themes. Different

segments of policy world use frames differently, indicating there is no “one size fits all” path to the most effective way to frame.

For Stem Cell Research, the most effective frame was a science-based frame, although broader in scope than Needle Exchange (Table 4c.) The idea of showing promise or hope through research without a specific scientific outcome, resonated for this issue. Interestingly, the duality argument forwarded by the con advocates (Adult cells are as useful as embryonic) was considered an effective frame by pro advocates and somewhat effective by experts. Given these findings, it is curious that this duality frame never resonated more broadly within the debate. Further research could be done to discover why the potential was never reached with this argument.

Needle Exchange, it has already been noted, also utilized a science-based argument effectively, according to the interviewees (Table 4b.) Based on the analysis of news articles, Needle Exchange was shown to be a complex issue, usually with multiple frames discussed in one article. Although the *Political* frame was the most often used, followed by *Science*, the themes frequently overlapped (Chart B1, Chapter 4). Certain subthemes resonated particularly well within the *Political* frame. Political leadership was an important factor, as was the role of science, with the latter’s importance growing more over time.

Overall, for Issue Papers and Testimony, the “con” pieces tended to frame their views in *Moral* terms most frequently for both Needle Exchange and Stem Cell Research. However, the Stem Cell Issue Papers and Testimony also

combined frames more often. Although Science was on the side of Needle Exchange, these examples of Issue Papers and Testimony show this frame used slightly more by Stem Cell advocates, although the studies and facts related to this issue were ultimately weaker than in the later arguments for Needle Exchange.

Examining what participants believed to be the important factors in the lawmaking process (Tables 4d and 4e), the same three elements were named for both Needle Exchange and Stem Cell Research though the order was slightly different. Needle Exchange interviewees equally named Framing, Legislative Support, and the Strength of Interest Groups while more Stem Cell Research participants named Strength of Interest Groups, followed by Framing and Legislative Support tied for second. While the differences were only slight, the important conclusion to draw here is both groups acknowledged similar factors as playing a role in the lawmaking process, indicating some commonality across issues regarding areas to focus on while moving through the legislative process.

Most Effective Frames – Needle Exchange

Table 4b.

Frame	Very effective	Somewhat effective	Not Effective
Success in stopping/slowing HIV	Policymakers Con Policymakers Pro	Advocates Con Advocates Pro	
Useful entrypoint into healthcare system	Advocates Pro Experts	Media	
Programs increase drug use and enables addicts	Advocates Con Policymakers Pro	Advocates Pro	Experts
Programs send the Wrong Message	Policymakers Con Policymakers Pro		
Tax dollars should not support drug users	Policymakers Con Policymakers Pro		
Research results remain Inconclusive		Media Policymakers Pro	Advocates Pro Experts
Results show the program is not effective		Advocates Con	Media Advocates Pro Policymakers Pro

Note: These results include ONLY when **all** participants in a given group agreed on a frame. Number of respondents in each group varied from 1 – 3.

Most Effective Frames – Stem Cell Research

Table 4c.

Frame	Very effective	Somewhat effective	Not Effective
Most cell research shows promise	Advocates Con Policymakers Con Policymakers Pro Experts	Advocates Pro	
Adult cells are as useful as embryonic	Policymakers Con Advocates Pro	Policymakers Pro Experts	
Embryonic Research is promising	Policymakers Con Policymakers Pro	Advocates Con	Advocates Pro
Research is unethical since it ends a life	Policymakers Con Advocates Pro		Experts
Stem cells show very little promise	Policymakers Con		Advocates Pro Experts
Research thus far is inconclusive	Policymakers Con		Advocates Pro Experts
Research provides economic opportunities and jobs		Advocates Con Policymakers Con	Advocates Pro

Note: These results include ONLY when **all** participants in a given group agreed on a frame. Number of respondents in each group varied from 1 – 3.

Effectiveness of framing – Theory meets Practice. Kuklinsky (2000)

suggests that politicians or other elites may present information that is in some sense biased. He does not suggest that they purposely distort facts or lie, rather they “spin” the information a certain way that is beneficial to their argument. Ramifications of this include questioning how people can make informed decisions if they have the wrong information. While some theories regarding Issue Framing have been at least partially supported by this study, the evidence is far from definitive. Clearly, a component of Issue Framing in the policy world lies directly in making the best argument to convince groups to support a certain view on a legislative issues. While certain morally based issues appear to lend themselves more easily to framing, it appears a grey area exists between the abstract theory of framing and making the best argument

The role of other factors on the lawmaking process. When questioned about important factors in the lawmaking process, each group of interviewees named the same top three – Framing, Interest Groups, and Legislative Support (Tables 4d and 4e). So while it appears that issue framing impacts the policy process, it does so in concert with a number of other factors.

Strength of Interest Groups. Especially for Needle Exchange, the work of interest groups played a large role in the eventual passage of the bill. One advocate supporting Needle Exchange, Rikki Jacobs, used personal relationships and the individual concerns of legislators to address the perceived problems with the legislation. On the Stem Cell side, Jeannine LaRue, a long time New Jersey

lobbyist, also noted that she favored a personal, one-on-one approach to dealing with legislators.

Stem Cell pro advocates had an easier time than Needle Exchange supporters based on their built in constituencies. Advocating for primarily low income people, often minority drug users, obviously would not garner the same public or legislative support as research that had the potential to help people from all walks of life. The composition of constituencies and target groups, as defined by the participating interested groups, plays an important role in the lawmaking process. Additionally, Stem Cell Research had high profile, celebrity spokespersons like Christopher Reeve and Nancy Reagan who received instant media attention for their efforts.

This analysis shows, however, that even though an issue will have natural constituencies that help or hinder the cause, specific interest groups can have an impact. For Needle Exchange, some interviewees acknowledged that the Drug Policy Alliance helped turn the tide in the legislative process despite the handicap of their constituency. Regarding Stem Cell Research, supportive interest groups were not able to take advantage of their initial success and cement the place of Stem Cell Research in New Jersey. These groups were visible mostly in the debate phase of the policy process, but seemed to have less influence on outcomes.

Policy Diffusion. For both Needle Exchange and Stem Cell Research, the theory of Policy Diffusion may have played a small role. Specifically, the

argument that other states had Needle Exchange laws was included in newspaper articles with 12% of all political references and there may have been some pressure in the legislature to create an option in New Jersey. Policy diffusion, through its economic competition component, may have played a small role the Stem Cell debate. As the lack of federal funds and national infrastructure left a vacuum that state initiatives could fill. New Jersey leaders saw an opportunity to create jobs and propel the biotech industries in the state to the fore in research opportunities:

Scrambling to reassert New Jersey's position at the forefront of stem cell research, acting Governor Richard Codey is expected to announce an investment...to encourage local discoveries in the increasingly competitive field (Gurney, 2005).

The idea of a "race to the finish" propelled legislators to move to compete more efficiently with states like California to entice researchers and scientists to New Jersey. Assemblyman Neil Cohen told the press in 2006, "...[this] is our year, [New Jersey's] golden opportunity before we fall in the wake of other states" (Gurney, *The Philadelphia Inquirer*, 3/7/06).

If Policy Diffusion did play a role in both these debates, it took on a different character with each issue as various components of diffusion interacted with the legislative process. Since Policy Diffusion focuses more on the outcome section of the lawmaking process, it can serve as a complement to Issue Framing's debate focus.

Executive/Legislative leadership. The newspaper coverage of both Needle Exchange and Stem Cell Research heavily discussed the legislative or policy process involved with these issues as well as often quoting politicians

supporting, or opposing, the bills. As elected officials are the ones voting directly on an initiative, this element of legislative support directly impacted the outcome of Needle Exchange and Stem Cell bills.

New Jersey is unique in its legislative institutions as it has one of the strongest executives in the country. For Needle Exchange, a change in governor's office began to turn the tide on the opposition to this policy. The election of a democratic chief executive ushered in executive orders and stronger legislative support. These adjustments occurred over time, while Stem Cell Research benefitted from gubernatorial and legislative support from the outset.

In every state, not only New Jersey, the governor is usually the key policymaker. If he or she wants something, it generally gets done, albeit in a modified form. If the governor is opposed...rarely does something happen that the governor is against...While the issues were framed to appeal to legislators, press and public, and while the framing was useful in building support, without gubernatorial leadership, or at least acquiescence, nothing would have happened (Alan Rosenthal, Personal Communication, 10/7/2011).

Factors In the Lawmaking Process, Needle Exchange

Table 4d.

Factor	Very Important	Somewhat Important	Not Important
Framing	Policymakers Con Policymakers Pro Advocates Con Advocates Pro		
Legislative Support	Policymakers Con Policymakers Pro Experts Advocates Pro		
Strength of Interest Groups	Policymakers Con Policymakers Pro Experts Advocates Pro		
Timing	Policymakers Pro Experts Advocates Pro	Policymakers Con	
Media Coverage	Experts Advocates Con Advocates Pro		
Science	Media Policymakers Pro	Advocates Pro	
Public Support	Experts	Advocates Pro	
Relation to Other Issues		Media Advocates Pro	
Campaign Contributions		Policymakers Con	Media
Other			

Note: These results include ONLY when all participants in a group agreed on a frame. Number of respondents in each group varied from 1 – 3.

Factors In the Lawmaking Process, Stem Cell Research

Table 4e.

Factor	Very Important	Somewhat Important	Not Important
Strength of Interest Groups	Advocates Con Policymakers Con Advocates Pro Policymakers Pro		
Framing	Policymakers Con Advocates Pro Policymakers Pro		
Legislative Support	Advocates Con Policymakers Con Advocates Pro		
Media Coverage	Advocates Con Policymakers Con		
Science	Advocates Con	Policymakers Con Advocates Pro	
Timing	Advocates Con	Policymakers Con	
Campaign Contributions	Advocates Con	Policymakers Con	
Public Support	Policymakers Con		
Relation to Other Issues			
Other			

Note: These results include ONLY when all participants in a group agreed on a frame. Number of respondents in each group varied from 1 – 3.

Ultimately, Why Did One Move More Quickly Than The Other? While it was difficult to pinpoint the specific role played by framing in the outcome of Needle Exchange and Stem Cell Research, Table 4f displays a content analysis of all interviewees regarding why Stem Cell Research moved more quickly than Needle Exchange. This study concluded that Issue Framing was one of many factors that contributed to the debate and outcome of the policy process and the participants echoed that belief. “Framing” was only mentioned by two groups of interviewees, indicating that to participants in the process, this tool alone was not the main contributor to the policy debate. According to the interviewees, “Constituency” and “Science” played a large role in differentiating the two issues, making the groups with a stake in the issue as well as the substance of the topic important factors.

Another related concept to constituency is public perception and the Stem Cell supporters had more public support than the Needle Exchange advocates from the beginning. Roseanne Scotti, Needle Exchange advocate, expressed how the public perception initially overrode the *Science* frame:

The research clearly supported that Needle Exchange worked. If politicians were basing their decisions on only science, we would have had this years ago. The bottom line was public perception...drug users are demonized, no one wants to ‘own them’ (Personal Communication, January 28, 2009).

Testimony and Issue Papers help describe the views of certain constituencies and contribute information in the public policy debate. Both Needle Exchange and Stem Cell Research representatives used various frames to

express differing views – often *Moral* (Charts B2, B4, Chapter 4) for con arguments; sometimes a *Science* frame; or a *Political* one.

SUMMARY OF CHANGES OVER TIME :
Why Stem Cell legislation moved quicker than Needle Exchange
legislation - FACTORS NAMED BY INTERVIEWEES

Table 4f.

Factors mentioned in interviews	Media	Experts	Advocates Pro	Advocates Con	Polymakers Pro	Polymakers Con – same for both NE and SCR
Constituency	Yes	SC NE	SC NE		NE	SC
Science		SC NE	NE	SC	SC NE	SC
Public Perception	Yes	NE	SC	SC	SC NE	
Political – Leg Leaders	Yes	SC	SC		SC NE	
Framing	Yes	NE				
Political – Celebrity			SC	NE		
Middle Ground	Yes					
Economy/Job						SC
Debate: Public vs. Policy						SC
Embryonic v. Adult				NE		
Media			NE			
Negative Factors			NE			

KEY: SC = stem cell interviewees mentioned this factor; NE = Needle Exchange interviewees mentioned this factor

Generalizability. This study found that, in controversial public policy discourse, Issue Framing did play a role, albeit a limited one, in the cases of Needle Exchange and Stem Cell Research in New Jersey. It should be noted that, while these divisive issues were the focus, there is no evidence to suggest that this policy tool is limited only to provocative issues. Future studies could consider the difference of Issue Framing in divisive vs. less controversial issues.

Science as a factor in the policy debate provided interesting fodder for Issue Framing theory. As the science may change throughout the life of the legislative discussion, as it did with Needle Exchange, these changes can affect the debate and potentially the legislative outcome of a bill. While it is difficult to parse out the impact of Issue Framing as a policy tool in contrast to the ability to simply present an issue in a way that is beneficial to a certain group or individual, data can add weight to any viewpoint.

It is important to note that data can change over time, adding nuances to a legislative debate. Was there something specific about this particular time period that contributed to the difference in these discussions? Perhaps timing was initially a small factor with Needle Exchange. The War on Drugs was in full force around the time that this policy was being debated. As the intensity of the War on Drugs and the focus on crack cocaine specifically began to fade, perhaps Needle Exchange advocates were able to open the door on a new way to frame the issue. Issue Framing allows advocates to take into account the peculiarities of a certain period of time and work an argument that best reflects that time.

Various time periods should not be a limiting factor on Issue Framing as the theory lends itself to incorporating these particular quirks into an argument.

Target populations and constituencies had an impact in differentiating the two issues throughout the policy debates and it appears that constituencies will play a role in most legislative discussions. Appealing to the broadest groups possible increases the likelihood of a successful outcome. The narrower group of low income and drug addicted beneficiaries of Needle Exchange policy certainly rendered this intervention less attractive to policymakers and the public than Stem Cell Research, where a broader constituency and celebrity spokespersons provided another window of opportunity for supporters. It is likely that this concept of appealing to broad constituencies should apply to most issues as a positive way to influence a legislative debate and lead to a positive outcome.

Given New Jersey's legislative system, certain institutional factors provided opportunities in policy debates. Although New Jersey has a strong governor and that leadership or opposition to an issue impacted the debate and outcome, policy discussions in other states will also depend upon the absence or support of legislative and gubernatorial leadership.

Overall, Issue Framing has a role to play in the legislative process. Framing effects may be greatest when frames overlap. It appears that the most effective practice of Issue Framing includes concentrating on the debate stage and serving as one piece of the legislative puzzle, including the use of

constituencies and advocacy groups. While some issues may lend themselves more appropriately to framing, this policy tool can be applied to almost any legislative issue. Although this study focused on New Jersey legislation, Issue Framing usage is not limited to a particular state or level of government and indeed can and should be used on the federal level as well.

Limitations. There were a number of limitations to this study. First, only two policy issues were analyzed in one state at a specific period of time. Additionally, the state of New Jersey has a particularly strong Executive which may make its legislative process unusual. The development of other issues in other states could be examined to further test the applicability of Issue Framing.

The sample size of the primary sources was small – dividing the participants into four different groups yielded a maximum of three interviews per group, far below a representative sample size.

Issue Framing was compared to only two other policymaking theories. Further research should be done to determine if Issue Framing may also work most effectively in concert with other concepts, as this study indicated with Policy Diffusion.

The retrospective nature of this study also imposed limitations. Asking people to remember what happened in the past can be full of bias and difficult to confirm, although the data was triangulated by secondary sources and some overlap in primary interview sources.

The data and literature suggest framing is strongest on moral issues; this study only focused on moral issues and did not examine non-morally based issues. Further research could be done comparing Issue Framing in the context of a provocative and non-controversial issue.

Implications. The literature suggests that Issue Framing has an impact in the policymaking process and this study supports that finding. It appears that framing effects are strongest during the debate phase of the policy process. Also important to note is that framing can change over time, impacting the legislative deliberation at any course in the discussion and with a different focus. That strategy was particularly true with Needle Exchange. Such change also indicates that the power of this policy tool may depend upon the issue being examined, as well as the constituencies involved in that legislative discussion, making Issue Framing a particularly useful tool for advocates, but accessible to all groups involved in the policy process.

The fluidity of Issue Framing is both a strength and weakness. The ability to alter course at various points throughout a legislative debate allows groups to use Issue Framing to its maximum advantage. Advocacy organizations may become more, or less, engaged as new facts emerge as provided by experts. The media may change their coverage of a topic by devoting more or less time to it or utilizing new words or phrases to convey a different interpretation to the public. However, this flexibility makes it difficult to apply Issue Framing to

determine a policy outcome as the debate could continuously shift focus, creating different interpretations for policymakers.

Framing sometimes worked in concert with another policymaking theory, Policy Diffusion. If a policy existed in another state, the framing argument could be bolstered, positively or negatively, by the experiences of that state

It is clear that Issue Framing furthers conflict in the lawmaking process – the ability to present an issue in a variety of ways allows for many different arguments and viewpoints. This idea of discussion and deliberation is truly one of the cornerstones of our democracy. Is Governor Christie's veto of family planning funds in the New Jersey budget "anti-woman" or is it "fiscally responsible?" Is President Obama's health care reform plan a "government takeover of healthcare" or is it an attempt to provide basic care to all Americans? While this paper does not attempt to answer these questions, it does explain the platform which allows for each description to be considered by policymakers and the public.

APPENDICES

Appendix # 1: INTERVIEWS CONDUCTED

STEM CELL RESEARCH:

Advocates

2 pro

- * Carl Van Horn
- * Jeannie LaRue

3 Con

- * Jennifer Ruggerio
- * Pat Brannigan/
- * Dr. Corwin

Researchers

3 content based:

- * Grumet
- * Kern
- * Cohen

Reporters

3 content based:

- * Livio
- * Aron
- * Moran

Policymakers

3 pro

- * Cammarano
- * Lee
- * Candelosi

2 con

- * Sen. Tom Keane, Jr.
- * Sen. Pennacchio

Appendix # 1, continued

NEEDLE EXCHANGE:

Advocates:

3 Pro:

- * Scotti
- * Jacobs
- * LaRue

2 Con:

- * Dr. George Corwell
- * Len Deo

Researchers

3 content based:

- * Peter Lurie
- * Don DeJarlais
- * Robert Heimer

Reporters

3 content based:

- * Livio
- * Aron
- * Moran

Policymakers

3 pro

- * Cammarano
- * Lee
- * Candelosi

2 con

- * Sen. Tom Keane, Jr.
- * Senator Pennacchio

TOTAL INTERVIEWS: 32

Appendix # 2: DATA ANALYSIS

Case 1: Needle Exchange

A. Data Collection/Data Organization

1. Uncovering frames used in the policy process for the Needle Exchange discussion.
 - a. Moral
 - b. Scientific
 - c. Political
 - d. Other – HIV focus
2. Analysis of media absorption of certain frames and/ or creation of frames by the media.
 - a. Analysis of interviews of media representatives.
 - b. Analysis of newspaper articles
 - c. **Source:** Primary and Secondary; Interviews, Newspaper articles.
3. Analyzing legislators' ability to recognize frames and respond to them. Studying if legislators created their own frames
 - a. Analysis of interviews
 - b. **Source:** Primary; Interviews
4. Examining the use of expert views in the policy process
 - a. Analysis of interviews with experts
 - b. **Source:** Primary; Interviews
5. Analyzing the role of advocates/stakeholders in the policy process
 - a. Analysis of interviews with advocates/stakeholders
 - b. Review of Issue Papers
 - c. Review of Testimony
 - d. **Source:** Primary and Secondary; Interviews, Issue Papers, Testimony

B. Data, by grouping, applied to policy process

1. Moral
2. Scientific
3. Political
4. Other

C. Applicability of Issue Framing

Case 2: Stem Cell Research

A. Data Collection/Data Organization

1. Uncovering frames used in the policy process for the Needle Exchange discussion.
 - a. Moral
 - b. Scientific
 - c. Political
 - d. Other – Economic focus
2. Analysis of media absorption of certain frames and/ or creation of frames by the media.
 - a. Analysis of interviews of media representatives.
 - b. Analysis of newspaper articles
 - c. **Source:** Primary and Secondary; Interviews, newspaper articles.
3. Analyzing legislators' ability to recognize frames and respond to them. Studying if legislators created their own frames
 - a. Analysis of interviews
 - b. **Source:** Primary; Interviews
4. Examining the use of expert views in the policy process
 - a. Analysis of interviews with experts
 - b. **Source:** Primary; Interviews
5. Analyzing the role of advocates/stakeholders in the policy process
 - a. Analysis of interviews with advocates/stakeholders
 - b. Review of Issue Papers
 - c. Review of Testimony
 - d. **Source:** Primary and Secondary; Interviews, Issue Papers, Testimony

6. Data, by grouping, applied to policy process

- a. Moral
- b. Scientific
- c. Political
- d. Other

7. Applicability of Issue Framing

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