

## **INFORMATION TO USERS**

**This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.**

**The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.**

**In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.**

**Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.**

**ProQuest Information and Learning  
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA  
800-521-0600**

**UMI<sup>®</sup>**



**NEWS COVERAGE, AGENDA SETTING, AND STATE POLICY:  
A STUDY OF VIOLENCE AGAINST WOMEN AND HEALTH CARE POLICY**

by

**Jennifer A. Manganello, M.P.H.**

**A dissertation submitted to Johns Hopkins University in conformity with the  
requirements for the degree of Doctor of Philosophy**

**Baltimore, Maryland**

**March, 2003**

**© Jennifer A. Manganello 2003**

**All rights reserved**

UMI Number: 3080725

Copyright 2003 by  
Manganello, Jennifer Anne

All rights reserved.

UMI<sup>®</sup>

---

UMI Microform 3080725

Copyright 2003 by ProQuest Information and Learning Company.  
All rights reserved. This microform edition is protected against  
unauthorized copying under Title 17, United States Code.

---

ProQuest Information and Learning Company  
300 North Zeeb Road  
P.O. Box 1346  
Ann Arbor, MI 48106-1346



## **ABSTRACT**

Because of the negative health effects of violence against women, there have been several policies developed to address issues concerning the health care of female victims of violence, particularly those affected by intimate partner violence. Such policies include training health care providers regarding issues of intimate partner violence, and requirements for health care providers to screen for abuse. The aims of this study were (1) to describe the frequency and nature of print news coverage of these health care policies and (2) to compare news coverage with state policy adoption status.

A content analysis was conducted on articles obtained from a sample of major and state capital daily newspapers from 22 states. News articles and editorials focusing on intimate partner violence and provider screening and training were selected for the years 1994 through 2001 (Part 1) and for time periods prior to policy adoption (Part 2). Part 2 analysis used a matched case-control method to compare news coverage in states that adopted laws to states that did not while adjusting for state-level statistics collected from published sources.

Results for Part 1 showed that print news coverage of the issue was not likely to have debate or portray the issue in a negative way. Most articles discussed the individual role of health providers in addressing the issue. However, the mention of state role increased over time from 1994 to 2001.

For Part 2, a case-control study measured the relationship of news coverage to state policy adoption while accounting for other variables commonly associated with policy change. Although differences were not statistically significant at the .05 level,

results showed that news coverage in states that adopted laws was less likely to provide data, but more likely to have higher prominence, mention the state's role in addressing the issue, and have articles with 'State role' as the main frame.

The results provide information to advocates, researchers and policymakers to help develop future media strategies, education campaigns, policy initiatives and future studies.

Advisor: Daniel Webster, Sc.D., M.P.H.

Readers: Jacquelyn Campbell, Ph.D., M.S.N.

Andrea Gielen, Sc.D., Sc.M.

Phyllis Piotrow, Ph.D.

Alternates: Brian Caffo, Ph.D.

Shannon Frattaroli, Ph.D., M.P.H.

## ACKNOWLEDGMENTS

One of the things I learned early in the process was that earning a Ph.D. would be something that could only be achieved with the participation and support of others.

Completing this degree would not have been possible without the time and input of the many faculty members who contributed to my knowledge and skills as a researcher. My advisor, Daniel Webster, helped me to navigate the entire process, from choosing courses, to selecting a topic, to reviewing the final dissertation draft. His willingness to listen and his thoughtful advice always helped me to take the next step and make it to the end. I learned a great deal from Jackie Campbell, who was an excellent mentor and always had time for me during the past four years. I would also like to thank Phyllis Piotrow and Andrea Gielen, who were always willing to share their expertise and provide thoughtful suggestions and comments. Shannon Frattaroli deserves special recognition for her assistance with both the dissertation process and her contributions to my personal and professional development. Other faculty members who took time to participate as committee members or offered valuable input along the way include Lynda Burton, Brian Caffo, Lingxin Hao, Joan Kub, Tom Oliver, Steve Teret, and Jon Vernick. Sharon Wakefield and others from the fifth floor also deserve recognition for making my days more manageable.

So much of my experience as a student was influenced by the wonderful friends I made over the last four years. Thanks go to Lisa Clemans-Cope, Valerie Forman, Kate Fothergill, Jason Gerson, Sara Johnson, Allegra Kim, Judy Ng, Amy O'Sullivan, Jennifer Wolff, and my T32 colleagues. Special thanks also go to Melissa Bottrell and Cathy

Taylor, long-time friends who were earning their own doctorates. I was glad we could go through this process together. My other friends who gave me support and encouragement are too numerous to mention, but you know who you are, and I appreciate every email and phone call I received along the way.

My wonderful parents deserve special thanks for their constant love and support throughout the last thirty-two years, twenty-two of which have been spent in school. At several points during my academic career, when I thought I couldn't do it, they were the ones who told me I could. I am also lucky to have two sisters who are also my best friends. Their support and encouragement was something I could always count on. My grandparents and the rest of my relatives also deserve mention for providing much encouragement along the way. I also appreciate the support I received from the Rulison family, who accepted me into their family with open arms.

Finally, this section would not be complete without offering an endless amount of gratitude for my husband, Larry Rulison. His unwavering support, love, intellectual input, journalistic perspectives, and willingness to take whatever came with each new day of this process helped me to achieve this goal. This would not have been possible without his daily support that came however I needed it. I am looking forward to the next chapter of our lives.

Support for this study was provided by the National Institute of Mental Health Pre-doctoral Fellowship for Interdisciplinary Research Training on Violence (T32 MH20014) and the Woodrow Wilson/Johnson & Johnson Women's Health Dissertation Grant.

## TABLE OF CONTENTS

<b>ABSTRACT</b> .....	<b>II</b>
<b>ACKNOWLEDGMENTS</b> .....	<b>IV</b>
<b>TABLE OF CONTENTS</b> .....	<b>VI</b>
<b>LIST OF TABLES</b> .....	<b>IX</b>
<b>LIST OF FIGURES</b> .....	<b>XI</b>
<b>CHAPTER 1: INTRODUCTION</b> .....	<b>1</b>
<b>CHAPTER 2: BACKGROUND</b> .....	<b>4</b>
OVERVIEW .....	4
INTIMATE PARTNER VIOLENCE AS A HEALTH ISSUE.....	4
INTIMATE PARTNER VIOLENCE AND HEALTH POLICY .....	7
AGENDA SETTING.....	13
NEWS MEDIA .....	16
NEWS AND POLICY.....	19
MEDIA ADVOCACY .....	23
NEWS AND INTIMATE PARTNER VIOLENCE.....	25
CONCEPTUAL MODEL.....	28
RESEARCH AIMS AND HYPOTHESES .....	30
<b>CHAPTER 3: RESEARCH METHODS</b> .....	<b>32</b>
OVERVIEW.....	32
METHODS: CONTENT ANALYSIS .....	32
<i>Newspaper selection</i> .....	34
<i>News article selection</i> .....	36
<i>Measures: Newspaper data</i> .....	41
<i>Measures: Article data</i> .....	41
<i>Interrater Reliability (IRR)</i> .....	56
METHODS: PART 1 .....	64
<i>Study population: States</i> .....	64
<i>Study population: Time period</i> .....	64
<i>Study population: Newspapers and articles</i> .....	65
<i>Sample size</i> .....	65
<i>Study design</i> .....	66
<i>Measures</i> .....	66
<i>Statistical analysis</i> .....	66
METHODS: PART 2 .....	68
<i>Study population: States</i> .....	68
<i>Study population: Time period</i> .....	69
<i>Study population: Newspapers and articles</i> .....	70

<i>Sample size</i> .....	71
<i>Study design</i> .....	72
<i>Measures</i> .....	74
<i>Statistical analysis</i> .....	86
<b>CHAPTER 4: RESULTS</b> .....	<b>92</b>
RESULTS: PART 1 .....	92
<i>Descriptive data: Article population</i> .....	93
<i>Descriptive data: Article sample</i> .....	95
<i>Hypotheses 1.1-1.2</i> .....	117
<i>Hypothesis 1.3</i> .....	121
RESULTS: PART 2 .....	124
<i>Article-level news data</i> .....	124
<i>State-level covariates</i> .....	137
<i>Multivariate conditional logistic regression</i> .....	145
<i>Hypothesis 2.1</i> .....	146
<i>Hypothesis 2.2</i> .....	146
<i>Hypothesis 2.3</i> .....	147
<i>Hypothesis 2.4</i> .....	148
<i>Hypothesis 2.5</i> .....	149
<i>Exact logistic regression</i> .....	151
<i>High influence articles</i> .....	152
<i>News coverage in year prior to policy adoption</i> .....	152
<b>CHAPTER 5: DISCUSSION</b> .....	<b>154</b>
OVERVIEW .....	154
PART 1 .....	155
<i>Overview of news coverage</i> .....	155
<i>Hypotheses 1.1-1.3</i> .....	158
PART 2 .....	160
<i>Overview of news coverage</i> .....	160
<i>Hypotheses 2.1-2.5</i> .....	161
STUDY STRENGTHS .....	164
STUDY LIMITATIONS .....	166
GENERALIZABILITY .....	169
IMPLICATIONS OF STUDY RESULTS.....	170
FUTURE RESEARCH .....	173
<b>APPENDIX A: STATE LAW LIST</b> .....	<b>176</b>
<b>APPENDIX B1: STUDY SAMPLE FOR PART 1</b> .....	<b>181</b>
<b>APPENDIX B2: STUDY SAMPLE FOR PART 2</b> .....	<b>183</b>
<b>APPENDIX C: CONTENT ANALYSIS NEWSPAPER SAMPLE</b> .....	<b>185</b>
<b>APPENDIX D: ARTICLE CODEBOOK</b> .....	<b>192</b>

TIME PERIOD.....	194
DEFINITIONS .....	195
DATA CODING INSTRUCTIONS.....	196
VARIABLE LIST .....	197
<b>APPENDIX E: LIST OF VARIABLES.....</b>	<b>218</b>
<b>APPENDIX F: ARTICLE SUBSETS.....</b>	<b>223</b>
<b>REFERENCES.....</b>	<b>225</b>
<b>CURRICULUM VITA.....</b>	<b>261</b>

## LIST OF TABLES

Table 1: Coding values for location variable.....	58
Table 2: Interrater Reliability Coefficients.....	61
Table 3: Characteristics of all coded news articles in the random sample from 1994-2001 (59 newspapers from 20 states, n=188).....	97
Table 4: Continuous variables for articles from 1994-2001 (59 newspapers from 20 states, n=188).....	99
Table 5: Characteristics of fully coded news articles from 1994-2001 (59 newspapers from 20 states, n=81).....	105
Table 6: Characteristics of sources appearing in fully coded news articles from 1994-2001 (59 newspapers from 20 states, n=70).....	107
Table 7: Percent of fully coded articles with source type listed for each main frame of the article from 1994-2001 (59 newspapers from 20 states, n=70 articles).....	109
Table 8: Variables for fully coded articles vs. state role from 1994-2001: Chi-square test (59 newspapers from 20 states, n=81).....	112
Table 9: Variables for fully coded articles vs. frame from 1994-2001: Chi-square test (59 newspapers from 20 states, n=81).....	115
Table 10: Chi-square trend test for state role over time (59 newspapers from 20 states, n=81).....	120
Table 11: Association of article position with key variables for fully coded articles from 1994-2001 (59 newspapers from 20 states, n=81).....	123
Table 12: Means for continuous variables for news articles collected prior to policy adoption (76 newspapers from 22 states, N=203): unmatched case-control comparisons.....	125
Table 13: Characteristics of categorical variables for news articles collected prior to policy adoption (76 newspapers from 22 states, N=203): unmatched case-control comparisons.....	126
Table 14: Characteristics of categorical variables for fully coded articles collected prior to policy adoption (76 newspapers from 22 states, N=113): unmatched case-control comparisons.....	128



Table 15: Differences after excluding articles about legislative action from the sample collected prior to policy adoption (76 newspapers from 22 states) .....	131
Table 16: Aggregate continuous news coverage variables for non-legislative articles collected prior to policy adoption (76 newspapers from 22 states, n=190): matched pairs^ .....	133
Table 17: Aggregate dichotomous news coverage variables converted from continuous variables for non-legislative articles collected prior to policy adoption (76 newspapers from 22 states, n=190).....	134
Table 18: Aggregate dichotomous news coverage variables for non-legislative articles collected prior to policy adoption (76 newspapers from 22 states, n=190): matched pairs .....	136
Table 19: Means for continuous covariates for 22 states from the year of policy adoption: matched case-control pairs .....	138
Table 20: Dichotomous covariates for 22 states from the year of policy adoption: matched case-control pairs .....	140
Table 21: Dichotomous versions of continuous covariates for 22 states from the year of policy adoption: unmatched states .....	142
Table 22: Dichotomous versions of continuous covariates for 22 states from the year of policy adoption: matched pairs .....	144
Table 23: Multivariate model for aggregate influence measure^ .....	147
Table 24: Multivariate model for aggregate prominence measure^ .....	148
Table 25: Multivariate model for 'State role' as main frame^ .....	150
Table 26: Multivariate model for mention of state role^ .....	150
Table 27: Comparison of different simple logistic regression models for key news coverage variables .....	151

## LIST OF FIGURES

Figure 1: Conceptual Model (next page).....	28
Figure 2: Frame categories .....	54
Figure 3: Analysis plan for Part 1 .....	67
Figure 4: Analysis plan for Part 2 .....	86
Figure 5: Total # of unreviewed articles retrieved by year from 1994-2001 using general vs. specific search terms (59 newspapers from 20 states) .....	93
Figure 6: Frequency over time of the population of news articles from 1994-2001 after reviewing all retrieved articles for relevance and eligibility criteria (59 newspapers from 20 states, N=567) .....	94
Figure 7: Ratio of # news articles in the population/# newspapers by state from 1994-2001 after reviewing all retrieved articles for relevance and eligibility criteria (59 newspapers from 20 states, N=567) .....	95
Figure 8: Box plot for number of words for articles from 1994-2001 (59 newspapers from 20 states, n=188) .....	100
Figure 9: Box plot for prominence score for articles from 1994-2001 (59 newspapers from 20 states, n=188) .....	101
Figure 10: Box plot for influence score for articles from 1994-2001 (59 newspapers from 20 states, n=188) .....	102
Figure 11: Main frame of fully coded articles by year from 1994-2001 (59 newspapers from 20 states, n=81) .....	118
Figure 12: Percent of fully coded articles mentioning state role by year from 1994-2001 (59 newspapers from 20 states, n=81) .....	119

## **CHAPTER 1: INTRODUCTION**

In the last decade, research in the area of intimate partner violence and health care has grown. Studies have explored a variety of issues related to the health care of battered women and policies designed to address health issues concerning intimate partner violence. These policies have included screening by health care providers, the development and use of protocols for provision of services, and mandatory reporting by health professionals.

While there have been some studies examining the nature and effectiveness of these policies, there has been little research regarding the adoption of these policies at the state level of government. The one source identified was a report card published in the summer of 2000 and again in August of 2001 by the Family Violence Prevention Fund (FVPF) (FVPF, 2000; FVPF, 2001). The organization conducted a survey regarding the existence and nature of intimate partner violence health laws in each state, including: training of providers, screening for intimate partner violence, confidentiality of medical records for victims of intimate partner violence, mandatory reporting of intimate partner violence by providers, and insurance discrimination protections. No other research exists that describes the development and passage of policies related to health care issues and intimate partner violence.

Although no research has been conducted specifically in this area, many studies have examined what influences state policymaking for other issues (e.g., Legge & Nice, 1993). In particular, studies have focused on agenda setting as a key theory behind what policies get adopted (e.g., Hays & Glick, 1997). There are a variety of factors that contribute to agenda setting and can lead to a policy being proposed and/or passed. Most

scholars agree that the media are one of these factors (e.g., Yanovitzky, 2002). The exact strength and nature of the relationship between the media and policy remains unclear. Still, there do seem to be relationships between media, agenda setting, and policy change.

This study examines how the news media has covered intimate partner violence and health care/health policies. The two policies that are the focus of this study include health provider training and screening by health providers. Since much of the policymaking related to intimate partner violence and health care has occurred within state governments, the state level of government, as opposed to the federal government, is the focus of this study (Campbell, 2001).

The main research method was a content analysis of news articles employing both quantitative and qualitative methods. This content analysis was designed to examine the coverage and framing of intimate partner violence as a health policy issue. Variables collected from conducting the content analysis were then used for subsequent analyses related to policy adoption.

In summary, this study examined how the news media has covered issues related to screening by and training of health care providers and intimate partner violence. By analyzing the frequency and nature of coverage related to these issues, it may be possible to evaluate the extent to which various groups (advocates, health care professionals, policymakers, agency officials) have used media, to measure which messages or frames are most commonly employed when reporting on the issue, to measure what factors are associated with certain key attributes of articles (frame, influence), and to measure associations regarding the media and policy adoption. The aims of this study are presented below.

**Aim 1:**

**To describe the frequency and nature of print news coverage of intimate partner violence as a health policy issue and to examine changes over time**

**Aim 2:**

**To compare news coverage of intimate partner violence health policy with state policy adoption status**

## **CHAPTER 2: BACKGROUND**

### **Overview**

Intimate partner violence has become a more recognized social issue as research in the area has grown and interest groups have become more active over the last twenty years. There are many studies that have examined the incidence and prevalence of intimate partner violence. There are also studies that have looked at the interactions and experiences of abused women with both health care and criminal justice services and systems. Finally, there are studies that have evaluated programs and services for battered women. Besides the increase in research studies regarding intimate partner violence, the issue has also received greater attention in media over the past twenty years as well (Maxwell, Huxford, Borum & Hornik, 2000).

This literature review will present information related to intimate partner violence as a health care problem and describe research surrounding health policies and IPV. To address the more theoretical aspects of this study, the major literature concerning agenda setting, media advocacy and news and policymaking will also be discussed. The conceptual framework presented at the end will provide a graphical context for how all of these topics fit together to support the research aims and hypotheses.

### **Intimate Partner Violence as a Health Issue**

Although violence against women was traditionally considered a criminal issue, in more recent years the problem has been recognized as a significant public health problem due to the harmful physical and mental health effects of family violence. These

outcomes include both minor and severe injuries, homicide and long-term mental health problems. The Bureau of Justice Statistics (BJS) reports that one-third of female homicides from 1976 through 2000 involved a current or former intimate partner (BJS, 2002). One of the most recent studies of intimate partner violence (National Violence Against Women Survey) found that 22 percent of women are physically assaulted by an intimate partner at some point during their lifetime (Tjaden & Thoennes, 2000, iv). In the same study, when asked about abuse in the past year, 1.9 percent reported physical violence (Tjaden & Thoennes, 2000). A survey conducted in 1998 by the Commonwealth Fund found that 31 percent of women reported lifetime abuse and 3 percent reported abuse in the last year (Commonwealth Fund, 1999).

A number of studies have examined injuries among victims of intimate partner violence. Data from one survey found that during the most recent physical assault by a partner, 41.5 percent of women were injured (Tjaden & Thoennes, 2000). Another study conducted by the Bureau of Justice Statistics found that about 37% of women treated for injuries in emergency departments in the United States were injured by a current or former intimate partner (BJS, 1997).

In addition, there are many long-term health effects of intimate partner violence, including headaches and body pain, gastrointestinal problems, cardiac symptoms and greater frequency of illnesses like cold and flu (Campbell, 2002; Campbell, Jones, Dienemann, Kub, Schollenberger, O'Campo, Gielen & Wynne, 2002; Coker, Davis, Arias, Desai, Sanderson, Brandt & Smith, 2002). The Commonwealth Fund reports that abused women are more likely to experience poor physical health and mental health problems including depression and are more likely to engage in unhealthy behaviors like

smoking and drinking, which can also lead to negative health outcomes (Commonwealth Fund, 1999).

Several studies have examined IPV and medical care. A recently published study reports higher utilization of health care and health care costs by women with documented partner violence as compared to women with no prior documentation of IPV (Ulrich, Cain, Sugg, Rivara, Rubanowice & Thompson, 2003). One article cites a study that found high use of health services by abused women (Rodriguez, Bauer, McLoughlin, & Grumbach, 1999). Another study found that 1 in 5 of injured women sought medical treatment (Greenfield & Rand, 1998). A study using data from the Behavioral Risk Factor Surveillance System in Massachusetts found that about 29 percent of women reporting intimate partner violence in the past five years reported seeing a doctor or nurse due to the incident (MMWR, 2000). A study examining femicide cases reported that two-fifths of women killed by intimate partners had visited a health care provider in the year prior to their death (Sharps, Koziol-McLain, Campbell, McFarlane, Sachs, & Xu, 2001). Finally, in one survey, less than one third of women reporting exposure to physical violence discussed that violence with their health care provider and also reported greater problems obtaining health care (Commonwealth Fund, 1999).

As one article suggests, there are three issues concerning IPV and health care: “the patient’s inability or unwillingness to seek medical help, the patient’s withholding of information from the health care provider, and the health care provider’s failure to ask the patient about battering” (Rodriguez et al., 1996). Because of the health implications of intimate partner violence and the complex interactions between women experiencing abuse and the health care system, there have been several policies incorporated by



institutions and at a more general level that attempt to address issues related to the health care of abused women, including increased detection by asking about violence and improvement in care. Each has been addressed in the literature to varying degrees. To date, no study has examined the development and passage of health policies related to intimate partner violence or news coverage of such policies.

### **Intimate Partner Violence and Health Policy**

As research and interest in the area of intimate partner violence has grown, so has policymaking. For many years, government did not play a large role in this area because intimate partner violence was seen as a private matter. As intimate partner violence became more of a public issue, and advocates began fighting for policies, the federal government put the issue on its agenda.

In the early 1990's, when investigating the problem of intimate partner violence, members of Congress heard a great deal of evidence and found few state laws, so they introduced a federal policy (Biden, 1993; Senate Report 103-138). The Violence Against Women Act (VAWA) was enacted on September 13, 1994 as part of the Violent Crime Control and Law Enforcement Act, also known as the Crime Act of 1994. Two main goals of the legislation were to assist women impacted by violence with access to and navigation of the justice system and to fund programs and services.

As discussed in the introduction, the Family Violence Prevention Fund conducted a survey of all states to determine which states had passed certain health-related intimate partner violence policies or not. The agency looked at whether a state had enacted any of the policies, and assigned points to states for each statute, giving more points to states

with more comprehensive policies. FVPF then released a report card, listing the grades received by each state.

The following information is accurate as of August 28, 2001 (the second release of the FVPF Report Card). Pennsylvania is the only state to have four policies in effect, and is the only state that received a grade of A. South Dakota is the only state with no policies. Only three states have enacted legislation related to screening (California, New York and Pennsylvania), and eleven states have adopted policies regarding the training of health care professionals. Appendix A provides a list of policies and states.

Two policies are the focus of this study, screening and training. Many times, they are discussed together. Sometimes, only training is conducted while in others, training and screening are implemented together. It is also possible that providers may be screening patients but have not had any training. It is also important to recognize that although the focus of this study is the adoption of policies related to screening and training by state government, both screening and training can be adopted at a more local level, including individual facilities, organizations, or departments.

In general, screening refers to the act of health care providers asking patients about exposure to violence, with the goal being that if IPV is identified, assistance can be provided with the intention of preventing future violence. This is considered a form of secondary prevention (when a condition is identified early enough so that steps can be taken to help decrease the impact by appropriate management of the condition) (Campbell, Coben, McLoughlin, Dearwater, Nah, Glass, Lee & Durborow, 2001; Centers for Disease Control, 2002). Screening has received widespread support from health professionals as well as intimate partner violence advocacy groups. Studies have shown

that that women also seem to support screening by health providers (Gielen, O'Campo, Campbell, Schollenberger, Woods, Jones, Dienemann, Kub & Wynne, 2000; McCaw, Berman, Syme & Hunkeler, 2001; Stenson, Saarinen, Heimer & Sidenvall, 2001), including 2 review articles that cite several studies (Davidson, Grisso, Garcia-Moreno, Garcia, King & Merchant, 2001; Ramsay, Richardson, Carter, Davidson & Feder, 2002).

In a qualitative study that examined abused women's interactions with health providers, Rodriguez, Quiroga and Bauer (1996) found that 76% of respondents favored direct questioning by providers. Another study that questioned women in an emergency department found that 36% of respondents who were victims of intimate partner violence said they would only disclose abuse if asked directly by a provider (Hayden, Barton & Hayden, 1997). Finally, Caralis and Musialowski (1997) interviewed both abused and non-abused women visiting ambulatory care clinics and found that while 85% of all women agreed providers should ask about intimate partner violence, only 12% reported having been asked, and only 36% thought a doctor could actually provide assistance. In a panel discussion appearing in *Women's Health Issues* in 2001, McAfee, Heath and Campbell, in individual discussions, each stressed the importance of health providers' involvement with intimate partner violence and suggested strategies such as screening and/or education (Campbell, 2001; Heath, 2001; McAfee, 2001).

Even though screening is often recommended, screening rates tend to be fairly low (Abbott, Johnson, Koziol-McLain & Lowenstein, 1995; Coker, Bethea, Smith, Fadden & Brandt, 2002; Davis, Parks, Kaups, Bennink & Bilello, 2003; Heron & Kellermann, 2002). A recent article published by Koziol-McLain and Campbell states "most studies have found that fewer than 5% of women are being screened and that many

abused women are not being identified during their help-seeking encounters” (Koziol-McLain & Campbell, 2001, 603). Another study found that physicians were more likely to ask patients about smoking, alcohol use and HIV/STDs than IPV (Gerbert, Gansky, Tang, McPhee, Carlton, Herzig, Danley & Caspers, 2002). Other studies have shown that even with targeted efforts, screening rates did not increase (MMWR, 2000).

With respect to the outcomes of screening, one study found that screening increased both disclosure and documentation of intimate partner violence, and another study found that screening was able to correctly identify women who were more likely to experience future abuse (Coker et al., 2002; Koziol-McLain, Coates & Lowenstein, 2001). Other studies have shown that screening does increase rates of identification, especially when combined with training or other programs, such as having advocates available to meet with patients (Coker et al., 2002; Freund, Bak & Blackhall, 1996; Gadomski, Wolff, Tripp, Lewis & Short, 2001b; Krasnoff & Moscati, 2002; McCaw, et al., 2001; Muelleman & Feighny, 1999; Shepard, Elliott, Falk & Regal, 1999; Thompson, Rivara, Thompson, Barlow, Sugg, Maiuro & Rubanowice, 2000; Waalen, Goodwin, Spitz, Petersen & Saltzman, 2000). One review of published studies, though, concluded that although identification rates increased, the changes were limited and often did not last over time (Ramsay et al., 2002).

While many support screening, including the Centers for Disease Control (Osattin & Short, 1998), the American Medical Association, the American Nurses Association, and the American College of Obstetricians and Gynecologists (Clark, Martin, Petersen, Cloutier, Covington, Buescher & Beck-Warden, 2000; Glass, Dearwater & Campbell, 2001), among others (Rhodes & Levinson, 2003), there is debate regarding different

aspects of screening. Some issues of debate include which professionals should do the screening, how often screening should occur and whether screening should differ by provider type (British Medical Journal, 2002; Cole, 2000; Garcia-Moreno, 2002; Glass et al., 2001). There is also little data to demonstrate the outcomes of screening and to show success of interventions applied to patients who screen positive, so questions remain about its efficacy, especially in states that require mandatory reporting (British Medical Journal, 2002; Cole, 2000; Heron & Kellermann, 2002; Ramsay et al., 2002; Rodriguez, Bauer, McLoughlin & Grumbach, 1999; Wathen & MacMillan, 2003).

Because of this debate, researchers have expressed the need for further evaluation of screening methods and research concerning the impact of screening (British Medical Journal, 2002; Campbell et al., 2001; Nudelman & Trias, 1999; Thompson et al., 2000; Waalen et al., 2000; Waller, Hohenhaus, Shah & Stern, 1996). For example, a recent study illustrated that computerized screening can help with identification of patients experiencing IPV, showing that patients using the computerized tool were more likely to report risk factors for IPV than patients receiving the usual care (Rhodes, Lauderdale, He, Howes & Levinson, 2002). Still, as Heron & Kellermann (2002) point out, screening for IPV is only the first step toward helping people avoid future violence in their relationships.

The other policy that is the focus of this study involves training of health care providers regarding how to ask patients about abuse and how to handle identification of cases. Training policies generally include continuing education requirements and completion of training courses. The Centers for Disease Control is one of the groups that supports training for health providers regarding IPV (Centers for Disease Control, 2003:

Sisley, Jacobs, Poole, Campbell & Esposito, 1999). Where training has been evaluated, providers have reported greater knowledge and skills regarding screening, identification, and referrals (Campbell et al., 2001; Short, Hadley & Bates, 2002). A recent national study using data from the National Violence Against Women Survey concluded that training should be provided to health care professionals (Tjaden & Thoennes, 1998). Also, given that 7 states have laws requiring the reporting of IPV injuries to law enforcement and that many providers are not aware of such laws (Houry, Sachs, Feldhaus & Linden, 2002), training could also help increase awareness and understanding of such laws.

In a review of the literature on IPV and health provider training, Davidson et al. found that in general, training programs are very brief (in many cases, one session lasting for one to three hours) with little evidence of success (Davidson et al., 2001). Most studies examine changes in provider knowledge, attitudes and practices, but few studies examined whether such programs actually provide benefits to women experiencing abuse (Davidson et al., 2001; Institute of Medicine, 2002). There have been several studies that have shown an increase in knowledge, self-efficacy or practices of health care providers surrounding issues of IPV (Gadomski et al., 2001b; Institute of Medicine, 2002; Thompson, Meyer, Smith-DiJulio, Caplow, Maiuro, Thompson, Sugg & Rivara, 1998), and some research has found that providers are more likely to provide information or referrals after training (Institute of Medicine, 2002).

Still, some studies have found that the benefits of training providers are limited without institutional support and policies regarding treatment of patients reporting abuse (Campbell et al., 2001; Rodriguez et al., 1999) or that effects may not last long-term

(Fanslow, Norton & Robinson, 1999; Harwell, Casten, Armstrong, Dempsey, Coons & Davis, 1998). Others suggest that training alone has less of an effect for identifying patients than a combination of training and screening (Olson, Anciaz, Fullerton, Brillman, Arbuckle & Sklar, 1996; Waalen et al., 2000). While training is generally supported, some debate exists regarding whether training should be mandatory and administered through licensing boards or if it should be a voluntary educational program (FVPPF, 2001; Institute of Medicine, 2002).

As mentioned earlier, there are no studies that specifically look at adoption of health care policies related to intimate partner violence and no studies that examine news coverage of intimate partner violence with respect to screening and training. This absence of information, combined with active research and ongoing interventions for screening/training, suggests that the proposed research is both needed and timely. To understand the conceptual framework for the study, some additional relevant areas of literature need to be discussed. These include: agenda setting, news media, news and policy, media advocacy, and IPV in the news.

### **Agenda Setting**

Agenda setting is the main theory used to explain links between the media and policymaking, a central connection for this study. In many cases, getting policy passed can be a function of getting it on the agenda more than winning a policy debate. Rogers and Dearing write "the agenda-setting process is an ongoing competition among issue proponents to gain the attention of the media professionals, the public, and policy elites" (Rogers & Dearing, 1996, 1). The literature on agenda setting is quite large, and has been

described to have three main areas. These include: the media agenda (what is covered, usually measured through content analysis), the public agenda (what people think about, determined from public opinion data), and the policy agenda (regulatory or legislative actions on the issue, evaluated through policy activity and decisions) (Wallack, Dorfman, Jernigan & Themba, 1993; Rogers, Dearing & Bregman, 1993; Kosicki, 1993; Rogers & Dearing, 1996). In their agenda setting model, Rogers and Dearing suggest that the media and policy agendas influence each other in a reciprocal relationship, since the media can influence policymaking and also report on policy activities. However, there is a uni-directional relationship from the media agenda to the public agenda to the policy agenda. This study focuses on the relationship between the media and policy agendas.

The first significant agenda setting article was published in 1972 by Maxwell McCombs and Donald Shaw and has been cited over 100 times (Rogers et al., 1993). The article discussed results from a study that examined the media and the 1968 presidential election and found that "the media influenced voters' judgments of what were considered to be the main campaign issues" (Wallack et al., 1993, 62). In a review of agenda setting literature, Rogers and Dearing discuss why this article was so important. They cite its introduction to the theories and methods of agenda setting research, its finding of a strong relationship between the media and agenda setting, and its usefulness in linking agenda setting to a variety of fields, including communications, political science, and sociology (Rogers et al., 1993).

Also that same year (1972), Anthony Downs published an article that described what is called the 'issue-attention cycle'. This cycle has five stages, including: the pre-problem stage, the discovery stage, the realization of cost stage, the decline of public



interest stage, and the post-problem stage (Downs, 1972). Issues that affect a limited number of people, provide benefits to a more powerful group, and are fairly unexciting are more likely to experience this cycle of interest than exciting or widespread issues (Downs, 1972). The stages are important, as the media may have varying levels of influence at the different stages.

As mentioned by several authors, one of the key actors in agenda setting is the media (Hilgartner & Bosk, 1988; McCombs & Shaw, 1993; Iyengar & Kinder, 1987). There have been many studies comparing the media agenda and the public agenda using content analysis and public opinion surveys. Over the years, agenda setting research has transitioned to an examination of how the news sets the public agenda, and who is involved with setting the news agenda (some sources of media agenda setting include: the President, Congress, state legislators, public officials, private industry, and interest groups) (Chang, 1999; McCombs & Shaw, 1993). Bernard Cohen said, in a widely used quote, "the press may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about" (Dearing & Rogers, 1996, 1). As Maxwell McCombs says, "for the most part, news media in democratic societies do not consciously and deliberately set the agenda. But they do set it inadvertently as a by-product of the necessity to choose a few topics for attention in each day's news report" (McCombs, 1997, 433). In order to better understand how the news media influences news coverage, the next section will briefly discuss some important aspects of the process of newsmaking.

## **News Media**

There are many characteristics of news production that can potentially impact agenda setting and policymaking with respect to intimate partner violence health policy. Although structural limitations related to news production were not analyzed in this study, it is important to acknowledge that they exist. For instance, Hilgartner refers to the 'carrying capacity' which refers to limitations of the newspaper regarding the number of stories it can run due to number of inches available for stories, number of reporters or editors on staff, time for preparing stories, etc., while reporters are limited by time and budget, among other things (Hilgartner & Bosk, 1988, 59).

One important concept that was examined is which issues or events become news items. If something does not make it into the news, it cannot set an agenda. It seems that it is hard to define exactly what makes something newsworthy (Graber, 1980). Doris Graber offers five criteria for what makes news: high impact, disaster or conflict, familiarity, local, and timely (Graber, 1980; Jamieson & Campbell, 1997). A story with all of those traits is more likely to be published than a story with one or none of these traits. Herbert Gans, in *Deciding What's News*, believes that availability and suitability drive the news selection process (Gans, 1980). Many believe journalists are more likely to cover topics that are attached to a significant or interesting event (Patterson & Donsbach, 1996; Chang, 1999) and that feature a personal story (Patterson & Donsbach, 1996; Sugg, 2001). The news industry has a bias toward writing stories that have a personal and dramatic nature to them, as opposed to stories about the bigger scheme of the issue (Bennett, 1996; Jamieson & Campbell, 1997).

Another relevant aspect of news production and agenda setting involves sources.

Source development and use is one of the major tasks for journalists, and reporters must mesh well with organizations in order to have and maintain sources and get the news they need (Schudson, 1989). Besides providing information to reporters, sources have a significant impact on the way an issue gets represented (McLendon & Peterson, 1999). Still, journalists often set their own agenda for an article, and use sources and quotes in a way that fits this agenda (Terkildsen, Schnell & Ling, 1998; Callaghan & Schnell, 2001).

One of the most significant aspects of news coverage that affects agenda setting and policymaking is framing, or, the way in which a social problem is portrayed (Wallack et al., 1993). The way an issue is framed has an impact on public opinion and how social problems are presented and subsequently addressed, as well as who is responsible for solving the problem (Linsky, 1986; McCombs & Shaw, 1993; McCombs, 1997; Mebane, 2001; Nelkin, 1987; Rogers & Dearing, 1996; Terkildsen & Schnell, 1997; Wallack et al., 1993). Still, as Iyengar (1991) found in his research, although frames did have an effect on influencing how people thought about issues, the effect varied by issue and by certain personal characteristics.

According to Entman, frames “define problems, diagnose causes, make moral judgments, and suggest remedies” (Entman, 1993, 52). Frames can also play a role in influencing people to engage in health behaviors (Rothman, Salovey, Antone, Keough & Martin, 1993). With respect to policy, frames can also impact decisions that are made about the type of policy solutions that should be applied to a particular problem (McLendon & Peterson, 1999; Tewksbury, Jones, Peske, Raymond & Vig, 2000; Walsh-Childers, 1994a). Still, as Yanovitzky points out (2002), framing has questionable influence on policymakers, stating they “are likely to follow media prescriptions of

responsibility and solutions to problems if they already fit into their belief structure” (Yanovitzky, 2002, 426).

In addition to how an issue gets discussed, when scholars talk about frames, there is also discussion of episodic and thematic frames. Lawrence Wallack states that “episodic frames tend to be event oriented, specific, and concrete...Thematic frames, on the other hand, are issue oriented, general and abstract” (Wallack et al., 1993, 72). Iyengar presents a similar definition of the two, saying that episodic coverage describes “concrete events” such as a protest, while thematic coverage tends to present issues in a more general way with a presentation of “general outcomes or conditions” (Iyengar 1991, 14). He discusses how thematic coverage tends to be more in-depth, and generally involves a larger number of sources providing discussion about an issue (Iyengar, 1996). Episodic coverage is more commonly seen in the news than thematic coverage (Iyengar, 1991). Wallack discusses how episodic presentations of a problem suggest individual responsibility for overcoming those problems, where as thematic frames present issues as needing to be addressed by society as a whole (Iyengar, 1991, 137). Iyengar states that this use of episodic frames shifts the blame for a problem from society to individuals (Iyengar, 1991, 137).

This study examined which sources were used in the stories and examined whether the use of certain sources was associated with particular frames of intimate partner violence and screening/training issues. It also analyzed what types of frames were present in the news coverage and whether coverage tended to be more episodic or thematic.

## **News and Policy**

While the literature and evidence suggests that news has an impact on agenda setting (Baumgartner, Jones & Leech, 1997; McCombs, 1997), there is less research regarding the relationship between the media and actual policy outcomes (Borquez, 1993). There are ambiguous findings related to policy agendas and media because of what Rogers and Dearing refer to as a "circular model of the agenda-setting process", suggesting that the relationship is non-linear and can go in both directions (Rogers & Dearing, 1996, 75). Still, much of the literature supports the idea that the media influence policy in some way. Many authors discuss and confirm the idea that the media plays an important role in shaping policy, especially in cases that involve high levels of debate. Media does seem to help policy issues get on the public agenda and to influence the process of policymaking (Bennett, 1993; Cook, Tyler, Goetz, Gordon, Protesse, Leff & Molotch, 1983; Graber, 1980; Jeon & Haider-Markel, 2001; Kingdon, 1995; Lambeth, 1978; Linsky, 1986; McLendon & Peterson, 1999; Marcos, 1989; Walsh-Childers, 1994a; Walsh-Childers, 1994b; Yanovitzky & Bennett, 1999).

The news can impact policy by educating and influencing policymakers at both the state and federal levels (Gormley, 1995; Iyengar, 1982; Walsh-Childers, 1994a; Walsh-Childers, 1994b). Yanovitzky states that both in his research and in the work of others, it has been documented that Congressional members report regular use of newspapers and television news to obtain information about what is going on at both a national and local level (Yanovitzky, 2002). In addition to their direct exposure to the media, policymakers may hear media messages through constituents or staff.

Besides influencing policymakers, it has been shown that the news impacts public

opinion, which can potentially affect policymakers (Kingdon, 1995; Yanovitzky, 2002). In addition, media coverage may effect policymakers' beliefs about what issues the public finds important (Cook et al., 1983; Yanovitzky, 2002).

Another way the media can influence policymaking is by providing information generated by research studies. Studies may be inaccessible to the public and policymakers if information appears only in academic journals (Straus, 1992). Popular press coverage may increase exposure to this type of information (Straus, 1992). This is especially relevant to intimate partner violence and health issues, as much information about this topic appears in academic literature.

One study looked at media and state politics in North Carolina. William Gormley conducted a content analysis to explore the content and number of articles printed during the meeting days of the General Assembly in 1973. He then surveyed state senators, asking them to rate twenty-five specific issues and seven general issue areas by importance. Although he found a fairly high agreement among newspaper articles and legislator responses concerning which issue areas were important, there were differences regarding which group considered which issues to be more important. This suggests that even if intimate partner violence health policies have received high levels of media coverage, such policies may not be a priority for policymakers. The opposite is also true, indicating that lack of media coverage does not necessarily mean that a policy is not considered important enough to be addressed by the state government.

Another aspect of media coverage to consider is where in the policymaking process that coverage can have the greatest impact. Linsky argues that the initial stages of the policy process, issue identification and solution formation, is where the media can

have the biggest impact by defining a problem and identifying solutions (Kosicki, 1993; Yanovitzky, 2002). The media can also play a role in each of the other stages. For instance, it can provide a platform for debate for multiple policy solutions. Linsky, in his book *Impact*, agrees, and specifies that the press can help further a policy when there is a positive spin, or hinder policy development when a negative tone is used (Linsky, 1986).

While some say that the media plays a major role in policymaking, others don't agree. In *Agendas, Alternatives, and Public Policies*, John Kingdon claims that the relationship of media and policy is not as strong as some have thought, and that "the media report what is going on in government, by and large, rather than having an independent effect on governmental agendas" (Kingdon, 1995, 59). Others, in discussing the link between media and policy, emphasize that just because a policy passes after a large amount of media coverage does not indicate that the media caused the passage of the policy (Spitzer, 1993). Doris Graber discusses how the influence of the media varies by topic (Graber, 1980). Yanovitzky talks about how exposure to issues covered by the news media does not always translate into action, and that other factors can influence what a policymaker does with the information (Yanovitzky, 2002).

The research about health policy and agenda setting, and the role the media play, is fairly limited (Colby & Cook, 1991). One study conducted by Suzanne McDevitt compared coverage of child abuse in the news with reports of child abuse to agencies on both a local and national level. She compared the frequency of both news coverage and abuse reports over time and found that increases in both occurred at the same time. This finding suggests that the media were not responsible for drawing attention to the issue, but the policy that required mandatory reporting led to an increase of abuse reports and

the media merely reflected that change. In this case, the policy agenda influenced the media agenda.

In an effort to determine when the media does influence policymaking, Itzhak Yanovitzky examined the relationship between news coverage of drunk driving and policy change over a period of seventeen years (Yanovitzky, 2002). Results indicated that there was an association between media coverage and policy activity over time. More importantly, the major contribution of this research was the finding that as media coverage decreased over time, policymakers seemed to shift away from more immediate policy solutions to more long-term ways of addressing the issue. One interesting note is that Yanovitzky observed limited controversy in the news articles and suggests that this led to a more rapid development of policy solutions.

Felicia Mebane explored the media coverage of long-term care during 1998 (Mebane, 2001). A content analysis of both print and television news was conducted on a sample to create variables about the story reflecting the primary topic, the secondary topic, degree of potential influence of the story (prominence, etc.), and framing of the issue (Mebane, 2001). She found that coverage of long-term care mostly focused on nursing homes, and was rarely given a high level of prominence in the paper. In addition, there was limited discussion of the general issue (Mebane, 2001).

Finally, Kim Walsh-Childers examined special news coverage series for four issues and in general, concluded that influence of the news on policy decisions was 'limited' and 'indirect', and that more research needs to be done to better understand the link between news and health policy (Walsh-Childers, 1994b). One of the issues, though, seemed to have more positive findings. The researchers examined news coverage of



infant mortality issues in Alabama and its influence on policy in that state. The researchers conducted an analysis of relevant articles and interviewed reporters and editors, advocates, and health officials from local and state levels of government. While many people interviewed did not attribute the entire reason for policy change to the media coverage, they believed that the process occurred more quickly because of the publicity surrounding the issue (Walsh-Childers, 1994a). Conclusions from the study suggest that the presence of interest groups and officials that were interested in and active about the issue helped the news stories to have an even greater influence (Walsh-Childers, 1994a). This conclusion leads to the next section, a discussion of media advocacy.

### **Media Advocacy**

Advocacy, as defined by Katherine Christoffel, is “the application of information and resources to effect systemic changes that shape the way people in a community live” (Christoffel, 2000, 3). There are a variety of strategies used by advocacy groups to accomplish their goals. Some of the most common ones include: litigation, lobbying, activity during elections, education, and protests (Zakocs, Earp & Runyan, 2001).

Another strategy used by advocates involves use of the media. The technique of developing and implementing strategies to influence media coverage has become known as media advocacy. Media advocacy is the strategic use of mass media to apply pressure to advance public policy (Wallack & Dorfman, 1996), helping to transform individual problems into social ones (Wallack, 1994). The specific goal of media advocacy when

used in the field of public health is to reduce death and illness in a population (Christoffel, 2000).

Lawrence Wallack identifies three main functions of media advocacy. These tie into the previously reviewed literature, as one is agenda setting (getting the issue on the public agenda), another is framing of an issue, and the third is the advancement of policies designed to provide solutions to the issue (Wallack & Dorfman, 1996). He also refers to the issue-attention cycle developed by Downs' to discuss how media advocacy can help to keep an issue in the forefront of the news. Framing is especially important, as news can do harm to the cause as well as help it depending on how the issue gets framed (Wallack et al., 1993). Different stakeholders attempt to influence the framing of the issue in a way that will support their interests.

There have been a number of studies that have tried to evaluate the effects of media advocacy programs, and most measure effects of advocacy activity on media coverage. Holder and Treno have published several articles related to advocacy efforts surrounding the reduction of alcohol-related injuries. The Community Trials Project used the news media to draw attention to policies and behaviors related to drinking. The study involved a qualitative analysis of media advocacy training provided to members of the project, and a content analysis of media coverage (Treno, Breed, Holder, Roeper, Thomas & Gruenwald, 1996). The results showed that media advocacy efforts did correlate with an increase in news coverage, and that efforts were successful in attracting attention by both the public and officials to the problems (Treno et al., 1996).

One of the few media advocacy studies related to intimate partner violence examined a program designed to reduce sexist alcohol advertisements. This project, the

Dangerous Promises Campaign, was based on the concept that certain types of advertising can potentially influence violence against women (Woodruff, 1996). It was started in three California cities with the goal of altering how alcohol advertisers portrayed women in their ads. After communicating directly with various industry associations, and getting little positive response, the coalition chose to advance their goals using media advocacy. In the end, although the group achieved some successes, Woodruff states that other advocacy activities are necessary as well, and that it takes a great deal of time and effort to maintain press coverage over a long-term period (Woodruff, 1996). Although this is one of the only studies that focused on intimate partner violence and media advocacy, there have been other studies looking at intimate partner violence and the news media in general.

### **News and Intimate Partner Violence**

One of the implications of the growing attention given to the issue of violence against women is that it has received more widespread exposure in the media, especially the news (e.g. Maxwell et al., 2000). Yet, little research has been done concerning the nature of coverage and its effects. As Mia Consalvo said in her 1998 paper that reviewed the portrayal of intimate partner violence in the television series *Cops*, "media attention to the issue of intimate partner violence in both news and entertainment has increased, but with unknown results. Very little scholarly work has looked at media depictions and coverage of intimate partner violence. What, then, are the accounts 'saying'? Who is doing the telling? What is the underlying message being conveyed?" (Consalvo, 1998, 1). Also, how does coverage of intimate partner violence influence people reading the

articles? For instance, a survey of public opinion for the Family Violence Prevention Fund found that 47% of respondents were more inclined “to take some action to help reduce intimate partner violence” after reading stories in the news (Klein, Campbell, Soler & Ghez, 1997, 151).

Studies have assessed how various types of media portray intimate partner violence. Some sociological studies have examined coverage of intimate partner violence in women’s magazines, reality television, literature, and movies. Other studies have been informative and useful with respect to understanding how the media reflects social norms regarding intimate partner violence, and how the portrayal of intimate partner violence has changed over time.

There have also been studies specifically related to reporting of intimate partner violence in the news (and although some focused on homicide in general, they included categories related to IPV) (Berkeley Media Studies Group, 2003; Johnstone et al., 1995; Lamb & Keon, 1995; Maxwell et al., 2000; Sorenson, Manz & Berk, 1998; Taylor & Sorenson, 2002). The Berkeley Media Studies Group conducted the most recent study (FVPF, 2/14/03). After examining articles from two California newspapers, they found that although the papers were less likely to publish stories about incidents of intimate partner violence compared to other types of violence, they were more likely to publish stories about IPV when it involved a homicide (Berkeley Media Studies Group, 2003). They also found that coverage of IPV was more likely to be episodic rather than thematic compared to coverage of other types of violence.

Previous studies have suggested that domestic abuse is often portrayed as incident based or event oriented as opposed to issue oriented (Maxwell et al., 2000; Taylor &

Sorenson, 2002). One author, Lisa Cuklanz, explored media coverage of rape trials in her book *Rape on Trial*. She discussed several cases and how they were represented in the media, and examined thematic vs. episodic coverage. In the end, she found a greater portrayal of events versus themes (Cuklanz, 1996). Another study that examined coverage of homicide found that compared to other types of homicides, those stories that covered incidents involving intimate partners were not as likely to present opinions, discuss broader issues, and involve thematic coverage (Taylor & Sorenson, 2002).

One researcher, Marian Meyers, conducted a study employing both content analysis and interviews to examine the portrayal of intimate partner violence in the news. Her book, *News Coverage of Violence Against Women*, mostly examined the portrayal of female victims of crime in the news, discussing issues such as 'blaming the victim', 'good girl/bad girl' representations, and the way journalists cover crime news, including presentations of race, class and gender in crime stories (Meyers, 1997). Meyers did not look at issues related to coverage of intimate partner violence policies or intimate partner violence and health issues. Still, her work is informative to the extent that some of the issues she uncovered are likely to be present in any coverage of intimate partner violence, even when it is specifically related to health care.

Another study compared coverage of intimate partner violence in three major newspapers before and after the OJ Simpson case to determine whether any changes in the frequency and nature of coverage could be observed. The researchers expected that there would be a greater number of articles about intimate partner violence, and that there would be fewer incident articles and greater coverage of intimate partner violence as an

issue (Maxwell et al., 2000). The results indicated that although the frequency of coverage increased, there was no significant change in content (Maxwell et al., 2000).

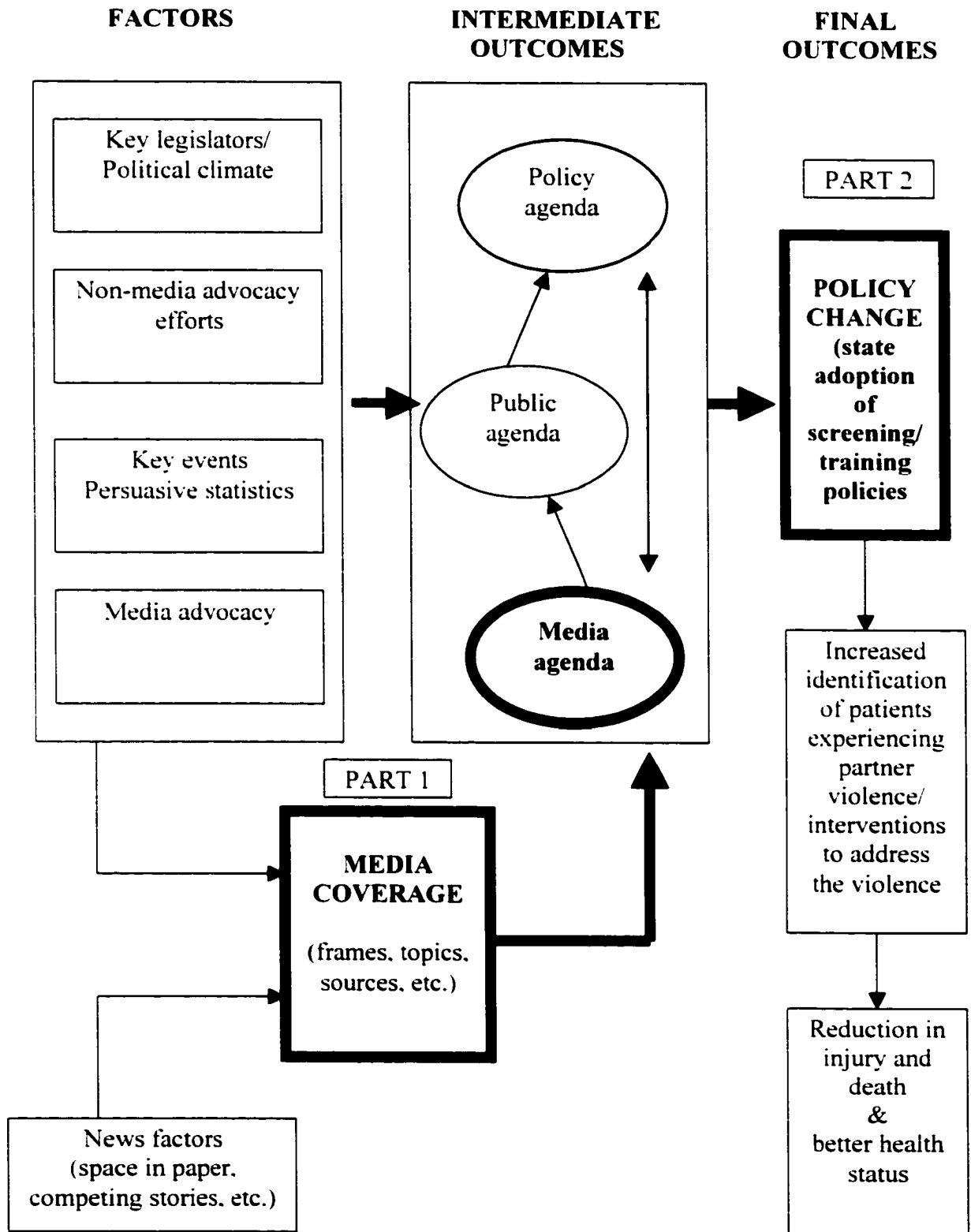
### **Conceptual Model**

The conceptual model is based in part on an agenda setting model presented by Everett Rogers and James Dearing in 1988 (Rogers and Dearing, 1996). It depicts the relationship between the three types of agendas and illustrates how a variety of factors can play a role in influencing each of these agendas.

The box labeled 'Part 1' shows how the first part of the study is designed to describe the nature of newspaper coverage of health care provider screening and training. In order to determine whether the messages provided in the news media about the issue have the potential to influence policy or not, the messages must be identified and understood. Although there are few hypotheses associated with this part of the study, the process of designing a codebook for analyzing the news articles and developing frame descriptions presents an advance in research methods in this field.

'Part 2' shows how the second part of the study is designed to measure the association between the media agenda and policy outcomes, while using the key factors as controlling variables. Ideally, one would have also tried to measure the public agenda, but no state-level public opinion data about IPV could be located. Also, the policy agenda would have incorporated information about policy activity in general (such as hearings or bills that were proposed but did not pass), but again, this information was difficult to obtain at the state level.

**Figure 1: Conceptual Model (next page)**



## **Research Aims and Hypotheses**

The above summary of literature suggests that the proposed research study is both feasible and relevant, and the conceptual model illustrates where the study fits in with agenda setting theory. Although this study cannot analyze causal relationships, it can describe characteristics of media coverage and answer research questions about the existence of any associations between relevant characteristics of media coverage and policy adoption. The results will provide information to people working in the field, such as advocates, researchers, and policymakers, with knowledge regarding how the media portrays issues related to intimate partner violence and health care provider training and screening. This information may help develop future media strategies, studies, and policy initiatives. The study will also provide a model to examine the relationship between media coverage and policy activity for other issues.

The study aims and research hypotheses are presented on the next page. For Part 2, case states are those states that adopted laws related to training, screening, or both.



**Aim 1: To describe the frequency and nature of print news coverage of intimate partner violence as a health policy issue**

Hypothesis 1.1: News articles are more likely to use 'State role' as the main frame over time as more states adopt policies.

Hypothesis 1.2: News articles are more likely to mention that states are playing a role in addressing the issue over time.

Hypothesis 1.3: Thematic (vs. episodic) coverage, main frame, and presentation of data are more likely to be associated with a pro-policy position as opposed to a neutral or con-policy position in news articles.

**Aim 2: To compare news coverage of intimate partner violence health policy with state policy adoption status**

Hypothesis 2.1: Compared with control states, case states are more likely to have coverage that is thematic (focused on discussion of issues) than mixed or episodic (focused on personal stories/events).

Hypothesis 2.2: Compared with control states, case states are more likely to have a higher number of pro-policy editorials than con-policy editorials.

Hypothesis 2.3: Compared with control states, case states are more likely to have articles with a higher influence measure.

Hypothesis 2.4: Compared with control states, case states are more likely to have articles with a higher prominence measure.

Hypothesis 2.5: Compared with control states, case states are more likely to have articles with 'State role' as the main frame.

## CHAPTER 3: RESEARCH METHODS

### Overview

There were two parts to this research study. Part 1 involved a content analysis of news articles representing 20 states during the years 1994 through 2001. Appendix B1 presents a diagram and sample information for Part 1. The second part of the study was designed to examine and compare media coverage in states that passed policies related to health care provider training and screening (cases) with those that did not (controls) to address Aim 2. The sample for Part 2 is described in Appendix B2. Because the content analysis was conducted the same way for each part of the study, the first section of this chapter describes the details of the content analysis, presents information about the codebook, and describes what data were collected from both newspapers and news articles. The remainder of the chapter describes the methods for each part of the study.

### Methods: Content Analysis

Content analysis, a research method traditionally used to describe and analyze various forms of communication, was the main research method utilized for this study. Kimberly Neuendorf, in her book *The Content Analysis Guidebook*, offers the following definition of content analysis.

“Content analysis is a summarizing, quantitative analysis of messages that relies on the scientific method (including attention to objectivity-intersubjectivity, a priori design, reliability, validity, generalizability, replicability, and hypothesis testing) and is not limited as to the types of variables that may be measured or the context in which the messages are created or presented” (Neuendorf, 2002, 10).

A description of the usual steps involved with content analysis, taken from a combination of Altheide (1996) and Neuendorf (2002) and applied to news articles, is provided below.

1. Choose a focus area
2. Explore sources of information
3. Review a selection of relevant articles
4. Develop questions and a protocol for data collection (codebook)
5. Test the codebook on a sample of articles/obtain reliability measures
6. Revise the codebook as needed and repeat/continue testing reliability measures
7. Develop a sampling strategy
8. Read and code the sample of articles for data collection
9. Analyze the data

One of the most important aspects of any content analysis is selecting a sample. There are various sample units that can be examined in content analysis. Some studies look at words, phrases or sentences (Bengston & Fan, 1999; Berelson, 1971; Weber, 1990). Paragraphs and entire articles can also be used (Berelson, 1971; Lowry & Wang, 2000; Schooler, Sundar & Flora, 1996). Sometimes people analyze television segments or shows as well. This study used entire articles appearing in newspapers as the unit of analysis. A description of the selection of newspapers is below, followed by a discussion regarding how relevant articles were identified in each newspaper to develop the news article sample.

### Newspaper selection

This study focused on news coverage in print media. It did not include television news, which is considered less influential for agenda setting. Suzanne McDevitt cites several studies illustrating how newspapers have a greater agenda-setting influence than television news (Arvai & Mascarenhas, 2001; McDevitt, 1996). It was also expected that television news coverage would be similar to newspaper coverage based on prior studies (Bystrom, Robertson & Banwart, 2001). Finally, it would have been more difficult to search for and obtain relevant news clips.

News transcripts from internet web sites were not used either, mostly because it would be difficult to conduct a study of this material retrospectively, and partially because it would likely mirror print news. Also, it is not known if these sites are influential with respect to state policymaking. A Pew Research Center Survey conducted in 1998 found that obtaining news online does not necessarily change other news habits, as sixty-eight percent of respondents who stated they reviewed news online reported reading a newspaper regularly (Pew, 1998). Although this suggests thirty-two percent of respondents only get their news from online sources, many times, information found on online news websites is similar to what is published in print editions of the newspaper.

When selecting a sample, many content analysis studies define eligibility criteria, such as newspaper title or date range, and then select all articles that meet that criterion. Some studies employ random sampling procedures in order to limit the data collected when the number of articles is expected to be exceptionally high. Generally, this is done by randomly sampling certain dates of the newspaper or randomly selecting articles that meet inclusion criteria. In some cases, the universe of articles is used for analysis.

Generally, this universe falls within a specific time frame and specified number of newspapers. For instance, in Bystrom, Robertson, and Banwart (2001), fourteen newspapers were searched for articles between May 1 and August 31 of 2000. All articles found that discussed candidates running for the U.S. Senate and gubernatorial primaries were included in the study.

For this study, medium to large sized daily newspapers (defined as having a circulation of 50,000 or more using year 2000 circulation data) in twenty states were included in the sample. It seemed reasonable to select newspapers based on circulation since circulation figures have been used in other studies to select newspapers (Kennedy & Bero, 1999; MacDonald & Hoffman-Goetz, 2001). This study used similar circulation cut-off points as other studies (Magzamen, Charlesworth & Glantz, 2001). The Gale Directory of Publications as well as the website for the American Journalism Review were used to help identify newspapers and determine circulation sizes (American Journalism Review, 2001; Gale, 2001).

In addition, newspapers located in the state capital of each state were included regardless of circulation for a few reasons. One is that it is likely that state legislators were exposed to the contents of these papers (Walsh-Childers, 1994a), and another was the likelihood that these papers could have higher coverage of state policies. Also, some studies have shown that people rate local television and newspaper news as more credible than national news, and that there is greater readership of local news than national news (Ibelema & Powell, 2001).

Legal, business, tabloid and other specialized newspapers were excluded from the study since their coverage was very specific. Also, newspapers written in a language

other than English were excluded.

Once a newspaper was selected using the above criteria, the electronic availability of the newspaper was determined for each part of the study. Thus, the sample of newspapers was a convenience sample based on electronic availability (availability of electronic text has been used as criteria in other content analysis studies, e.g. Andsager & Smiley, 1998). A list of newspapers included for both parts of the study is provided in Appendix C.

#### News article selection

Because electronic availability of newspapers was a requirement for inclusion in the sample, and different newspapers were available in different online news databases, several databases were utilized to obtain news articles in order to maximize the number of newspapers in the sample. Early in the study, a list was developed to outline which newspapers were available in each database, and when online coverage began. Once the list was compiled, a search strategy was developed to determine which databases would be used to search each newspaper.

Lexis-Nexis was the primary database used to search for articles since a majority of newspapers were available in this database. Westnews (part of Westlaw) was the secondary database used for searching newspapers, and was used whenever newspapers were not available in Lexis-Nexis. To maximize the number of newspapers available, if a newspaper was available for some of the time in one database and some of the time in another, multiple databases were used. This technique has been utilized in other studies

examining online news articles (Booth, 2000; Haller & Ralph, 2001; Maxwell et al., 2000).

When newspapers were not available in either of these databases, they were excluded for Part 1. Since Part 2 required the maximum amount of news coverage to assess differences between case and control states, newspaper websites or Newslibrary (a site that offered electronic archives for several newspapers) were also included when needed to supplement data collection. These databases were not used for Part 1 of the study because of the financial cost associated with obtaining articles from these websites.

Search terms to locate relevant articles were created and refined based on pre-tested article retrieval. Terms were also informed from prior studies, some of which searched for articles concerning intimate partner violence (Brodie, Brady & Altman, 1998; Maxwell et al., 2001; Wray, Maxwell & Hornik, 2001). Since intimate partner violence is discussed using different words, it was important to develop a variety of terms to capture the greatest number of articles (Altheide, 1996; Wray et al., 2001).

All search terms were applied to the full text of articles (as opposed to the headline or lead paragraph). This was done in part because WITHIN connectors could only be used in full text searches. Also, many of the articles were not primarily about the issue, and would not have been identified using lead paragraphs only.

Intimate partner violence terms were linked with terms related to screening and training to develop a complete search. Although previous studies have developed tested search terms for IPV (Maxwell, personal communication, 2002; Maxwell et al., 2000; Wray et al., 2001), the terms were too long to use in combination with other topics needed for this study, so these previously used terms were condensed. It was also

necessary to conserve space due to limitations in search term entry fields in some of the newspaper web site search engines. For this reason, a dictionary was consulted to help determine the shortest root word to save space. For instance, 'violen!' could locate 'violent' or 'violence'. The W/25 command was used in order to select stories where the health related terms appeared within 25 words of the intimate partner violence related terms. This technique seemed to locate a majority of the relevant articles, and was a method used in other content analyses (Feigenson & Bailis, 2001). The search terms that were used are detailed here.

(partn! OR spous! OR domes! OR marita! OR wom\*n OR husb!) w/4 (abus! OR violen! OR batter!)

**W/25**

(professi! OR emerg! OR patient OR health care OR medica! OR doctor OR nurs! OR physic!)

**W/25**

(advoc! OR train! OR screen! OR detec! OR iden! OR ask! OR recog!)

In order to measure the success of the search terms used in selecting articles, measures of recall and precision were calculated (Yanovitzky & Bennett, 1999; Yanovitzky & Blitz, 2000). These measures were similar to sensitivity and specificity and helped to establish the semantic validity of the study (Yanovitzky & Bennett, 1999). As Soothill and Grover (1997) discuss, when conducting searches in Lexis-Nexis (and others), the search is likely to result in a certain number of 'false positives' and 'false



negatives'. The 'false positives' refer to articles that are found in the search but are not relevant to the focus of the study. Meadow et al. (2000) provide an equation to calculate this measure.

$$\text{Precision} = \frac{\text{\# relevant articles}}{\text{total \# articles obtained in search}}$$

'False negatives' are more problematic since that group includes articles relevant to the study but not located using the specified search terms. Again, Meadow et al. propose a way to calculate this statistic.

$$\text{Recall} = \frac{\text{\# relevant articles found using terms}}{\text{total \# of relevant articles}}$$

Wray et al. (2001) suggest that these figures can be calculated by using a smaller sub-sample of about 20 to 30 articles. Because of the large number of stories located by the search terms that were not at all relevant to training and screening, a targeted sample was used for calculating the statistics. Two Illinois newspapers were selected and searched from 1994 through 2001. Precision was calculated by counting the number of articles that had no relation to the topic of interest. Recall was obtained by conducting a second search using a broader set of search terms and looking for any relevant articles not obtained in the original search.

The recall for the search terms used in this study was 83% and the precision was 27%. Although the precision was quite low, since this was the first time this topic was being studied, it was decided that it was more important to capture the greatest number of articles possible even if it meant locating a large number of articles that were not related to the topic. The 83% recall figure suggests that 17% of relevant articles were not located with the search terms. Still, in reviewing the articles that were not captured by

the search terms, it seemed that very few of them were directly related to the topic of screening and training. In many cases, there was just a brief mention of the issue, so it was unlikely the missed articles would have greatly altered the findings.

News articles, editorials (which have been shown to influence opinion) (Stone, 1987), and opinion columns were all included in the sample. Then, exclusion criteria were applied as has been done in other studies (Brodie et al., 2000; Collie, Caburnay, Kreuter & Luke, 2002; Fan & Norem, 1992; Lewis, Yulis & Greenberg, 2002; Lima & Siegel, 1999; Menashe & Siegel, 1998). Several types of articles were excluded. The following list details which articles were excluded from the study:

- duplicate articles (stories in different editions of the newspaper on the same date)
- article that did not include any mention of screening or training
- child abuse (unless it specifically mentioned IPV and screening/training)
- elder abuse (unless it specifically mentioned IPV and screening/training)
- health fairs/screenings
- international focus about IPV
- medical care provided at a shelter/help getting medical care
- obituaries
- stalking (unless it specifically mentioned IPV and screening/training)
- volunteer recruitment

Once an article was included in the study, it was given an identification number according to state and date. For instance, an article printed on 9/1/01 in Maryland was given the number 'MD010901'.

#### Measures: Newspaper data

In order to have information available about each newspaper, a data set was constructed in Microsoft ACCESS that included specific information about each newspaper. Data entered into this database included: name of the newspaper (NEWSNAME), the three-letter code of the newspaper (ANEWSAP), the average daily circulation of the newspaper as of 2000 (CIRC), the two-letter state code describing the state where the newspaper was published (STAT), whether this state was a case or not (CASE), the ID number used to match case and control states (ID), whether or not the newspaper was based in a state capital or not (STATECAP), and which databases were used for data collection for each part of the study (DATAPOL & DATATIM).

This dataset was merged with the news article data using the ANEWSAP variable so that information about the specific newspaper could be linked to each article. These measures were used for both Part 1 and Part 2 of the study.

#### Measures: Article data

A codebook with detailed instructions was developed and used to collect data from each news article in the sample (Neuendorf, 2002; Riffe et al., 1998). Textbooks and codebooks used in previous studies assisted with the development of the codebook (Bauer et al., 2002; Hobbs, 2001; Kennedy & Bero, 1999; F. Mebane, personal

communication, 2001; Miller, Miller & Kline, 1974; Oliver, 2002; Riffe et al., 1998; Sylvester, Wu & Hamilton, 1999). Some of the variables that were collected were common to many content analysis studies, while others were developed for this particular topic and study. Appendix D provides the codebook used to collect data from the news articles. The principal investigator was the main coder for the study. An assistant with a journalistic background was trained to assist with coding and to double-code in order to calculate the Interrater reliability.

About half of the news articles included only a brief mention (1 or 2 sentences) of the issue of health care provider training and/or screening. Excluding these articles would have cut the sample size in half, so only the basic article demographics were coded as opposed to answering all questions in the codebook. This has been done in other studies and made sense because, for example, an article with only a brief mention of the issue was not likely to have a dominant frame (Feigenson & Bailis, 2001; Maxwell et al., 2000). Coders were instructed to stop coding after Question #14 for these types of articles (see instructions in Appendix D).

A coding sheet was developed to use with the codebook for recording data from each article. One coding sheet was used per newspaper article. Microsoft ACCESS was used for data entry from the coding sheets.

Each of the article-specific variables described below is connected to a question in the codebook. Although the variables are briefly described, one can refer to the codebook for specific information regarding the wording of the question and the response categories. These measures were used for both Part 1 and Part 2 of the study. Some

measures were collapsed from multiple categories to two categories based on frequency of responses.

### *Article Demographics*

Berelson refers to the collection of “space and time measures” which include items like article origin (from news staff, a newswire, a larger paper, etc.), number of inches, location, and prominence (Lowry & Wang, 2000; Schooler et al., 1996; Berelson, 1971). Many studies have collected information about publication name, date, page number of story, type of news item, and number of words in article (Atkins & DeJong, 2000; Feigenson & Bailis, 2001; Haas, Chapman, Viney, Hall & Ferguson, 2001; Kerr & Moy, 2002; Lawrence, Bammer & Chapman, 2000; Lemmens et al., 1999; Lewis et al., 2002; Magzamen et al., 2001; Stillman et al., 2001; MacDonald & Hoffman-Goetz, 2001).

Several demographic variables were collected in this study to provide basic information about the article placement, length and origin. They were: source of the article (ASOURCE), type of article (ATYPE), gender of the journalist (AGENDER), page letter (APAGEL), page number (APAGEN), section of newspaper the article appeared in (ASECTION), whether the article was located on the front page or not (ALOCAT), and number of words in the article (AWORDNUM).

### *State*

A variable capturing which state the newspaper was published in was included in the newspaper data set. A second variable (ASTTOPIC) was coded based on the state or

region that was the focus of the article. The responses for this variable included each state in the study as well as states not listed (=30) and national or unspecified location (=40). Similar data have been collected in other studies (Lewis et al., 2002). Another variable (ASTFOC) was also created to capture whether or not the state that was the focus of the article was the same as the state of origin of the newspaper.

#### *Article Topic*

The main topic of the article is another category often coded (Brodie et al., 1998; Feigenson & Bailis, 2001; Haas et al., 2001; Kennedy & Bero, 1999; Kerr & Moy, 2002; Lawrence et al., 2000; Leask & Chapman, 2002; Lemmens et al., 1999; Lewis et al., 2002; Lima & Siegel, 1999; Haas et al., 2001; Haller & Ralph, 2001; Magzamen et al., 2001; Mercado-Martinez, Robles-Silva, Moreno-Leal & Franco-Almazan, 2001). A list of topics was developed based on an initial review of articles. For this study, coders were instructed to “use the headline and the lead paragraphs to help determine the major focus of the article. The main topic should also be discussed for at least one-half of an article” (Manganello codebook, 2002; F. Mebane, personal communication, 2001).

#### *Percent of article about IPV/screening and training*

In order to capture the focus of the news article on the issue, two questions were developed to determine how much of the article focused on issues related to IPV and screening and training. One question asked what portion of the article focused on intimate partner violence in general (ADVGPCNT). The other question asked what percentage of the article focused in IPV and health care provider training and/or

screening (ADVHPCNT). For both questions, responses included 'some of the article/brief mention', 'about half of the article', or 'majority of the article'.

As discussed earlier, only articles that included more than a brief mention of health care provider training and screening were completely coded (ADVHPCNT=1 or 2). The rest of the article variables described below were collected only from articles that were coded all the way through. These articles are referred to as "fully-coded articles".

#### *Prominence and influence variables*

Three questions were asked to assess the likelihood that an article would draw the attention of readers to the article, since articles that were more likely to be noticed might have also been more likely to influence the agenda. The first question concerned whether or not there was any reference in the headline to the issue of IPV and health care provider training/screening (AHEADLIN). Another question asked coders to note whether or not a photograph appeared with the article (APHOTO). Finally, coders were also asked to note whether or not a chart, graph or text box appeared as part of the article (ACHART).

Some studies have combined different variables to create a new variable that reflects the overall prominence of the article, meaning, is the article prominently featured in the newspaper in a way that makes it more likely to be noticed by the reader. For instance, one study multiplied the number of words in the article times a categorical variable that described where in the paper the article was located (front page, etc.) to obtain a measure of prominence (Yan, 1998). Two studies examining coverage of homicide in the news created a variable to capture how prominent an article was using

article characteristics such as number of words and presence of a photograph (Johnstone, Hawkins & Michener, 1995; Taylor & Sorenson, 2002).

In this study, a prominence score (PROM) was created in the following way using a combination of article variables. Higher variables for the prominence measure correspond with more prominent articles. Newspaper circulation was not taken into account since this variable was designed to measure prominence within the newspaper. Details regarding the creation of this variable are provided below.

$$\text{PROM} = (\text{LOCNW} + \text{AWDGRP} + \text{APHOTONW} + \text{ACHARTNW})$$

LOCNW

(0='Missing'; 1='Non-front page'; 2='Front page of non-front section'; 3='Front page of front section')

AWDGRP

(1='1-299 words'; 2='300-599 words'; 3='600-999 words'; 4='≥ 1000 words')

APHOTONW

(0='No photo or missing'; 1='Photo')

ACHARTNW

(0='No chart or missing'; 1='Photo')

A second variable was created to help identify which articles were the most “ideal” for setting an agenda with respect to health care provider training and/or screening. This variable was called the influence variable (INFL) and was constructed as shown on the next page. As with the prominence score, higher values correspond to articles considered to be more influential.



INFL = (AHEADLIN + AEPITH2 + PROM + AIMPR2 + STAFRM + ADVHPCTG +  
ASTAROLE + ADATAN)\*CIRCNW

AHEADLIN: headline mentions issue  
(0='No'; 1='Yes')

AEPITH2: article is thematic  
(0='No'; 1='Yes')

PROM  
(described above)

AIMPR2: article gives reader impression that issue is important  
(0='No'; 1='Yes')

STAFRM: 'State role' is main frame of article  
(0='No'; 1='Yes')

ADVHPCTG: percent of article about the issue  
(0='About half or brief mention'; 1='Majority of article')

ASTAROLE: state role mentioned in article  
(0='No'; 1='Yes')

ADATAN: data presented in article  
(0='No'; 1='Yes')

CIRCNW  
(Newspaper circulation/100,000)

*Discussion of intimate partner violence health policies*

There were additional policies related to health care and intimate partner violence that were not included as the focus of this study. Still, since more than one policy was often discussed in the same article, two variables captured information about whether or not the article mentioned insurance discrimination against victims of IPV (ARINSUR) or mandatory reporting by health care providers (ARREPORT). This was done to

determine whether it was more common to talk about a range of policies in one article, or if articles about screening and training specifically focused on those policies only.

*Discussion about who should address intimate partner violence as a health issue*

One of the hypotheses for this study anticipated that states that adopted laws would be more likely to have news articles that assigned responsibility to the state for addressing the issue. One of the ways to assess this was a question about the main frame of the article. Since in many cases, responsibility for addressing the issue was mentioned but was not considered a frame, three additional questions were added to the codebook. One asked whether there was any mention in the article that health care providers were responsible for or have made efforts in addressing the issue of IPV (APRVROLE). A second question was similar but instead asked about whether or not health facilities or agencies, such as hospitals or HMOs, should help or have helped address intimate partner violence (AFACROLE). The third question asked about state role, and was coded as 'Yes' if there was any mention of the state being involved in addressing issues related to screening/training or statements made that the state should be involved (ASTAROLE).

*Presence of data/statistics*

In order to determine how often news articles about the issue referred to research studies or other types of statistics, one question asked whether data or statistics were provided in the article (ADATA), a measure also captured in other studies of violence in the news (Maxwell et al., 2000; Rodgers & Thorson, 2001). Because sometimes statistics were mentioned with no reference to where they came from, coders were provided with

instructions to only count data that came from cited sources. For instance, if someone was quoted saying that 1 in 4 women are victims of domestic violence, with no mention of where that statistic came from, the coder was instructed to select 'No'.

Initially, coders were also asked to select choices regarding the types of data that were presented, but this question had low reliability so the final codebook only asked a yes/no question about the presentation of data. Low reliability resulted for this question because it was often hard to group the data into a pre-defined category.

#### *Article position*

The direction of the story, meaning, whether it was slanted toward one side of the issue or another was also important data to collect and has been collected in several studies (Atkin & DeJong, 2000; Booth, 2000; Brodie et al., 2000; Bystrom et al., 2001; Lawrence et al., 2000; Lemmens et al., 1999; Lewis et al., 2002; Magzamen et al., 2001; Stillman et al., 2001). For instance, were both sides of a debate represented? Were they presented in similar ways? Or did the article seem to present one side in a more favorable view? One would expect that a greater number of articles supporting a particular policy would be more likely to influence readers to support the policy.

As discussed earlier, the literature discusses how the media like to present conflict, and how that desire to provide controversy can alter the message provided to the reader. For this analysis, the issue slant was captured by analyzing whether the article was supportive of the policy (pro-position), neutral, or against the policy (con-position). As Stillman, et al. (2001) did, all news articles were coded as neutral. Only editorials and opinion pieces were coded as either supporting or opposing the policy.

Two additional position questions were asked specifically about a training or screening law that may have been discussed in the article (APOSSCLW/APOSTRLW). For both questions, the coder was provided with a response to select if there was no mention of a training or screening law in the article (=8) or if there was a mention of the law, but the article was a news article as opposed to an editorial or opinion piece (=0).

### *Impression*

Because news articles were coded as neutral for the position variable, another question was added that asked about the coder's impression of the issue. Coders were asked to assess whether or not they had a favorable impression of the issue, meaning, would they support training for health care providers or think that providers should screen patients for IPV after reading the article. The coder was asked to answer this question for all types of articles, not just editorials and opinion pieces.

### *Debate in article*

Since several studies have examined the nature of controversy in news coverage of various issues, and have speculated on how this impacts policymaking, coders were asked to assess the articles to determine whether any type of debate occurred about training or screening (ADEBATE). To rate this variable as a 'Yes', the coders were instructed to only consider presentation of opposite views by different sources as debate. For instance, if one source talked about how they supported training for providers, and also talked about how some providers did not think training was important, this was not

considered debate since it was one person who supported the policy but was presenting an opposing viewpoint in their discussion.

#### *Episodic vs. thematic coverage*

This variable (AEPITHEM) was designed to measure whether the article was more focused on an event or individual story (episodic coverage) or whether it provided a more comprehensive discussion of the issue with the presentation of different arguments, a description of government or community response to a problem, specific data, and/or “talking heads” (thematic) (Dorfman et al., 1997; Iyengar, 1991). Several studies of news coverage have looked at this characteristic, some of which focused on crime and violence (Dorfman et al., 1997; Iyengar, 1991; Taylor & Sorenson, 2002). As mentioned in Chapter 2, studies have shown that news articles about intimate partner violence tend to be more episodic.

#### *Article sources*

Research on news coverage often includes an examination of sources that appear, including the affiliation of the source, the order sources are presented in, and other aspects of source identification and usage (Atkin & DeJong, 2000; Feigenson & Bailis, 2001; Haas et al., 2001; Kennedy & Bero, 1999; Leask & Chapman, 2002; Magzamen et al., 2001; Mercado-Martinez et al., 2001; Powers & Andsager, 1999; Terkildsen et al., 1998). Some studies only consider sources that appeared with actual quotations (Kennedy & Bero, 1999; Magzamen et al., 2001). Other studies included sources that were both quoted and referred to in the article (Leask & Chapman, 2002; Riffe et al.,

1998). Looking at sources when analyzing news coverage is important to know what groups are getting their message into the media and how those groups may be associated with particular frames and article characteristics.

This study examined the affiliation and number of sources used per article, as well as the order in which the sources appeared. The instructions for identifying and coding sources can be reviewed in the codebook (Appendix D). Although many studies only include sources that are quoted in the article, it was decided to include non-quoted sources as well. Because in many cases, sources such as research studies were not actually quoted but were an important source of information for the article, coders were asked to note whether the source was quoted or not. The codebook also included questions that determined whether sources expressed any opinion about laws related to health provider and screening, and if so, which sources expressed which opinions.

### *Frames*

As discussed in Chapter 2, frames are another important aspect of news coverage to measure in content analysis studies examining policy issues. As a reminder, frames “select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation” (Entman, 1993, 52). Frame analysis is also referred to as discourse analysis (Lawrence et al., 2000). The technique to develop frames is complex. Entire studies have been conducted with the intention of developing frames and testing new methods for frame identification.

Several articles that examined framing of various health issues and IPV were used

to help with the development of framing categories for this study (Kennedy & Bero, 1999; Leask & Chapman, 2002; Lima & Siegel, 1999; Menashe & Siegel, 1998; Taylor & Sorenson, 2002). As articles were reviewed for relevance, initial assessments were made about the types of frames. Twenty-two articles were then randomly selected from the final sample for development of the framing matrix, a system described by Ryan (1991) and Winnett (1997) that has been used in other studies (Menashe & Siegel, 1998).

Coders were asked to identify the main frame of the article. Although an initial list of frames was developed and included in the codebook, coders were instructed to take note of articles that did not fit into any of the listed frame categories. The frame categories developed for the study are listed on the next page in Figure 2.

**Figure 2: Frame categories**

<b>CODE</b>	<b>FRAME</b>	<b>POSSIBLE SPONSORS</b>	<b>DESCRIPTION</b>
<b>0</b>	No frame in article		
<i>FRAMES THAT GENERALLY SUPPORT SCREENING/TRAINING</i>			
<b>1</b>	Provider role	advocacy groups/DV service providers/medical organizations/researchers	Providers should ask/identify abuse since it is their role to help patients with this issue
<b>2</b>	Facility role	advocacy groups/DV service providers/medical organizations/researchers	Health care facilities (such as hospitals or emergency rooms) need to develop policies/guidelines and have training programs to help providers
<b>3</b>	State role	advocacy groups/legislators	State should help make policy/develop programs to provide assistance to health care providers/facilities to address the issue
<b>4</b>	Survey says	researchers/advocacy groups/health providers/medical organizations	Research studies show that 1. women are abused 2. Abused women use health services but are not identified 3. abuse causes injuries etc.
<b>5</b>	Child safety	advocacy groups/medical organizations	Patients should be asked about domestic violence to help protect child who may be living in the home
<b>6</b>	Women's health	health providers	Health care system/providers have not addressed women's health needs in general/there is a gender bias in the health care system
<b>7</b>	Fill in the gap	advocacy groups/DV service providers/non-health agencies	Some women only use health care so health care providers can't rely on other agencies/some women will only talk to health providers
<b>8</b>	System failure	DV service providers/people experiencing DV/health providers	The "system" (government agencies, courts, etc.) doesn't help victims/doesn't address their needs-someone needs to be responsible/making changes to improve the system or services
<b>9</b>	Cost/benefit	health care facilities	DV costs money to treat victims/will save money if patients are identified and helped
<b>10</b>	Get involved	advocacy groups/DV service providers/people experiencing DV	People should get involved/individuals should try to help/all types of professionals should address the issue
<i>FRAMES THAT GENERALLY DO NOT SUPPORT SCREENING/TRAINING</i>			
<b>21</b>	Blame the victim	health providers	The victim is responsible for leaving the relationship or getting help/they should bring the issue up with the provider if they want help/admit to abuse if asked
<b>22</b>	Private matter	health providers/patients	Providers/people in general don't think it is any of their business or it is a personal issue- feel that women will perceive questions as invasion of privacy or don't want to talk about it



23	Not health care problem	health providers/health administrators	Abuse is a problem for others/other agencies to address-it is not the role of the health care system
24	Health system	health providers/health administrators	The health system has other problems that make it hard to address this issue-these other problems need to be solved first via health system reform
25	Data dispute	researchers	Data does not show or is not conclusive that abuse is a problem in the health care system or that asking about abuse helps patients
26	Cynicism	health providers/service providers/victims	Victims aren't sure they would tell anyway/providers think women won't tell/will put a strain on resources: not enough places to refer to/etc.

### *Arguments*

When conducting the frame analysis, several concepts that were originally classified as frames were actually arguments that appeared within frames. This was especially common with the 'Provider role' frame, where a variety of concepts were often discussed within that particular frame. For instance, in discussing the role of the provider, a statement or two was made about how providers are hesitant to screen for IPV because it is considered a private matter.

While a frame is considered to characterize the entire article and provide a general description of how the problem is discussed, an argument is a particular statement that appears for or against the issue. Since one statement was not enough to be considered a frame, a second set of questions was developed that asked about specific statements, or arguments, appearing in the article (either for or against health care provider training and screening). This list can be found on the last two pages of the codebook (Appendix D).

### Interrater Reliability (IRR)

All resources that discuss methods for content analysis suggest examining Interrater Reliability (IRR) to assess the reliability of the coding instrument (e.g. Riffe et al., 1998). Two figures are generally calculated to assess IRR: simple agreement (# same responses/# total responses) and the Kappa statistic (Riffe et al., 1998). A Kappa coefficient accounts for how much agreement would be expected by chance alone (Stemler, 2001). An example of the calculation of Kappa is provided later in this section.

Although many sources suggest calculating these statistics, few propose what percent of a sample should be used for doing this. In reviewing journal articles of content analysis studies using human coders (as opposed to computer assisted coding), most selected 5-15% of the sample to be reviewed by at least one other coder to calculate the IRR (Brodie et al., 1998; Bystrom et al., 2001; Corbett & Mori, 1999; Keefer, 1993; Lemmens et al., 1999; Magzamen et al., 2001). In some cases, less than 5% of the sample was coded to calculate IRR (Haas et al., 2001; Schooler et al., 1996) and in other cases, more than 15% of the sample was coded (Kennedy & Bero, 1999; McLendon & Peterson, 1999; Terkildesen & Schnell, 1997). Some studies do not mention how many articles were coded or do not give specifics regarding calculation of IRR (Andsager & Powers, 1999; Arvai & Mascarenhas, 2001; Atkin & DeJong, 2000; Dorfman et al., 1997; Dorfman et al., 1996; Kerr & Moy, 2002; Lawrence, 2000; Lowry & Wang, 2000; Powers & Andsager, 1999; Protess et al., 1985; Stewart & Caswell, 1993; Stillman et al., 2001). It is unclear whether these studies did not assess IRR, or if it was not reported in the publication.

Lacy and Riffe (1996) have described a method for determining the number of

articles needed to measure reliability between coders. For instance, a study with 250 articles in the population should have two people code a sub-sample of 91 articles in order to measure a Kappa coefficient of .85 at a 95% level of probability (Lacy & Riffe, 1996).

To determine what sample to use for calculating IRR, the sample size of 203 articles (from the policy analysis) and a 95% level of probability ( $p=.05$ ) was plugged into the equation. The desired minimum level of agreement for all variables was .80 (80% agreement) or higher and it was expected based on pre-testing of the instrument that agreement between coders averaged 90% (some questions were 80% or lower while others were 100%). Based on this information, the following equation (Lacy & Riffe, 1996; Riffe et al., 1998) was used to calculate the minimum number of articles required to obtain an accurate measure of Interrater Reliability.

$$\text{Standard Error (SE)} = \sqrt{\frac{P \times Q}{n-1}} \times \sqrt{\frac{N-n}{N-1}}$$

$$P = .90 \text{ (assuming an average of 90\% agreement)}$$

$$Q = .10 \text{ (1-P)}$$

$$N = 203 \text{ (sample size)}$$

$$SE^2 = (.05/1.64)^2 = .0009 \text{ (for an alpha level of .05)}$$

To solve for  $n$ , the equation becomes:

$$n = \frac{(N-1)(SE)^2 + PQN}{(N-1)(SE)^2 + PQ}$$

$$n = \frac{(203-1)(.0009) + (.90)(.10)(203)}{(203-1)(.0009) + (.90)(.10)} = 68$$

This calculation indicated that a minimum of 68 articles needed to be coded by both coders to calculate IRR. It was decided to double-code eighty articles, which represented 33% of the sample of policy articles.

It is becoming standard to present coefficients for each variable (Kerr & Moy, 2002; D. Riffe, personal communication, 2002) so this study calculated IRR coefficients for each variable in the codebook. Calculation of the IRR statistics and refinement of the coding tool continued until an appropriate IRR coefficient was obtained for each item or until it was decided that the item should be left out of the study. Simple agreement was calculated for each item in the codebook and the agreement was then adjusted to account for chance agreement using the Kappa statistic.

The standard assessment of Kappa scores is that .61 - .80 is substantial agreement, while .81 to 1.0 is almost perfect (Feigenson & Bailis, 2001; Landis & Koch, 1977). This study attempted to obtain a Kappa coefficient of at least .70 or greater, assuming that this was a strong enough level of agreement for a study exploring this topic for the first time (Stemler, 2001).

Table 1 and the following equations illustrate the calculation of kappa for the variable that represented where the article was located in the paper (ALOCAT).

**Table 1: Coding values for location variable**

	<i>RATER1</i>				
<i>RATER2</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>999</b>	<b>TOTAL</b>
<b>1</b>	5	0	0	0	5
<b>2</b>	0	10	1	0	11
<b>3</b>	0	1	46	0	47
<b>999</b>	0	2	1	4	7
<b>TOTAL</b>	5	13	48	4	70

*Simple Agreement:*

$$(5+10+46+4)/70 = 65/70 = 93\%$$

*Kappa Statistic:*

$$= \frac{P(\text{obs}) - P(\text{exp})}{1 - P(\text{exp})}$$

$$\text{Expected agreement 1: } (5)(5)/70 = .36$$

$$\text{Expected agreement 2: } (13)(11)/70 = 2.0$$

$$\text{Expected agreement 3: } (48)(47)/70 = 32.2$$

$$\text{Expected agreement 4: } (4)(7)/70 = .40$$

$$= \frac{(65/70) - ((.36 + 2.0 + 32.3 + .40)/70)}{1 - ((.36 + 2.0 + 32.3 + .40)/70)} = \frac{.93 - .50}{1 - .50} = .43/.5 = .86$$

After completing calculations for all items, making changes and adjustments to the questions and response categories, and re-testing the items, a satisfactory level of agreement was obtained for most items. Since some variables had little variation, the expected agreement was quite high, which resulted in low kappa scores for even one discrepancy. For instance, the variable describing whether debate was present in the article or not ended up having little variation. ‘Yes’ was only coded a few times, so although simple agreement was calculated at a high level of 86%, the Kappa statistic was very low (.35). The table below (Table 2) presents the agreement statistics for each item included in the study codebook. Some of the more problematic items were the argument questions, headline, mention of facility role, debate in article, main frame, and the argument variables (listed in the table in bold type).

The argument questions turned out to be somewhat difficult to code due to the ambiguity of text in the articles. Although in some cases it was obvious when an

argument appeared, it was often difficult to tell whether the text was making a particular argument or not. Thus, coding these variables was not straightforward. Many of the differences between coders occurred when one coder inferred that an argument was being made while the other coder assumed that since the argument was not specific enough, it should not be coded as a 'Yes'. Since the argument variables were not integral to the analysis, they were dropped from the codebook.

Since the frame variable (AFRAME) was integral to the analysis, but had a somewhat low level of reliability ( $Kappa = .58$ ), it was decided that both coders would review all articles to assess the main frame of the article as had been done in other studies (e.g. Menashe & Siegel, 1998). Whenever there was a discrepancy between coder responses, the coders met to discuss which frame should be coded as the final answer. A record was kept of the number of occasions when coders disagreed with respect to AFRAME choice. The simple agreement statistic of 68% for the frame variable remained fairly constant throughout the rest of the coding process, as coders agreed for 57 of the 80 (71%) additional articles coded for frames. This suggests that the sample that was selected to assess reliability for all variables was adequate for determining IRR statistics.

**Table 2: Interrater Reliability Coefficients**

VARIABLE DESCRIPTION	VARIABLE NAME	# AGREE	% AGREE	KAPPA STATISTIC*	SE	CONFIDENCE INTERVAL
ALL ARTICLES	<i>sample size=80</i>					
Newspaper name	ANEWS	79/80	99%	.99	.01	.96 – 1.0
State/area of focus	ASTTOPIC	73/80	91%	.90	.04	.83 – .97
Article source	ASOURCE	72/80	90%	.85	.05	.76 – .95
Article type	ATYPE	75/80	94%	.85	.06	.73 – .97
Gender of author	AGENDER	75/80	94%	.91	.04	.84 – .99
Page letter	APAGEL	79/80	99%	.98	.02	.95 – 1.0
Page number	APAGEN	78/80	98%	.97	.02	.93 – 1.0
Page section	ASECTION	72/80	90%	.91	.03	.84 – .97
Article location	ALOCAT	73/80	91%	.82	.06	.69 – .94
# of words (group)	AWDGRP	79/80	99%	.98	.02	.95 – 1.0
Article topic	ATOPIC	<b>61/80</b>	<b>76%</b>	<b>.73</b>	<b>.05</b>	<b>.63 – .83</b>
Article topic (group)	ATGRP	72/80	90%	.87	.04	.78 – .95
% article DV	ADVGPCNT	75/80	94%	.88	.06	.76 – .99
% article DV health**	ADVHPCNT	65/80	81%	.80	.05	.70 – .89

VARIABLE DESCRIPTION	VARIABLE NAME	# AGREE	% AGREE	KAPPA STATISTIC*	SE	CONFIDENCE INTERVAL
<b>FULLY CODED ARTICLES</b>	<i>sample size=44</i>					
Article headline	AHEADLIN	<b>33/44</b>	<b>75%</b>	<b>.61</b>	<b>.10</b>	<b>.41 – .80</b>
Article has photo	APHOTO	44/44	100%	1.0	.00	
Article has chart	ACHART	44/44	100%	1.0	.00	
Mentions insurance discrimin.	ARINSUR	44/44	100%	1.0	.00	
Mentions mandatory reporting	ARREPORT	43/44	98%	.93	.07	.79 – 1.1
Mentions provider role	APRVROLE	43/44	98%	.79	.20	.39 – 1.2
Mentions facility role	AFACROLE	36/44	82%	<b>.58</b>	<b>.13</b>	<b>.33 – .84</b>
Mentions state role	ASTAROLE	41/44	93%	.83	.09	.65 – 1.0
Article has DV data	ADATA	39/44	89%	.77	.10	.59 – .96
Impression about issue	AIMPR	42/44	95%	.81	.13	.55 – 1.1
Position about sc/tr	APOSIT	42/44	95%	.83	.11	.61 – 1.0
Position about sc law	APOSSCIW	42/44	95%	<b>.65</b>	<b>.23</b>	<b>.20 – 1.1</b>
Position about tr law	APOSTRLW	41/44	93%	.81	.11	.60 – 1.0
Debate in article	ADEBATE	38/44	86%	<b>.35</b>	<b>.19</b>	<b>.00 – .73</b>
Episodic/thematic	AEPITHEM	39/44	89%	<b>.74</b>	<b>.11</b>	<b>.53 – .95</b>
Article main frame***	AFRAME	<b>30/44</b>	<b>68%</b>	<b>.58</b>	<b>.09</b>	<b>.41 – .75</b>
Arguments in article	AARGUM	41/44	93%	.81	.10	.61 – 1.0
people afraid to discuss	AARGUM1	<b>23/34</b>	<b>68%</b>	<b>.42</b>	<b>.14</b>	<b>.14 – .69</b>
prevent future abuse/injuries	AARGUM2	<b>26/34</b>	<b>76%</b>	<b>.62</b>	<b>.11</b>	<b>.40 – .85</b>
provide help/referrals	AARGUM3	<b>25/34</b>	<b>74%</b>	<b>.59</b>	<b>.12</b>	<b>.35 – .82</b>
show concern for patient	AARGUM4	28/34	82%	<b>.67</b>	<b>.12</b>	<b>.43 – .91</b>
hard to detect	AARGUM5	<b>26/34</b>	<b>76%</b>	<b>.58</b>	<b>.12</b>	<b>.34 – .82</b>
not enough time/too busy	AARGUM21	<b>27/34</b>	<b>79%</b>	<b>.64</b>	<b>.11</b>	<b>.42 – .86</b>
don't know how to ask	AARGUM22	29/34	85%	.75	.10	.55 – .95
private matter	AARGUM23	29/34	85%	<b>.70</b>	<b>.11</b>	<b>.49 – .92</b>
patients don't tell truth	AARGUM24	<b>27/34</b>	<b>79%</b>	<b>.60</b>	<b>.12</b>	<b>.36 – .84</b>



VARIABLE DESCRIPTION	VARIABLE NAME	# AGREE	% AGREE		KAPPA STATISTIC*	SE	CONFIDENCE INTERVAL
<b>SOURCES</b>	<i>sample size=36</i>						
# sources in article	ASRCNUM	<b>20/36</b>	<b>56%</b>		<i>.80</i>	<i>.05</i>	<i>.71 - .89</i>
First source in article	ASRC1	<b>28/36</b>	<b>78%</b>		<i>.76</i>	<i>.09</i>	<i>.58 - .93</i>
Sources have view about laws	ASRCVW	35/36	97%		<i>.92</i>	<i>.08</i>	<i>.76 - 1.1</i>
Sources no comment on laws		10/10	100%				
Sources support laws		4/5	80%				
Sources oppose laws		0/0	100%				
<b>Whether type of source appears in article or not</b>							
Health provider source	PVSGRP	35/36	97%		<i>.94</i>	<i>.06</i>	<i>.82 - 1.1</i>
Med. prof organiz source	AMSGRP	33/36	92%		<i>.81</i>	<i>.11</i>	<i>.60 - 1.0</i>
Victim/patient source	VTSGRP	36/36	100%		<i>1.0</i>	<i>.00</i>	
Advocacy group source	ADSGRP	33/36	92%		<i>.82</i>	<i>.10</i>	<i>.62 - 1.0</i>
Research study source	RSSGRP	25/28	89%		<i>.77</i>	<i>.12</i>	<i>.53 - 1.0</i>
State government official	STSGRP	36/36	100%		<i>1.0</i>	<i>.00</i>	

\*Variables using weighted kappa statistics (because agreements closer in number were better due to an ordinal nature of the variable) are listed in italics.

\*\*3 disagreements affected whether the coder coded the rest of the article or not.

\*\*\*After the reliability coding, the 2 coders agreed on frames 57/80 times, for a simple agreement percentage of 71%.

## **Methods: Part 1**

Specific sample information, study design, measures and data analysis for Part 1 of the study are described below.

### Study population: States

For ease of data collection, the same states selected for Part 2 of the study were also used in Part 1. The Family Violence Prevention Fund Health Report Cards of 2000 and 2001 and other documents were consulted to determine which states had laws regarding health provider screening and training, and then control states were selected to match with each case state (FVPPF Report Card, 2000; FVPPF Report Card, 2001; ILJ, 2000; ILJ, 2001). The list of case and control states is provided in Appendix A. The twenty states included for Part 1 were: California, Florida, Georgia, Illinois, Louisiana, Maryland, Massachusetts, Minnesota, Nevada, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Tennessee, Texas, Virginia, Washington and West Virginia. Two states, Alaska and Kentucky, were not included in Part 1 since there were no newspapers available electronically from 1994 through 2001.

### Study population: Time period

1994 was selected as the first year for two reasons. First, the OJ Simpson case occurred in 1994. Studies have found that media coverage of intimate partner violence changed in frequency and somewhat in content as a result of this case (Maxwell et al., 2000). Thus, results may be biased when comparing changes in news coverage pre- and post-1994. Second, choosing this year maximized the number of newspapers available

for the analysis since many of the newspapers that met inclusion criteria for the sample did not become available electronically until the mid-1990's. Even starting data collection in 1992 would have resulted in the loss of several newspapers from the sample.

#### Study population: Newspapers and articles

The selection of newspapers was described earlier in this chapter. For this part of the study, the newspaper must have been available electronically in one or more of the databases from January 1, 1994 through December 31, 2001 without interruption. Appendix C provides a list of the 59 newspapers that were used for Part 1 of the study. All newspapers were searched using the specified search terms. As described earlier, all articles selected were reviewed for relevance and eligibility.

#### Sample size

For this part of the study, articles were the unit of observation. The total number of eligible articles collected from the sample of newspapers was 567. A random sample was taken of these articles to create a more manageable sample to code. In most studies involving content analysis, a sample was determined ahead of time and newspapers from certain days of the year are searched for relevant articles (e.g. Lacy, Robinson & Riffe, 1995; Riffe, Lacy & Fico, 1998). In this study, since all articles were located and the population was known, a random sample was drawn from the population of news articles. This has also been done in previous studies (Lemmens, Vaeth & Greenfield, 1999). Stratification has been used before as well, especially in longitudinal studies where the researcher wants to ensure there are enough articles to examine in each time period

(Lemmens et al., 1999). For this reason, articles were proportionately selected by year. The equation to determine sample size employed the use of the Finite Population Correction factor to account for the known population size and is described in Appendix B1. The final sample size was 188 articles (33% of the population).

### Study design

The basic design for this part of the study involved the collection of news articles over a specified time period to examine how the issue of health care provider training and screening has been covered by the news media. As discussed above, articles were located from a sample of newspapers using tested search terms. A random sample of the articles was then drawn stratified by year. This design allowed for the examination of news coverage in general, and by collecting articles over time, ensured that changes in news coverage could be detected.

### Measures

The data used for this part of the study included both newspaper and news article measures, all of which were described earlier in this chapter. A list of variables used for the analysis for Part 1 of the study can be found in Appendix E. Data from the news articles was entered into Microsoft ACCESS, exported into Microsoft Excel, and then imported into SAS (SAS, 1999) for data cleaning and analysis.

### Statistical analysis

Figure 3, on the next page, presents the analysis plan for Part 1 of the study.

**Figure 3: Analysis plan for Part 1**

<b>AIM 1: To describe the frequency and nature of print news coverage of intimate partner violence as a health policy issue</b>			
<b>#</b>	<b>Hypotheses</b>	<b>Key Variables</b>	<b>Analysis (Results)</b>
1.1	News articles are more likely to use 'State role' as the main frame over time as more states adopt policies	STAFRM	Chi-square trend test  (FIGURE 11: TABLE 10)
1.2	News articles are more likely to mention that states are playing a role in addressing the issue over time	ASTAROLE	Chi-square trend test  (FIGURE 12: TABLE 10)
1.3	Thematic (vs. episodic) coverage, main frame, and presentation of data are more likely to be associated with a pro-policy position as opposed to a neutral or con-policy position in news articles.	AIMPR & APOSIT (Categorical)	Logistic regression  (TABLE 11)

*Descriptive statistics*

The first stage of data analysis involved generating descriptive statistics for each variable collected from the content analysis. All variables were examined to identify any errors in data entry (mistakes or missing data). All continuous variables were examined by looking at means, medians, minimums and maximums. However, most variables coming from the content analysis were categorical. For categorical variables, frequencies were examined to evaluate proportions of responses observed for each variable.

*Bivariate relationships*

Contingency tables were produced to examine differences between sets of categorical variables. Both the Chi-square and Fisher's exact tests were used to assess

the null hypothesis that the variables appearing in the rows and columns of each contingency table were independent from each other (Glantz, 2002; Stokes et al., 2000). For both statistics, a p-value of less than .05 was considered statistically significant for rejecting the null hypothesis. The Chi-square test was used except for tables where each cell did not have a frequency of more than five. In these cases, the two-tailed Fishers exact test was used (noted in results tables) (Glantz, 2002; Stokes et al., 2000).

In order to examine changes in certain variables over time, graphs were created to look for linear trends. In addition, a statistical test was conducted to look for trends that might not be easily observed from the data. For categorical variables, a Chi-square trend test was used to determine whether there was significant change over time. For continuous variables, analysis of variance (ANOVA) tests were used to compare the average value of each variable over time. Because the variables for Hypothesis 1.3 were unable to be analyzed due to limited responses, logistic regression wasn't used for Part 1.

## **Methods: Part 2**

Part 2 was designed to try to determine whether certain aspects of media coverage were associated with policy adoption of laws related to health care provider training and screening. Specific sample information, study design, measures and data analysis for Part 2 of the study are described below.

### Study population: States

In order to determine which states to include, the Family Violence Prevention Fund Health Report Cards of 2000 and 2001 and other documents were consulted to

determine which states had laws regarding health provider screening and training (FVPP Report Card, 2000; FVPP Report Card, 2001; ILJ, 2000; ILJ, 2001). After obtaining a list of states and policies, extensive legal research was conducted to determine exactly when the laws had been passed and approved by the governor. This research was conducted by using the statute number to search through microfiche of each state's session laws. Appendix A lists information about which states were identified as having related laws and the year the law passed.

This list of states was used to determine which states were included as 'cases'. New York was included twice since two different laws were passed at different times. This resulted in a total of twelve cases (eleven unique states). After establishing a list of case states, control states were then selected to match with case states. Options were limited for selection of control states as several states had no electronically available newspapers so could not be included, and states that were already on the case list could not be included as a control. Matched control states were selected on the basis of similarity of region and similarity of electronically available newspaper circulation, calculated by comparing the sum of circulation of all eligible newspapers with the sum of circulation of all electronically available newspapers. Information about circulation availability for each state is provided in Appendix C. Paired t-tests indicated that the proportion of eligible circulation available electronically did not differ between the matched pairs (average difference of 3%,  $p = .53$ ).

Study population: Time period

Newspapers from the case and control states were searched for articles appearing

for a period of time that began on January 1 of the year prior to policy adoption in the case state. For instance, in Alaska, the law was approved on June 17, 1996. Thus, media coverage was included from January 1, 1995 (the start of the year prior to policy adoption) through June 17, 1996. For control states, the same period of time was used to select articles as the matched case state. Time periods used for Part 2 data collection can be viewed in Appendix B2.

Although one could make an argument for starting pre-policy coverage earlier (for instance, January 1, 1994), it is less likely this coverage would directly influence the policy process since it appeared much earlier than the time when the law was being considered. Also, starting too early would result in fewer newspapers being available for analysis due to limitations of electronic availability. Other studies have used similar time periods for inclusion of media variables. For instance, in an event history analysis examining agenda setting variables and state adoption of living will laws, Hays & Glick (1997) included the number of articles published about the issue in the previous year.

#### Study population: Newspapers and articles

The selection of newspapers was described earlier in this chapter. For Part 2, the newspaper must have been available electronically for the period of time specified for each state in Appendix B2. Appendix C provides a list of the 76 newspapers that were used for Part 2 of the study. More newspapers were eligible for this part of the study because of the limited period of time specified for data collection. All newspapers were searched using the search terms described earlier in this chapter. All articles retrieved by the terms were reviewed for relevance and eligibility.



### Sample size

The total number of eligible articles collected from the sample of newspapers was 203. All news articles were coded and the data were converted into state-level variables (described later in this chapter) since states were the main unit of analysis for this part of the study. Matched pairs of states (N=12) were the unit of analysis for this part of the study. Although there were 11 case states and 11 control states, New York passed two separate laws at different times, so there were two sets of comparisons for New York and Massachusetts, resulting in 12 pairs instead of 11.

The small sample size meant that limited multivariate analysis could be conducted to control for covariates when comparing news coverage between case and control states. It also meant that the results would be biased toward the null, making it harder to detect any differences even if they did exist. Although a sample size this small did present a problem with respect to analysis, this study was designed to provide an exploratory examination of differences in news coverage and to determine the direction of any detectable differences between case and control states. Most state-level analyses are limited in sample size to begin with, since the population of states is fifty. Thus, all statistics results when comparing the matched pairs of states were examined to note whether any differences did appear as opposed to assessing the statistical significance of those differences.

Since the sample size was predetermined, a power analysis was conducted using information about the sample size and data about the cases and controls to assess what level of power would be achieved. Since the variable concerning 'State role' as the main frame in the article was the most relevant exposure variable considered for analysis, the

calculation used data based on this variable. The power calculation used the equation for matched pair studies provided by Schlesselman (1982) and resulted in a value of .81 for  $z_{\beta}$ , which is equivalent to a power of .80. Thus, there was an 80% chance of detecting a five times increase in news coverage with 'State role' as the main frame for case states as compared to control states (Schlesselman, 1982).

$$z_{\beta} = [ -z_{\alpha}/2 + \sqrt{m(P - 1/2)^2} ] / \sqrt{P/(1 - P)}$$

- $z_{\alpha}$  = 1.96 (for  $\alpha$  level of .05)  
 $m$  = 6 (number of discordant pairs)  
 $P$  = .83 (odds ratio/1+ odds ratio)

### Study design

States passed policies in different years, making a cross-sectional comparison difficult. Studies of agenda setting and media are more common for national policies, where one is examining policy activity and media coverage over time. Analysis of states is more challenging as policy activity varies across states.

One option considered for analyzing the data was time series analysis. Virginia Gray (1976) examined differences between cross-sectional and time series models for looking at state policymaking and concluded that time series analysis provides more accurate estimates regarding the policymaking process at the state level. Another model commonly used is event history analysis (the equivalent of survival analysis), which has been described in great detail with respect to its application to policy change (Box-Steffensmeier & Jones, 1997). This method involves starting in a specified year prior to

when the first state adopted a law, and then, when a state adopts a law, it is coded as having an event for that year and drops out of the analysis for subsequent years.

This method was used in a study of state adoption of living-will laws. Hays and Glick (1997) used event history analysis with a combination of agenda setting and state-specific explanatory variables to determine likelihood of adoption of the law. They found that the model that incorporated both agenda setting and state characteristic variables was the best one for explaining policy adoption, which supports the use of both agenda setting and state variables in this analysis. Berry and Berry (1990) also used this technique when looking at state lottery adoptions. While this model may have been appropriate, it was determined that the small number of states passing laws would have resulted in a very small number of "events" to analyze. In addition, since the adoption of the laws was spread over such a long period of time, and the data collection from news articles was so time-consuming, there were not enough resources to fully examine all media articles that would have been required for conducting an event history analysis. Additional newspapers would have been excluded as well because electronic availability over long periods of time would have been limited.

Some state policy studies have used cross-sectional analysis with logistic regression. Kaskie, Knight & Liebig (2001) used a logistic regression for examining state policymaking with respect to dementia laws, but only looked at laws passed in all states during one particular year. Lambert and McGuire (1990) used a similar model to examine state policymaking regarding mental health insurance, but in their study, the dependent variable was whether a policy had been passed by 1983 or not. These models, though, did not include detailed news coverage variables in their models.

The goal of this study was to compare news coverage prior to policy adoption in states that passed laws with news coverage in states that did not to look for any type of agenda setting effect. Although a simple logistic regression model with a binary dependent variable of policy adoption could have been used for this study, it would have been difficult to compare news coverage between case and control states without matching due to an ambiguous time period of data collection for control states. If a control state did not pass a law, how would one determine when to collect news coverage from that state? This was important since media coverage clearly varied over time according to the results of Part 1.

For this reason, a one-to-one matched case-control study seemed to be an improved way of analyzing the data. Each state that passed a law was matched with a control state that did not pass the law. The news articles were collected from the control state over the same period of time as data collection for its respective case state. Using a matched case-control study allowed for specified time periods for data collection from control states. Otherwise, it would have been more difficult to determine when news articles should have been collected from control states.

### Measures

In addition to the data collected about newspapers and from newspaper articles, described earlier, data were also collected about the states. Because many factors can account for policy adoption, an attempt was made to identify measurable factors that may have played a role in the adoption of screening and training policies. Several studies that have examined policy adoption were reviewed to determine which variables are most

commonly used when assessing likelihood of policy adoption. These variables were then used in regression models as covariates when examining the relationship between news coverage and policy adoption.

Also, since this part of the study used a state-level analysis, data collected from the news articles during the specified time periods was aggregated to provide an overall measure of the news coverage for each state. This process is described in more detail below.

Because states passed policies in different years and this was a cross-sectional comparison, all state-related measures were collected from the year the policy was adopted in each case state except when indicated. For example, since California passed its laws in 1993, all variables used for California and Texas (its control state) were from 1993. Since many of the measures collected may be related to the state population, several measures were either collected as 'per capita' data or were transformed to 'per capita' data by using state population figures for the appropriate year. Each measure used for Part 2 of the study is described below.

Data analysis was conducted using SAS (SAS, 1999) and Stata (Stata, 1999).

#### *News sub-groups*

Groups of articles were created to differentiate between certain types of articles. One sub-set isolated articles that were solely about legislative action (they simply reported on activities of the state legislature). There was also speculation that there might be different types of articles appearing during different parts of the time period for data collection. For instance, were articles that appeared in the year prior to policy adoption

different than articles that appeared during that year? For this reason, variables were created to enable analysis of certain sub-groups of articles (e.g., a sample that excluded articles only about legislative action, a sample that only included articles from the first half of the time period).

*Aggregate news coverage*

A few state policy studies have included media-related variables. Hays and Glick incorporated the number of news articles in their analysis (Hays & Glick, 1997), and Jeon and Haider-Markel (2001) looked at both number of articles and article theme (how the issue of disability was presented). This study made an attempt to include more detailed information about news coverage than had been done previously.

Before creating aggregate measures of news coverage, the sub-group of articles that were only about legislative activity was examined in more detail. Removing these articles seemed to have an impact on key variables about discussion of state role in the articles (results presented in Chapter 4), but it was unlikely that such articles played a major role in agenda setting. For this reason, these articles were not used when creating the aggregate news variables. Removing these articles slightly reduced the number of articles in three case states, and resulted in a total sample size of 190 (see Appendix F).

Categorical variables of interest for the 190 articles were tabulated by state and the relevant percentages were used to create the aggregate news variables. For instance, one hypothesis called for the examination of the 'State role' frame. The resulting percentage of articles from each state that had a value of 1 for this variable (did have

'State role as the main frame) was used to create a new variable which represented the percent of articles for each state where the main frame of the article was 'State role'.

These continuous percentage and average variables were also converted to dichotomous variables. Each variable was examined and split apart into two groups in a way that seemed to capture the main differences between the states. Results from both the continuous and dichotomous versions of the variables are presented in Chapter 4. This group of variables represents the main independent variables of interest in the analysis.

#### *News sample information*

Besides capturing data about the nature of the news coverage, as described above, information was also collected and examined about the sample of articles collected for analysis. Variables were included that measured the number of articles about screening/training from each state included in the analysis (NUMSTAN), the number of articles divided by the number of newspapers used to locate articles for each state (STNARAN), and the number of articles adjusted for state population (NUMSTC).

It was also possible that states with large newspapers having a wider readership, such as the *New York Times*, would have a greater number of articles or a different type of coverage than states without such newspapers. To capture any differences, a variable was created to provide information about the number of newspapers in the sample from each state with a daily circulation of 400,000 or more (NMAJPAP).

*Total number of intimate partner violence stories*

News articles about intimate partner violence that did not mention health care provider training or screening were not included in this study, but it was likely that some articles about other aspects of IPV may have also had the potential to influence policymakers and the policy agenda. For this reason, it was important to compare differences between states regarding the overall number of IPV-related news stories.

To do this, a full text search of all newspapers in the sample was conducted using only the search terms for IPV. Ideally, one would have searched only the headline and lead paragraphs for the total number of intimate partner violence articles to capture those stories that may have had some greater level of influence, but this was not feasible due to the use of the WITHIN connector. A variable was then created to capture the total number of articles located during the specified time period for each state with the IPV terms only (DVSTOR). This number was then divided by the number of newspapers from each state included in the sample to adjust for differences in newspapers used for data collection among the states (DVSTPAP). It is important to note that this number represents articles that were not reviewed for relevance, so many of these stories may not have been about IPV but were still retrieved using the search terms.

Another variable was created to measure the percentage of IPV articles that mentioned screening and/or training. Those stories selected using only the IPV terms could not be reviewed for relevance, as there were thousands of them. For this reason, this variable (PERDV) was constructed by dividing the total number of stories located using the screening and training specific terms (as opposed to those selected for inclusion



in the study after review) by the total number of stories found with the IPV terms. This technique has been used in other studies (Maxwell et al., 2000).

### *Political climate variables*

When examining any type of policy or policy activity, it is important to understand the nature of the political climate and factors related to elections. Other studies examining policy change have included variables that capture political climate in their analytical models (Berry & Berry, 1990; Hays and Glick, 1997; Kaskie, Knight & Liebig, 2001; Lambert & McGuire, 1990; Legge & Nice, 1993; Murphy, 1997). For instance, Backstrom and Robins (1995/96) reported that policymakers addressing AIDS responded that the 'political orientation' of a state was influential when making decisions about AIDS policies.

Three types of data were collected concerning politics in each state (U.S. Census Bureau, Statistical Abstract of the United States, 1996 & 2001). One was the political party representation in each state legislature. The percentage of Democrats in the state legislature was calculated (PERDEMSEL). Another described the political party affiliation of the governor in power (GOVPAR). Whether or not it was an election year for the governor was also included (GOVELECT).

Since IPV is an issue that more commonly affects women, the percentage of women in the state legislature (PERWOM) was also determined (Center for American Women in Politics, 1990-1998). For example, Murphy (1997) found that the percent of women in state legislatures was significantly associated with passage of DV arrest laws.

Another variable that has sometimes been used in policy studies reflects the ideology of the state government was used in this study as well (IDEAL). The measure selected was used by Kaskie et al., (2001) and came from the work of Berry, Ringquist, Fording and Hanson (1998). It incorporated information about the party affiliation of the governor and legislature and the power of each party within the legislature to describe whether a state was liberal or conservative.

A final political measure used captured “innovativeness” of the states. Scholars in the political science field have developed measures to reflect the likelihood that states will make reforms or adopt new policies. Such scores are based on an examination of policy adoption activity over time and are often used in studies of state policymaking (Lambert & McGuire, 1990; Legge & Nice, 1993). One measure commonly used is that created by Walker (1969) and another is that of Robert Savage (1978). The Savage scores, which examined more recent policymaking activity from 1930 to 1970, were used for this analysis (INNOV). A higher score suggests that a state is more likely to adopt innovative policies before other states. Carter and Laplant (1997) examined adoption of eight health care policies to create “innovativeness” scores that were specific to health care policy. This second set of innovation scores were also added to the analysis for this study (HLTHIN).

#### *Socio-economic variables*

Two main socio-economic measures that have been used in other state policy studies were included in the analysis (Berry & Berry, 1990; Hill, 2000; Kaskie et al., 2001; Lambert & McGuire, 1990; Legge & Nice, 1993). One was per capita income

(CAPINC) (U.S. Bureau of Economic Analysis, 2003). Another was the percent of state population living in a metropolitan area (METRO) (U.S. Census Bureau, Statistical Abstract of the United States, 1996/1999/2000). It is not certain if such variables would influence policymaking around IPV, but these variables could serve as indicators of other factors that could be involved but not measured in the model.

#### *Media exposure variables*

Since this study involved the assessment of news coverage for each state, it was also important to compare media penetration for each state. Even though newspaper articles were the focus of this study, it was important to capture general media exposure for each state, so data regarding televisions and radio stations were collected as well.

The percentage of households with televisions (TVHOUSE) was obtained from the United States TV Household Estimates (Nielsen Media Research, 1990-1998). These figures were almost identical for all states with most states reporting that 95% to 99% of households had televisions. The number of radio stations in the state was obtained from the Gale Directory and was adjusted using the state population to obtain the number of radio stations per capita (RADIOC) (Gale Research, 1990-1998). With the growth of Internet use and increased ability to get news online, the percent of households with Internet access (INTACCSC) was also obtained (U.S. Census Bureau, Statistical Abstract of the United States, 2002). 1998 statistics were used for all states since that was the only year available. With respect to newspapers, statistics regarding the number of daily newspapers published in the state (NUMPAP) and the daily newspaper circulation per

1,000 population (STCIRC) were obtained from the Statistical Abstracts of the United States (U.S. Census Bureau, Statistical Abstract of the United States, 1992-1999).

*State health care variables*

Since the issue being studied was relevant to the health care community, information concerning health care in each state was collected as has been done in other studies examining health care policies (Kaskie et al., 2001; Lambert & McGuire, 1990). Also, Backstrom and Robins (1995/96) reported that state medical and hospital associations were somewhat influential when making policy related to AIDS.

The number of active physicians (ACTMD) and the number of active nurses per 100,000 population (ACTNRS) were obtained in order to assess the number of practitioners in the state (U.S. Census Bureau, Statistical Abstract of the United States, 1996-2000). These statistics were available beginning in 1994. In part, these data can serve as a proxy measure for the influence of these groups on policymaking (Lambert & McGuire, 1990).

Since hospitals play an important role in provider training and screening and are the site of many programs related to this issue, the number of hospital beds per 1,000 (HOSBEDS) was included. Finally, since emergency departments are commonly discussed with respect to provider training and screening, the number of emergency departments per 1,000 (ERDEPTSC) as well as the number of emergency room visits per 1,000 (ERVISITS) were considered to be important data as well to measure the activity of ERs around the state. Statistics regarding hospitals were collected from annual reports of the American Hospital Association (American Hospital Association, 1991-2000).

### *Advocacy variables*

Other policy studies included measures to capture advocacy activity (Kaskie et al., 2001; Lambert & McGuire, 1990; Murphy, 1997). There was little information readily available, but some measures were collected to try to approximate the level of activity around IPV.

The number of full-time staff at state domestic violence coalitions (NUMFTADV) was listed for 1994-95 by the Centers for Disease Control (CDC website, 1995). These data were adjusted by state population and included in the analysis because they provided some assessment of the level of advocacy activity in the state. Since this was the only time period available, the same year was used for all states. Also, the number of domestic violence shelter beds per woman in the state was obtained for the fiscal year 1999 to 2000 (NSHBEDC). Data were obtained from the National Directory of Domestic Violence Programs and since these data were not available every year, the same year was used for all states (NCADV, 1999). In addition, the Family Violence Prevention Fund has been conducting campaigns targeted at improving the health care response in certain states around the country beginning in 1995 (FVPPF, 2003). Each state was coded as Yes/No to indicate whether or not they were part of the campaign (FVPPF1).

### *State intimate partner violence measure*

Other studies have examined variables relevant to the policy issue being examined (Hill, 2000; Legge & Nice, 1993). For instance, Legge & Nice, when looking at state adoption of mandatory seat belt laws, included variables related to traffic safety such as traffic fatality and injury rates, highway mileage, vehicle miles, and alcohol

consumption data.

No data were readily available concerning rates of intimate partner violence at the state level for the years needed for this analysis. Still, this was an important measure to include given the nature of the policies being examined. Since the measure was intended to provide a comparison between states as opposed to an absolute measure of IPV, a "proxy" measure was developed to attempt to capture possible differences in IPV across the states.

Statistics have shown that women are more likely to be killed by intimate partners than men. Three out of four intimate partner homicide victims were women in 1998 (Rennison & Welchans, 2000), and one of three female homicides were linked to intimate partners for the years 1981 through 1998 (Paulozzi, Saltzman, Thompson, & Holmgreen, 2001). Using WISQARS data from the Centers for Disease Control (WISQARS, 2003), data were obtained for the number of homicides for both men and women ages 20 to 45 for each state. The rate of women killed per state population was obtained (FHOMRT). A second variable was created where a ratio was calculated of female to male homicides (HOMRAT). The ratio measure was used to account for variations across states, as some states might have greater numbers of homicides in general. Both variables were examined as "proxy" measures for intimate partner violence homicide rates.

Although the use of these proxy measures was imperfect, after the analysis had been completed, a source of data was located that provided state rates of intimate partner homicide per 100,000 population for white females (Paulozzi et al., 2001). Analysis was then conducted to examine the differences between case and control states with respect to this measure. The resulting p-value from paired t-tests was .84, similar to the values of

.72 and .73 that were obtained when comparing the two measures described above. This suggested that either the above variables were reasonable proxy measures, or that none of the measures were different when comparing case and control states.

Statistical analysis

A list of variables used for this part can be found in Appendix E. The analysis plan for Part 2 is detailed below in Figure 4.

**Figure 4: Analysis plan for Part 2**

<b>AIM 2: To compare news coverage of intimate partner violence health policy with state policy adoption status</b>			
<b>#</b>	<b>Hypotheses</b>	<b>Key Variables</b>	<b>Analysis (Results)</b>
2.1	Compared with control states, case states are more likely to have coverage that is thematic (focused on discussion of issues) than mixed or episodic (focused on personal stories/events).	Y=CASE (0/1) X <sub>1</sub> =STEPHG (Dichotomous)	Conditional logistic regression  (NA)
2.2	Compared with control states, case states are more likely to have a higher number of pro-policy editorials than con-policy editorials.	Y=CASE (0/1) X <sub>1</sub> =APOSIT (Dichotomous)	Conditional logistic regression  (NA)
2.3	Compared with control states, case states are more likely to have articles with a higher influence measure.	Y=CASE (0/1) X <sub>1</sub> =STINFG (Dichotomous)	Conditional logistic regression  (TABLE 23)
2.4	Compared with control states, case states are more likely to have articles with a higher prominence measure.	Y=CASE (0/1) X <sub>1</sub> =STPRMG (Dichotomous)	Conditional logistic regression  (TABLE 24)
2.5	Compared with control states, case states are more likely to have articles with 'State role' as the main frame.	Y=CASE (0/1) X <sub>1</sub> =STFRMST (Dichotomous)	Conditional logistic regression  (TABLE 25)



### *Descriptive statistics*

The first stage of data analysis involved calculating descriptive statistics for each variable collected from the content analysis. All variables were examined to identify any errors in data entry (mistakes or missing data). Statistics were generated for the individual article-level data. As described earlier, these statistics were then converted into aggregate state-level measures. These variables, which were percentages or averages, were then examined looking at means, medians and ranges. The frequencies of the dichotomous versions were examined as well.

Means, medians and ranges were also examined for the state level measures, which were also mostly continuous. State level categorical variables were examined by looking at frequencies.

### *Bivariate relationships*

Contingency tables were constructed to examine differences in news coverage between case and control states using the article level of data where each variable from the codebook was examined.

For unmatched case and control state comparisons, Chi-square statistics were calculated and assessed to detect statistically significant differences by comparing all categorical variables to the CASE variable (0=control/1=case). As with Part 1, when there were fewer than 5 observations in cells, Fisher's exact test was used to assess whether the groups were significantly different or not (Stokes et al., 2000).

Then, contingency tables were developed to examine differences between matched pairs of case and control states for the categorical state-level variables.

McNemar's test was used to examine comparisons between matched case-control pairs for dichotomous variables. This statistic is a test for homogeneity and is similar to that of asymptotic conditional tests (Newman, 2001). To conduct this test, dichotomous variables were converted to sets of responses according to whether the data came from a case or control state. This test was similar to Chi-square tests, but analyzed discordant responses of pairs as opposed to individual cell counts (Stokes et al., 2000). Although this test offered an improvement over Chi-square for analyzing matched pairs, it only examined similarity of pair responses and did not account for the specific matched pairs.

T-tests were used to examine differences between unmatched case and control states for the continuous variables for both article level and state level variables. To compare differences for matched pairs, paired t-tests were used to assess whether the means of the variables were significantly different.

#### *Conditional logistic regression*

Simple and multivariate logistic regression models were used to explore the association between news coverage measures and the case variable. Because of a small number of observations, few variables could be incorporated into the multivariate models, but analysis was conducted to determine whether any covariates were influential in adjusting the relationship between the dependent case variable and the main independent variable measuring news coverage (Hosmer & Lemeshow, 2000).

Standard logistic regression models were not used because, as Allison (1999) points out, an issue with matched analyses is that the assumption of independence is violated and could lead to a bias in estimates of the standard error. For this reason,

conditional logistic regression is an improvement over standard logistic regression when analyzing a data set consisting of matched pairs. This form of logistic regression uses maximum likelihood estimation to estimate the conditional log-likelihood, which results in estimates for the parameters that most closely agree with the observed data (Hosmer & Lemeshow, 2000).

The following conditional likelihood model was taken from class notes (Zeger, Biostatistics, 2000) and Hosmer & Lemeshow (2000, 226-227). The model was designed to identify which explanatory variables were associated with policy adoption, or the probability that the case variable was equal to one ( $Y=1$ ). Conditional logistic regression does not measure intercepts so there is no constant in the model. The response variable was CASE, with a value of 1 for cases and 0 for controls. For this study, there were twelve strata, each with one case and one control. The following conditional logistic regression model was used for analysis.

$$l_k(\mathbf{B}) (Y=1) = \frac{e^{\mathbf{B}'x_{1k}}}{e^{\mathbf{B}'x_{1k}} + e^{\mathbf{B}'x_{0k}}}$$

$x_{1k}$  = case

$x_{0k}$  = control

$k$  = strata

This conditional logistic regression did not measure the probability of  $Y$  being 1, since there was a set number of cases and controls. Instead, the model measured the probability of covariate values to assess the relationship between the covariates and case

(Hosmer & Lemeshow, 2000). In other words, the model indicated the log odds that  $Y=1$  (was a case) as a function of the explanatory variables. Thus, for interpretation of the conditional logistic model,  $e^{\beta_j}$  was equal to the relative odds of being a case ( $Y=1$ ) for a one unit increase in  $X_j$  holding other covariates constant.

When conducting analysis of matched-pairs, the association between case status and exposure is calculated only through information provided by discordant pairs (Schlesselman, 1982). A discordant pair occurred when either a case or control state was exposed to the variable of interest but the matched case/control state was not. For this reason, the estimator was undefined in the regression model when there were no discordant pairs (Hosmer & Lemeshow, 2000). The numbers of discordant pairs for each model are presented in the results tables in Chapter 4.

In order to achieve the most parsimonious model (fewest number of explanatory variables), each independent variable was compared with the CASE variable (described above) to look for significant associations among bivariate relationships. In addition, simple conditional logistic regressions were conducted to examine the relationship between each covariate with the case variable while accounting for matching. Variables with a  $p$ -value of less than .35 were initially included in multivariate models, slightly higher than the cut-off of .25 recommended by Hosmer and Lemeshow (2000, 95). This was done because having such a small sample size reduced the probability that significant  $p$ -values would result in the bivariate analyses.

The SAS PHREG procedure was used to estimate the model (SAS, 1999), with a STRATA statement that included the ID variable to identify the matched pairs.  $P$ -values of less than .05 for a coefficient generally indicate which variables had a significant

relationship with the outcome variable. Again, due to the small number of observations, variables with larger p-values were generally considered to be eligible for further testing.

Variables were also assessed to identify potential multicollinearity as this can cause problems with interpreting estimates from the model (Chriqui, 2000; Munro, 2001). This was done by running a linear regression model and examining the Variance Inflation Factors (VIFs). VIF scores should be as close to 1 as possible to indicate that the variable is not highly correlated with any of the other independent variables. Also, as Hosmer and Lemeshow (2000) state, extremely large standard errors also suggest there is a problem with the covariates and can indicate both 0 cell counts as well as collinearity issues. In addition to examining VIF scores, standard errors were also examined throughout model building.

Models with fewer variables were compared with extended models using the likelihood ratio test. A difference in the log likelihood with a p-value of greater than .05 indicated that the model with fewer variables was as adequate (explains as much of the variance) as the extended model. Generally, when conducting logistic regressions, continuous variables are compared to the logit on a graph to look for linear trends (Hosmer & Lemeshow, 2000). Each continuous variable was examined using locally weighted scatterplot smoothing. Interactions terms between covariates are usually examined, but given the small number of observations, interaction terms were not included in the models. The Pearson Chi-square statistic was examined to assess model fit (whether there was an overall significant relationship between the dependent and independent variables) (Hosmer & Lemeshow, 2000).

## CHAPTER 4: RESULTS

Because each part of the study used a different sample, this chapter is separated into two sections. The first section will provide a description of results for Part 1 of the study, which examined the nature of coverage in general as well as looking at changes in coverage over time. Because this part of the study was to collect mostly descriptive data, tables presenting information on the data collected will be presented first, with hypothesis testing presented later in the section. The second section will present findings from Part 2 of the study, which compared news coverage prior to policy adoption between states that did adopt training and screening policies with matched control states that did not. As a reminder, descriptions of the samples for both parts of the study are provided in Appendix B1 and B2.

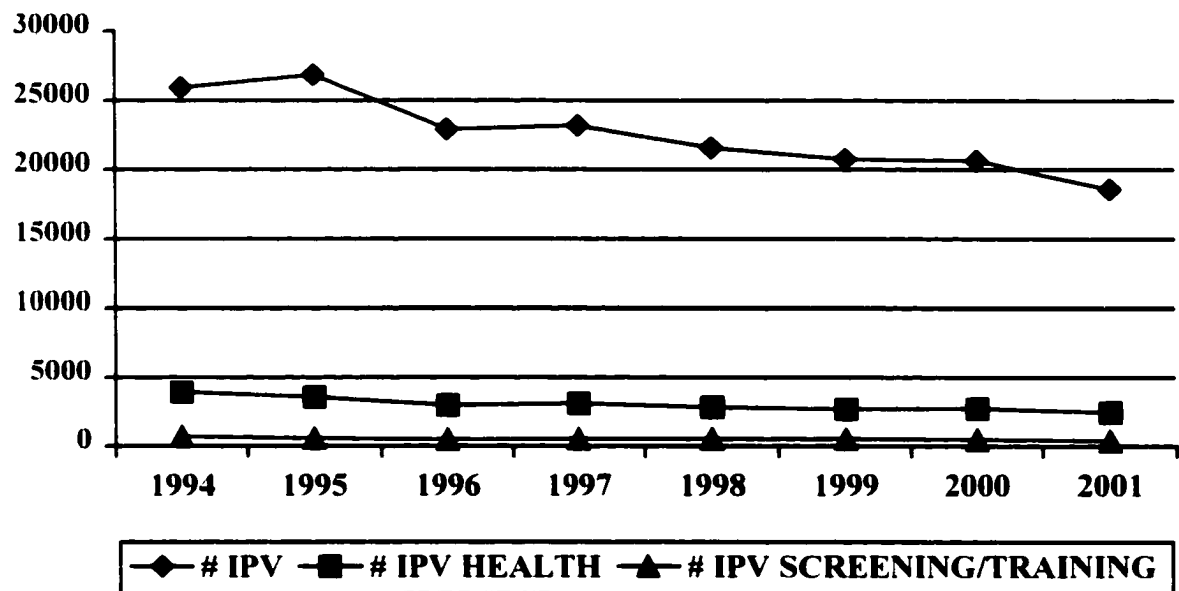
### **Results: Part 1**

The first figure (Figure 5) presents information about the number of articles retrieved over time using the search terms detailed in Chapter 3. The ‘# IPV’ articles represents the total number of articles retrieved from all twenty states for each year when using only the IPV related search terms (the first line of terms). The ‘# IPV HEALTH’ articles are articles that were retrieved using both the IPV and the health-related terms (lines 1 and 2 of the terms). The ‘# IPV SCREENING/TRAINING’ articles includes those articles that were retrieved using the entire set of search terms. This figure represents the total number of screening and training articles retrieved prior to exclusion based on eligibility criteria to enable more accurate comparisons with the other two

groups of articles.

The figure indicates that there was a general decline in all three groups of articles from 1994 through 2001. It also illustrates that a small percentage of all IPV articles were located with the general health and IPV terms, and an even smaller number of articles were retrieved when searching for articles specifically about provider training and/or screening.

**Figure 5: Total # of unreviewed articles retrieved by year from 1994-2001 using general vs. specific search terms (59 newspapers from 20 states)**



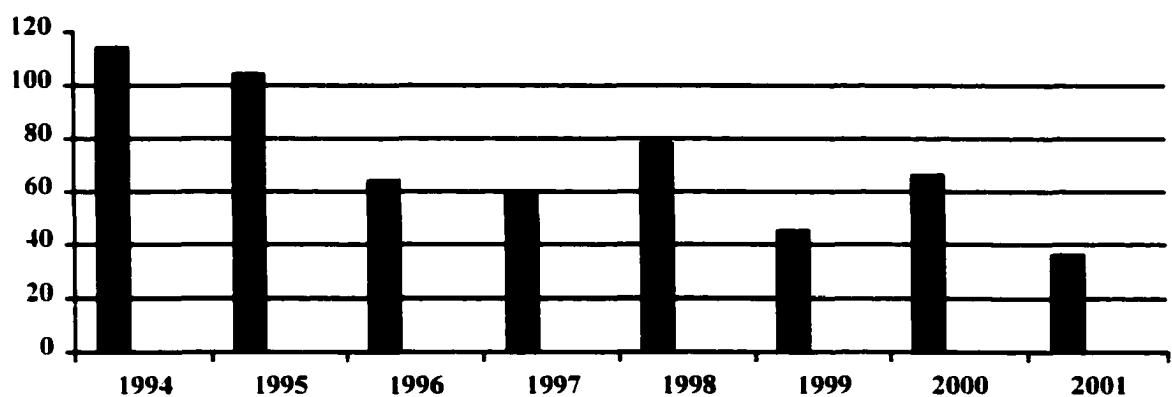
Descriptive data: Article population

The next two figures help to describe the total population of articles collected for Part 1 of the study. These figures include the 567 articles selected for inclusion in the study after all articles selected by the search terms were reviewed for relevance and exclusion criteria. Figure 6 depicts the number of articles located for each year included

in the study. This figure includes all articles and suggests a downward trend over time in the number of articles about health care provider training and screening.

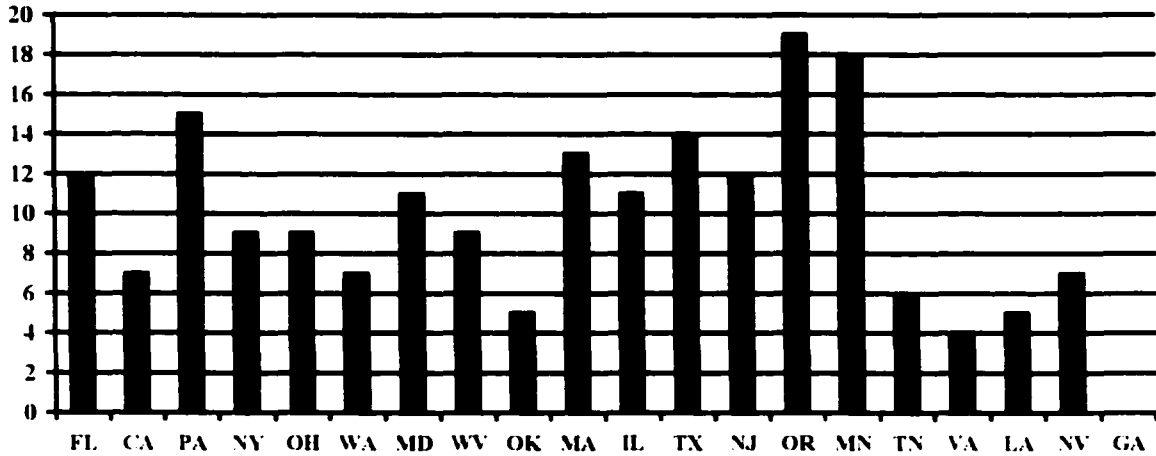
With respect to which states seemed to have the greatest coverage of the issue, the highest number of articles was found in Florida (61) followed by California and Massachusetts (51 for each). Because the number of newspapers searched for articles differed by state, Figure 7 depicts the number of news articles divided by the number of articles retrieved for each state. Comparing this ratio resulted in a different answer about how the coverage varied by state. Oregon had the greatest number of articles per newspaper ( $19/1=19$ ) while Minnesota came in second ( $18/1=18$ ) followed by Pennsylvania ( $46/3=15$ ). The states that had the overall highest number of articles seemed to have less coverage when adjusting that number to account for the number of newspapers. For instance, there were a total of 61 articles located in Florida over the year 1994 through 2001. When sixty-one is divided by five (the number of newspapers searched for articles in Florida), the resulting number is twelve, which is listed in the graph.

**Figure 6: Frequency over time of the population of news articles from 1994-2001 after reviewing all retrieved articles for relevance and eligibility criteria (59 newspapers from 20 states, N=567)**





**Figure 7: Ratio of # news articles in the population/# newspapers by state from 1994-2001 after reviewing all retrieved articles for relevance and eligibility criteria (59 newspapers from 20 states, N=567)**



Descriptive data: Article sample

As discussed in Chapter 3, a random sample of articles was selected from the population of 567 articles for coding. Thus, the number of articles coded for Part I of the study was 188. All 188 articles were read by one or more coders and the initial set of questions in the codebook were answered (through question 14). Almost half of these articles (81) were primarily about screening/training and were coded all the way through.

Table 3 presents descriptive data for the all articles coded for Part I. A majority of articles were news articles (81%) as opposed to editorial or other types of articles, and half were written by newspaper staff (51%). Very few articles were located on the front page of the newspaper (5%) or the front page of another newspaper section (18%). The mean number of words per article was 678 with a minimum of 65 and a maximum number of words of 4195 (SD= 495). At approximately 50 words to a column inch, the average number of inches was 13.6, about the size of a typical news article.

Two variables assessed how much of the article was focused on the issue. One question asked about the percentage of the article dedicated to a discussion of intimate partner violence in general. Most articles were coded as having a majority of the article focused on intimate partner violence (80%). Only 28% of articles were mostly about health care provider training and/or screening, while in 16% of articles, about half of the article discussed the topic. In over half of the articles (56%, 105/188), there was only a brief mention of the issue; these articles were not fully coded.

The main topic of the article was examined in two different ways. The first grouping separated out different issues related to IPV and provided a breakdown of the actual substantive issue discussed. About 1/3 of the 188 articles were primarily about an issue related to health care provider screening and/or training. This could have included an article about a research study or program related to the issue. Twenty-nine percent of articles were about another IPV issue (such as a legal intervention or a conference), and ten percent focused on some aspect of IPV and health (for instance, a research study that focused on injuries from IPV). The 'Other' category included articles about topics such as medical education and women's health.

The second topic group split the articles based on what journalists call the "news peg", which is the event or activity that makes the story relevant (Gans, 1979). Twenty-three percent of articles were classified as some type of feature story about IPV as opposed to covering a particular event. Fifteen percent of articles were written to discuss a particular program, such as a new hotline or shelter, and twelve percent of articles focused on presenting a government report or other activity, such as the creation of a task force. Coverage of research studies only accounted for eight percent of the articles.

**Table 3: Characteristics of all coded news articles in the random sample from 1994-2001 (59 newspapers from 20 states, n=188)**

<b>VARIABLE</b>	<b>%</b>	<b>(#)</b>
<i>News article source</i>		
Newspaper staff	51%	(96)
Non-staff/other	23%	(43)
Not sure	26%	(49)
<i>News article type</i>		
News	81%	(153)
Editorial/opinion	12%	(22)
Other/Not sure	7%	(13)
<i>Newspaper section</i>		
Local/state	34%	(63)
Living/Features	11%	(21)
Editorial	9%	(16)
Health	4%	(7)
News/Other/Not sure	42%	(81)
<i>News article location</i>		
Front page of first section	5%	(10)
Front page of another section	18%	(34)
Other	68%	(127)
Not sure	9%	(17)
<i>Number of words in article</i>		
1 to 299	16%	(31)
300 to 599	39%	(74)
600 to 999	28%	(52)
1000 or more	16%	(31)
<i>Journalist gender</i>		
Female	44%	(82)
Male	15%	(28)
Unknown/Not sure	41%	(78)
<i>% article about DV</i>		
Majority of article	80%	(151)
About half of article	4%	(7)
Brief mention	16%	(30)

**Table 3: continued**

<b>VARIABLE</b>	<b>%</b>	<b>(#)</b>
<i>% article about IPV screening/training</i>		
Majority of article	28%	(53)
About half of article	16%	(30)
Brief mention	56%	(105)
<i>Main topic of article: grouping 1</i>		
IPV and training/screening	31%	(58)
Other IPV	29%	(55)
IPV and health	10%	(18)
Government response	10%	(18)
Medicare care/women's health	6%	(11)
Other	14%	(28)
<i>Main topic of article: grouping 2</i>		
General IPV topic	23%	(43)
Specific program	15%	(29)
Government response/report	12%	(23)
Conference/seminar	12%	(22)
Research study	8%	(15)
Other	30%	(56)

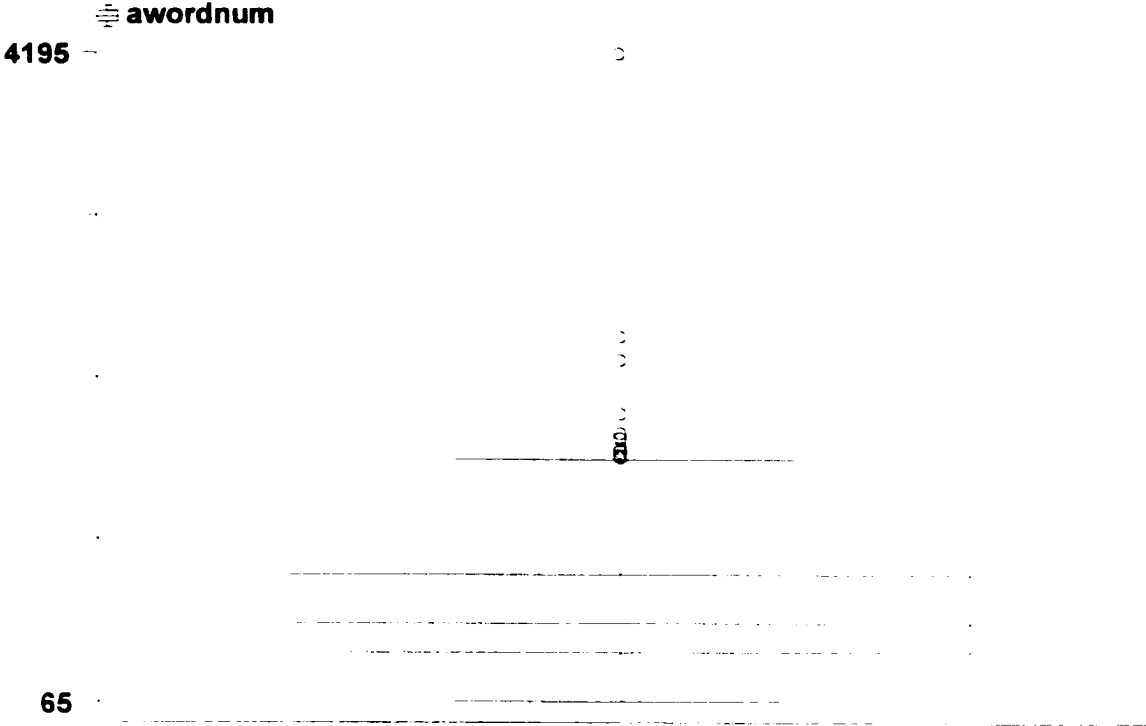
Table 4 presents the results for the three continuous variables from the articles coded for Part 1 of the study, and Figures 8 through 10 display box plots for each of the variables. Nine was the maximum prominence score possible based on the way the variable was created. This value would mean the article was on the front page of a section, was in the group with the highest number of words, had a photograph, and had a chart or text box. The mean score of 3.7 suggests that most articles had an average number of words and were not located on the front page of a section. Articles with higher scores were most likely on a front page or were accompanied with some type of graphic.

The influence score could have been as much as sixteen before adjusting for newspaper circulation. The range of values observed was one to twelve. This score was then multiplied by the newspaper circulation/100,000. This adjustment accounted for the exposure the article was likely to get based on the number of newspapers available to readers. Articles with scores greater than twelve, then, typically appeared in a newspaper with a circulation greater than 100,000. The average article generally had an initial score of 5 or 6 and tended to appear in a larger newspaper (circulation 200,000 to 400,000).

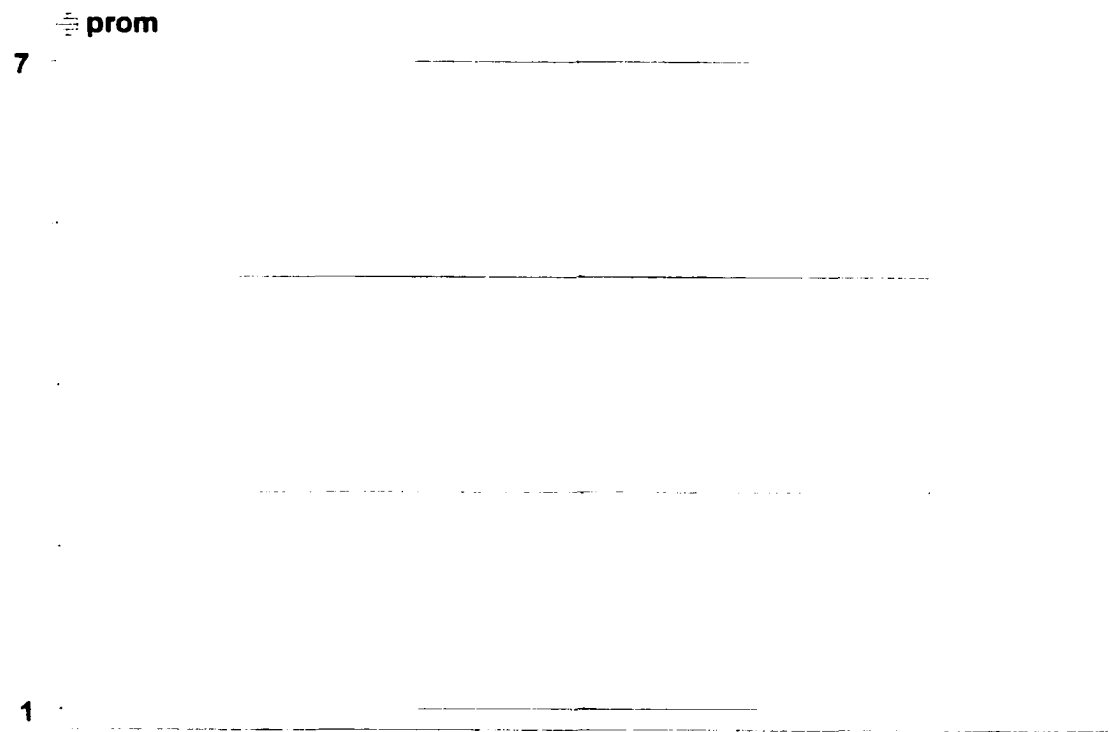
**Table 4: Continuous variables for articles from 1994-2001 (59 newspapers from 20 states, n=188)**

<b>CONTINUOUS VARIABLES</b>	<b>Mean</b>	<b>Minimum</b>	<b>Maximum</b>
Average number of words in article	678	65	4195
Average prominence score	3.7	1.0	7.0
Average influence score	17.2	1.1	120.7

**Figure 8: Box plot for number of words for articles from 1994-2001 (59 newspapers from 20 states, n=188)**



**Figure 9: Box plot for prominence score for articles from 1994-2001 (59 newspapers from 20 states, n=188)**



**Figure 10: Box plot for influence score for articles from 1994-2001 (59 newspapers from 20 states, n=188)**

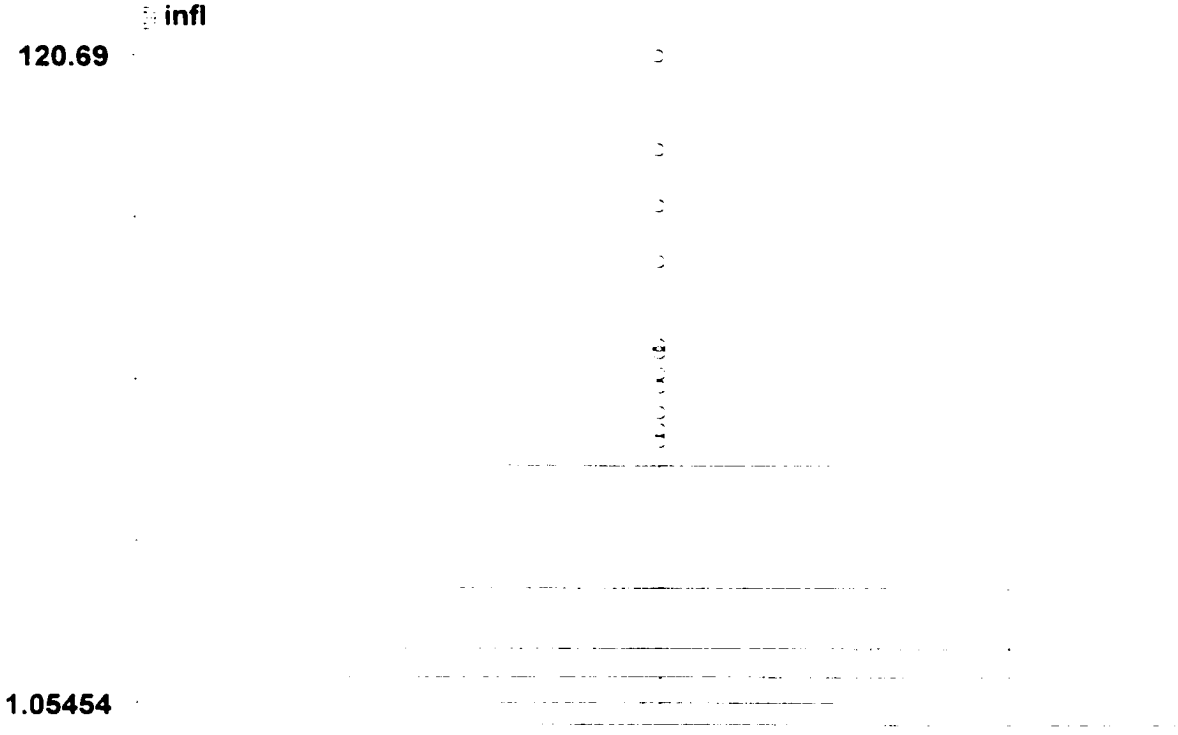




Table 5 presents the variables that describe the sample of news articles that were coded in their entirety (n=81). Of these articles, about a third (31%) had headlines that specifically mentioned the issue of health care provider training and/or screening, while about half (53%) did not even mention anything about the issue of even IPV and health in general. Only 14% of the articles had a photograph, while 10% had a chart, graph or text box.

Over half of articles (65%) presented data of some type related to intimate partner violence. Almost all articles (90%) discuss how the provider should play a role with respect to screening and/or training. About a third of articles (31%) mentioned how facilities such as hospitals or HMOs should be involved in addressing the issue, while a third of articles (32%) also brought up the state's role related to the issue.

Besides health care provider screening and training, there have been some other policies related to IPV and health care that have been covered in the news. One is insurance discrimination and another is mandatory reporting. Since screening and training could both be related to these issues, two questions asked about whether or not these other policies were mentioned or discussed in the articles. Only 10% of the 81 articles also mentioned insurance discrimination. Slightly more discussed mandatory reporting (22%, 18/81). Six of the eighteen articles that mentioned mandatory reporting were located in states with mandatory reporting laws (Houry et al., 2002).

Variables designed to capture positions of the articles as well as the level of controversy about the issue revealed little variation among the articles. Very few articles (9%, 7/81) had any type of debate about whether screening and training should occur, and

the reader got the impression that providers should be trained/screen patients in 89% of articles.

Frames were coded for eighty-one articles. The most common article frame was one that focused on discussing the role of health care providers in addressing IPV (‘Provider role’). Examples of these articles include stories about health care providers who thought it was important to ask patients about abuse, or guidelines issued for providers with respect to asking patients about IPV. ‘State role’ (discussion of state efforts to address IPV) and ‘Survey says’ (about research studies) were then next most common frames (twenty percent of articles for each one), followed by ‘Facility role’ (fourteen percent). ‘State role’ was usually selected for articles about state efforts or policies related to screening and training, or articles focusing on the Family Violence Prevention Fund report card results (7/81, 9%). Articles coded with ‘Survey says’ were those that featured results of a research study. Those articles in the category of ‘Facility role’ generally focused on specific hospital programs or initiatives. The rest of the articles were coded using a variety of other frame categories.

**Table 5: Characteristics of fully coded news articles from 1994-2001 (59 newspapers from 20 states, n=81)**

<b>VARIABLE</b>	<b>%</b>	<b>(#)</b>
<b>Headline mentions issue</b>		
Yes, screening and training	31%	(25)
Yes, DV ad health	16%	(13)
No	53%	(43)
<b>Article has photo</b>		
Yes	14%	(11)
<b>Article has chart/text box</b>		
Yes	10%	(8)
<b>Article mentions insurance discrimination</b>		
Yes	10%	(8)
<b>Article mentions mandatory reporting</b>		
Yes	22%	(18)
<b>Article discusses role of provider</b>		
Yes	90%	(73)
<b>Article discusses role of health facilities</b>		
Yes	31%	(25)
<b>Article discusses role of state</b>		
Yes	32%	(26)
<b>Article presents data/statistics</b>		
Yes	65%	(53)
<b>Reader impression about the issue</b>		
Positive	89%	(72)
Negative	0%	(0)
Not enough information/not sure	11%	(9)
<b>Article position about the issue</b>		
Positive	12%	(10)
Neutral (all news articles)	88%	(71)
Negative	0%	(0)
<b>Debate/controversy present in article</b>		
Yes	9%	(7)

**Table 5: continued**

<b>VARIABLE</b>	<b>%</b>	<b>(#)</b>
<b>Episodic vs. thematic coverage</b>		
Episodic	0%	(0)
Mixed	32%	(26)
Thematic	68%	(55)
<b>Arguments about issue present in article</b>		
Yes	91%	(74)
<b>Main frame of article</b>		
Provider role	22%	(18)
State role	20%	(16)
Facility role	14%	(11)
Survey says	20%	(16)
Get involved	10%	(8)
Child safety	6%	(5)
No frame	5%	(4)
Other	4%	(3)

Since sources were only coded for news articles (not editorials or other types of articles), there were 70 articles that are represented in the following two tables. With respect to source use, Table 6 shows how often each type of source appeared in the articles by showing the percentage of articles where the source type appeared at least once. In some cases, a source type appeared more than once (for instance, two different health care providers were used as sources), but that is not captured here. Sources not easily categorized, or categories with very few sources, were combined into 'Other', which represented almost half of the articles (46%). After that, types of sources that appeared most often were research studies (44%), people representing domestic violence agencies (44%), and health care providers (31%). The average number of sources used

per article was 3.5. The minimum number of sources used in any article was 0, while the most number of sources identified was 12.

**Table 6: Characteristics of sources appearing in fully coded news articles from 1994-2001 (59 newspapers from 20 states, n=70)**

<b>SOURCE TYPE</b>	<b>% ARTICLES WITH SOURCE TYPE APPEARING AT LEAST ONCE</b>
<b>Research study</b>	44% (31)
<b>IPV agency/advocate</b>	44% (31)
<b>Health provider/health facility</b>	31% (22)
<b>Law agency/law enforcement/DA</b>	20% (14)
<b>State agency/elected official</b>	17% (12)
<b>Health organization (eg. AMA)</b>	17% (12)
<b>IPV victim</b>	13% (9)
<b>Federal agency</b>	6% (4)
<b>Local/county government</b>	6% (4)
<b>Other(a)</b>	46% (32)

(a) includes categories such as: IPV task force, insurance association, city officials, federal government personnel or agencies, and not sure

Table 7 shows the bivariate relationships between the types of sources appearing in the articles and the main frame of the article. The percentages represent the percent of articles with each frame that had that particular source appearing at least once. For example, 53% of articles with 'Provider role' frame had a health care provider affiliated source appearing at least once in the article. No hypotheses were developed with respect to this relationship since a more in-depth journalistic study would be needed to truly understand how the sources and frames are inter-related. For instance, it is difficult to assess whether the use of certain types of sources lead to the way the issue gets framed, or if the sources were contacted based on the topic of the story.

Looking at Table 7, some relationships are self-explanatory. For example, 100% of articles with the main frame of 'Survey Says' had a research study appearing at least once in the article. Some other relationships, though, are more interesting. Articles with the 'Provider role' frame are more likely to include sources from health professional organizations such as the American Medical Association ( $p = .03$ ), and academic sources ( $p = .02$ ), than other frames. Sources most commonly appearing in articles with 'State role' frame are agencies or organizations related to domestic violence (79%). Research studies are more likely to appear in articles with 'State role' frame than with 'Provider role' or 'Facility role' frames. Health care providers are most likely to appear in articles with 'Provider role' or 'Facility role' frames ( $p = .02$ ). An interesting finding was that victims of IPV were used less often than other types of sources in articles of all frame types.

**Table 7: Percent of fully coded articles with source type listed for each main frame of the article from 1994-2001 (59 newspapers from 20 states, n=70 articles)**

SOURCE TYPE	ARTICLE MAIN FRAME				
	Provider role (n=18)	Facility role (n=11)	State role (n=16)	Survey says (n=16)	Other (n=20)
<b>Providers* (n=27)</b>	10 63%	5 56%	2 14%	3 19%	7 47%
<b>Health organization* (n=13)</b>	7 44%	2 22%	0 0%	2 13%	2 13%
<b>IPV victim (n=9)</b>	3 19%	2 22%	1 7%	2 13%	1 7%
<b>IPV advocate/agency (n=33)</b>	8 50%	2 22%	11 79%	7 44%	5 33%
<b>State source* (n=13)</b>	0 0%	0 0%	7 50%	2 13%	4 27%
<b>Researcher/study*** (n=30)</b>	1 6%	2 22%	5 36%	16 100%	6 40%
<b>Law related source (n=14)</b>	2 13%	1 11%	3 21%	3 19%	5 33%
<b>Academic source* (n=10)</b>	6 38%	2 22%	0 0%	1 6%	1 7%
<b>Other (n=27)</b>	8 50%	5 56%	4 29%	5 31%	5 33%

\*p ≤ .05    \*\*p ≤ .001    \*\*\*p ≤ .0001

Note: The p-value assesses the relationship between the source type yes/no variable across the different frames. For example, the first row assesses whether health care providers were more likely to appear in articles with one frame than another.

Since one of the goals of looking at news coverage was to determine whether or not the issue of health care provider screening and/or training gets discussed as an issue relevant for the state, Table 8 provides a cross-tabulation to examine what characteristics were associated with whether or not the article discussed a state.

Twenty-seven of the eighty-one articles mentioned some aspects of state involvement with health care provider screening and/or training. One of the interesting differences between articles where state role was mentioned was related to the article topic. One would expect that significantly more articles that discussed state role with respect to screening and/or training would be mostly about the issue. More articles that mentioned state role were about the issue (59% vs. 41%), but this difference was not statistically significant ( $p = .75$ ). A similar difference was found with whether the article was mostly about IPV or not- 93% of articles mentioning state role were mostly about IPV as opposed to 100% of articles that did not mention state role ( $p = .04$ ).

Articles that discussed state role were more likely to also mention other types of health care policies related to IPV. Articles where state role was mentioned were also more likely to discuss insurance discrimination (30% vs. 0%,  $p < .0001$ ) and mandatory reporting (44% vs. 11%,  $p = .007$ ) than articles with no mention of state role.

Another interesting note is that when state role was discussed, articles were *less* likely to also mention provider role (78% vs. 94%,  $p = .02$ ), suggesting that although almost all articles did mention the role of health care providers, articles that discussed state initiatives were the ones least likely to discuss the role of individual providers. Finally, as can be expected, many more articles that mentioned state role were coded as



having a main frame of 'State role' as compared to articles that did not mention state role (59% vs. 0%,  $p < .0001$ ).

There were no differences in the means of the three continuous variables (number of words, prominence score, and influence score) between articles mentioning state role and articles not mentioning state role.

**Table 8: Variables for fully coded articles vs. state role from 1994-2001: Chi-square test (59 newspapers from 20 states, n=81)**

VARIABLE	ARTICLE MENTIONS STATE ROLE	
	Yes (n=27)	No (n=54)
<b>Article source</b>		
Newspaper staff	52%	56%
Non-staff/other	26%	26%
Don't know	22%	19%
<b>Article type</b>		
News	96%	83%
Editorial/Other/Don't know	4%	17%
<b>Article location</b>		
Front page of a section	15%	24%
Other/unknown	85%	76%
<b>Article section</b>		
State or local	44%	28%
Living/features	4%	15%
Editorial	4%	7%
Other/unknown	48%	50%
<b>Article word count</b>		
1-299 words	11%	19%
300-599 words	48%	39%
600-999 words	33%	26%
≥ 1,000 words	7%	17%
<b>Journalist gender</b>		
Female	37%	52%
Male	15%	11%
Mix/not sure/not given	48%	37%
<b>Article topic**</b>		
IPV and training/screening	59%	63%
IPV general/health focus	11%	31%
Other	30%	6%
<b>% of article about IPV* (F)</b>		
Majority of article	93%	100%
Half/some of article	7%	0%
<b>% of article about scr/trn</b>		
Majority of article	63%	61%
Half/some of article	37%	39%

**Table 8: continued**

VARIABLE	ARTICLE MENTIONS STATE ROLE	
	Yes (n=27)	No (n=54)
<b>Article headline</b>		
Yes	30%	31%
No	70%	69%
<b>Article has photo</b>		
Yes	15%	13%
No	85%	87%
<b>Article has chart, etc.* (F)</b>		
Yes	0%	15%
No	100%	85%
<b>Article mentions insurance discrimination***</b>		
Yes	30%	0%
No	70%	100%
<b>Article mentions mandatory reporting**</b>		
Yes	44%	11%
No	56%	89%
<b>Article mentions provider role* (F)</b>		
Yes	78%	94%
No	22%	6%
<b>Article mentions facility role</b>		
Yes	33%	31%
No	67%	69%
<b>Article provides data</b>		
Yes	63%	67%
No	37%	33%
<b>Article thematic</b>		
Yes	78%	63%
No (part episodic)	22%	37%
<b>Article main frame***</b>		
Provider role	15%	26%
Facility role	7%	17%
State role	59%	0%
Survey says	4%	28%
Other	15%	30%

\*p ≤ .05    \*\*p ≤ .001    \*\*\*p ≤ .0001

Table 9 examines differences between various characteristics of the articles compared to the main frame of the article. This was one of the most important aspects of the article since the main frame is likely to influence how people think about the problem and how people think the problem should be solved. The most common frame was 'Other' (20), with the next most common frame being 'Provider role' (18). 'State role' and 'Survey says' were both tied at 16. The least common frame was 'Facility role' (11).

There were a few variables concerning other aspects of the article that were associated with frame types. One was the article topic. Articles with a main frame of 'Facility role' were most likely to be associated with articles where the main topic was health care provider training and/or screening (82%). 'Other' frames were most commonly associated with articles that were mostly about IPV in general or IPV with a health focus other than provider training/screening (90%). Articles with a main topic that was not related to IPV were most commonly associated with frames of 'State role'. Ninety-four percent of the articles where 'Provider role' was the main frame occurred in cases where the article was mostly about IPV training/screening.

As occurred when looking at Table 8 about mention of state role, articles with a main frame of 'State role' were most likely to also discuss other policies related to IPV and health care, such as mandatory reporting ( $p = .04$ ) and insurance discrimination ( $p < .0001$ ).

**Table 9: Variables for fully coded articles vs. frame from 1994-2001: Chi-square test (59 newspapers from 20 states, n=81)**

VARIABLE	ARTICLE MAIN FRAME				
	Provider role (n=18)	Facility role (n=11)	State role (n=16)	Survey says (n=16)	Other (n=20)
<b>Article source</b>					
Newspaper staff	61%	82%	50%	44%	45%
Non-staff/other	17%	9%	25%	44%	30%
Don't know	22%	9%	25%	13%	25%
<b>Article type</b>					
News	89%	82%	94%	100%	75%
Editorial/Other/Don't know	11%	18%	6%	0%	25%
<b>Article location</b>					
Front page of a section	17%	18%	0%	38%	30%
Other/unknown	83%	82%	100%	63%	70%
<b>Article section</b>					
State or local	39%	36%	44%	19%	30%
Living/features	11%	9%	0%	6%	25%
Editorial	11%	9%	6%	0%	5%
Other/unknown	39%	45%	50%	75%	40%
<b>Article word count</b>					
1-299 words	11%	9%	19%	25%	15%
300-599 words	50%	36%	63%	31%	30%
600-999 words	22%	36%	19%	31%	35%
≥ 1,000 words	17%	18%	0%	13%	20%
<b>Journalist gender</b>					
Female	56%	64%	38%	31%	50%
Male	17%	9%	6%	13%	15%
Mix/not sure/not given	28%	27%	56%	56%	35%
<b>Article topic</b>					
IPV and training/screening	67%	82%	56%	69%	45%
IPV general/health focus	17%	9%	13%	31%	45%
Other	17%	9%	31%	0%	10%
<b>% of article about IPV</b>					
Majority of article	100%	91%	100%	100%	95%
Half/some of article	0%	9%	0%	0%	5%
<b>% of article about scr/trn**</b>					
Majority of article	94%	64%	56%	63%	35%
Half/some of article	6%	36%	44%	38%	65%

**Table 9: continued**

VARIABLE	ARTICLE MAIN FRAME				
	Provider role (n=18)	Facility role (n=11)	State role (n=16)	Survey says (n=16)	Other (n=20)
<b>Article headline</b>					
Yes	44%	18%	31%	50%	10%
No	56%	82%	69%	50%	90%
<b>Article has photo*</b>					
Yes	28%	9%	0%	0%	25%
No	72%	91%	100%	100%	75%
<b>Article has chart, etc.</b>					
Yes	6%	0%	0%	25%	15%
No	94%	100%	100%	75%	85%
<b>Article mentions insurance discrimination*** (F)</b>					
Yes	0%	0%	50%	0%	0%
No	100%	100%	50%	100%	100%
<b>Article mentions mandatory reporting* (F)</b>					
Yes	11%	27%	50%	13%	15%
No	89%	73%	50%	87%	85%
<b>Article mentions provider role* (F)</b>					
Yes	100%	73%	77%	100%	90%
No	0%	27%	25%	0%	10%
<b>Article mentions facility role***</b>					
Yes	6%	100%	38%	19%	25%
No	94%	0%	63%	81%	75%
<b>Article mentions state role***</b>					
Yes	22%	18%	100%	6%	20%
No	78%	82%	0%	94%	80%
<b>Article presents data*</b>					
Yes	56%	64%	63%	100%	50%
No	44%	36%	38%	0%	50%
<b>Article thematic</b>					
Yes	61%	73%	75%	75%	60%
No (part episodic)	39%	27%	25%	25%	40%

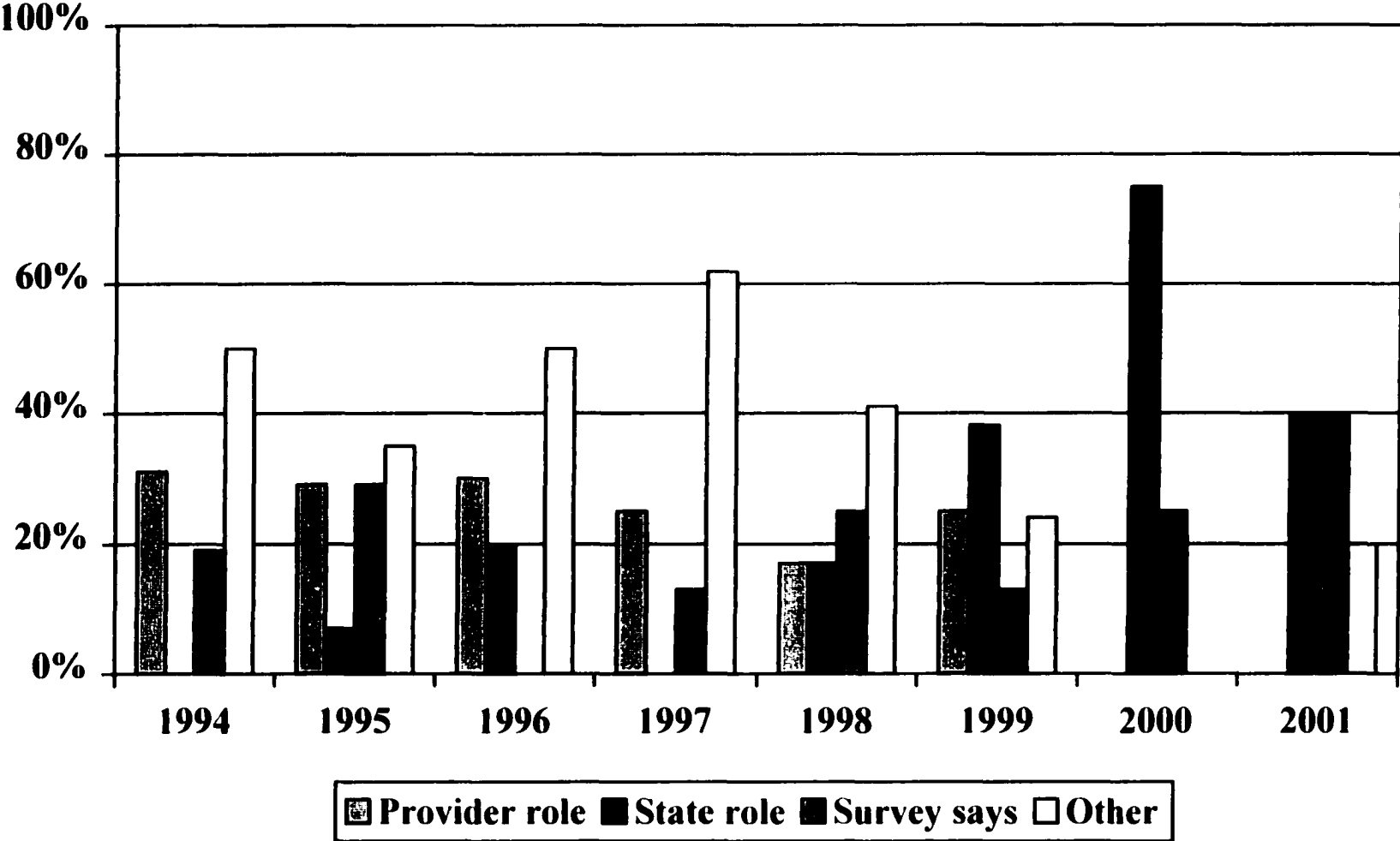
\*p ≤ .05    \*\*p ≤ .001    \*\*\*p ≤ .0001

### Hypotheses 1.1-1.2

1.1	News articles are more likely to use 'State role' as the main frame over time as more states adopt policies	STAFRM	Chi-square trend
1.2	News articles are more likely to mention that states are playing a role in addressing the issue over time	ASTAROLE	Chi-square trend

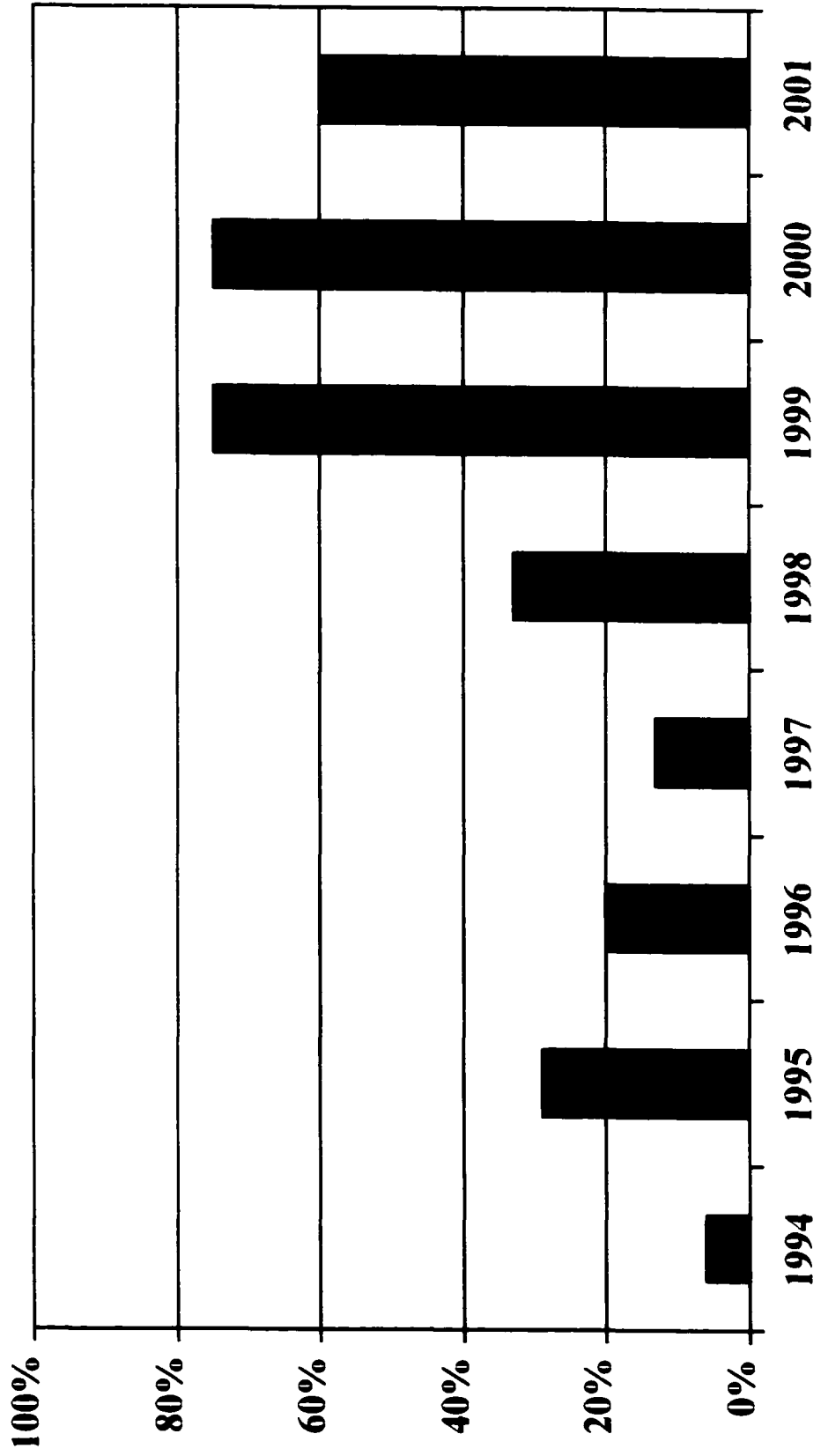
One of the goals of the study was to determine whether there have been significant changes in the discussion of the state's role in addressing the issue over time. One variable examined was the main frame of the article. Figure 11 presents a graph depicting the time trend for this variable. The most notable difference is a decrease in the use of 'Provider role' and an increase in articles coded as having 'State role' as the main frame. To test whether or not this change was significant over time, a Chi-square trend test was conducted using a yes/no variable where yes indicated that 'State role' was the main frame of the article. The data for this test is shown in Table 10. Because of low cell frequencies, the Fishers exact statistic was requested. The resulting p-value ( $< .0001$ ) suggested that the change over time was statistically significant. Since the article may have mentioned state involvement while 'State role' was not the main frame, another variable was examined that measured whether or not there was any mention at all of state role in the article. This variable is depicted in Figure 12 and the data is presented in Table 10. This test also showed that there was a significant increase in the percent of articles mentioning state role over time ( $p = .002$ ).

Figure 11: Main frame of fully coded articles by year from 1994-2001 (59 newspapers from 20 states, n=81)





**Figure 12: Percent of fully coded articles mentioning state role by year from 1994-2001 (59 newspapers from 20 states, n=81)**



**Table 10: Chi-square trend test for state role over time (59 newspapers from 20 states, n=81)**

<b>VARIABLE</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>p-value</b>
<b>'State role' as main frame</b>	0	1	2	0	2	3	6	2	<.0001
<b>Mention of state role in article</b>	1	4	2	1	4	6	6	3	.0017

### Hypothesis 1.3

The goal of Hypothesis 1.3 was to help differentiate what aspects of news articles might contribute to positive or negative coverage of the issue of health care provider training and/or screening. The analysis plan called for two separate logistic regressions to explore the association of a set of independent variables with two dependent variables: position of the article and impression of the article. As a reminder, these two questions did not reflect whether a policy was supported or not, but whether or not the reader thought that the article supported training/screening in general. After examining the data, no article was coded as having a negative position or giving the reader a negative impression. This lack of variation in the dependent variable made it impossible to run a useful logistic regression as had been originally planned. Still, bivariate relationships were examined to see if there were any interesting differences.

To provide an assessment of how some of the key variables were related to these two variables, two-sided Fisher's exact test results were conducted with the results provided below in Table 11. Fisher's exact was used instead of Chi-square because of small cell sizes. There were only a few statistically significant differences.

The position variable was only coded for editorial or opinion articles. All news articles were coded as neutral for this variable. Of 188 articles, only 81 were coded for the position variable, and of these, only 9 were coded as having a position of 'Positive'. No articles were coded as 'negative' and the rest were coded as neutral. Table 11 shows that there were no statistically significant differences when comparing articles with a neutral position versus a positive one.

As opposed to the position variable, the impression variable was coded for all articles. Again, there was little variation for this variable, and no article was coded as giving the reader a negative impression about the issue. In fact, the 9 articles that were not coded as 'Positive' were coded as 'Not enough information to decide'. Table 11 shows that there were a few differences that reached a level of statistical significance when examining key bivariate relationships for the impression variable. One significant relationship was related to whether or not the main frame of the article was 'Other' (56% not enough information vs. 21% positive,  $p = .04$ ). Another difference appeared regarding whether or not the article provided data (22% not enough information vs. 71% positive,  $p = .007$ ).

Because the position and impression variables asked the coder to assess the article for views on screening and training in general, two additional questions asked about the position with respect to screening and training laws. One question asked about the article's position about screening laws and another question asked about position with respect to training laws. Only 12 of 81 articles mentioned a screening law, while 15 of 81 articles mentioned a training law. Of the articles that did mention laws, only 1 was an editorial or opinion piece that could be coded as positive or negative (since news articles were coded neutral), and this 1 article was coded as 'Positive'. No analysis was done using these variables since they did not apply to a majority of articles.

**Table 11: Association of article position with key variables for fully coded articles from 1994-2001 (59 newspapers from 20 states, n=81)**

VARIABLE	ARTICLE POSITION		ARTICLE IMPRESSION	
	Neutral (n=71)	Positive (n=10)	Not enough info. (n=9)	Positive (n=72)
<b>Article has debate</b>				
Yes	8%	10%	11%	8%
<b>Article mentions provider role</b>				
Yes	89%	90%	67%	92%
<b>Article mentions facility role</b>				
Yes	32%	30%	0%*	36%
<b>Article mentions state role</b>				
Yes	37%	10%	56%	31%
<b>Article main frame: provider role</b>				
Yes	23%	20%	0%	25%
<b>Article main frame: facility role</b>				
Yes	13%	20%	0%	15%
<b>Article main frame: state role</b>				
Yes	21%	10%	33%	18%
<b>Article main frame: survey says</b>				
Yes	23%	0%	11%	21%
<b>Article provides data</b>				
Yes	66%	60%	22%**	71%
<b>Article thematic</b>				
Yes	66%	80%	78%	67%
Mixed (part episodic)	34%	20%	22%	33%

\*p ≤ .05    \*\*p ≤ .001

## **Results: Part 2**

The second part of the study was designed to examine differences in news coverage between states that passed laws related to health care provider training and/or screening and states that did not. As discussed in Chapter 3, there were several issues that were considered when developing the study design to answer the questions of whether news coverage was significantly different or not between these two groups of states. A matched case-control study design was used to address this question. This section provides descriptive statistics of state-level data and models to test the hypotheses for Aim 2.

### Article-level news data

The first set of tables (Tables 12 - 14) presents characteristics of all 203 news articles collected for Part 2 of the study. Table 12 compares the means for continuous variables (using t-tests) for articles from case and control states. The average number of words was similar for cases compared to controls (671 vs. 699,  $p = .68$ ). The average prominence score, measuring how noticeable the article was, was higher for articles in states that adopted laws compared to articles in control states (4.0 cases vs. 3.5 controls,  $p = .009$ ). There was no significant difference in the influence measure, although it was slightly higher for cases than controls (22.0 cases vs. 19.2 controls,  $p = .27$ ). There was no difference for the number of articles per capita.

Table 13 describes bivariate relationships (using Chi-square tests) between all articles appearing in case and control states. These statistics were NOT based on matched pairs, but instead provides general information about characteristics of articles in

case compared to control states. In many cases, the news coverage was similar between the two sets of articles, but there were some differences between the two groups. One difference was that articles in case states were much more likely to appear on the front page of a section than articles from control states (30% vs. 11%,  $p = .002$ ). Another difference was related to article section. More articles in case states were likely to appear in state or local sections than in control states (46% vs. 25%,  $p = .02$ ).

Another difference concerned article topic. More articles from case states were likely to be coded as having some sort of state activity as the main topic of the article than articles from control states (29% vs. 2%). Another notable finding was that articles from case states were less likely than articles from control states to have IPV screening/training (34% vs. 42%) or IPV in general (19% vs. 30%) as the main topic of the article.

**Table 12: Means for continuous variables for news articles collected prior to policy adoption (76 newspapers from 22 states, N=203): unmatched case-control comparisons**

<b>CONTINUOUS VARIABLES</b>	<b>Case states (N=122)</b>	<b>Control states (N=81)</b>
Words per article ( $p = .68$ )	670.5	698.5
Prominence score ( $p = .009$ )	4.0	3.5
Influence score ( $p = .27$ )	22.0	19.2
Articles per 1,000,000 population ( $p = .71$ )	.74	.84

**Table 13: Characteristics of categorical variables for news articles collected prior to policy adoption (76 newspapers from 22 states, N=203): unmatched case-control comparisons**

<b>VARIABLE</b>	<b>Case states (N=122)</b>	<b>Control states (N=81)</b>
<b>Article source</b>		
Newspaper staff	55%	47%
Non-staff/other	29%	31%
Don't know	16%	22%
<b>Article type</b>		
News	81%	78%
Editorial	14%	12%
Other/Don't know	5%	10%
<b>Article location*</b>		
Front page of any section	30%	11%
Other/unknown	70%	89%
<b>Article section*</b>		
State or local	46%	25%
Living/features	6%	5%
Editorial	8%	11%
Other/unknown	40%	59%
<b>Article word count*</b>		
1-299 words	13%	23%
300-599 words	40%	23%
600-999 words	34%	36%
≥ 1,000 words	12%	17%
<b>Journalist gender</b>		
Female	39%	40%
Male	22%	11%
Mix/not sure/not given	39%	49%
<b>Article topic***</b>		
IPV and training/screening	34%	42%
IPV general/health focus	19%	30%
State focus	29%	2%
Other	18%	26%
<b>% of article about IPV</b>		
Majority of article	75%	79%
About half of article	2%	6%
Brief mention	23%	15%
<b>% of article about screen/train</b>		
Majority of article	32%	35%
About half of article	15%	19%
Brief mention	53%	47%

\*p ≤ .05    \*\*\*p ≤ .0001



Table 14 presents similar comparisons for articles that were coded all the way through (N=113). As discussed in Chapter 3, this subgroup of articles consisted of those articles that made more than a brief mention of the issue. A much higher percentage of articles in case states mentioned a state's role compared to control states (42% cases vs. 2% controls,  $p < .0001$ ). Another difference was that articles from case states were much less likely to present some type of data or statistics in the articles (54% cases vs. 80% controls,  $p = .005$ ). Also, although not statistically significant, articles in case states were more likely to have some type of debate around the issue than in control states (14% cases vs. 5% controls,  $p = .21$ ). With respect to the main frame, case states were less likely to have articles with a frame of 'Provider role' (33% cases vs. 46% controls,  $p = .17$ ) but more likely to have articles with a 'State role' frame (13% cases vs. 0% controls,  $p = .02$ ).

**Table 14: Characteristics of categorical variables for fully coded articles collected prior to policy adoption (76 newspapers from 22 states, N=113): unmatched case-control comparisons**

<b>VARIABLE</b>	<b>Case states (N=72)</b>	<b>Control states (N=41)</b>
<b>Article headline</b>		
Mentions screening/training	32%	32%
Mentions IPV and health	21%	34%
No mention of either	47%	34%
<b>Article has photo</b>		
Yes	21%	17%
No	79%	83%
<b>Article has chart or text box*</b>		
Yes	14%	2%
No	86%	98%
<b>Article mentions insurance disc.</b>		
Yes	7%	2%
No	93%	98%
<b>Article mentions mandatory rep.</b>		
Yes	22%	15%
No	78%	85%
<b>Article mentions provider role**</b>		
Yes	79%	98%
No	21%	2%
<b>Article mentions facility role</b>		
Yes	26%	37%
No	74%	63%
<b>Article mentions state role***</b>		
Yes	42%	2%
No	58%	98%
<b>Article provides data*</b>		
Yes	54%	80%
No	46%	20%
<b>Article position</b>		
Positive	8%	15%
Neutral (all news articles)	88%	83%
Negative	0%	0%
Not sure	4%	2%
<b>Article position about screening laws</b>		
Positive	1%	0%
Neutral (all news articles)	6%	0%
Negative	0%	0%
Screening law not mentioned	93%	100%

\*p ≤ .05    \*\*p ≤ .001    \*\*\*p ≤ .0001

**Table 14: continued**

<b>VARIABLE</b>	<b>Case states (N=72)</b>	<b>Control states (N=41)</b>
<b>Article position about training laws**</b>		
Positive	3%	0%
Neutral (all news articles)	26%	0%
Negative	0%	0%
Training law not mentioned	71%	100%
<b>Article impression</b>		
Positive	76%	85%
Negative	0%	0%
Not enough information	24%	15%
<b>Debate in article</b>		
Yes	14%	5%
No	86%	95%
<b>Article thematic</b>		
Thematic	78%	78%
Mixed	22%	22%
Episodic	0%	0%
<b>Article main frame</b>		
Provider role	33%	46%
Facility role	6%	10%
State role*	13%	0%
Survey says	10%	15%
Other	39%	29%
<b>Arguments present</b>		
Yes	72%	83%
No	28%	17%

\*p ≤ .05    \*\*p ≤ .001

As described in Chapter 3, a variable was created to categorize whether or not the article only reported on legislative activity. To determine the impact of removing these articles, Chi-square tests were re-done after excluding the thirteen articles that were only about legislative action.

Table 15 provides details about which variables experienced a large change with respect to statistical significance and percentages. The p-value did not change much with respect to the number of articles mentioning state role ( $p < .0001$  vs.  $p = .0007$ ). However, the percentage of articles mention state role in case states decreased from 41% to 29%. With respect to mention of provider role, the p-value assessing the difference between case and control states changed from .01 to .64 to indicate that the difference was no longer significant. There was negligible change for the variable measuring 'State role' as the main frame of the article. A noticeable change affected the variable for whether or not the article provided data about IPV. The percentage of articles from case states that provided data increased from 53% to 66% and the p-value for the comparison with control states changed so that it was no longer significant (.0004 vs. .12).

**Table 15: Differences after excluding articles about legislative action from the sample collected prior to policy adoption (76 newspapers from 22 states)**

	<b>ALL ARTICLES</b>	<b>APOLYTP=0</b>
<i>All articles</i>	Case=122 vs. Control=81	Case=109 vs. Control=81
<b>Article location</b> Front page of any section Other/unknown	29% vs. 11% 71% vs. 89% p= .002	32% vs. 11% 68% vs. 89% p= .0007
<b>Journalist gender</b> Female Male Mix/not sure/not given	38% vs. 40% 23% vs. 11% 39% vs. 49% p= .09	43% vs. 40% 25% vs. 11% 32% vs. 49% p= .02
<b>Article # words</b> 1-299 words 300-599 words 600-999 words ≥ 1,000 words	13% vs. 23% 40% vs. 23% 34% vs. 36% 12% vs. 17% p= .05	13% vs. 23% 38% vs. 23% 36% vs. 36% 14% vs. 17% p= .10
<b>Article topic</b> IPV and training/screening IPV general/health focus State focus Other	34% vs. 43% 19% vs. 29% 29% vs. 3% 18% vs. 26% p= .0001	39% vs. 43% 21% vs. 29% 20% vs. 3% 20% vs. 26% p= .004
<i>Fully coded articles</i>	Case=72 vs. Control=41	Case=59 vs. Control=41
<b>Article provides data</b> Yes No	53% vs. 80% 47% vs. 20% p= .004	66% vs. 80% 34% vs. 20% p= .12
<b>Article mentions provider role</b> Yes No	79% vs. 98% 21% vs. 2% p= .01	95% vs. 98% 5% vs. 2% p= .64 (F)
<b>Article mentions state role</b> Yes No	41% vs. 2% 59% vs. 98% p< .0001	29% vs. 2% 71% vs. 98% p= .0007
<b>'State role' as main frame</b> Yes No	13% vs. 0% 88% vs. 100% p= .03 (F)	12% vs. 0% 88% vs. 100% p= .04 (F)

(F) indicates Fisher's exact test was used

### State-level news data

The main analysis for Part 2 involved the development of conditional logistic regression models to compare key characteristics of matched case and control state pairs. Thus, matched pairs of states (N=12) are the unit of analysis for the remainder of this chapter. As a reminder, aggregate news coverage variables were created using data collected from the news articles to provide a measure of all news coverage for each state. The average values comparing the means for the continuous aggregate news variables are presented in Table 16. P-values from paired t-tests and simple conditional logistic regressions are also provided. None of the differences approached a level that was statistically significant.

**Table 16: Aggregate continuous news coverage variables for non-legislative articles collected prior to policy adoption (76 newspapers from 22 states, n=190): matched pairs<sup>^</sup>**

	Case states (n=12)	Control states (n=12)		paired t-test <i>p</i> -value	simple cond. log. <i>p</i> -value
<b><i>Aggregate News Variables</i></b>					
average # of words	484.1	531.8		.66	.64
Prominence of article	2.9	3.0		.86	.86
Influence of article	13.4	14.2		.84	.83
Data in article	20.5%	26.1%		.39	.39
Thematic coverage	22.2%	27.9%		.29	.29
'Provider role' main frame	20.0%	23.9%		.50	.49
Mention of state role	8.5%	4.2%		.36	.36
'State role' main frame	3.5%	2.8%		.83	.82

<sup>^</sup>The percentages in this table are different from those in Table 14 because they represent the percentage of articles with that attribute out of all non-legislative articles (n=190) instead of just those that were fully coded (n=100). Also, several states had 0% values which brought the average percent value down.

Because of the use of conditional logistic regression for analysis, the continuous variables were converted into dichotomous variables which were better suited for this type of analytical model. It seemed reasonable to split the variable according to whether or not more than a third of the articles in a state had the attribute. Since a few variables had 0% values from several states, they were split into whether or not the state had any articles with the attribute. Table 17 presents the breakdown of the dichotomous variables for case and control states.

**Table 17: Aggregate dichotomous news coverage variables converted from continuous variables for non-legislative articles collected prior to policy adoption (76 newspapers from 22 states, n=190)**

<b>VARIABLE</b>	<b>Case states (n=12)</b>	<b>Control states (n=12)</b>
# articles/# papers		
0 to 2	67%	58%
2.1 or greater	33%	42%
Prominence of article		
0 to 3.5	42%	58%
3.6 or greater	58%	42%
Influence of article		
0 to 19.9	83%	75%
20.0 or greater	17%	25%
Data in article		
0% to 30%	67%	50%
31% or greater	33%	50%
Thematic coverage		
0% to 30%	50%	50%
31% or greater	50%	50%
'Provider role' main frame		
0% to 30%	83%	58%
31% or greater	17%	42%
Mention of state role		
0%	50%	83%
greater than 0%	50%	17%
'State role' main frame		
0%	58%	92%
greater than 0%	42%	8%



Table 18 shows results from McNemars test and simple conditional logistic regressions when comparing dichotomous versions of the aggregate news variables for matched case-control pairs. Although there were no statistically significant differences, there were some notable findings. Case states were five times as likely to have news coverage mentioning state role (OR= 5.0, p= .14) and five times as likely to have articles where 'State role' was the main frame (OR= 5.0, p= .14). Case states were equally as likely as control states to have thematic coverage (OR= 1.0, p= 1.0) and about 60% less likely to have data in the articles (OR= .3, p= .34). Articles from case states were twice as likely to have higher prominence scores (OR= 2.0, p= .42).

Although 'Provider role' as the main frame had a somewhat low p-value resulting from McNemars test (p= .18), this variable was unable to be estimated in the simple logistic regression due to a zero cell in the discordant pairs. The same was true of the influence measure as well, which had a p-value of .16 for McNemars test. For both variables, the control states had higher values than the case states. As discussed in Chapter 3, conditional logistic regression only uses data from these pairs, so when there were zero cells, the measure could not be estimated in the model.

**Table 18: Aggregate dichotomous news coverage variables for non-legislative articles collected prior to policy adoption (76 newspapers from 22 states, n=190): matched pairs**

McNEMARS TEST		SIMPLE CONDITIONAL LOGISTIC REGRESSION			
	<i>p</i> -value	Odds ratio	<i>p</i> -value	95% CI	Discordant pairs <sup>^</sup>
# articles/# papers 0 to 2 2.1 or greater	1.0	.5	.57	(.05 – 5.5)	(1.2)
Prominence of article 0 to 3.5 3.6 or greater	.18	2.0	.42	(.4 – 10.9)	(4.2)
Influence of article 0 to 19.9 20.0 or greater	.65	.67	.66	(.1 – 4.0)	(2.3)
Data in article 0% to 30% 31% or greater	.18	.3	.34	(.04 – 3.2)	(1.3)
Thematic coverage 0% to 30% 31% or greater	.65	1.0	1.0	(.1 – 7.1)	(2.2)
‘Provider role’ main frame 0% to 30% 31% or greater	.18	0.0	1.0	--	(0.3)
Mention of state role 0% greater than 0%	.03	5.0	.14	(.6 – 42.8)	(5.1)
‘State role’ main frame 0% greater than 0%	.01	5.0	.14	(.6 – 42.8)	(5.1)

<sup>^</sup>First number indicates number of pairs where the variable is 0 for the control and 1 for the case  
Second number indicates number of pairs where the variable is 1 for the control and 0 for the case

### State-level covariates

Since news coverage was expected to play only a small role in the adoption of the policies, the model was designed to include other variables that may have been associated with policy adoption.

Table 19 presents a comparison of the means for the continuous measures of the covariates for all states, and then broken into unmatched case and control states. Paired t-tests and simple conditional logistic regressions examined differences between matched case and control states. The averages for case and control states were similar for most variables. However, a non-significant difference appeared for policy innovativeness score (1.21 cases vs. 1.03 controls,  $p = .17$ ).

There were also some differences that did reach p-values close to .05 from the paired t-tests. These included newspaper circulation per 1,000 (2659 cases vs. 1493 controls,  $p = .09$ ), percent of screening/training articles out of all IPV articles (2.3% vs. 3.0%,  $p = .07$ ) and number of major newspapers in the sample (.50 cases vs. .83 controls,  $p = .10$ ).

**Table 19: Means for continuous covariates for 22 states from the year of policy adoption: matched case-control pairs**

<b>VARIABLE</b>	<b>Case states (n=12)</b>	<b>Control states (n=12)</b>	<b>Paired t-test p-value</b>	<b>Simple cond. log. p-value</b>
<b><i>Matching Variable</i></b>				
% eligible newspaper circulation electronically available	.80	.77	.66	.52
<b><i>IPV Variables</i></b>				
ratio of female:male homicides for ages 20-45	.26	.25	.72	.71
female homicide rate for ages 20-45	5.6	5.3	.73	.72
<b><i>Health Care Variables</i></b>				
# ER departments/1,000	.015	.017	.44	.42
# ER visits/1,000	366.4	371.5	.76	.75
# hospital beds/1,000	3.3	3.3	1.0	1.0
# active physicians/100,000	249.5	252.0	.87	.86
# active nurses/100,000	853.4	846.1	.91	.91
<b><i>Media Exposure Variables</i></b>				
% households with internet	27.2%	26.5%	.73	.71
# radio stations/1,000	.041	.033	.33	.39
% households with tvs	98%	98%	.17	.21
# daily newspapers/1,000	.230	.222	.76	.75
newspaper circulation/1,000	2659.3	1493.33	.09	.16
<b><i>Political/SES Variables</i></b>				
% Democrats in state legislature	56.3%	59.3%	.39	.38
% women in state legislature	19.4%	19.8%	.88	.88
Ideology score	53.5	55.6	.80	.79

<b>VARIABLE</b>	<b>Case states (n=12)</b>	<b>Control states (n=12)</b>		<b>Paired t-test p-value</b>	<b>Simple cond. log. p-value</b>
Innovativeness score	1.21	1.03		.17	.20
Health policy innovativeness score	.27	.28		.94	.93
% metropolitan	75.5%	81.2%		.36	.35
<b><i>Advocacy Variables</i></b>					
# full time advocates in state DV coalition* 1,000/pop.	.91	1.24		.36	.35
# DV shelter beds/state population of women over 19	.41	.27		.37	.48
<b><i>News Sample Variables</i><sup>^</sup></b>					
# general IPV articles/# newspapers in sample	450	472		.73	.71
% of all IPV articles	2.3%	3.0%		.07	.17
# major newspapers in sample (circ. > 400,000)	.50	.83		.10	--
# screening/training articles	9.3	6.5		.25	.29
# screening/training articles per # papers in sample	1.5	2.3		.14	.21
# screening/training articles per capita	.74	.84		.65	.63

<sup>^</sup>These variables were constructed using data collected for this study to capture any differences with respect to attributes of the newspaper or article samples.

McNemar's tests and simple conditional logistic regressions were conducted to examine each dichotomous covariate to compare matched case and control state pairs. The results are presented in Table 20. The percentage differences were: whether or not it was a governor election year (50% cases vs. 33% controls), having a Democratic governor (58% cases vs. 33% controls) and part of the FVPF campaign (25% cases vs. 8% controls). There were no differences that reached a p-value of less than .05. Still, according to the results, the odds of a state passing a law were four times greater when a Democratic governor was in office as compared to a Republican governor (OR= 4.0, p= .22) and were 75% lower when the state had a smaller number of emergency departments (OR= .25, p= .22).

**Table 20: Dichotomous covariates for 22 states from the year of policy adoption: matched case-control pairs**

McNEMARS TEST		SIMPLE CONDITIONAL LOGISTIC REGRESSION			
	<i>p</i> -value	Odds ratio	<i>p</i> -value	95% CI	Discordant pairs
Part of FVPF campaign	.56	--	1.0	-	(2.0)
No					
Yes					
Governor election year	.26	3.0	.34	(.31 – 28.8)	(3.1)
No					
Yes					
Governor political party	.26	4.0	.22	(.45 – 35.8)	(4.1)
Democrat					
Republican					

After reviewing comparisons of the covariates, certain measures were excluded from further analysis because there was no indication of any measurable difference between case and control states (either matched or unmatched). These variables were:

- ratio of female to male homicides
- female homicide rates
- ER visits/1000
- # hospital beds/1000
- # active physicians/1000
- # active nurses/1000
- 
- % households with televisions
- % women in state legislature
- ideology score
- health policy innovativeness score
- part of FVPF campaign
- # IPV articles/# newspapers in sample.

Each continuous covariate was then examined in graphs using kernel smoothed plots to assess the linearity of the relationship between the log odds and the continuous variable. All of the variables either lacked a linear relationship, or had so few numbers it made more sense to transform the variable into a dichotomous variable. Due to the results of the plots, the small number of observations, and the limited range of values for each of the covariates, each continuous variable that was not excluded above was transformed into a dichotomous variable and examined further.

**Table 21: Dichotomous versions of continuous covariates for 22 states from the year of policy adoption: unmatched states**

<b>VARIABLE</b>	<b>Case states (n=12)</b>	<b>Control states (n=12)</b>	<b>Chi-square p-value</b>
<b><i>Health Care Variables</i></b>			
# ER departments per 1.000 0 to .01 .02 or greater	67% 33%	42% 58%	.22
<b><i>Media Exposure Variables</i></b>			
% households w/Internet access 0% to 25% 26% or greater	58% 42%	33% 67%	.22
# radio stations per 1.000 .01 to .03 .04 or greater	58% 42%	50% 50%	.68
# daily newspapers per 1.000 0 to .20 .21 or greater	33% 67%	50% 50%	.41
# newspaper circ. per 1.000 0 to 1.500 1.501 or greater	50% 50%	58% 42%	.68
<b><i>Political/SES Variables</i></b>			
% Democrats in state legislature 40% to 60% 61% or greater	67% 33%	50% 50%	.41
Innovativeness score 0 to 1.2 1.3 or greater	55% 45%	75% 25%	.40
% metropolitan 0% to 80% 81% or greater	33% 67%	50% 50%	.41
<b><i>Advocacy Variables</i></b>			
# full time state advocates/capita 0 to .99 1.0 or greater	64% 36%	42% 58%	.29
# DV shelter beds/state 0 to .24 .25 or greater	58% 42%	50% 50%	.68



**Table 21: continued**

<b>VARIABLE</b>	<b>Case states (n=12)</b>	<b>Control states (n=12)</b>	<b>Chi-square p-value</b>
<b><i>News Sample Variables</i></b>			
% of all IPV articles			
0% to 2.9%	58%	50%	.68
3.0% or greater	42%	50%	
# major newspapers			
0	58%	42%	.41
1 or more	42%	58%	

Table 21 (above) presents the breakdowns for each of the covariates as well as the p-values from the Chi-squares tests examining differences between unmatched case and control states. None of the covariates achieved a significant p-value.

McNemar's test for matched pairs and simple conditional logistic regressions were then run for each of the dichotomous covariates to examine differences between matched pairs. Table 22 presents the results of each of these tests. Information regarding discordant pairs is also presented.

The results of the conditional logistic regressions show that none of the covariates reached a significant level of association. The lowest two p-values were for the number of ER departments per 1,000 population ( $p = .22$ ) and percent of households with Internet access ( $p = .27$ ). Although it is unclear why this would be connected, it is possible that Internet access served as a proxy measure for another state characteristic. Wide confidence intervals for some estimates resulted in part from the limited number of discordant pairs available for analysis (Hosmer & Lemeshow, 2000).

**Table 22: Dichotomous versions of continuous covariates for 22 states from the year of policy adoption: matched pairs**

McNEMARS TEST		SIMPLE CONDITIONAL LOGISTIC REGRESSION			
	<i>p</i> -value	Odds ratio	<i>p</i> -value	95% CI	Discordant pairs
<b><i>Health Care Variables</i></b>					
# ER departments/1,000*	.26	.25	.22	(.03 – 2.2)	(1.4)
<b><i>Media Exposure Variables</i></b>					
% households w/Internet	--	.40	.27	(.08 – 2.1)	(2.5)
# radio stations per 1,000	.41	.50	.57	(.05 – 5.5)	(1.2)
# daily newspapers/1,000	.48	3.0	.34	(.31 – 28.8)	(3.1)
# newspaper circ./1,000	.41	2.0	.57	(.18 – 22.1)	(2.1)
<b><i>Political Variables</i></b>					
% Democrats in state legis.	.56	.50	.42	(.09 – 2.7)	(2.4)
Innovativeness score	.65	1.5	.67	(.25 – 9.0)	(3.2)
% metropolitan area	.41	3.0	.34	(.31 – 28.8)	(3.1)
<b><i>Advocacy Variables</i></b>					
# full time state advocates/capita	1.0	.60	.48	(.14 – 2.5)	(3.5)
# DV shelter beds/state	.48	.50	.57	(.05 – 5.5)	(1.2)
<b><i>News Sample Variables</i></b>					
% of all IPV articles	.41	.50	.57	(.05 – 5.5)	(1.2)
# major newspapers in sample (circ. > 400,000)	1.0	--	1.0	--	(0.2)

\*First number indicates number of pairs where the variable is 0 for the control and 1 for the case  
 Second number indicates number of pairs where the variable is 1 for the control and 0 for the case

### Multivariate conditional logistic regression

Based on the results of the bivariate analyses, conditional logistic regression models were constructed to answer each of the hypotheses developed to address Aim 2. Because of the limited number of observations (n=12 pairs), there were limitations for constructing models using more than one or two covariates. For this reason, each covariate was carefully assessed and tested in order to determine which ones were most likely to be associated with the probability of a state being a case.

Because of the limited number of observations, all of the media coverage variables could not be tested in one model, so individual models were created to address each hypothesis. Basically, each model was constructed in a similar way, but used a different main independent variable depending on the hypothesis. For instance, to test Hypothesis 2.3, a set of models was developed that included the case variable as the dependent variable, the influence measure as the main independent variable, and one of the covariates as a second independent variable. Each of these models was then examined to see which covariates were most likely to influence the relationship between the case variable and the influence variable by looking at coefficients and p-values.

### Hypothesis 2.1

2.1	Compared with control states, case states are more likely to have coverage that is thematic (focused on discussion of issues) than mixed or episodic (focused on personal stories/events).	Y=CASE (0/1) X <sub>1</sub> =STEPHG (Dichotomous)	Conditional logistic regression
-----	--	---	---------------------------------

Results of the bivariate testing (Tables 15 and 17) indicated that there was no statistically significant relationship between thematic coverage and case vs. control states. The paired t-test and simple conditional logistic regression comparing the continuous version of the variable resulted in a p-value of .29. For the dichotomous version of the variable, due to the equal number of discordant pairs, the odds ratio was 1.0 in a simple conditional logistic regression. There was little variation for this variable overall, and no difference between case and control states. For these reasons, no additional model testing was conducted to examine this variable further.

### Hypothesis 2.2

2.2	Compared with control states, case states are more likely to have a higher number of pro-policy editorials than con-policy editorials.	Y=CASE (0/1) X <sub>1</sub> =APOSIT (Dichotomous)	Conditional logistic regression
-----	--	---	---------------------------------

Similar to the results found in Part 1, there was little variation for this variable and most articles could not be coded for position. Given that there were only twelve editorials on these policies that were identified, analysis was not conducted for the position variable.

Hypothesis 2.3

2.3	Compared with control states, case states are more likely to have articles with a higher influence measure.	Y=CASE (0/1) X <sub>1</sub> =STINFG (Dichotomous)	Conditional logistic regression
-----	---	--	---------------------------------

Table 15 provided results indicating that average influence scores for case and control states were fairly similar (13.4 cases vs. 14.2 controls,  $p = .84$ ). Once the variable was converted into the dichotomous format, results in Table 16 showed that 25% of case states had an average influence score of 15 or higher compared to 75% of control states. The  $p$ -value for McNemar's test was .18. Based on bivariate relationships, control states seemed to have slightly more articles with higher influence scores.

The odds ratio for the simple conditional regression was .67 ( $p = .66$ ). After testing several covariates, the total circulation of newspapers per 1,000 population seemed to alter the estimate for the main independent variable, influence measure, and increase the difference. A resulting odds ratio of .21 suggested that case states were about 80% less likely than control states to have an average influence score of 20 or more when adjusting for newspaper circulation.

**Table 23: Multivariate model for aggregate influence measure<sup>^</sup>**

VARIABLE	OR	SE	z	P> z	CI
<b>Influence measure</b>	.21	.31	-1.0	.29	(.01 – 3.9)
<b>Newspaper circ./ 1,000 population</b>	1.0	.001	1.6	.11	(.99 – 1.0)

<sup>^</sup>Chi-square for the model  $p = .09$

Hypothesis 2.4

2.4	Compared with control states, case states are more likely to have articles with a higher prominence measure.	Y=CASE (0/1) X <sub>1</sub> =STPRMG (Dichotomous)	Conditional logistic regression
-----	--	--	---------------------------------

Table 15 provided results indicating that the average prominence scores for case and control states were almost identical (2.9 cases vs. 3.0 controls). The p-value from the paired t-test was .86. Once the variable was converted to its dichotomous version, there was still little difference between case and control states. The simple conditional logistic regression showed that case states were twice as likely to have articles with a prominence score of 3.6 or higher (OR= 2.0, p= .42).

When an attempt was made to determine whether any covariates had an impact on this relationship, some variables seemed to have a small effect. Similar to the influence measure, the most significant covariate was the amount of newspaper circulation per 1,000 population. Adding this covariate into the model decreased the odds ratio for the prominence variable from 2.0 to 1.5.

**Table 24: Multivariate model for aggregate prominence measure<sup>^</sup>**

VARIABLE	OR	SE	z	P> z	CI
<b>Prominence measure</b>	1.5	1.4	.4	.67	(.2– 9.8)
<b>Newspaper circ./ 1,000 population</b>	1.0	.00	1.3	.18	(.99 – 1.0)

\Chi-square for the model p= .16

### Hypothesis 2.5

2.5	Compared with control states, case states are more likely to have articles with 'State role' as the main frame.	Y=CASE (0/1) X <sub>1</sub> =STFRMSTG (Dichotomous)	Conditional logistic regression
-----	---	--	---------------------------------

Table 15 provided results indicating that there was a small difference between case and control states regarding the percent of news coverage coded as having 'State role' as the main frame (3.5% cases vs. 2.8% controls). The paired t-test comparing these averages confirmed that this difference was not statistically significant ( $p = .83$ ).

Once the variable was converted into the dichotomous format, the difference became more substantial, since the new version captured whether or not a state had at least one article that mentioned state role. The many states with 0% for this measure had lowered the average percentage scores for both case and control states. The results of the simple conditional logistic regression indicated that case states were five times as likely to have news coverage with a main frame of 'State role' (OR= 5.0,  $p = .14$ ).

Attempts were made to determine whether the inclusion of any covariates in the conditional logistic regression model would modify this relationship. The only variable that seemed to make a difference was the ratio of number of articles to number of newspapers. The inclusion of this variable changed the odds ratio for the state frame variable from 5.0 to 8.7, suggesting that the difference between case and control states was even larger after accounting for the number of articles collected from each state.

**Table 25: Multivariate model for 'State role' as main frame<sup>^</sup>**

VARIABLE	OR	SE	z	P> z	CI
'State role' frame	8.7	13.0	1.4	.15	(.5 – 163.2)
# articles in sample/ # papers in sample	.21	.35	-.9	.35	(.01 – 5.5)

<sup>^</sup>Chi-square for the model p= .04

Since some articles mentioned state role, but were not coded as having 'State role' as the main frame, a second multivariate regression was run to see if covariates affected this variable similarly. Table 17 showed that case states were five times as likely to have articles mentioning state role than control states (OR= 5.0, p= .14). As with the state frame variable, adjusting for the number of articles analyzed from each state had an impact on the relationship between mention of state role and the dependent variable, case. In this case, though, the odds ratio decreased from 5.0 to 4.2, suggesting that case states were about four times more likely to have articles mentioning state role than control states.

**Table 26: Multivariate model for mention of state role<sup>^</sup>**

VARIABLE	OR	SE	z	P> z	CI
Mention of state role	4.2	4.9	1.3	.21	(.4 – 40.1)
# articles in sample/ # papers in sample	.44	.38	-.96	.34	(.08 – 2.3)

<sup>^</sup>Chi-square for the model p= .09



### Exact logistic regression

Because of the small sample sizes, there was little chance that the conditional logistic regression models would result in any significant findings because it was an asymptotic test which becomes less reliable for smaller sample sizes (Derr, 2003; Newman, 2001; Stokes et al., 2000). Robert Derr (2003) developed a way to conduct a test involving exact logistic regression that could also account for matched pairs. Simple logistic regression models testing the main independent variable for each hypothesis were re-run using the exact logistic regression method to look for any differences in results.

When conducting exact logistic regression, results were similar. Table 27 illustrates how the p-value changed only slightly, increasing a little for the main independent variables. This was to be expected, as exact tests typically generate higher p-values (Stokes et al., 2000). An unmatched exact logistic regression was run as well to see if there was any major difference in the outcome when dropping the matching criteria. Again, there was little difference, suggesting that the state pairs were reasonably matched.

**Table 27: Comparison of different simple logistic regression models for key news coverage variables**

	<b>Conditional LR <i>matched</i></b>	<b>Exact conditional LR <i>matched</i></b>	<b>Exact LR <i>unmatched</i></b>
Article prominence	.69 (p= .42)	.69 (p= .69)	.64 (p= .68)
Article influence	-.41 (p= .66)	-.41 (p= 1.0)	-.49 (p= 1.0)
'State role' frame	1.6 (p= .14)	1.6 (p= .22)	2.0 (p= .16)
Mention of state role	1.6 (p= .14)	1.6 (p= .22)	1.5 (p= .19)

### High influence articles

Another question of interest concerned whether or not differences would appear between case and control states when examining a sub-group of articles with the highest influence scores. It could have been possible that some of the articles with the highest potential to influence the agenda were located in case states. An examination of influence scores showed that 25% of the 190 policy articles had a score of 25 or higher. This sub-group of 43 articles was then examined in more detail.

Of these 43 articles, 23 were from case states and 20 were from control states, indicating that case states did not seem to have a higher proportion of the articles with the highest influence potential. Even when looking at articles with the highest ten scores, six were from case states and four were from control states. Because of the similarity regarding the number of articles from case and control states, and the insignificant findings of tests examining bivariate relationships, logistic regression was not used to examine this subgroup.

### News coverage in year prior to policy adoption

Another issue that could have altered findings related to when the articles were published during the specified time period for each state. Two different methods of separating the articles by time were examined. One examined whether or not the article was published in the year prior to policy adoption or in the year the policy passed. The second variable split the time period used for data collection in half. There was little difference in the number of articles when comparing these two variables (Appendix F). For this reason, it was decided to focus on the variable that created subgroups based on

whether the article was published in the year of policy adoption or in the year before policy adoption. Of the 190 articles, 106 were published in the year prior to policy adoption, 51 from case states and 55 from control states.

Since this was an article level variable, it could not be included in the model as a covariate, so analysis was conducted to compare articles from case and control states for this sub-group. Examining bivariate relationships showed that similar to the data with all articles included, case states were more likely to appear in the front page of a section (31% cases vs. 15% controls,  $p = .04$ ), were more likely to have state response as the main topic of the article (18% cases vs. 2% controls,  $p = .04$ ) and were more likely to mention state role (28% cases vs. 4% controls,  $p = .02$ ). Two differences, however, were that articles from case states were less likely to have data in the articles with a significant p-value (56% cases vs. 85% controls,  $p = .02$ ) and were less likely to discuss facility role (16% cases vs. 48% controls,  $p = .01$ ), a difference that did not exist before. Given these limited differences, no further testing was conducted using conditional logistic regression.

## CHAPTER 5: DISCUSSION

### Overview

Because intimate partner violence is an important public health problem, various systems and agencies have developed strategies and engaged in prevention efforts to help reduce injuries and deaths caused by this form of interpersonal violence. Although much research has been conducted to evaluate programs and policies and to examine the effects of IPV, little research has been done to examine how such programs and policies have been covered by the news media.

As discussed in Chapter 2, a majority of studies that have examined intimate partner violence in the news have focused on the portrayal of victims and on the description of incidents and homicides or on homicides in general. For instance, one study examined general characteristics of news coverage of IPV before and after the OJ Simpson case (Maxwell et al., 2000). No studies have focused on news coverage of policy issues related to intimate partner violence, and few studies have examined policy adoption at the state level of government for IPV-related legislation.

This research study was designed to provide an initial examination of how issues related to IPV screening and training by health providers are covered by the news media and how this coverage may be associated with policy adoption. Training and screening policies were selected as the focus of this study because health care facilities have become an important setting for developing strategies to identify victims of IPV and prevent future abuse.

The main findings for Part I of this study showed that print news coverage of

screening and training issues rarely included debate, were infrequently located on the front page of a section, and were likely to appear in state or local sections of the newspaper. Few editorials or opinion pieces were found. The most common sources used in the articles were researchers and people from agencies or coalitions affiliated with intimate partner violence. Almost all articles discussed the role of the provider, and the most common frames were 'Provider role', 'State role' and 'Survey says'.

For Part 2, limited differences were found in the news coverage of screening and training in states that had adopted laws compared to states that had not. Although the differences were not statistically significant, news coverage in case states was five times as likely to mention state role or have 'State role' as the main frame than news coverage in control states. In general, articles from case states had higher prominence scores, but lower influence scores than news coverage appearing in control states.

This chapter will discuss the specific findings from each part of the study and will assess each hypothesis. The remainder of the chapter will then address strengths and limitations of the study, discuss policy implications, and offer possibilities for future research.

## **Part 1**

Part 1 was designed to describe the frequency and nature of print news coverage of intimate partner violence as a health policy issue and to examine changes over time.

### Overview of news coverage

At the beginning of the study, it was unclear if there was any news coverage of

health care provider training and screening. The population of 567 articles collected from the sample of 59 newspapers from 1994 through 2001 offers evidence that although there was limited coverage of this issue, there was some discussion of training and screening in the news media. Figure 6 showed that while there were 114 articles retrieved in 1994, that number had dropped to 36 articles by 2001. It is unclear why there was a decrease over time, but it is likely that the higher number of articles in 1994 and 1995 was related to increased coverage of as a result of the OJ Simpson case. In fact, the time trend graph depicted in Figure 6 closely matched time trend graphs presented in the Maxwell et al. (2000) study.

Figure 7 illustrated that coverage varied greatly by state with respect to the overall number of articles retrieved. The ratio of articles to newspapers searched is the number provided in the figure as opposed to the overall number of articles. However, it is unclear which number would be more closely associated with having a greater agenda setting influence. For instance, if most of the 51 articles in California appeared in one newspaper that had a high influence, would that have a greater impact than having a few articles appear in each of the seven newspapers included in the sample? Or would having a few articles in several papers reach a greater audience and thus have a greater agenda-setting effect? These questions could not be answered by this study.

With respect to overall news coverage of IPV, the articles collected with the search terms for this study represented only about two percent of all stories retrieved when using the general IPV terms. This was consistent over time. Although screening and training has received coverage in the news media, the articles about this issue represent only a small fraction of all IPV related stories, suggesting that other aspects of

IPV such as specific incidents or other policy/program issues receive more coverage.

The sample of 188 coded articles provided more in-depth information regarding the nature of the news coverage. In general, the news coverage of this issue consisted of non-front page stories that appeared in local, state or other sections of the paper and had a small number of words, suggesting that the issue did not receive a high level of attention in the press.

Although 80% of the articles in the sample were mostly about intimate partner violence, only 28% of the coded articles were mostly about screening and/or training and more than half (56%) included only a brief mention. Thus, while more articles than expected were obtained when searching newspapers with the specified search terms, over half of the articles did not offer any in-depth discussion about the issue. In many cases, this issue was discussed briefly as part of other topics about IPV or other issues.

Another interesting note about the general coverage of screening/training is that there were no articles coded as 'Episodic'. This is different from other studies of IPV that have focused on incidents and homicides. In those cases, almost all articles were classified as 'Episodic', or focused on individuals (Rodgers & Thorson, 2001; Taylor & Sorenson, 2002). About 32% of the articles collected for this study were coded as mixed, while the rest were thematic. This finding is positive as it suggests that when screening or training is discussed in the news, it is discussed as a social issue in a broader context as opposed to being described as part of a particular incident. As discussed in Chapter 2, this type of coverage is better suited to encouraging policy initiatives even though in general, episodic coverage is more prevalent (Bennett, 1996; Iyengar, 1991; Jamieson & Campbell, 1997).

Another interesting note is related to the transfer of information from research studies to the media. Barbara Nelson (1991) discussed how information from important research articles about child abuse was carried widely in the media, and described how this growing news coverage resulted in child abuse becoming an important issue on the public agenda.

In this study, sixty-five percent (53/81) of fully coded articles provided some type of IPV data or statistics from a research study or cited data source. In fact, sixty-six percent of the articles that did provide data were coded as having a main topic about screening/training. The study results suggest that research in this area has made an important contribution to generating media attention to screening and training because the release of findings from a research study could be considered a newsworthy issue, and by providing data and statistics that can be incorporated into news stories.

### Hypotheses 1.1-1.3

In assessing Hypothesis 1.1 and 1.2, Figures 8 and 9 along with Table 10 confirmed that the number of articles with 'State role' as the main frame and the number of articles that mentioned state role in addressing the issue increased over time. The graphs illustrating the trend over time combined with the significant p-values for the Chi-square trend tests support both hypotheses (reject the null of no change over time).

These hypotheses were developed with the idea that as more states adopted laws related to screening and training the coverage of the issue would shift to include frames that promoted state roles. Thus one might have expected that there would be more articles about state involvement during years when there was greater policy activity



among the states. However, this did not occur. The latest year that a law was passed was 1998, yet state role was mentioned more often in news coverage starting in 1999.

It is unclear why this shift occurred. This finding may be in part related to the publication of two report cards by the Family Violence Prevention Fund in 2000 and 2001 that assessed state initiatives with respect to intimate partner violence and health care. Five of eight fully coded articles from 2000 and two of five fully coded articles for 2001 were about the report cards. Thus, news coverage of these report cards may have helped to shift the framing of the issue from a problem that was the responsibility of individual providers to an issue that should be addressed by state government. However, the report cards do not account for the rise in 1999. No particular trend was observed for that year, but it is possible that a growth in state programs related to screening/training or an increase of news coverage of such programs occurred.

Unfortunately, the data did not allow for a clear assessment of Hypothesis 1.3 to determine which characteristics of the news articles were most closely associated with a positive or negative position about the issue. Only ten articles were editorials or opinion pieces that could be coded as either 'Positive' or 'Negative' for the position variable. This lack of editorials and the limited variation for the position variable made it impossible to conduct the comparisons needed to test Hypothesis 1.3.

Although the hypothesis could not be adequately addressed, the results did suggest that no negative pieces were written about screening or training. In addition, the fact that all articles were coded for the impression variable, and again, none were coded as 'Negative', indicates that all coverage of the issue portrayed screening and training as activities that should be done and were generally supported by the news coverage.

## **Part 2**

The second part of the study was designed to address the following study aim, to compare news coverage of intimate partner violence health policy with state policy adoption status.

### Overview of news coverage

In general, the 203 articles obtained for Part 2 of the study were surprisingly similar in nature to the articles collected for the first part of the study given the difference in time periods used for data collection. This finding provided support that the sample drawn from Part 1 was an accurate reflection of the articles from the entire population.

There were also some differences that stood out between articles from case and control states. For instance, articles from case states were more likely to appear on the front page of a section than articles from control states. With respect to some of the key policy-oriented variables, articles from case states were much more likely to have the main topic focus on state action, mention state role somewhere in the article, and have a main frame of 'State role'. This finding was to be expected since it was assumed that a certain number of articles from the case states would be reporting on legislative actions. Still, even once those articles were removed, a slightly weaker but still significant difference did remain for mention of state role as well as 'State role' as the main frame of the article (see Table 15).

### Hypotheses 2.1-2.5

In general, the analysis to test the hypotheses for Part 2 was somewhat limited because of the small number of observations. The models had been designed to test differences in specific aspects of news coverage that would be considered relevant for influencing the policy agenda surrounding provider screening and training. Findings about the differences are discussed, but no differences were statistically significant so should be regarded as exploratory as opposed to definitive.

Hypothesis 2.1 and 2.2 could not be analyzed in regression models, in part because there was little variation for either case or control states with respect to thematic coverage and debate. Clearly, most articles about this issue were thematic in nature, and no articles presented an opposing viewpoint of these policies. Thus, there were basically no differences between case and control states with respect to these variables.

Hypothesis 2.3 was not supported, since case states were 80% less likely to have articles with higher influence scores than control states. This may have been due in part to the fact that control states were slightly more likely to have newspapers with a circulation greater than 400,000. Such large-scale papers may have differences regarding space and layout that allowed for articles to receive higher influence scores.

Hypothesis 2.4 was not supported either, as there was little difference between case and control states with respect to the prominence score. Although an initial odds ratio suggested that case states were twice as likely as control states to have more prominent articles, after adjusting this relationship by total newspaper circulation in the state, the odds ratio decreased to 1.5 and had a very high p-value of .67. Part of this difference may have been harder to detect since some of the online articles did not

provide clear information about page numbers and sections, so were coded unknown for certain variables used to construct the prominence score.

The most significant difference appeared for Hypothesis 2.5. Case states were five times as likely to have articles with 'State role' as the main frame compared to control states. Adjusting for other covariates only seemed to enhance this difference by increasing the odds ratio. A similar relationship was seen for mention of state role, although after adjustment for the number of articles in the sample, the odds ratio decreased slightly to 4.2.

Clearly, there did seem to be a substantial difference in news coverage between case and control states with respect to how likely it was that articles from case states would offer some sort of discussion about state involvement in news articles about this issue. Although some of the coverage may have been linked to discussion about the policy itself, due to the bi-directional relationship of the media and policy agendas (Rogers & Dearing, 1996), having a policy up for consideration does not ensure its approval, so the fact that news space was given to the issue and the issue was discussed in a favorable way is still important.

While this association could signify that the media agenda helped to influence the political agenda, the association could also be related to some unmeasured factor. For instance, perhaps a group was active in several areas regarding this issue, and was able to obtain media coverage of a variety of activities while also being active in the policy arena to encourage adoption of policies. Another possibility is that the state may have already been active in the area of supporting initiatives which later encouraged policy adoption.

Apart from an assessment of differences between news coverage between case and control states, the analysis of covariates also provided information about other ways that case and control states differed. Few of the covariates seemed to indicate that there were significant differences between the case-control pairs. A few did stand out, however to suggest that case states had a larger newspaper circulation per capita and were more likely to have higher “innovativeness” scores, suggesting that they have been more likely to adopt innovative policies in the past. Unfortunately, two of the variables that seemed to be different between case and control states, party of Governor and percent of all IPV articles, could not be analyzed in a multivariate model with the news coverage measures because the model would not converge, most likely because of the small sample size and sparse data patterns.

In one of the only studies that examined policy adoption related to intimate partner violence, Patricia Murphy developed a model that looked at what factors were most likely to predict the adoption of policies related to police arrest legislation at the state level of government. She included factors related to social, economic, political, and feminist group activity to see which variables were most likely to predict whether or not a state was likely to adopt such policies. Measures of media were not included in this study. She found that the most significant predictor of policy adoption was the number of women in the state legislature (Murphy, 1997). That variable did not appear to be different between cases and control states for this study.

Clearly, there must have been other factors that were associated with policy adoption that were not accounted for in the models. One possibility could have been the activity of individuals or organizations with a particular interest in the issue, otherwise

called “policy entrepreneurs” (Kingdon, 1995), which would not have been captured in any measurable variable.

Backstrom and Robins (1995/1996) surveyed chairs of health committees in state legislatures to find out what factors influenced state policymaking around the issue of AIDS. The responses that appeared the most was state health departments, followed by legislative leaders and then state medical associations. These factors were not easily measured in this study. However, because it is likely that physician and nursing professional health associations would be two groups expressing a position regarding this issue, the number of active physicians and nurses were used to approximate strength of these two professional groups. Neither of those variables was different for case compared to control states.

Finally, one study that examined state policies designed to address AIDS and schools determined through interviews that most states adopted policies to address future problems (Bishop & Jones, 1993). It is hard to know what the problem environment was in each state without more specific measures of IPV.

### **Study Strengths**

There are some general strengths of content analysis that apply to this research project. Two important strengths of content analysis studies in general are that the data are publicly available and it is a fairly inexpensive type of study to conduct (Berger, 2000; Paalman, 1997).

There are also strengths of this particular study. One is the thorough testing of the coding instrument’s reliability. Reliability refers to whether the item being examined is

measured the same way every time. The most relevant form of reliability for content analysis is reproducibility, or inter-coder reliability, which concerns whether the coding results match among multiple coders (Weber, 1990). The testing for IRR and results of the tests were discussed and evaluated in great detail in Chapter 3. Overall, the reliability for the codebook was fairly high

Another relevant measure of reliability discussed by Weber refers to accuracy. This measure of reliability can be obtained when a standard exists for the type of text being coded (also known as the 'gold standard'). In most content analyses, there is no standard, so very few studies are able to determine the level of accuracy (Weber, 1990). Krippendorff suggests that detailing methods and coding instructions in enough detail for someone to be able to replicate the study can help add to the accuracy of the study (Krippendorff, 1980). This level of detail was included in the codebook and should allow others to replicate the process.

A final strength to mention is the application of the case-control research method, which has been traditionally used in public health research, to an analysis of state policy. This technique was selected because of the need to compare news coverage in states while accounting for the fact that news coverage changes over time. Longitudinal, or event-history analysis, was not feasible due to limitations of electronic availability of newspapers. However, utilizing a cross-sectional study approach that examined news coverage prior to policy adoption presented a problem regarding what to use as a comparison group. By using a matched-pair study, historical differences in news coverage could be accounted for by comparing coverage in a case state to coverage appearing during the same time period in a control state.

## **Study Limitations**

While there are several strengths of this study, there are also some limitations. Some are those that are common to all projects involving content analysis. For instance, subjectivity and bias of the researcher is a potential confounder that could have influenced the coding schemes developed for analyzing text (Paalman, 1997). Although Interrater Reliability was critically evaluated to ensure the reliability of the coding tool, as one author points out (Ahuvia, 2001), IRR does not measure whether a coding tool is justifiable and valid, meaning, whether others would interpret the text in similar ways. Semantic validity addresses this ambiguity of definitions for words and categories used in the coding process (Riffe et al., 1998). Although the coders were able to read the article and code it in a similar way, it is unknown whether readers unfamiliar with the issue or simply skimming the article would take away the messages captured by the codebook. For instance, would someone recognize when state role was mentioned? In addition, interviewing journalists and advocates would have helped to assess the types of frames being used, but resources were not available to allow for conducting such interviews. Assistance from other people who reviewed the codebook and helped with the development and refinement of categories and definitions helped to alleviate this concern. Still, a question of validity remains.

Other limitations relate to issues concerning any policy study using online newspaper documents (Woolley, 2000). One is the lack of electronic availability of certain newspapers. If there was a pattern regarding which newspapers were unavailable, there could be some bias in the results. Still, this study represented an initial attempt to collect data from news articles at a more local level and tried to ensure that matched state



pairs had equivalent levels of electronically available news coverage. Another issue is that online content may not exactly match what appeared in print, as well as the fact that different editions of newspapers may be loaded into the electronic databases and the types of articles are sent to the databases may not be consistent across newspapers (Soothill & Grover, 1997).

Although the overall reliability of the coding tool was reasonably high, the reliability of the main frame variable was fairly low (below the suggested level for exploratory analysis of .70 per Riffe et al., 1998). Since this was a key variable for the analysis, it was a limitation that the agreement for this measure was low. Although this problem was addressed by having both coders review articles and resolve any discrepancies as has been done in other studies (Lima & Siegel, 1999; Menashe & Siegel, 1998), it is possible that inconsistencies may have impacted the final results concerning data for the frame categories.

As mentioned earlier, the application of a case-control method to state policy and agenda-setting research was a new approach. However, there were limitations associated with matching states given that each state is unique, making it difficult to find a comparable state, especially with the lack of detailed state-level data to measure relevant state attributes. Each state has its own individual culture, political system, and policy entrepreneurs. Still, there were few significant differences between covariates examined for the states. Also, an attempt was made to examine some of the associations using unmatched regressions and similar results were found, suggesting that the matching was adequate for the purpose of this analysis.

An issue specific to examining media coverage at the state level concerns shared

media markets and national newspapers. In some cases, certain newspapers may be widely read in more than one state. For example, the *Boston Globe* may have an effect on New Hampshire. In other cases, newspapers in a state may have very high circulations and be widely read around the country. This may affect the type of news coverage in that paper. For instance, Illinois did not pass a law, but seemed to have a higher amount of news coverage than some of the other states, possible due to articles from the *Chicago Tribune* and the *Chicago Sun Times*. These types of news exposure overlaps were not accounted for in this study.

Also, as discussed in Chapter 3, the issue of small sample size with respect to the state-level analysis was another limitation of this study. Comprehensive multivariate models could not be explored, and the small sample size may have biased the findings toward the null in the analyses that were conducted. The data still allowed for initial examination of differences that should be explored further. It is also important to mention that all states with laws were examined in this study. Given that the states included represent a 'population' of states (rather than a sample) with screening and training laws, the p-values may be less important because significance levels are most meaningful when making inferences about a population from a sample.

Finally, it is impossible to determine a direct causality between newspaper coverage and policy success in state government due to the many factors that influence policymakers (Paalman, 1997). Still, as Altman, Strunk and Smith (1999) suggest, it is important to describe this first link, the evidence that the message has entered the news arena, when examining media influence. This study helped to determine whether any association existed.

## **Generalizability**

This study would likely be generalizable to other issue areas that have limited public debate and target a specific group of people, or to issues that also seem to have low salience in the media. For issues that have more public debate, or are more salient in the media, news coverage may play a different role in influencing the policy agenda and policy adoption (Yanovitzky, 2002). For example, groups may want to promote their views and the way they want the issue framed in the media to help sway public opinion, leading to competing messages in the media. For issues such as this one that seemed to have minimal coverage and little debate in the media, getting information about the issue at all into the news to get people to think it is important may be the primary goal as opposed to influencing opinions about the issue. Because of differences in the way the news media are likely to cover issues of high salience as opposed to low salience, the results of this study may not be generalizable to issues of high salience. There may also be differences with respect to how the media influence the policy agenda for high salience issues as opposed to low salience issues (Lemert, 1992).

There were also some unique trends with respect to coverage of this issue that may not be applicable to other topics. For instance, in early 1992, Antonia Novello, then Surgeon General, made an announcement regarding getting the medical community involved in the fight against IPV. In June of 1992, the American Medical Association released guidelines to physicians about IPV at the same time that a landmark article, "Opening Pandora's Box", about IPV and health care providers was published in the *Journal of the American Medical Association* (Sugg & Innui, 1992). This all led to a large amount of news coverage in 1992 as seen when coding articles from California and

Texas for that year. Clearly, events that are unique to a time period or particular issue may limit the generalizability of the results from this study to other issues.

### **Implications of Study Results**

The descriptive information collected from the study contributed to the literature in the field of intimate partner violence and health care policy by providing information about how the issue of screening and training is discussed in the news media. The study confirmed that while there has been some discussion by the news media of these issues, much of the discussion has focused around efforts that individuals can make in addressing IPV.

As was discussed in Chapter 2, the way an issue gets framed can influence how the issue is addressed by both society and the political system (Entman, 1993; Taylor & Sorenson, 2002). The findings from this study suggest that the main frame for this issue has changed over time. People working in the field, whether it is advocates or researchers, may be able to influence news coverage, especially for an issue such as this one that appeared to have little debate in the media. Thus, people should try to influence news coverage in a way that is compatible with the goals they want to accomplish. For example, perhaps refocusing the discussion to address how states can be involved could lead to more funding for programs in health care settings and more policies that could influence how the health system responds to the problem. Media advocacy is the term used to describe this use of the media to achieve policy goals and is referred to many as “the strategic use of mass media to apply pressure to advance healthy public policy” (Wallack & Dorfman, 1996, 298).

As previous researchers have suggested, getting the public health perspective into news stories about violence can be an important way to encourage policies and interventions in health care settings that may help reduce violence (Coleman & Thorson, 2002; Dorfman et al., 1997; Rodgers & Thorson, 2001; Taylor & Sorenson, 2002). Coleman and Thorson (2002) even illustrated how adding that perspective can sometimes be successful in shaping reader perceptions of the problem. Since this study specifically searched for articles that were related to health care issues, the public health message was present in many of the articles. However, Figure 5 showed how even the articles that included the general IPV terms and the general health terms represented only a small percentage of the total articles retrieved when using the IPV terms only.

Another interesting aspect of the coverage for this issue relates to the transfer of information about research studies from professional journals to mass media. Since only 8% of articles coded from Part 1 of the study indicated that the focus of the article was on a research study, perhaps researchers could improve efforts at getting studies covered by the news media. Ensuring that important findings about intimate partner violence, and especially the success of health care interventions, are covered by the news media increases the chances that this information can help shape the public and political agenda (Nelson, 1991; Strays, 1992).

A recent report by the Berkeley Media Studies Group (2003) that examined news coverage of IPV provided a list of recommendations for people working in the field to get their messages into stories about intimate partner violence. The report encourages researchers and advocates to: “build relationships with reporters”, “share data about IPV”, “create news about IPV that is not linked to homicide”, and “use editorial venues”

such as opinion pieces (Berkeley Media Studies Group, 2003, 22-23). Researchers can also try to disseminate their findings directly to policymakers. An article by Feldman, Nadah & Gursen (2001) discussed ways to do this with respect to long-term care, but the suggestions are transferable to the field of intimate partner violence.

The second part of the study provided an initial examination of the links between media and policy. Although cause and effect between media coverage and policymaking could not be determined, the goal was to explore the association between media coverage and policy adoption. There was some association of discussion of state role in addressing the issue of screening and training in the media and policy adoption. It is unclear what explains this association, but the findings from this initial study can hopefully provide direction to researchers hoping to further explore these issues.

Also, while searching for measures to assess the problem of intimate partner violence in each state, limited state-level data that was easily accessible seemed difficult to find. Studies have found that policymakers rely on data to help understand problems in their states (e.g., Feldman et al., 2001). Perhaps making state-level data about intimate partner violence more accessible would help states determine whether there were specific problems that could be addressed through programs or policies.

Another implication of this study is its contribution to the literature regarding the media and state policy. While several studies of media and policy have focused on national policymaking, this study attempted to develop methods for examining links between policy and media at the state level of government. It is generally more difficult to obtain information regarding policy activity other than actual policy adoption and to obtain electronically available newspaper coverage when focusing on the state level

rather than the national level. This study developed methods for comparing media coverage and policymaking at the state level of government. The methods used for this study offer ways to explore similar concepts in other policy areas.

Finally, the content analysis conducted for this study resulted in the development of a codebook for others to use in identifying and coding articles related to intimate partner violence and health. The codebook also provides a template that other researchers can refer to when analyzing any issue related to state policy.

### **Future Research**

This study provided an initial examination of news coverage of health care policies related to intimate partner violence and of the association between news coverage and state policy adoption. The information obtained illustrated how the issue of health care provider training and screening was covered in the news.

A future study could collect additional information about news coverage and use a different study design to determine if differences in news coverage between states did exist but were not captured in this study. Other studies could also evaluate a wider sample of news articles about a broader range of policies related to IPV to understand which policies or issues receive the greatest coverage, and how this can potentially influence the policy agenda for all policies related to IPV. For instance, a study could look at whether policies related to the criminal justice system receive greater coverage than policies related to health care settings, and how this may affect policy initiatives.

Future studies could take a case study approach and incorporate qualitative data to better understand both the influence of the news on policymakers, and the other factors

that may have been associated with policy adoption. Interviews with policymakers about their awareness of news coverage of the issue and what factors were likely to influence their positions on the issue would help better understand any agenda-setting effect of the news media for this particular issue. Interviews with legislative staff would also be helpful to ask about the influence of the media as compared to letter writing campaigns or other types of communication or media. Interviews with advocates could help assess efforts made to help support these issues and policies, including media campaigns and other types of activities. Another study including interviews with key informants and additional data collection could also contribute to understanding what factors were associated with the adoption of these policies in certain states and the nature of any media initiatives going on in certain states.

This study did not attempt to evaluate the efficacy of screening or training for intimate partner violence, or to assess the effectiveness of state laws that have been implemented to address screening and training. Further research about whether laws are effective or not by would also contribute to the field of family violence and health care policy (Institute of Medicine, 2002).

In addition, a federal policy, the Domestic Violence Screening and Treatment Act of 2002, was proposed in the U.S. Congress in 2002 (FVPF, 3/20/02). One could incorporate the news data collected in this study and collect additional data to conduct an agenda-setting study with a national focus. This policy has again been proposed in 2003 (FVPF, 2/4/03), so perhaps information from this study can be used to help inform media campaigns that may be targeted at supporting this federal policy.



Finally, perhaps examining issues that received greater news coverage or were more controversial would result in more definitive detectable differences between aspects of news coverage compared to policy adoption. The codebook and research methods developed for this study can be used to examine policies related to other issues to further explore issues of news coverage and agenda setting.

**APPENDIX A: STATE LAW LIST**

## TRAINING

**States that have developed training programs for medical professionals OR require medical professionals to participate in training as of August 28, 2001\*:**

<u>Case state</u>	<u>Date^</u>	<u>Number</u>	<u>Control state</u>	<u>Law description</u>
Oklahoma	5/1/90	OK S.T. 63 §1-227(B.2)	Minnesota	requires that non-mandatory training for domestic violence is made available to various professionals, including medical providers
New York	7/17/92	NY Exec §575 1999 (Boehm, 2001)	Massachusetts	established a state office responsible for conducting training for health providers
California	10/11/93	CA Bus & Prof. Code §2191(h)	Texas	suggested that the Division of Licensing should consider including a course about partner abuse for health providers; created two sites to train providers to conduct evidentiary exams
Maryland	5/26/94-98	s19-1703	Virginia	provided for a pilot program for three hospitals to conduct training for health providers of emergency services

<u>Case state</u>	<u>Date^</u>	<u>Number</u>	<u>Control state</u>	<u>Law description</u>
Ohio	12/9/94	ORC §4723.25; §4731.282; §4732.141	Illinois	require boards of nursing, medicine and psychology to offer at least one continuing education course related to domestic violence and the relationship of domestic violence to child abuse
Florida	6/8/95	FS §455.597	Georgia	requires a 1 hour training session for biannual licensure/re-certification for health providers
Alaska	6/17/96	AS §18.66.310	Nevada	requires the provision of education about domestic violence for those public employees required to report child abuse
Washington	3/28/96	R.C.W. §43.70.610	Oregon	requires the creation of an education program by the Department of Health about domestic violence for health professionals
Kentucky	4/9/98	KRS §194A.540	Tennessee	requires a three hour course on domestic violence for licensure or certification for various types of health providers (either initial or renewal)

<u>Case state</u>	<u>Date<sup>^</sup></u>	<u>Number</u>	<u>Control state</u>	<u>Law description</u>
Pennsylvania	12/3/98	HB 2268	New Jersey	allowed for the creation of medical advocacy programs at various sites that will conduct training about domestic violence for health professionals
West Virginia	3/4/98	WVC 48-26-503 (former s. 48-2c-13a)	Louisiana	requires the Department of Health to provide standards for domestic violence training programs for health providers

<sup>^</sup>date approved by the Governor

- \*Sources:** (Family Violence Prevention Fund, 2001b; Institute of Medicine, 2002)
- Alaska:** Act of June 17, 1996 (Chapter 64, Article 3, Section 18.66.300, June 17, 1996), Laws of Alaska, p. 28 [Current version of statute retrieved 10/22/01 from LexisNexis online]
- California:** An act for continuing medical education, California Business and Professional Code Chapter 5, Article 10, §2191 (2001). Retrieved October 22, 2001 from LexisNexis online.
- Florida:** Act of June 8, 1995 (Chapter 95-187, Section 4(455.222)), Laws of Florida, p. 1731.
- Kentucky:** Act of April 9, 1998 (Chapter 426 (HB 132), April 9, 1998), Acts of the General Assembly, p. 1422. [Current version of statute retrieved 10/22/01 from LexisNexis online]
- Maryland:** Domestic Violence Medical Response Act (Chapter 558, May 26, 1994), 1994 Laws of Maryland, p. 2623.
- New York:** Act of July 17, 1992 (Chapter 463, Section 575, July 17, 1992), Laws of New York, p. 3196. [Current version of statute retrieved 10/22/01 from LexisNexis online]
- Ohio:** Act of December 9, 1994 (HB 335, Sections 4723.25; 4731.282; 4732.141), Ohio House Laws, p. 5451. [Current version of statutes retrieved 10/22/01 from LexisNexis online]
- Oklahoma:** Child Abuse Prevention Act, (Chapter 154, May 1, 1990), Oklahoma session laws, p.451. [Current version of statute retrieved 10/22/01 from LexisNexis online]
- Pennsylvania:** Domestic Violence Health Care Response Act (Act #2268, 1998). Retrieved March 10, 2002 from <http://www.legis.state.pa.us/WU01/LI/BI/BI/1997/0/HB2268P3979.HTM>
- Washington:** Act of March 28, 1996 (Chapter 191, Section 89, 1996), Washington Session Laws, p. 817. [Current version of statute retrieved 10/22/01 from LexisNexis online]
- West Virginia:** Act of March 4, 1998 (Chapter 124, Section 48-2C-13a, 1998), West Virginia Session Laws, p. 690. [Current version of statute retrieved 10/22/01 from LexisNexis online]

**SCREENING**

**States that require some type of IPV screening by medical professionals as of August 28, 2001\*:**

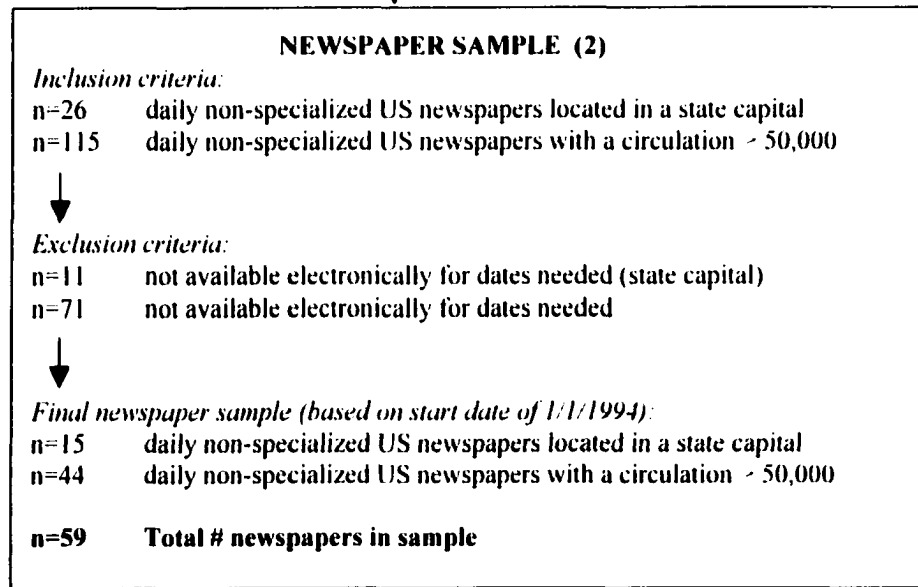
<u>Case state</u>	<u>Date<sup>^</sup></u>	<u>Number</u>	<u>Control state</u>	<u>Law description</u>
California	10/11/93	CA Health §1233.5a	Texas	requires medical clinics, acute care and acute psychiatric clinics, and substance abuse programs to screen for spousal or partner abuse
New York	7/7/98	NY Public Health §2137	Massachusetts	requires procedures to screen for domestic violence when testing for HIV/AIDS and contacting partners
Pennsylvania	12/3/98	HB 2268	New Jersey	created medical advocacy sites that will provide universal screening

<sup>^</sup>date approved by the Governor

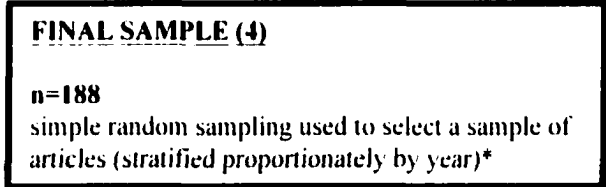
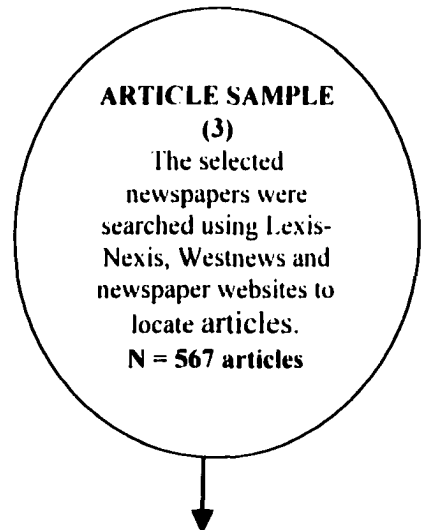
\* \*Sources: (FVPF, 2001b)  
 California: Act of October 11, 1993, (Section 12, Section 1233.5, 1993), California Statutes of 1993 p.7094 [Current version of statute retrieved 10/22/01 from LexisNexis online]  
 New York: Act of July 7, 1998 (Chapter 163, Section 2137, 1998), Laws of New York, p. 2821. [Current version of statute retrieved 10/22/01 from LexisNexis online]  
 Pennsylvania: Domestic Violence Health Care Response Act (Act #2268, 1998). Retrieved March 10, 2002 from <http://www.legis.state.pa.us/WU01/LI/BI/BI/1997/0/HB2268P3979.HTM>

**APPENDIX BI: STUDY SAMPLE FOR PART I**

**STATE SAMPLE (1):** 20 states based on state selection for Part 2 of study



→ *search with terms* →



\*using a standard error of proportion equation with a finite population correction from Levy and Lemeshow (1991)

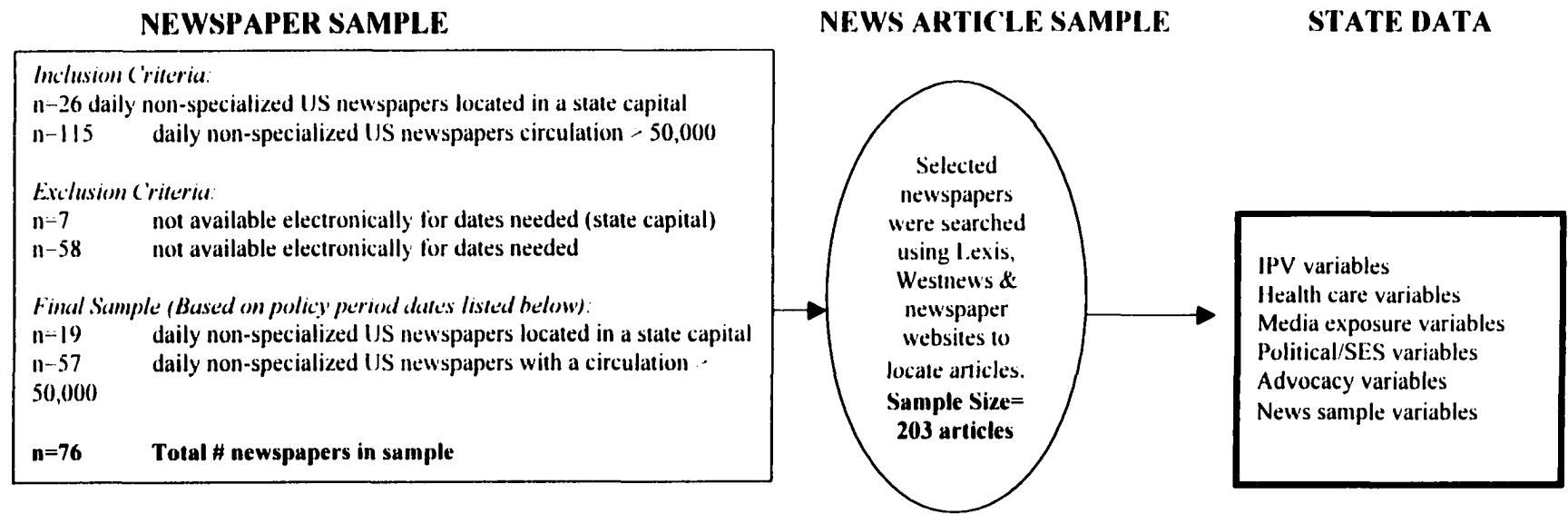
95% confidence level  $\alpha = .05$   $Z = 1.96$  error term = 10% = .10

$$n = \frac{(PQ)(Z^2/P^2)}{e^2 + [(PQ)(Z^2/N*P^2)]} = \frac{(.5)(.5)(3.84/.25)}{.01 + [(.5)(.5)(3.84/142)]} = \frac{3.84}{.01 + .0068} = 229$$

finite population correction  $n = n^0 / 1 + (n^0 / N) = 229 / 1.40 = 164$  is minimum



**APPENDIX B2: STUDY SAMPLE FOR PART 2**



**STATE LIST (n=22)**

<b>Policy state</b>	<b>Control state</b>	<b>Dates*</b>
Alaska	Nevada	1/1/95-6/17/96
California	Texas	1/1/92-10/11/93
Florida	Georgia	1/1/94-6/8/95
Kentucky	Tennessee	1/1/97-4/9/98
Maryland	Virginia	1/1/93-5/26/94
New York	Massachusetts	1/1/91-7/17/92
New York	Massachusetts	1/1/97-7/7/98
Ohio	Illinois	1/1/93-12/9/94
Oklahoma	Minnesota	1/1/89-5/1/90
Pennsylvania	New Jersey	1/1/97-12/3/98
Washington	Oregon	1/1/95-3/28/96
West Virginia	Louisiana	1/1/97-3/4/98

\*End date is date the law was approved by the governor for the policy state

**APPENDIX C: CONTENT ANALYSIS NEWSPAPER SAMPLE**

The following table presents a list of which newspapers were included from each state for each part of the study. Percentages are also provided to indicate what proportion of eligible newspapers was electronically available for inclusion in the study. A \* indicates the newspaper is from a state capital.

$$\% \text{ circulation in sample} = \frac{\text{total sum of newspaper circulation for eligible newspapers that were also electronically available}}{\text{total sum of newspaper circulation for eligible newspapers}}$$

$$\% \text{ newspapers in sample} = \frac{\text{total number of eligible newspapers that were also electronically available}}{\text{total number of eligible newspapers}}$$

	PART 1		PART 2			
	% circulation in sample		% newspapers in sample		% circulation in sample	
			% major	% capital	Case	Control
<b>Alaska</b>	0%		1/1=100%	0/1=0%	91%	66% (NV)
Anchorage Daily News	NA					
<b>California</b>	56%		8/21=38%	1/1=100%	68%	70% (TX)
Daily News of LA						
Fresno Bee						
Los Angeles Times						
Orange County Register						
Press Enterprise			NA		NA	
Press Telegram	NA					
*Sacramento Bee	NA					
San Francisco Chronicle						
San Francisco Examiner						
San Jose Mercury News	NA					

	PART 1		PART 2			
	% circulation in sample		% newspapers in sample		% circulation in sample	
			% major	% capital	Case	Control
<b>Florida</b>	50%		6/12=50%	1/1=100%	77%	78% (GA)
Miami Herald	NA					
Orlando Sentinel						
Palm Beach Post						
St. Petersburg Times						
Sun-Sentinel (Ft. Lauderdale)						
*Tallahassee Democrat	NA					
Tampa Tribune						
<b>Georgia</b>	78%		1/3=33%	1/1=100%	78%	
Atlanta Journal and Constitution						
*Augusta Chronicle						
<b>Illinois</b>	78%		3/7=43%	1/1=100%	78%	
Chicago Sun-Times						
Chicago Tribune						
Peoria Journal Star						
*State Journal-Register						
<b>Kentucky</b>	0%		½=50%	0/1=0%	31%	65% (TN)
Lexington Herald-Leader	NA					

	PART 1		PART 2			
	% circulation in sample		% newspapers in sample		% circulation in sample	
			% major	% capital	Case	Control
<b><u>Louisiana</u></b>	100%		1/1=100%	1/1=100%	100%	
*Advocate (Baton Rouge)						
Times-Picayune (New Orleans)						
<b><u>Maryland</u></b>	100%		1/1=100%	1/1=100%	100%	92% (VA)
Baltimore Sun						
*Capital (Annapolis)						
<b><u>Massachusetts</u></b>	78%		2/6=33%	2/2=100%	50% POL1	
*Boston Globe					78% POL2	
*Boston Herald						
Patriot Ledger (Quincy)						
Telegram and Gazette (Worcester)						
<b><u>Minnesota</u></b>	78%		0	2/2=100%	100%	
*Pioneer Planet Press	NA					
*Star Tribune						
<b><u>Nevada</u></b>	66%		1/3=33%	0/1=0%	66%	
Las Vegas Review Journal						

	<b>PART 1</b>		<b>PART 2</b>			
	<b>% circulation in sample</b>		<b>% newspapers in sample</b>		<b>% circulation in sample</b>	
			<b>% major</b>	<b>% capital</b>	<b>Case</b>	<b>Control</b>
<b>New Jersey</b>	54%		2/6=33%	1/2=50%	62%	
Record (Bergen County)						
Star-Ledger (Newark)						
*Times (Trenton)	NA					
<b>New York</b>	68%		4/12=33%	1/1=100%	68% POL1	50% (MA)
Buffalo News					68% POL2	78% (MA)
New York Times						
Newsday (Long Island)						
Post-Standard						
*Times Union (Albany)						
<b>Ohio</b>	58%		4/8=50%	1/1=100%	68%	78% (IL)
Beacon Journal (Akron)	NA					
Cincinnati Post						
*Columbus Dispatch						
Dayton Daily News						
Plain Dealer						
<b>Oklahoma</b>	100%		1/1=100%	1/1=100%	100%	100%(MN)
*Oklahoman (Oklahoma City)						
Tulsa World						

	PART 1		PART 2			
	% circulation in sample		% newspapers in sample		% circulation in sample	
			% major	% capital	Case	Control
<b>Oregon</b>	82%		1/1=100%	0/1=0%	82%	
Oregonian (Portland)						
<b>Pennsylvania</b>	41%		5/7=71%	1/1=100%	94%	62% (NJ)
Centre Daily Times (State College)	NA					
Morning Call (Allentown)						
*Patriot-News (Harrisburg)						
Philadelphia Daily News	NA					
Philadelphia Inquirer	NA					
Pittsburgh Post-Gazette						
<b>Tennessee</b>	52%		4/4=100%	0/1=0%	65%	
Chattanooga Times	NA					
Chattanooga Free Press	NA					
Commercial Appeal (Memphis)						
Knoxville News-Sentinel						
<b>Texas</b>	59%		3/10=30%	1/1=100%	70%	
*Austin American-Statesman						
Dallas Morning News						
Fort Worth Star-Telegram	NA					
Houston Chronicle						



	PART 1		PART 2			
	% circulation in sample		% newspapers in sample		% circulation in sample	
			% major	% capital	Case	Control
<b>Virginia</b>	77%		3/4=75%	1/1=100%	92%	
Newport News Daily Press	NA					
*Richmond Times Dispatch						
Roanoke Times & World News						
Virginian-Pilot (Norfolk)						
<b>Washington</b>	88%		5/6=83%	0/1=0%	95%	82% (OR)
Columbian (Vancouver, WA)	NA					
News Tribune (Tacoma)						
Seattle Post-Intelligencer						
Seattle Times						
Spokesman-Review						
<b>West Virginia</b>	100%		0/0	2/2=100%	100%	100% (LA)
*Charleston Daily Mail						
*Charleston Gazette						

## **APPENDIX D: ARTICLE CODEBOOK**

## Codebook For Data Collectors and Coders

**Title:** Domestic Violence and Health Provider Screening/Training

**Prepared by:** Jennifer Manganello

### References Used for Codebook/Coding Sheet

Bauer, Martin, Ragnarsdottir, Asdis, Rudolfsdottir, Annadis, & Durant, John. Public perceptions of BSE and CJD risk in Europe. From *Science and technology in the British press, 1946-1990: A systematic content analysis of the press. Project report (1995)*. Available at <http://academic.csuohio.edu/kneuendorf/content/hcoding/hcindex.htm>. Last accessed May 27, 2002.

S Hobbs. *Attribute Agenda-Setting in an Open Primary: An Examination of Press Coverage and Political Ad Effects*. Baton Rouge: Louisiana State University; 2001.

G Kennedy and L Bero. Print Media Coverage of Research on Passive Smoking. *Tobacco Control* 8: 254-260, 1999.

Mebane, Felicia. Personal Communication. 2001.

Miller, Warren E., AH Miller, and FG Klines. *Media Content Analysis Study, 1974* from ICPSR #7586

Oliver, Pamela. *Codebook for Content Analysis of Stories about Protest Events*. Available at <http://www.ssc.wisc.edu/~oliver/PROTESTS/codebook2000.htm>. Last accessed May 27, 2002.

Riffe, D, S Lacy, and FG Fico. *Analyzing Media Messages: Using Quantitative Content Analysis in Research*. Mahwah, New Jersey: Lawrence Erlbaum Associates, 1998.

Sylvester J, Wu HD, Hamilton JM. *A Content Analysis of The Philadelphia Inquirer's Israeli/Palestinian Coverage*. Louisiana State University; 1999.

Per Mebane, the format and some of the coding procedures in this document were based in part on a similar document developed by PSRA and the Kaiser Family Foundation.

## **U.S. News Sources**

News article sources: Lexis-Nexis (from Academic Universe)  
Westnews (from Westlaw)  
Individual newspaper websites with electronic archives, including  
Newslibrary

### *Inclusion criteria:*

#### *Major Newspapers*

U.S. daily, English, non-specialized newspapers with a circulation of 50,000 or greater as stated in the *Gale Publications Directory (135<sup>th</sup> edition, 2001)*

#### *State Capitol Newspapers*

Newspapers located in the capitol city of a state

### *Exclusion criteria:*

Any newspaper not available electronically for the required years

## **Time Period**

Longitudinal analysis: 1/1/1994 through 12/31/2001

Policy analysis: January 1 of the year prior to the year the policy passed until the date policy was signed by the governor

*Example: in California, law was signed by governor on 10/11/93 media coverage was obtained from 1/1/92 to 10/11/93 for CA and TX (control state)*

## Search Terms

These terms can be copied from this document and pasted into the fields for each search.

### Domestic violence terms (searches the full text):

Terms: (partn! OR spous! OR domes! OR marita! OR wom\*n OR husb!) w/4 (abus! OR violen! OR batter!)

### Health terms (searches the full text)

Terms: (professi! OR emerg! OR patient OR health care OR medica! OR doctor OR nurs! OR physic!)

### Screening training terms (searches the full text):

Terms: (advoc! OR train! OR screen! OR detec! OR iden! OR ask! OR recog!)

## Definitions

The following list defines and explains some terms that will appear throughout the news articles and coding sheet. Please read carefully and ask the PI if you have any questions.

*Domestic violence:* refers to violence or abuse occurring between intimate partners (for example, between a husband and wife or if between people who used to date but are no longer dating) You may also see the following terms to explain this, including: intimate partner violence, partner abuse, spouse abuse, battered women and sometimes family violence depending on the context.

*Health provider:* refers to any professional that provides health care, including doctors, nurses, physician assistants, or EMTs

*Provider screening:* refers to the process where a health care providers asks all patients of a sub-group of patients whether they are experiencing abuse by a current or former intimate partner, whether they feel safe in the home, etc.

*Provider training:* refers to an program or educational instruction that provides information to health care providers about how to screen for domestic violence and/or how to help patients who are identified as being abused

*Insurance discrimination:* refers to the practice where insurance companies deny coverage (health, home, etc.) to people who they know are victims of domestic violence (via medical records, etc.)

*Mandatory reporting:* refers to the requirement that health care providers must contact law enforcement if they identify that a patient is a victim of domestic violence

## Search and Save Instructions for Article Searches

1. Choose the database to be searched (e.g., General News, U.S. News, Newspaper Archives, etc.).
  - In the Lexis-Nexis U.S. News database, choose the appropriate state then click on "sources". Check the boxes for appropriate sources.
  - In Westnews, search for the newspaper in the Westnews database and select the appropriate newspaper
2. Insert terms as indicated on page 3 of the handbook.
3. Insert time period
  - For the 1994 to 2001 time period, search separately for each year.
  - For the policy period, search for the entire time frame.
4. Conduct the search.
5. Record date of the search, number of records retrieved, and other requested information on the search coding sheet.
6. Review the expanded document list and tag articles to be included in the dataset. **INCLUDE ANY ARTICLE THAT HAS EVEN A BRIEF MENTION OF HEALTH CARE PROVIDER SCREENING OR TRAINING.** (In most cases the expanded document list provides sufficient information to assess the relevance of the article; if not, review the full text of the article).

*The following types of articles are excluded from the content analysis. Do not select these types of articles.*

*Advice columns (for example, Ann Landers)  
Book reviews  
Health fairs/health screenings  
Letters to the Editor  
Movie reviews  
Obituaries  
Support group calendars meetings (even if at health center)  
Volunteer organization recruitment*

7. If the same article is found for different editions of the paper on the same day, select the article published in the final edition.
8. Save the full text of the tagged articles in a TXT or other word document file using the download feature.
9. Once all of the stories have been collected, begin data coding.

## Data Coding Instructions

To code each article, answer all questions beginning on page 5 of this codebook and record the answers on a separate data coding sheet for each article coded. If an article is reviewed and is either a letter to the editor or does not seem to make any reference at all to health provider screening/training, bring the article to the PI prior to coding. **IF AN ARTICLE CONSISTS OF SEVERAL SMALLER ARTICLES WITH INDIVIDUAL HEADLINES, ONLY CODE THE SMALLER ARTICLE THAT IS RELEVANT TO THIS STUDY.**

## Variable List

Variable 01	Article code
Variable 02	Newspaper
Variable 03	State that is focus of article
Variable 04	Article source
Variable 05	Article type
Variable 06	Gender of journalist
Variable 07	Letter of page number
Variable 08	Number of page number
Variable 09	Article section
Variable 10	Location of article
Variable 11	Article word number
Variable 12	Major topic
Variable 13	% of article about domestic violence
Variable 14	% of article about domestic violence and screening/training
Variable 15	Headline of article
Variable 16	Article has a photo
Variable 17	Article has a chart/graph
Variable 18	Mention of insurance discrimination
Variable 19	Mention of mandatory reporting
Variable 20	Mention of provider role
Variable 21	Mention of facility role
Variable 22	Mention of state role
Variable 23	Article provides data about domestic violence
Variable 23a-h	Types of data provided in article
Variable 24	Impression of article
Variable 25	Position of article
Variable 26	Position of article regarding screening law
Variable 27	Position of article regarding training law
Variable 28	Debate in the article
Variable 29	Coverage episodic or thematic
Variable 30a-p	Source affiliation
Variable 31	Number of different sources
Variable 32	Source viewpoints on laws
Variable 33	Main frame in article
Variable 34	Arguments appearing in article
Variable 35a-e	Arguments supporting screening/training
Variable 36a-d	Arguments opposing screening/training

## START CODING HERE

### Variable 01 Code Identifier 8 spaces AIDCODE

Indicates the identification code assigned to each article. Generally, this code is printed at the top of the article. Do not write the 'p' if there is a p at the end of the identification code on the article.

Write down the state initials + date of article \_\_\_\_\_

Example: Article published in Maryland on 1/12/94 would have a code MD940112. If 2 articles are published on the same day in the same state, add a letter to the end, for instance, MD940112A for the second article.

**Variable 02****Newspaper name****ANEWSPAP**

Record the specific newspaper for each article. Select the appropriate number and enter on coding sheet.

**.Alaska**

anc = Anchorage Daily News

**California**

dla = Daily News of LA

frs = Fresno Bee

los = Los Angeles Times

ocr = Orange County Re

pre = Press Enterprise

prt = Press Telegram

sac = Sacramento Bee

sfc = San Francisco Chronicle

sfx = San Francisco Examiner

sjm = San Jose Mercury News

**Florida**

mim = Miami Herald

orl = Orlando Sentinel

pbp = Palm Beach Post

stp = St. Petersburg Times

ssl = Sun-Sentinel (Ft. Laud)

tth = Tallahassee Democrat

tam = Tampa Tribune

**Georgia**

atl = Atlanta Journal and Const.

aug = Augusta Chronicle

**Illinois**

cst = Chicago Sun-Times

ctr = Chicago Tribune

pjs = Peoria Journal Star

sta = State Journal-Register

**Kentucky**

lex = Lexington Herald-Leader

**Louisiana**

adv = Advocate (Baton Rouge)

pic = Times-Picayune

**Maryland**

bal = Baltimore Sun

cap = Capital (Annapolis)

**Massachusetts**

bgl = Boston Globe

bhr = Boston Herald

pat = Patriot Ledger (Quincy)

tel = Telegram and Gazette

**Minnesota**

stb = Star-Tribune

pnr = Pioneer Planet Press

**Nevada**

vgs = Las Vegas Review Journal

**New Jersey**

rec = Record (Bergen County)

str = Star-Ledger (Newark)

tre = Times (Trenton)

**New York**

buf = Buffalo News

nyt = New York Times

new = Newsday (Long Island)

syr = Syracuse papers

alb = Times Union (Albany)

**Ohio**

bea = Beacon Journal (Akron)

cin = Cincinnati Post

col = Columbus Dispatch

dat = Dayton Daily News

pln = Plain Dealer

**Oklahoma**

okl = Oklahoman

tls = Tulsa World

**Oregon**

ore = Oregonian (Portland)

**Pennsylvania**

cen = Centre Times

mca = Morning Call (Allentown)

pnw = Patriot-News

pdn = Philadelphia Daily News

phi = Philadelphia Inquirer

pit = Pittsburgh Post-Gazette

**Tennessee**

cht = Chattanooga Times

chg = Chattanooga Free Press

com = Commercial Appeal

kno = Knoxville News-Sentine

**Texas**

aus = Austin American-States.

dal = Dallas Morning News

for = Fort Worth Star-Telegram

hou = Houston Chronicle

**Virginia**

npt = Newport News Daily Prs

rch = Richmond Times Dispatch

roa = Roanoke Times & World

vir = Virginian-Pilot (Norfolk)

**Washington**

clm = Columbian

tac = News Tribune (Tacoma)

spi = Seattle Post-Intelligencer

sea = Seattle Times

spk = Spokesman Review

**Washington DC**

pos = Washington Post

wtm = Washington Times

**West Virginia**

cdm = Charleston Daily Mail

chg = Charleston Gazette



**Variable 03****State or area that is the focus of article****2 spaces****ASTTOPIC**

Record what state or area is the focus of the article. Select the appropriate number and enter on the coding sheet. If the article is about multiple states, select code '30'. If the article is about the entire United States, including research studies that do not focus on a particular state, or no specific region or area is specified, select code '40'. If the article is about a city or area within a state, select the appropriate state code.

- |                    |   |
|--------------------|---|
| 01 = Alaska        | 15 = Oklahoma                             |
| 02 = California    | 16 = Oregon                               |
| 03 = Florida       | 17 = Pennsylvania                         |
| 04 = Georgia       | 18 = Tennessee                            |
| 05 = Illinois      | 19 = Texas                                |
| 06 = Kentucky      | 20 = Virginia                             |
| 07 = Louisiana     | 21 = Washington                           |
| 08 = Maryland      | 22 = West Virginia                        |
| 09 = Massachusetts | 23 = Washington DC                        |
| 10 = Minnesota     |   |
| 11 = Nevada        | 30 = Multiple states                      |
| 12 = New Jersey    | 31 = Other state(s) not on list           |
| 13 = New York      | 40 = United States/none specified/general |
| 14 = Ohio          | 999 = Not sure/Don't know                 |

**Variable 04****Article Source****3 spaces****ASOURCE**

Record the category that describes the source of the article. For this question, you are looking to see where the article originated. In other words, did the article come from the AP newswire? Did it come from the New York Times? Was it written by a staff writer? This information should be listed with each article. USE THE BYLINE ONLY FOR ANSWERING THIS QUESTION. Select the appropriate number and enter on coding sheet.

- 0 = Newspaper staff (*can use if no name is listed for an editorial or opinion piece*)
- 1 = Name given, but unknown if staff or not (*can use for any article when title isn't given*)
- 2 = Non-staff (*can use if name & title are given and it is clear the author isn't staff or if byline says "Special to the newspaper"*)

*Wire services/Other newspapers*

- 10 = AP story
- 11 = Bloomberg Business News
- 12 = Chicago Tribune Service
- 13 = Gannett
- 14 = Knight-Ridder
- 15 = LA Times
- 16 = NY Times
- 17 = Reuters
- 18 = Washington Post
- 19 = Misc. wire service/news service/unidentified wire service (for instance, "Wire reports")

30 = Combination – staff and wire service

888 = Other/other newspaper (Describe on space provided) \_\_\_\_\_

999 = Don't know (no name provided with article/not clear what type of article it is/etc.)

**Variable 05**  
**Article Type**  
**3 spaces**  
**ATYPE**

Describe the type of article. Opinion, commentary and editorial pieces should be identified at the top of the first page, although in some cases this information may be located at the end of the article. Only select '2' if it is clearly marked as an opinion piece, editorial or commentary. If it is not marked as opinion, editorial or commentary, select '1' unless there is an ambiguous heading, such as 'News and Opinion', making it difficult to determine the type of article. In that case, select '999'. Select the appropriate number and enter on the coding sheet.

- 1 = News article
- 2 = Editorial/opinion/comment/column
- 3 = Information/schedule for an upcoming event

888 = Other (Describe on space provided) \_\_\_\_\_  
999 = Don't know/not sure (use this if it is not clear whether it is a news or opinion piece)

**Variable 06**  
**Journalist Gender/article author**  
**3 spaces**  
**AGENDER**

Record the gender of the journalist or author who wrote the article by selecting the appropriate category. Use 'Unknown' for stories taken from news wire services or other articles. Select the appropriate number and enter on the coding sheet.

- 1 = Female/Multiple authors all female
- 2 = Male/Multiple authors all male
- 3 = Multiple authors of different genders
- 4 = Unknown (for instance, from AP or news service or editorial/opinion with no author listed)
- 999 = Not sure (use if you can't tell the gender by looking at the name)

**Variable 07**  
**Article Page-Section**  
**3 spaces**  
**APAGEL**

The page number of the article is generally given by both a letter and a number. In many cases, the letter of the page number and the section will be the same. The page number is either located at the beginning of the article or at the end. Write the letter on the coding sheet.

Letter of the page number      \_ \_ \_      (If unknown, leave blank)

**Variable 08**  
**Article Page-Number**  
**3 spaces**  
**APAGEN**

The page number of the article is generally given by both a letter and a number. The page number is either located at the beginning of the article or at the end. Write the number on the coding sheet.

Number of the page number      \_ \_ \_      (If unknown, leave blank)

**Variable 09**  
**Article Section**  
**4 spaces**  
**ASECTION**

Describes the name of the section where the article appears. Generally, the section will be listed at the top of the article next to the page number or at the end of the article, but may not appear in all articles. If you are unsure of whether you see a notation regarding the section or not, write in the information with a question mark and check with the PI. In some cases, the letter of the page number and the section will be the same. Use the page letter if no section name is given. Write the section letter/name exactly as it appears in the space provided on the coding sheet.

Section \_\_\_\_\_ (If unknown, leave blank)

**Variable 10**  
**Article Location**  
**3 spaces**  
**ALOCAT**

Indicate whether or not the article is on the front page of the first section or other sections. For major newspapers, the front page of the first section is indicated by page numbers like the following (A1, A01). Front pages of other sections generally appear with another letter (for instance, B1). Any page number that does not have the number 1 should be coded as choice #3 as it is not the first page of any section. If no page number is given, select '999'. If the page number is 1 but there is no letter indicating whether it is the first section or not, select '999'. Select the appropriate number and enter on the coding sheet.

- 1 = Front page article of first section
- 2 = Front page of another section
- 3 = All other stories

999 = Don't know/can't tell from information provided

**Variable 11**  
**Article word number**  
**4 spaces**  
**AWORDNUM**

Record the number of words in the article. This information is usually provided with the article. If not, they can be counted using the following rules. Also, if there are several shorter articles included with the print-out of the article, please count the words for the relevant article ONLY. Write the number of words on the coding sheet.

- 1. count numbers as a word
- 2. count phone numbers as 1 word
- 3. count initials as 1 word
- 4. count dashed words as separate words (41-year-old is 3 words)
- 5. do not count words in the headline

Number of words in the article \_\_\_\_\_

## **Variable 12**

### **Major Topic/3 spaces/ATOPIC**

Use the headline and the lead paragraphs to help determine the major focus of the article. The main topic should also be discussed for at least one-half of an article (per Mebane). If you cannot decide between categories, use don't know = 999 and write a note. Select the appropriate number and enter on coding sheet.

#### ***Health provider training and screening and domestic violence related topics***

- 10 = Domestic violence as a health facility/health provider problem or issue
- 11 = Discussion of health care facility/provider program and/or policy related to DV screening/training
- 12 = Discussion of DV guidelines issued by a medical association (ex: AMA or ANA) or other group
- 13 = Research study about domestic violence and issues related to health facilities/health providers
- 14 = Government study, report or publication related to health facilities/health providers
- 15 = Family Violence Prevention Fund domestic violence and health care report card
- 16 = Conference/meeting/lecture about domestic violence and health provider screening/training ONLY

#### ***Domestic violence and health related topics***

- 20 = Domestic violence as a health problem or issue (focus on injuries/deaths/health effects from DV)
- 21 = Research study about injuries/deaths/health effects from domestic violence
- 22 = Government study, report or publication related to injuries/deaths/health effects from DV
- 23 = Conference/meeting/lecture about domestic violence and health issues/as a public health problem

#### ***General domestic violence related topics***

- 30 = Domestic violence as a problem or issue (general discussion of DV or victims/NOT health-related)
- 31 = Research study about domestic violence in general/NOT health specific
- 32 = Government study, report or publication related to domestic violence
- 33 = Conference/meeting/lecture about domestic violence (general/NOT health-related)
- 34 = Domestic violence as a problem or issue for non-health agencies (such as courts/police/etc.)
- 35 = Domestic violence shelter/agency/organization program or activity, including fundraisers
- 36 = Domestic violence awareness month

#### ***Government response***

- 40 = Government-related action or activity not categorized by 41 through 48 or more than 1 category
- 41 = Local government initiative, program, report, task force or policy related to DV (city/county)
- 42 = State government initiative, program, report or task force related to domestic violence (not a policy)
- 43 = State policy proposed or voted on (mentions at least 1 domestic violence law)
- 44 = State policy proposed or voted on (mentions ONLY domestic violence and health care related laws)
- 45 = State policy signed into law/approved by governor (mentions at least 1 domestic violence law)
- 46 = State policy signed into law/approved by governor (mentions ONLY DV and health care related laws)
- 47 = State policy proposed/voted on/approved by governor-NOT RELATED TO DOMESTIC VIOLENCE
- 48 = National policy proposed/passed related to domestic violence
- 49 = National program or initiative

#### ***Other topics***

- 50 = Research study about an issue OTHER THAN domestic violence
- 51 = Government study, report or publication for an issue OTHER THAN domestic violence
- 52 = Conference/meeting/lecture for an issue OTHER THAN domestic violence
- 53 = Discussion of guidelines issued by a medical association for non-DV topic (ex: AMA or ANA)
- 54 = Costs related to domestic violence
- 55 = Domestic violence as a workplace issue
- 56 = Award given to someone working on the issue
- 57 = Domestic violence incident (homicide, arrest, court case, etc.)
- 888 = Other (Describe on space provided) \_\_\_\_\_
- 999 = Don't know/not sure

**Variable 13**  
**DV % of article**  
**3 spaces**  
**ADVGPCNT**

How much of the news article focuses on/discusses domestic violence in general? This can include any aspect of domestic violence, including health care issues. You do not need to count words or paragraphs-just provide a general estimate. The percentages are meant to be a guideline and may be more or less applicable depending on the length of the story. Select the appropriate number and enter on the coding sheet.

- 1 = A majority of the article (over 60%: article is basically about domestic violence)
- 2 = About half of the article (30-59%: article is about something else but does discuss domestic violence)
- 3 = Some of the article (about 1-29%: article is about something else with a BRIEF mention of IPV)

999 = Don't know/not sure

**Variable 14**  
**DV as health issue % of article**  
**3 spaces**  
**ADVHPCNT**

How much of the news article focuses on/discusses domestic violence as it relates to health provider training and/or screening? You do not need to count words or paragraphs-just provide a general estimate. The percentages are meant to be a guideline and may be more or less applicable depending on the length of the story. Select the appropriate number and enter on the coding sheet.

- 1 = A majority of the article (over 60%: article basically about domestic violence and health care provider screening training)
- 2 = About half of the article (30-59%: article about something else/a related topic but has some discussion of health provider screening/training)
- 3 = Some of the article (about 1-29%: article about something else with BRIEF mention of health provider screening training and little or no discussion about what it is or why it is important)

999 = Don't know/not sure

## **STOP**

**IF THE ANSWER TO THIS QUESTION IS #3, OR IF THE ANSWER TO QUESTION#5 IS 3 OR 888, PLEASE DISCONTINUE CODING AT THIS POINT-YOU ARE FINISHED CODING THIS ARTICLE.**

**HOWEVER, *CONTINUE* CODING IF THE ARTICLE IS ABOUT STATE LEGISLATION ACTIVITY FOR HEALTH PROVIDER SCREENING/TRAINING.**

**Variable 15**  
**Headline of article**  
**3 spaces**  
**AHEADLIN**

Is there any reference in the headline to the issue of health provider screening/training? The headline **MUST BE** specific to health providers being trained in issues related to domestic violence or about health providers asking patients about domestic violence. Headings with phrases like 'diagnosis of domestic violence by health providers' that do not specifically say training and screening but imply screening/training should be coded as 'Yes'. It must be clear from the headline that the articles is related to health providers receiving training/education about domestic violence or finding out if patients are experiencing domestic violence. Something like 'Prescription for abuse' should be coded as '0' since it is not specific enough to be coded as either '1' or '2'.

- 0 = No
- 1 = Yes
- 2 = No reference specifically to screening or training, but does mention an aspect of domestic violence related to health care and/or health care providers
- 999 = Not sure

**Variable 16**  
**Article has a photo**  
**1 space**  
**APHOTO**

Photographs are not included in the databases, but in many cases, the text states whether a photo was included and provides a description of the photo. If it is clear the article has a picture with it, mark 'yes'. If there is no mention of a picture, mark 'no' or 'don't know'. It is coded this way since it is not clear whether all newspapers list pictures in the electronic databases. Select the appropriate number and enter on the coding sheet.

- 0 = No/Don't know
- 1 = Yes

**Variable 17**  
**Article has a chart or graph or text box**  
**1 space**  
**ACHART**

Charts/graphs are not included in the databases, but in many cases, the text states whether a chart/graph was included with the article. If it is clear the article has a chart/graph with it, or a text box graphic, mark 'yes'. If there is no mention of a chart or graph, mark 'no' or 'don't know'. It is coded this way since it is not clear whether all newspapers list charts/graphs in the electronic databases. Select the appropriate number and enter on coding sheet.

- 0 = No/Don't know
- 1 = Yes

**Variable 18**

**Mention of other health policies-insurance discrimination**

**3 spaces**

**ARINSUR**

Is the issue of insurance discrimination against victims of domestic violence mentioned in the article?  
Select the appropriate number and enter on the coding sheet.

0 = No

1 = Yes

999 = Not sure

**Variable 19**

**Mention of other health policies-mandatory reporting**

**3 spaces**

**ARREPORT**

Is the issue of mandatory reporting for victims of domestic violence by health providers mentioned in the article? Select the appropriate number and enter on the coding sheet.

0 = No

1 = Yes

999 = Not sure

**Variable 20**  
**Mention of provider role**  
**3 spaces**  
**APRVROLE**

Does the article or a source in the article suggest it is the role/responsibility of health care providers to address the issue of health provider screening/training? This includes statements such as health providers are responsible for learning about the issue, asking patients about DV, or other related topics. Select the appropriate number and enter on the coding sheet.

0 = No  
1 = Yes  
999 = Not sure

**Variable 21**  
**Mention of facility role**  
**3 spaces**  
**AFACROLE**

Does the article or a source in the article suggest it is the role/responsibility of health facilities or organizations (such as hospitals, HMO's or ERs) to address the issue of health provider screening, training and taking responsibility for developing programs, guidelines and/or policies? This can include current programs/policies, future programs/policies, or information about how many facilities have programs/policies. Select the appropriate number and enter on the coding sheet.

0 = No  
1 = Yes  
999 = Not sure

**Variable 22**  
**Mention of state role**  
**3 spaces**  
**ASTAROLE**

Does the article or a source in the article suggest it is the role/responsibility of states to address the issue of health provider screening/training and taking responsibility for developing programs, guidelines and/or policies? This can include current programs/policies, future programs/policies, or information about how many states have programs/policies. Select the appropriate number and enter on the coding sheet.

0 = No  
1 = Yes  
999 = Not sure



**Variable 23**

**Article provides data about domestic violence**

**1 space**

**ADATA**

Does the article provide any data/statistics about domestic violence? The type of data that should be coded here includes any statistics or numerical information obtained from research studies, reports, agencies, organizations and/or official government sources. This includes data about a program provided by a person working with the program. Thus, a doctor saying that about 10% of patients coming to the ER are victims of abuse WOULD NOT be coded, but a report stating that 10% of patients coming to the ER are victims of abuse WOULD be coded.

ONLY SELECT EACH TYPE OF DATA ONCE EVEN IF THAT TYPE OF DATA APPEARS MORE THAN ONCE IN THE ARTICLE (EXCEPT FOR '888/OTHER'-THAT CAN BE USED MORE THAN ONCE). For example, if data were provided about the number of hospitals with a training program for domestic violence and the number of hospitals with policies regarding screening for domestic violence, you would only write the number 3 one time. If data were provided about something related to domestic violence but not listed you can use the 'Other' code and write in the type of data that appears. 'Hospitals/ER/etc.' refers any type of health facility or provider. Select the appropriate number(s) and enter on the coding sheet. The data does NOT have to be listed in the order it appears.

0 = No      *If NO, go to next question.*

1 = Yes      *If YES, indicate the type of data. Select ALL that apply and write in ALL numbers on the coding sheet.*

1 = How many people are abused/injured from domestic violence

2 = How many people are killed from domestic violence

3 = Number of hospitals/health facilities with programs or policies to address DV

4 = Number of patients attending hospitals/ER/etc. that are experiencing DV

5 = Number of patients asked about DV/identified as DV positive by hospitals/ER etc

6 = Number of hospitals/ER/etc. in compliance with guidelines, rules, or policies

7 = Number of DV patients who are referred for services/programs by hospitals/ER/etc.

8 = Number of DV services/programs/shelter beds available in a city/state/etc.

9 = How many people use any type of DV services/programs/shelters in a city/state/etc.

10 = Number of calls to police OR arrests for domestic violence

888 = Other DV data (Describe on space provided) \_\_\_\_\_

999 = Don't know/not sure/unclear description of data

**Variable 24**

**Overall impression of article-provider screening/training**

**3 spaces**

**AIMPR**

Overall, are you left with a sense that health providers should ask patients about domestic violence or receive training around issues related to domestic violence? Select the appropriate number and enter on the coding sheet.

0 = No

1 = Yes

2 = Not enough information provided about screening/training to form an opinion

999 = Not sure

**Variable 25**  
**Position of article**  
**3 spaces**  
**APOSIT**

This question is designed to capture whether the article supports health provider screening training issues related to domestic violence. In general, only editorials, opinion pieces, and comment pieces will be either positive or negative. Code all straight news articles as neutral. Select the appropriate number and enter on the coding sheet.

- 0 = Neutral (use for all news articles or articles of type=888)
- 1 = Positive (supports having health providers screen patients or receive training for domestic violence)
- 2 = Negative (opposes having health providers screen patients or receive training for domestic violence)
  
- 999 = Not sure (use if unsure or if type of article was unknown (999))

**Variable 26**  
**Position of article regarding screening law**  
**3 spaces**  
**APOSSCLW**

This question is designed to capture whether the article supports health provider screening AS A STATE LAW (should the state require health providers to screen patients for domestic violence). In general, only editorials, opinion pieces, and comment pieces will be either positive or negative. For this study, all straight news articles will be coded as neutral. If a particular news article seems to take a strong position one way or the other, consult with the PI. Select the appropriate number and enter on the coding sheet.

- 0 = Neutral (use for all news articles that mention screening laws-otherwise code as 8)
- 1 = Positive (supports a screening law)
- 2 = Negative (opposes a screening law)
- 8 = There was no mention of health provider screening and domestic violence as a state law in the article
  
- 999 = Not sure (use if unsure or if the law is mentioned but the type of article was unknown (999))

**Variable 27**  
**Position of article regarding training law**  
**3 spaces**  
**APOSTRLW**

This question is designed to capture whether the article supports health provider training AS A STATE LAW (should the state require health providers to receive education about domestic violence). In general, only editorials, opinion pieces, and comment pieces will be either positive or negative. For this study, all straight news articles will be coded as neutral. If a particular news article seems to take a strong position one way or the other, consult with the PI. Select the appropriate number and enter on the coding sheet.

- 0 = Neutral (use for all news articles that mention training laws-otherwise code as 8)
- 1 = Positive (supports a training law)
- 2 = Negative (opposes a training law)
- 8 = There was no mention of health provider training and domestic violence as a state law in the article
  
- 999 = Not sure (use if unsure or if the law is mentioned but the type of article was unknown (999))

**Variable 28**  
**Controversy in the article**  
**3 spaces**  
**ADEBATE**

Is there any type of debate or controversy occurring in the article concerning health provider screening/training? Controversy exists if two different sides of the issue are presented by different sources. For instance, if one or more sources talk about why health care providers SHOULD receive training for domestic violence, and one or more sources discuss why health care providers SHOULD NOT receive training for domestic violence, this question would be coded as 'Yes'. If the article presents results of a research study that asked providers why they do or do not ask patients about domestic violence, and arguments are presented for each side, this would be coded as 'No'. Similarly, if one source supports provider training but in their discussion mentions reasons why people do not think health care providers should receive domestic violence training, this would be coded as 'No'. Select the appropriate number and enter on the coding sheet.

0 = No

1 = Yes

999 = Don't know/Not sure

**Variable 29**  
**Is the coverage more episodic or thematic?**  
**2 spaces**  
**AEPITHEM**

EPISODIC COVERAGE stresses the details of a particular event or personal story (e.g. incidents involving domestic violence, a description of a particular time when a provider asked a patient about domestic violence) with minimal or no attention to the broader social issues related to the event. Episodic stories generally feature people or case studies.

THEMATIC COVERAGE focuses on the more general issues raised by the event. For example, a thematic article would provide statistics on the numbers of battered women using health care services and suggest reasons why health providers do not ask women about domestic violence. Conferences about the issue, research studies, legislation related to the issue, and a discussion of statistics concerning domestic violence would fall into this category. Thematic stories generally feature "talking heads".

Given the above distinction, select one of the following responses to indicate whether an article should be described as EPISODIC or THEMATIC. Write the appropriate number on the coding sheet. Use 2 when there is a fairly equal distribution of thematic and episodic coverage.

1 = Episodic (the article features episodic coverage-the article is mostly about a person or particular incident)

2 = Mixed (the article appears to be a mix of episodic and thematic coverage-the article includes a discussion of a particular person or incident, *no matter how brief*, as well as presentation of statistics and/or general discussion of the issue-this discussion should be by the journalist-if a "talking head" or other source recounts a story, do not consider that episodic coverage)

3 = Thematic (the article features thematic coverage-the article is mostly a discussion of the problem, is about a conference, gives a lot of statistics, or presents information about a study-there is no specific event or personal story presented in the article)

999 = Not sure/Don't know

## SOURCES

The following question asks about sources used for each article. The sources should be listed IN ORDER of appearance of sources in the article, not the order of quotes. In some cases, a quote may be included by a source at the beginning of the article and again at the end of the article, with other sources referred to in the middle of the article. In this case, only count the source ONCE where the source FIRST appeared in the article. The following definition should be used to determine who is a source or not. "A source is a person, or organization, who gives information to news reporters. Sources are explicitly identified as such when news reporters quote or paraphrase information from them in stories. Story information not clearly attributed to a source is assumed to originate from a reporter's direct observations of actions and events." - Riffe et al.

**\*IMPORTANT: FOR THIS STUDY, THERE ARE TWO WAYS TO IDENTIFY SOURCES**

1. WHEN A QUOTATION IS USED.

2. WHEN THE FOLLOWING KEY WORDS/PHRASES ARE USED WHEN REFERRING TO WHAT A PERSON SAID OR INFORMATION THAT WAS OBTAINED. *IF YOU HAVE QUESTIONS ABOUT OTHER WORDS OR PHRASES USED, CONSULT THE PI.*

ACCORDING TO [SOURCE]

[SOURCE] SAYS/SAID

[SOURCE] NOTES/NOTED

[SOURCE] STATES/STATED

[SOURCE] SUGGESTS/SUGGESTED

[SOURCE] REPORTS/REPORTED

[SOURCE] CLAIMS/CLAIMED

[SOURCE] FINDS/FOUND (MOSTLY USED FOR STUDIES)

**\*ONLY CODE SOURCES FOR NEWS ARTICLES-DO NOT CODE SOURCES USED IN EDITORIALS OR OPINION PIECES OR IF THE TYPE OF ARTICLE WAS UNKNOWN (999).**

**\*ONLY QUOTE SOURCES IDENTIFIED WITH NAMES OF PEOPLE OR ORGANIZATIONS OR WHERE IT IS STATED THAT THE SOURCE IS ANONYMOUS OR NAME IS WITHHELD. THUS, STATEMENTS SUCH AS "MEDICAL OFFICIALS SAID" WOULD NOT BE CODED.**

**\*IF A SOURCE MAKES A REFERENCE TO SOMEONE ELSE, ONLY COUNT THE SOURCE MAKING THE REFERENCE AS A SOURCE.**

**\*If someone fits into more than one category, select the category that is MOST relevant to the reason the person is being interviewed for the article. For instance, if a doctor is quoted regarding a published study, code as 'researcher' instead of 'health provider'. If there is one quote from an agency and a quote from someone from the agency, only code the agency itself as one unique source. If it is unclear what the primary role is, use '888' and describe.**

### **Variable 30a-p**

**Source affiliation-first through fourteenth sources**

**3 spaces**

**ASRC1-ASRC16**

There are sixteen places on the coding sheet to enter the number describing the affiliation of each source used in the article. Codes for source affiliation are listed on the next page of the codebook. Select the appropriate number for each source and enter on the coding sheet IN ORDER of how the sources appear in the article. DO NOT CODE IF EDITORIAL OR OPINION PIECE OR IF THE TYPE OF ARTICLE WAS UNKNOWN (999). For each source, write in the number of the source followed by:

Q = if the source is quoted directly at some point in the article

N = if the source is never quoted directly with quotation marks anywhere in the article

## **SOURCE LIST (use for all source questions)**

### *Health providers/health administrators*

- 01 = Health provider
- 02 = Hospital/health facility administrator/hospital spokesperson/medical officials
- 03 = Health provider AND administrator/department director of health facility
- 04 = Personnel of domestic violence training program for health providers

### *Advocacy groups/professional organizations (can be sourced as agency itself or agency personnel)*

- 11 = Domestic violence state coalition
- 12 = Domestic violence shelter/group/agency
- 13 = Family Violence Prevention Fund (FVPF)
- 14 = Health professional organization (such as the AMA, AHA, ANA, etc.)
- 15 = Health insurance association
- 16 = Domestic violence advocates (mentioned as a general group-no specifics)
- 17 = Other advocacy group (focused on something else but also addresses DV *OR* not DV related)

### *Local/State government personnel*

- 21 = City elected official (Mayor, etc.)
- 22 = City employee/city agency (such as city health department)
- 23 = County employee/county agency
- 24 = District attorney/prosecutor (from any level of government)
- 25 = State legislator/spokesperson for state legislator
- 26 = State Governor/spokesperson for Governor
- 27 = State Attorney General/spokesperson for state Attorney General
- 28 = State agency (such as state health department)

### *Other sources*

- 31 = Insurance company personnel/administrator
- 41 = DV victim NOT medical patient
- 42 = DV victim AND medical patient
- 43 = Medical patient NOT DV victim
- 51 = Specific author of a research study (gives an actual person or agency name)
- 52 = Research study itself cited as source/no specific author (for instance, appears as "according to study")
- 53 = Professor (can also be a health provider)/Academic expert
- 54 = Student
- 55 = Surgeon General
- 56 = Report findings (not a research study)/survey results
- 61 = Law enforcement/court personnel (police, probation officer, judge)
- 62 = Attorney (private)
- 63 = FBI
- 71 = Federal government/congressional elected official/White House
- 72 = Centers for Disease Control (CDC)/National Center for Injury Prevention and Control (NCIPC)
- 73 = National Institute of Justice (NIJ) or any of its affiliated branches
- 74 = Department of Health and Human Services
- 75 = Other federal agency or department
- 81 = Anonymous/no name or affiliation provided
- 82 = AP or other newswire/other newspaper
- 888 = Other (Describe on space provided)
- 999 = Not sure (not clear what the affiliation is/hard to determine a category from what is written)

**Variable 31**  
**Sources used-total number**  
**2 spaces**  
**ASRCNUM**

Describes the number of DIFFERENT sources used in the article. Write the appropriate number on the coding sheet. DO NOT CODE IF EDITORIAL OR OPINION PIECE OR IF THE TYPE OF ARTICLE WAS UNKNOWN (999).

Number of DIFFERENT sources used    \_\_\_  \_\_\_

**Variable 32**  
**Source viewpoints on laws**  
**2 spaces**  
**ASRCVIEW**

Is there any place in the article where there is a mention of a state law related to health providers and domestic violence training or screening for domestic violence? DO NOT CODE IF EDITORIAL OR OPINION PIECE OR IF THE TYPE OF ARTICLE WAS UNKNOWN (999).

0 = No

1 = Yes

*If YES, list the position of all sources with respect to this law. Write in the number describing the source on the appropriate line on the coding sheet. For instance, if a source coded as 54 supported the law, you would write 54 on the appropriate line.*

Source does not comment on or discuss the law \_\_\_\_\_

Neutral position/source \_\_\_\_\_

Positive (supports the law) \_\_\_\_\_

Negative (opposes the law) \_\_\_\_\_

## **FRAMES**

Frames “define problems, diagnose causes, make moral judgments, and suggest remedies” (Entman, 1993: 52). Another definition of a frame is that it:

1. organizes central ideas on an issue (name of the frame),
2. deploys particular symbolic devices (metaphors), and
3. defines a particular polarity in controversy within itself; an agreement about how to disagree (the polarity).
4. tends to have particular sponsors. A sponsor is an actor that is likely to engage the issue under a particular frame (sponsor)” (Bauer et al. codebook, 2002).

In other words, frames are a way to present a problem that suggests who is responsible for the problem and how the problem can be solved. In order to code this variable, one should carefully review the frame explanation sheet to understand the concepts and characteristics for each frame.

**Variable 33**  
**Main frame used in article**  
**3 spaces**  
**AFRAME**

Please select the appropriate number of the MAIN frame that appears in the article and enter it on the coding sheet. If the OPPOSITE idea of the frame is presented, write the letter 'A' after the frame number. For instance, if the main frame discusses how it is NOT the health provider's role, you would enter '1A'.

999 = Don't know/not sure

CODE	FRAME	SPONSOR	DESCRIPTION
0	No frame in article		
1	Provider role	advocacy groups/DV service providers/medical organizations/researchers	Providers should ask/identify abuse since it is their role to help patients with this issue
2	Facility role	advocacy groups/DV service providers/medical organizations/researchers	Health care facilities (such as hospitals or emergency rooms) need to developing policies/guidelines and have training programs to help providers
3	State role	advocacy groups/legislators	State should help make policy/develop programs to provide assistance to health care providers/facilities to address the issue
4	Survey says	researchers/advocacy groups/health providers/medical organizations	Research studies show that 1. women are abused 2. Abused women use health services but are not identified 3. abuse causes injuries etc.
5	Child safety	advocacy groups/medical organizations	Patients should be asked about domestic violence to help protect child who may be living in the home
6	Women's health	health providers	Health care system/providers have not addressed women's health needs in general/there is a gender bias in the health care system
7	Fill in the gap	advocacy groups/DV service providers/non-health agencies	Some women only use health care so health care providers can't rely on other agencies/some women will only talk to health providers
8	System failure	DV service providers/people experiencing DV/health providers	The "system" (government agencies, courts, etc.) doesn't help victims/doesn't address their needs- someone needs to be responsible/making changes to improve the system or services
9	Cost/benefit	"	DV costs money to treat victims/will save money if patients are identified and helped
10	Get involved	advocacy groups/DV service providers/people experiencing DV	People should get involved/individuals should try to help/all types of professionals should address the issue
21	Blame the victim	health providers	The victim is responsible for leaving the relationship or getting help/they should bring the issue up with the provider if they want help/admit to abuse if asked
22	Private matter	health providers/patients	Providers/people in general don't think it is any of their business or it is a personal issue- feel that women will perceive questions as invasion of privacy or don't want to talk about it
23	Not health care problem	health providers/health administrators	Abuse is a problem for others/other agencies to address-it is not the role of the health care system
24	Health system	health providers/health administrators	The health system has other problems that make it hard to address this issue-these other problems need to be solved first via health system reform
25	Data dispute	researchers	Data does not show or is not conclusive that abuse is a problem in the health care system or that asking about abuse helps patients
26	Cynicism	health providers/service providers/victims	Victims aren't sure they would tell anyway/providers think women won't tell/will put a strain on resources/not enough places to refer to/etc.



## ARGUMENTS

In some cases, there are SPECIFIC REASONS given in articles concerning why or why not health providers should screen patients for domestic violence, and why or why not health providers should receive training for domestic violence, but these reasons are not comprehensive enough to be developed as a frame. For instance, if a statement was made that health providers do not have enough time to ask patients about abuse, this would be considered an argument opposing health provider screening. To be counted as an argument, there must be an EXPLICIT statement that asserts why screening/training is supported or opposed. Do not make inferences from the text.

The next question asks if any arguments appear in the article. If not, you can stop coding after this question. If arguments do appear, there is a series of questions that follow. These questions are yes/no questions that ask whether or not a particular argument appears in the article.

If an argument was used by a source with the opposite view, code as '2'. This would occur when, for example, one source may say that providers don't think screening is good because they don't have enough time to ask the question and then talk about why that reason isn't a good excuse. In other words, someone isn't stating the argument directly-it is being mentioned by someone that agrees with screening and is refuting arguments they have heard from others.

### Variable 34

Arguments used in article

3 spaces

AARGUM

Are any arguments regarding issues related to provider training and/or screening presented in the article?

0 = No            *If NO, you have completed coding this article-STOP CODING NOW*

1 = Yes           *If YES, continue coding on the next page.*

When discussing health provider training and/or screening, does the article or a source in the article mention that this is important because:

**Variable 35a: AARGUM1**

*people may be embarrassed, afraid, unsure, reluctant or uncomfortable to bring it up on their own to their health providers?*

- 0 = No
- 1 = Yes
- 2 = Mentioned by a source with the OPPOSITE view

**Variable 35b: AARGUM2**

*future abuse, injuries and deaths can be prevented?*

- 0 = No
- 1 = Yes
- 2 = Mentioned by a source with the OPPOSITE view

**Variable 35c: AARGUM3**

*health providers can provide help (services or referrals) to the person experiencing abuse?*

- 0 = No
- 1 = Yes
- 2 = Mentioned by a source with the OPPOSITE view

**Variable 35d: AARGUM4**

*it is a way for health providers to show concern for the patient's well being and safety (or, by not asking, suggests they don't care about the patient)? Can also state that the provider treats the patient as a person instead of a medical subject.*

- 0 = No
- 1 = Yes
- 2 = Mentioned by a source with the OPPOSITE view

**Variable 35e: AARGUM5**

*health providers should ask patients about domestic violence because it is not always obvious that someone is experiencing abuse, so asking may be the only way to detect abuse?*

- 0 = No
- 1 = Yes
- 2 = Mentioned by a source with the OPPOSITE view

## **ARGUMENTS OPPOSING TRAINING/SCREENING BY PROVIDERS**

When discussing health provider training and/or screening, does the article or a source in the article mention suggest that providers do not need training or should not screen patients for domestic violence because:

**Variable 36a: AARGUM21**

*health providers do not have enough time to ask patients about domestic violence: they are already over-worked and have too much to do?*

- 0 = No
- 1 = Yes
- 2 = Mentioned by a source with the OPPOSITE view

**Variable 36b: AARGUM22**

*health providers do not want to ask about domestic violence because they don't know how to ask or don't know what to do if the answer is yes: lack of training for providers?*

- 0 = No
- 1 = Yes
- 2 = Mentioned by a source with the OPPOSITE view

**Variable 36c: AARGUM23**

*health providers do not want to ask patients about abuse because it is a private matter and it is none of their business?*

- 0 = No
- 1 = Yes
- 2 = Mentioned by a source with the OPPOSITE view

**Variable 36d: AARGUM24**

*patients do not tell the truth about domestic violence even if asked?*

- 0 = No
- 1 = Yes
- 2 = Mentioned by a source with the OPPOSITE view

*If other arguments appear in the article, either in support or in opposition of health provider screening/training, list them at the end of the coding sheet. If you start to see an argument that appears often but is not listed in the questions above, inform the PI.*

**END OF CODEBOOK**

## **APPENDIX E: LIST OF VARIABLES**

<b>VARIABLE NAME</b>	<b>VARIABLE DESCRIPTION</b>	<b>VARIABLE TYPE</b>	<b>VARIABLE VALUES</b>
<b><i>Article-related variables (Part 1 and Part 2)</i></b>			
	See codebook for a list of variables collected from all news articles		
PERDV	% articles about screening/training out of all IPV articles	Continuous	
PERDVG	% articles about screening/training out of all IPV articles	Categorical	0 = 0% to 2.9% 1 = 3.0% or more
<b><i>News sample variables (Part 2 only)</i></b>			
CIRCEL	% electronically available circulation/eligible circulation	Continuous	
NEWSEL	% electronically available newspapers/eligible newspapers	Continuous	
NMAJPAP	# newspapers in sample with circulation > 400,000	Continuous	
NMAJPAPG	# newspapers in sample with circulation > 400,000	Categorical	0 = 0 1 = 1 or more
NUMSTAN	# articles included in policy analysis	Continuous	
STNARAN	# articles included in policy analysis/# newspapers in sample	Continuous	
NUMSTC	# articles included in policy analysis/population	Continuous	
<b><i>Aggregate news variables by state (Part 2 only)</i></b>			
STMWRD	Average # words per article	Continuous	
STMPRM	Average prominence score per article	Continuous	
STPRMG	Average prominence score per article	Categorical	0 = 0 to 3.5 1 = 3.6 or more
STMINF	Average influence score per article	Continuous	
STINFG	Average influence score per article	Categorical	0 = 0 to 19.9 1 = 20.0 or more
STEPTH	% articles with thematic coverage	Continuous	
STEPTHG	% articles with thematic coverage	Categorical	0 = 0 to 30% 1 = 31% or more

STDATA	% articles presenting data/statistics	Continuous	
STDATAG	% articles presenting data/statistics	Categorical	0 = 0 to 30% 1 = 31% or more
STFRMPR	% articles with 'Provider role' as the main frame	Continuous	
STFRMPRG	% articles with 'Provider role' as the main frame	Categorical	0 = 0 to 30% 1 = 31% or more
STFRMST	% articles with 'State role' as the main frame	Continuous	
STFRMSTG	% articles with 'State role' as the main frame	Categorical	0 = 0% 1 = more than 0%
STROLST	% articles mentioning state role	Continuous	
STROLSTG	% articles mentioning state role	Categorical	0 = 0% 1 = more than 0%
<b><i>State-level variables (Part 2 only)</i></b>			
ST	State	Text	2 letter state code
YR	Year of policy adoption	Number	
TOTALPOP	State population in the thousands	Continuous	
NUMWOM20	# women age 20 and over in 1999	Continuous	
NUMDEMHS	# Democrats in state House of Reps.	Continuous	
NUMTOTHS	# legislators in state House of Reps.	Continuous	
NUMDEMSN	# Democrats in state Senate	Continuous	
NUMTOTSN	# legislators in state Senate	Continuous	
NUMTOTLG	# legislators in House and Senate	Continuous	
PERDEML	% Democrats in state legislature	Continuous	
NUMWOMEN	# women in state legislature	Continuous	
PERWOM	% women in state legislature	Continuous	
GOVPAR	Political party of governor	Categorical	1=Democrat 2=Republican 3=Independent
GOVELECT	Election year for governor	Categorical	0=No 1=Yes
STCIRC	Average daily circulation per 1,000	Continuous	
NUMSHBED	# DV shelter beds in state as of 1999-2000	Continuous	

SHBEDC	# DV shelter beds per women age 20 and over (as of 2000)	Continuous	
SHBEDG	# DV shelter beds per women age 20 and over (as of 2000)	Categorical	0 = 0 to .244 1 = .245 or more
NUMFTADV	# full-time advocates as of 1994-95	Continuous	
FTADVC	# full-time advocates as of 1994-95*1,000/state population	Continuous	
FTADVG	# full-time advocates as of 1994-95*1,000/state population	Categorical	0 = 0 to .99 1 = 1.0 or more
FHOMRT	# homicides for females age 20 to 45	Continuous	
HOMRAT	Ratio of female to male homicides for people age 20 to 45	Continuous	
HOSBEDS	# hospital beds per 1,000 population	Continuous	
ERVISITS	# emergency room visits per 1,000 population	Continuous	
ERDEPTS	# emergency rooms per 1,000 population	Continuous	
ERDEPTG	# emergency rooms per 1,000 population	Categorical	0 = 0 to .01 1 = .02 or more
ACTMD	# active physicians per 100,000 population	Continuous	
ACTNRS	# active nurses per 100,000 population	Continuous	
INTACCS	% households with Internet access as of 1998	Continuous	
INTG	% households with Internet access as of 1998	Categorical	0 = 0 to 25.0 1 = 25.1 or more
NUMPAP	# daily newspapers per state	Continuous	
PAPCAP	# daily newspapers per capita	Continuous	
PAPCG	# daily newspapers per capita	Categorical	0 = 0 to .20 1 = .21 or more
STCIRC	newspaper circulation per 1,000 population	Continuous	
STCIRG	newspaper circulation per 1,000 population	Categorical	0 = 0 to 1500 1 = 1501 or more
TVHOUSE	% households with televisions	Continuous	
RADIOC	# radio stations in the state per 1,000 population	Continuous	
RADCG	# radio stations in the state per 1,000 population	Categorical	0 = 0 to .03 1 = .04 or more

INNOVN	policy innovativeness score (Savage, 1978)	Continuous	
INNOVNG	policy innovativeness score (Savage, 1978)	Categorical	0 = 0 to 1.2 1 = 1.3 or more
HLTHIN	health policy innovativeness score (Carter & LaPlant, 1997)	Continuous	
IDEAL	ideology score for the state (Berry et al., 2001)	Continuous	
METRO	% population living in metropolitan areas	Continuous	
METROG	% population living in metropolitan areas	Categorical	0 = 0% to 80% 1 = 81% or more



**APPENDIX F: ARTICLE SUBSETS**

<b>VARIABLE</b>	<b>CA vs. TX</b>	<b>FL vs. GA</b>	<b>PA vs. NJ</b>	<b>OH vs. IL</b>	<b>(1)NY vs. MA</b>	<b>(2)NY vs. MA</b>	<b>WA vs. OR</b>	<b>AK vs. NV</b>	<b>MD vs. VA</b>	<b>KY vs. TN</b>
<b># all articles</b>	41 vs. 18	30 vs. 6	16 vs. 6	14 vs. 22	10 vs. 11	9 vs. 5	3 vs. 5	1 vs. 1	1 vs. 0	0 vs. 3
<b># fully coded articles</b>	29 vs. 11	12 vs. 4	10 vs. 4	9 vs. 11	6 vs. 7	3 vs. 1	1 vs. 1	1 vs. 1	0 vs. 0	0 vs. 2
<b># articles if APOLYR=0<sup>§</sup></b>	33 vs. 18	27 vs. 6	14 vs. 6	13 vs. 22	10 vs. 11	9 vs. 5	3 vs. 5	1 vs. 1	1 vs. 0	0 vs. 3
	1992	1994	1997	1993	1991	1997	1995	1995	1993	1997
<b># articles if APOLYR=0<sup>^^</sup></b>	16 vs. 16	16 vs. 6	3 vs. 5	7 vs. 13	2 vs. 0	7 vs. 3	1 vs. 5	1 vs. 1	0 vs. 0	0 vs. 3
<b># articles if APOLYR=0<sup>^^</sup> APOLYR=0</b>	16 vs. 16	15 vs. 6	3 vs. 5	7 vs. 13	2 vs. 0	7 vs. 3	1 vs. 5	1 vs. 1	0 vs. 0	0 vs. 3
	1/1/92- 11/15/92	1/1/94- 9/15/94	1/1/97- 12/15/97	1/1/93- 12/15/93	1/1/91- 10/15/91	1/1/97- 10/1/97	1/1/95- 8/15/95	1/1/95- 9/21/95	1/1/93- 9/15/93	1/1/97- 9/1/97
<b># articles if APOLTIM=0<sup>^</sup></b>	12 vs. 14	10 vs. 5	3 vs. 5	7 vs. 13	1 vs. 0	7 vs. 2	0 vs. 3	0 vs. 1	0 vs. 0	0 vs. 2
<b># articles if APOLTIM=0<sup>^</sup> APOLYR=0</b>	12 vs. 14	9 vs. 5	3 vs. 5	7 vs. 13	1 vs. 0	7 vs. 2	0 vs. 3	0 vs. 1	0 vs. 0	0 vs. 2

\* WV vs. LA is left off of this table because no articles were located in either state

§ excludes articles about policy activity only

^^ includes articles that appeared in the year PRIOR TO policy adoption

^ includes articles that appeared in first half of time period for data collection

## REFERENCES

- Abbott, J., Johnson, R., Koziol-McLain, J., & Lowenstein, S. R. (1995). Domestic violence against women. Incidence and prevalence in an emergency department population. *JAMA*, 273(22), 1763-7.
- Ahuvia, A. (2001). Traditional, interpretive, and reception based content analyses: Improving the ability of content analysis to address issues of pragmatic and theoretical concern. *Social Indicators Research*, 54(2), 139-72.
- Allison, P. D. (1999). *Logistic regression using the SAS system*. Cary, NC: SAS Institute.
- Althaus, S., & Tewksbury, D. (2002). Agenda setting and the 'new' news: Patterns of issue importance among readers of the paper and online versions of the "New York Times". *Communication Research*, 29(2), 180-207.
- Altheide, D. L. (1996). *Qualitative media analysis* (Vol. 38). Thousand Oaks: Sage Publications.
- Altman, D. G., Strunk, B., & Smith, M. H. (1999). Newspaper and wire service coverage of tobacco farmers. *Health Education Research*, 14(1), 131-37.
- American Hospital Association. (1991). *Hospital statistics*. USA: Healthcare InfoSource, Inc.
- American Hospital Association. (1992). *Hospital statistics*. USA: Healthcare InfoSource, Inc.
- American Hospital Association. (1993). *Hospital statistics*. USA: Healthcare InfoSource, Inc.
- American Hospital Association. (1994). *Hospital statistics*. USA: Healthcare InfoSource, Inc.

- American Hospital Association. (1998). *Hospital statistics*. USA: Healthcare InfoSource, Inc.
- American Hospital Association. (1999). *Hospital statistics*. USA: Health Forum LLC.
- American Hospital Association. (2000). *Hospital statistics*. USA: Health Forum LLC.
- Andsager, J., & Smiley, L. (1998). Evaluating the public information: Shaping news coverage of the silicone implant controversy. *Public Relations Review*, 24(2), 183-201.
- Andsager, J. L. (2000). How interest groups attempt to shape public opinion with competing news frames. *Journalism & Mass Communication Quarterly*, 77(3), 577-92.
- Atkin, C. K., & DeJong, W. (2000). News coverage of alcohol and other drugs in U.S. college newspapers. *J Drug Educ*, 30(4), 453-65.
- Backstrom, C., & Robins, L. (1995/1996). State AIDS policy making: Perspectives of legislative health committee chairs. *AIDS & Public Policy Journal*, 10(4), 238-48.
- Bauer, M., Ragnarsdottir, A., Rudolfsdottir, A., & Durant, J. (1995). *Public perceptions of BSE and CJD risk in Europe*. Retrieved April 5, 2002, from Cleveland State University:  
<http://academic.csuohio.edu/kneuendorf/content/hcoding/hcindex.htm>
- Baumgartner, F., & Jones, B. (1993). *Agenda and instability in American politics*. Chicago: University of Chicago Press.

- Baumgartner, F. R., Jones, B. D., & Leech, B. L. (1997). Media attention and congressional agendas. In S. Iyengar & R. Reeves (Eds.), *Do the media govern?* (pp. 349-363). Thousand Oaks: Sage Publications.
- Bengston, D. N., & Fan, D. P. (1999). Conflict over natural resource management: A social indicator based on analysis of online news media text. *Society & Natural Resources*, 12(5), 493-500.
- Bennett, W. L. (1993). A policy research paradigm for the news media and democracy. *Journal of Communication*, 43(3), 180-89.
- Bennett, W. L. (1996). *News: The politics of illusion* (Third ed.). White Plains: Longman Publishers.
- Berelson, B. (1971). *Content analysis in communication research* (Second ed.). New York: Hafner.
- Berger, A. A. (2000). *Media and communication research methods*. Thousand Oaks: Sage Publications.
- Berkeley Media Studies Group. (2003). Distracted by drama: How California newspapers portray intimate partner violence. *Issue 13*. Berkeley, CA.
- Berry, D., Ringquist, E., Fording, R., & Hanson, R. (1998). Measuring citizen and government ideology in the American states, 1960-93. *American Journal of Political Science*, 42(1), 327-48.
- Berry, F. S., & Berry, W. D. (1990). State lottery adoptions as policy innovations: An event history analysis. *American Political Science Review*, 84(2), 395-415.
- Biden, J.R. (1993). Violence against women: The Congressional response. *American Psychologist*, 48(10), 1059-1061.

- Biklen, D. (1987). Framed: Print journalism's treatment of disability issues. In A. Gartner & T. Joe (Eds.), *Images of the disabled, disabling images* (pp. 79-95). New York: Praeger.
- Boehm, G. (2001). *Domestic violence workplace policies*. NOW Legal Defense and Education Fund. Retrieved November 14, 2001, from:  
<http://www.nowldef.org/html/issues/work/StateLawFactshts/Laws-Model.pdf>
- Booth, K. M. (2000). "Just testing": Race, sex, and the media in New York's "baby AIDS" debate. *Gender And Society*, 14(5), 644-61.
- Borquez, J. (1993). Newsmaking and policymaking: Steps toward a dialogue. In R. Spitzer (Ed.), *Media and public policy* (pp. 31-40). Westport: Praeger.
- Box-Steffensmeier, J., & Jones, B. (1997). Time is of the essence: Event history models in political science. *American Journal of Political Science*, 41(4), 1414-61.
- British Medical Journal. (2002). Letters to the editor: Screening for domestic violence. *British Medical Journal*, 325(7377), 1417.
- Brodie, M., Brady, L. A., & Altman, D. E. (1998). Media coverage of managed care: Is there a negative bias? *Health Affairs (Millwood)*, 17(1), 9-25.
- Buel, S. (1995). Family violence: Practical recommendations for physicians and the medical community. *Women's Health Issues*, 5(4), 158-72.
- Bureau of Economic Analysis. (2003). *Annual state personal income*. US Department of Commerce. Retrieved February 11, 2003, from  
<http://www.bea.gov/bea/regional/spi/>

- Bureau of Justice Statistics. (1997). *Violence-related injuries treated in hospital emergency departments*. Retrieved March 2003, from <http://www.ojp.usdoj.gov/bjs/pub/pdf/vrithed.pdf>
- Bureau of Justice Statistics. (2002). *Homicide trends in the United States*. Retrieved March 2003, from <http://www.ojp.usdoj.gov/bjs/homicide/intimates.htm>
- Bystrom, D., Robertson, T., & Banwart, M. C. (2001). Framing the fight: An analysis of media coverage of female and male candidates in primary races for governor and us senate in 2000. *American Behavioral Scientist*, 44(12), 1999-2013.
- Callaghan, K., & Schnell, F. (2001). Assessing the democratic debate: How the news media frame elite policy discourse. *Political Communication*, 18(2), 183-212.
- Campbell, J. (2002). Health consequences of intimate partner violence. *The Lancet*, 359(9314), 1331-36.
- Campbell, J., Coben, J., McLoughlin, E., Dearwater, S., Nah, G., Glass, N., Lee, D., & Durborow, N. (2001). An evaluation of a system-change training model to improve emergency department response to battered women. *Academic Emergency Medicine*, 8(2), 131-38.
- Campbell, J., Jones, A., Dienemann, J., Kub, J., Schollenberger, J., O'Campo, P., Gielen, A., & Wynne, C. (2002). Intimate partner violence and physical health consequences. *Archives of Internal Medicine*, 162, 1157-63.
- Caralis, P. V., & Musialowski, R. (1997). Women's experiences with domestic violence and their attitudes and expectations regarding medical care of abuse victims. *Southern Medical Journal*, 90(11), 1070-80.

Center for American Women in Politics. (1990). *Women in state legislatures 1990*.

Retrieved 2002. from Rutgers University:

<http://www.rci.rutgers.edu/~cawp/pdf/stleghist/stleg90.pdf>

Center for American Women in Politics. (1992). *Women in state legislatures 1992*.

Retrieved 2002. from Rutgers University:

<http://www.rci.rutgers.edu/~cawp/pdf/stleghist/stleg90.pdf>

Center for American Women in Politics. (1993). *Women in state legislatures 1993*.

Retrieved 2002. from Rutgers University:

<http://www.rci.rutgers.edu/~cawp/pdf/stleghist/stleg90.pdf>

Center for American Women in Politics. (1994). *Women in state legislatures 1994*.

Retrieved 2002. from Rutgers University:

<http://www.rci.rutgers.edu/~cawp/pdf/stleghist/stleg90.pdf>

Center for American Women in Politics. (1995). *Women in state legislatures 1995*.

Retrieved 2002. from Rutgers University:

<http://www.rci.rutgers.edu/~cawp/pdf/stleghist/stleg90.pdf>

Center for American Women in Politics. (1996). *Women in state legislatures 1996*.

Retrieved 2002. from Rutgers University:

<http://www.rci.rutgers.edu/~cawp/pdf/stleghist/stleg90.pdf>

Center for American Women in Politics. (1997). *Women in state legislatures 1997*.

Retrieved 2002. from Rutgers University:

<http://www.rci.rutgers.edu/~cawp/pdf/stleghist/stleg90.pdf>



- Center for American Women in Politics. (1998). *Women in state legislatures 1998*. Retrieved 2002, from Rutgers University:  
<http://www.rci.rutgers.edu/~cawp/pdf/stleghist/stleg90.pdf>
- Centers for Disease Control. (1995). *Violence against women programs*. Retrieved 2001, from <http://www.cdc.gov/ncipc/IPVp/vawprograms/vt.pdf>
- Centers for Disease Control. (2000). *Intimate partner violence fact sheet*. Retrieved February 15, 2000 from <http://www.cdc.gov/ncipc/factsheets/ipvfacts.htm>
- Centers for Disease Control. (2002). *Secondary prevention and treatment*. Retrieved February 18, 2003, from <http://www.cdc.gov/cancer/prostate/prosfuture/session3.htm>
- Centers for Disease Control. (2003). *Training activities*. Retrieved February 18, 2003 from <http://www.cdc.gov/ncipc/dvp/fivp/page5.htm>
- Chang, K. K. (1999). Auto trade policy and the press: Auto elite as a source of the media agenda. *Journalism & Mass Communication Quarterly*, 76(2), 312-24.
- Chriqui, J. (2000). Restricting minors' access to tobacco products: An examination of state legislation and policy innovation *Dissertation Abstracts International*, (UMI 9977698).
- Christoffel, K. (2000). Public health advocacy: Process and product. *American Journal of Public Health*, 90(5), 722-6.
- Clark, K. A., Martin, S. L., Petersen, R., Cloutier, S., Covington, D., Buescher, P., & Beck-Warden, M. (2000). Who gets screened during pregnancy for partner violence? *Archives of Family Medicine*, 9, 1093-99.

- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20(1), 37-46.
- Cohen, S., DeVos, E., & Newberger, E. (1997). Barriers to physician identification and treatment of family violence: Lessons from five communities. *Academic Medicine*, 72(1), S19-S25.
- Cohen, S., & Young, J. (1981). *The manufacture of news: Social problems, deviance, and the mass media*. London: Constable.
- Coker, A., Bethea, L., Smith, P., Fadden, M. K., & Brandt, H. M. (2002). Missed opportunities: Intimate partner violence in family practice settings. *Preventive Medicine*, 34, 445-54.
- Coker, A., Davis, K., Arias, I., Desai, S., Sanderson, M., Brandt, H., & Smith, P. (2002). Physical and mental health effects of intimate partner violence for men and women. *American Journal of Preventive Medicine*, 23(4), 260-68.
- Coker, A., Smith, P., McKeown, R., & King, M. (2000). Frequency and correlates of intimate partner violence by type: Physical, sexual, and psychological battering. *American Journal of Public Health*, 90(4), 553-59.
- Colby, D. C., & Cook, T. (1991). Epidemics and agendas: The politics of nightly news coverage of AIDS. *Journal of Health Politics, Policy and Law*, 16(2), 215-47.
- Cole, T. (2000). Is domestic violence screening helpful? *JAMA*, 284(5), 551-57.
- Coleman, R., & Thorson, E. (2002). The effects of news stories that put crime and violence into context: Testing the public health model of reporting. *Journal of Health Communication*, 7(5), 401-25.

- Collie, V., Caburnay, C., Kreuter, M., & Luke, D. (2002). *Examining coverage of obesity and specific recommendations for reducing weight in two mid-sized media market areas*. Paper presented at the American Public Health Association, Philadelphia, PA.
- Commonwealth Fund. (1999). *Violence and abuse fact sheet*. Retrieved 2001, from [http://www.cmwf.org/programs/women/ksc\\_whsurvey99\\_fact4\\_332.asp](http://www.cmwf.org/programs/women/ksc_whsurvey99_fact4_332.asp)
- Consalvo, M. (1998). Hegemony, domestic violence and 'Cops': A critique of concordance. *Journal of Popular Film and Television*, 26(2), 62-70. Retrieved from [http://www.findarticles.com/cf\\_0/m0412/n2\\_v26/21221635/print.jhtml](http://www.findarticles.com/cf_0/m0412/n2_v26/21221635/print.jhtml)
- Convissor, R. B., Vollinger, R. E., & Wilbur, P. (1990). Using national news events to stimulate local awareness of public-policy issues. *Public Health Reports*, 105(3), 257-63.
- Cook, F., Tyler, T., Goetz, E., Gordon, M., Protes, D., Leff, D., & Molotch, H. (1983). Media and agenda setting: Effects on the public, interest group leaders, policy makers, and policy. *Public Opinion Quarterly*, 47, 16-35.
- Corbett, J., & Mori, M. (1999). Medicine, media, and celebrities: News coverage of breast cancer, 1960-1995. *Journalism & Mass Communication Quarterly*, 76(2), 229-49.
- Cuklanz, L. M. (1996). *Rape on trial*. Philadelphia: University of Pennsylvania.
- Davidson, L. L., Grisso, J. A., Garcia-Moreno, C., Garcia, J., King, V. J., & Marchant, S. (2001). Training programs for healthcare professionals in domestic violence. *Journal of Women's Health and Gender-Based Medicine*, 10(10), 953-69.

- Davis, J., Parks, S., Kaups, K., Bennink, L., & Bilello, J. (2003). Victims of domestic violence on the trauma service: Unrecognized and underreported. *Journal of Trauma, 54*, 352-55.
- Dearing, J., & Rogers, E. (1996). *Agenda-setting*. Newbury Park: Sage.
- DeJong, W. (1996). MADD Massachusetts versus Senator Burke: A media advocacy case study. *Health Educ Q, 23*(3), 318-29.
- Derr, R. E. *Performing exact logistic regression using the SAS system*. SAS Institute, Inc. Available: <http://www.sas.com/rnd/app/papers/exactlogistic.pdf> [Last accessed: January, 2003].
- Dorfman, L., Woodruff, K., Chavez, V., & Wallack, L. (1997). Youth and violence on local television news in California. *American Journal of Public Health, 87*(8), 1311-15.
- Downs, A. (1972). Up and down with ecology-the issue-attention cycle. *Public Interest, 28*, 38-50.
- Entman, R. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication, 43*(4), 51-58.
- Family Violence Prevention Fund. (2000a). *The facts*. Retrieved September 29, 2001, from <http://endabuse.org/newsdesk/facts/>
- Family Violence Prevention Fund. (2000b). *Health report card 2000*. Retrieved 2001 from <http://endabuse.org/statereport/intro.php3>
- Family Violence Prevention Fund. (2001a). *Health public policy*. Retrieved September 29, 2001, from <http://endabuse.org/programs/display.php3?DocID=138>

- Family Violence Prevention Fund. (2001b). *Health report card 2001*. FVPF. Retrieved 2001 from <http://endabuse.org/statereport/intro.php3>
- Family Violence Prevention Fund. (3/20/02). *Representative Capps lauded for introducing new legislation on domestic violence screening*. Retrieved February 9, 2003 from <http://endabuse.org/newsdesk/releases.php3?Search=Article&ID=692>
- Family Violence Prevention Fund. (2003). *Model programs on health care and domestic violence*. Retrieved January 16, 2003 from <http://endabuse.org/programs/display.php3?DocID=35>
- Family Violence Prevention Fund. (2/4/03). *Newsflash: An urgent agenda for the new congress*. Retrieved February 8, 2003 from <http://endabuse.org/newsflash/index.php3?Search=Article&NewsFlashID=405>
- Family Violence Prevention Fund. (2/14/03). *Newsflash: Article(s) for intimate partner violence goes underreported in California newspapers, according to new study*. Retrieved February 14, 2003. from <http://endabuse.org/newsflash/index.php3?Search=Article&NewsFlashID=410>
- Fan, D. P., & Noren, L. (1992). The media and the fate of the Medicare Catastrophic Extension Act. *Journal of Health Politics, Policy and Law*, 17(1), 39-70.
- Fan, X., & Chen, M. (2000). Published studies of interrater reliability often overestimate reliability: Computing the correct coefficient. *Educational and Psychological Measurement*, 60(4), 532-42.

- Fanslow, J. L., Norton, R. N., & Robinson, E. M. (1999). One year follow-up of an emergency department protocol for abused women. *Australia and New Zealand Journal of Public Health, 23*(4), 418-20.
- Feigenson, N., & Bailis, D. (2001). Air bag safety: Media coverage, popular conceptions, and public policy. *Psychology, Public Policy, and Law, 7*(2), 444-81.
- Feldman, P.H., Nadash, P., & Gursen, M. (2001). Improving communication between researchers and policy makers in long-term care: or, researchers are from Mars; policy makers are from Venus. *Gerontologist, 41*(3), 312-321.
- FrameWorks Institute. (2002). *The frameworks perspective: Strategic frame analysis*. Retrieved July 1, 2002, from <http://www.frameworksinstitute.org/strategicanalysis/perspective.shtml>
- Freund, K. M., Bak, S. M., & Blackhall, L. (1996). Identifying domestic violence in primary care practice. *Journal of General Internal Medicine, 11*(1), 44-6.
- Gadomski, A., Tripp, M., Wolff, D., Lewis, C., & Jenkins, P. (2001a). Impact of a rural domestic violence prevention campaign. *Journal of Rural Health, 17*(3), 266-77.
- Gadomski, A., Wolff, D., Tripp, M., Lewis, C., & Short, L. (2001b). Changes in health care providers' knowledge, attitudes, beliefs, and behaviors regarding domestic violence, following a multifaceted intervention. *Academic Medicine, 76*(10), 1045-52.
- Gale Research. (1990). *Gale directory of publications and broadcast media* (122nd ed. Vol. 3). Detroit, MI: Gale Research.

- Gale Research. (1993). *Gale directory of publications and broadcast media* (125th ed. Vol. 3). Detroit, MI: Gale Research.
- Gale Research. (1994). *Gale directory of publications and broadcast media* (126th ed. Vol. 3). Detroit, MI: Gale Research.
- Gale Research. (1995). *Gale directory of publications and broadcast media* (127th ed. Vol. 3). Detroit, MI: Gale Research.
- Gale Research. (1996). *Gale directory of publications and broadcast media* (128th ed. Vol. 3). Detroit, MI: Gale Research.
- Gale Research. (1998). *Gale directory of publications and broadcast media* (131st ed. Vol. 3). Detroit, MI: Gale Research.
- Gale Research. (2000). *Gale directory of publications and broadcast media* (134th ed. Vol. 3). Detroit, MI: Gale Research.
- Gale Research. (2001). *Gale directory of publications and broadcast media* (135th ed. Vol. 3). Detroit, MI: Gale Research.
- Gans, H. J. (1980). *Deciding what's news: A study of CBS evening news, NBC nightly news, Newsweek, and Time*. New York: Vintage Books.
- Garcia-Moreno, C. (2002). Dilemmas and opportunities for an appropriate health-service response to violence against women. *Lancet*, 359(9316), 1509-14.
- Gerbert, B., Moe, J., Caspers, N., Salber, P., Feldman, M., Herzig, K., & Bronstone, A. (2002). Physicians' response to victims of domestic violence: Toward a model of care. *Women Health*, 35(2-3), 1-22.

- Ghez, M. (1995). *Communications and public education: Effective tools to promote a cultural change on domestic violence*. [Revision of paper presented at the Violence Against Women Strategic Planning Committee, National Institute of Justice, Washington DC]. Family Violence Prevention Fund. Retrieved April 23, 2001, from <http://www.fvvpf.org/publiced/nij.html>
- Gielen, A. C., O'Campo, P. J., Campbell, J. C., Schollenberger, J., Woods, A. B., Jones, A. S., Dienemann, J. A., Kub, J., & Wynne, E. C. (2000). Women's opinions about domestic violence screening and mandatory reporting. *American Journal of Preventive Medicine, 19*(4), 279-85.
- Glantz, S. A. (2002). *Primer of Biostatistics* (Fifth ed.). New York: McGraw-Hill.
- Glass, N., Dearwater, S., & Campbell, J. (2001). Intimate partner violence screening and intervention: Data from eleven Pennsylvania and California community hospital emergency departments. *Journal of Emergency Nursing, 27*(2), 141-149.
- Gonzenbach, W. J. (1996). *The media, the president, and public opinion: A longitudinal analysis of the drug issue, 1984-1991*. Mahwah: Lawrence Erlbaum Associates.
- Gordis, L. (1996). *Epidemiology*. Philadelphia: WB Saunders Company.
- Gormley, W. T. (1975). Newspaper agendas and political elites. *Journalism Quarterly, 52*, 304-08.
- Graber, D. (1980). *Mass media and American politics*. Washington DC: Congressional Quarterly Press.



- Gray, V. (1976). Models of comparative state policies: A comparison of cross-sectional and time series analysis. *American Journal of Political Science*, 20(2), 235-56.
- Greenfeld, L., & Rand, M. (1998). *Violence by intimates* (NCJ167237). Washington DC: US Department of Justice.
- Haller, B. A., & Ralph, S. M. (2001). Content analysis methodology for studying news and disability: Case studies from the United States and England. *Research in social science and disability* (Vol. 2, pp. 229-53). Oxford, England: Elsevier Science Ltd.
- Hamilton, L. (1998). *Statistics with STATA 5*. Pacific Grove, CA: Duxbury Press.
- Harwell, T. S., Casten, R. J., Armstrong, K. A., Dempsey, S., Coons, H. L., & Davis, M. (1998). Results of a domestic violence training program offered to the staff of urban community health centers. Evaluation committee of the Philadelphia family violence working group. *American Journal of Preventive Medicine*, 15(3), 235-42.
- Hass, M., Chapman, S., Viney, R., Hall, J., & Ferguson, A. (2001). The news on health care funding: A study of reporting in the Australian print media for 1996. *Journal of Health Services Research and Policy*, 6(2), 78-84.
- Hayden, S., Barton, E., & Hayden, M. (1997). Domestic violence in the emergency department: How do women prefer to disclose and discuss the issues? *Journal of Emergency Medicine*, 15(4), 447-51.
- Hays, S., & Glick, H. (1997). The role of agenda setting in policy innovation. *American Politics Quarterly*.

- Hendricks, J. (1992). Domestic violence legislation in the United States: A survey of states. In E. Viano (Ed.), *Intimate violence: Interdisciplinary perspectives* (pp. 213-26). Washington: Hemisphere Publishing Corporation.
- Heron, S., & Kellermann, A. (2002). Screening for intimate partner violence in the emergency department: Where do we go from here? *Annals of Emergency Medicine*, *40*(5), 493-95.
- Hilgartner, S., & Bosk, C. (1988). The rise and fall of social problems: A public arenas model. *American Journal of Sociology*, *94*(1), 53-78.
- Hobbs, S. (2001). *Attribute agenda-setting in an open primary: An examination of press coverage and political ad effects*. Louisiana State University, Baton Rouge.
- Hosmer, D. W., & Lemeshow, S. (2000). *Applied logistic regression* (Second ed.). New York: John Wiley and Sons, Inc.
- Houry, D., Sachs, C., Feldhaus, K., & Linden, J. (2002). Violence-inflicted injuries: Reporting laws in the fifty states. *Ann Emerg Med*, *39*(1), 56-60.
- Ibelema, M., & Powell, L. (2001). Cable television news viewed as most credible. *Newspaper Research Journal*, *22*(1), 41-51.
- Institute for Law and Justice. (2000). *2000 session laws*. Retrieved June 27, 2002, from <http://www.ilj.org/dv/2000sessionlaw.pdf>
- Institute for Law and Justice. (2001). *2001 session laws*. Retrieved June 27, 2002, from <http://www.ilj.org/dv/2001sessionlaw.pdf>
- Institute of Medicine. (2002). *Confronting chronic neglect: The education and training of health professionals on family violence*. Washington DC: National Academy Press.

- Iyengar, S. (1982). Experimental demonstrations of the "not so minimal" consequences of television news programs. *American Political Science Review*, 76(4), 848-58.
- Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. Chicago: University of Chicago Press.
- Iyengar, S. (1996). Framing responsibility for political issues. *The Annals of the American Academy of Political and Social Science*, 546, 59-70.
- Iyengar, S. (1997). Framing responsibility for political issues. In S. Iyengar & R. Reeves (Eds.), *Do the media govern?* (pp. 276-282). Thousand Oaks: Sage Publications.
- Iyengar, S. (1998). "Media effects" paradigms for the analysis of local television news. Annie E. Casey Foundation. Retrieved July 1, 2002, from <http://pcl.stanford.edu/common/docs/research/iyengar/1998/media-effects.pdf>
- Iyengar, S., & Kinder, D. (1987). *News that matters*. Chicago: University of Chicago Press.
- Jamieson, K., & Campbell, K. (1997). *The interplay of influence: News, advertising, and the mass media* (Fourth ed.). Belmont, CA: Wadsworth.
- Jeon, Y., & Haider-Markel, D. (2001). Tracing issue definition and policy change: An analysis of disability issue images and policy response. *Policy Studies Journal*, 29(2), 215-31.
- Johnstone, J., Hawkins, D., & Michener, A. (1995). Homicide reporting in Chicago dailies. *Journalism Quarterly*, 71(4), 860-72.

Jones-Webb, R., Baranowski, S., Fan, D., Finnegan, J., & Wagenaar, A. C. (1997).

Content analysis of coverage of alcohol control policy issues in black-oriented and mainstream newspapers in the us. *Journal of Public Health Policy*, 18(1), 49-66.

Kaid, L. L., & Wadsworth, A. J. (1989). Content analysis. In P. Emmert & L. L. Barker (Eds.), *Measurement of communication behavior* (pp. 197-217). New York: Longman.

Kaskie, B., Knight, B., & Liebig, P. (2001). State legislation concerning individuals with dementia: An evaluation of three theoretical models of policy formation. *Gerontologist*, 41(3), 383-93.

Keefer, J. D. (1993). The news media's failure to facilitate citizen participation in the congressional policy-making process. *Journalism Quarterly*, 70(2), 412-24.

Kennedy, G., & Bero, L. (1999). Print media coverage of research on passive smoking. *Tobacco Control*, 8, 254-60.

Kerr, P. A., & Moy, P. (2002). Newspaper coverage of fundamentalist christians, 1980-2000. *Journalism & Mass Communication Quarterly*, 79(1), 54-72.

Kingdon, J. W. (1995). *Agendas, alternatives, and public policies* (Second ed.). New York: Addison-Wesley Educational Publishers.

Klaidman, S. (1990). Roles and responsibilities of journalism. In C. Atkin & L. Wallack (Eds.), *Mass communication and public health: Complexities and conflicts* (Chapter 4). Newbury Park: Sage Publication.

- Klein, E., Campbell, J., Soler, E., & Ghez, M. (1997). *Ending domestic violence: Changing public perceptions/halting the epidemic*. Thousand Oaks: Sage Publications.
- Koehler, W. F., & Van Marter, N. D. (1995). Case study. Turning media gatekeepers into advocates. *J Health Care Mark*, 15(3), 59-63.
- Kosicki, G. (1993). Problems and opportunities in agenda-setting research. *Journal of Communication*, 43(2), 100-27.
- Koziol-McLain, J., & Campbell, J. (2001). Universal screening and mandatory reporting: An update on two important issues for victims/survivors of intimate partner violence. *Journal of Emergency Nursing*, 27(6), 602-06.
- Koziol-McLain, J., Coates, C., & Lowenstein, S. (2001). Predictive validity of a screen for partner violence against women. *American Journal of Preventive Medicine*, 21(2), 93-100.
- Krasnoff, M., & Moscatti, R. (2002). Domestic violence screening and referral can be effective. *Annals of Emergency Medicine*, 40(5), 485-92.
- Krippendorff, K. (1980). *Content analysis: an introduction to its methodology* (Vol. 5). Beverly Hills: Sage Publications.
- Lacy, S., & Riffe, D. (1996). Sampling error and selecting intercoder reliability samples for nominal content analysis. *Journalism & Mass Communication Quarterly*, 73, 963-73.
- Lacy, S., Robinson, K., & Riffe, D. (1995). Sample-size in content-analysis of weekly newspapers. *Journalism & Mass Communication Quarterly*, 72(2), 336-45.
- Lamb, S., & Keon, S. (1995). Blaming the perpetrator. *Psychology of Women Quarterly*.

19, 209-20.

- Lambert, D., & McGuire, T. (1990). Political and economic determinants of insurance regulation in mental health. *Journal of Health Politics, Policy and Law*, 15(1), 169-89.
- Lambeth, E. (1978). Perceived influence of the press on energy policy making. *Journalism Quarterly*, 5(1), 11-72?
- Lawrence, G., Bammer, G., & Chapman, S. (2000). 'Sending the wrong signal': Analysis of print media reportage of the ACT heroin prescription trial proposal, August 1997. *Australia and New Zealand Journal of Public Health*, 24(3), 254-64.
- Leask, J., & Chapman, S. (2002). 'The cold hard facts': Immunisation and vaccine preventable diseases in Australia's newsprint media 1993-1998. *Social Science & Medicine*, 54, 445-57.
- Legge, J., & Nice, D. (1993). Predicting mandatory seat belt law adoption in states. In F. A. Meyer & R. Baker (Eds.), *State policy problems*. (pp. 301-311). Chicago: Nelson-Hall.
- Leiman, J., Rothschild, N., Meyer, J., & Kott, A. (February 1998). *Addressing domestic violence and its consequences*. New York: Commonwealth Fund.
- Lemert, J.B. (1992). Effective public opinion. In J.D. Kenamer (Ed.), *Public opinion, the press, and public policy*. (pp. 41-61). Westport, CT: Praeger.
- Lemmens, P. H., Vaeth, P. A., & Greenfield, T. K. (1999). Coverage of beverage alcohol issues in the print media in the United States, 1985-1991. *American Journal of Public Health*, 89(10), 1555-60.

- Lewis, M., Yulis, S., & Greenberg, A. (2002). *First impressions: Using newspaper content analysis to evaluate public relations efforts of a statewide tobacco control program*. Paper presented at the American Public Health Association, Philadelphia, PA.
- Lima, J., & Siegel, M. (1999). The tobacco settlement: An analysis of newspaper coverage of a national policy debate, 1997-98. *Tobacco Control*, 8, 247-53.
- Linsky, M. (1986). *Impact: How the press affects federal policymaking*. New York: WW Norton and Company.
- Los, M., & Chamard, S. E. (1997). Selling newspapers or educating the public? Sexual violence in the media. *Canadian Journal of Criminology-Revue Canadienne De Criminologie*, 39(3), 293-328.
- Lowry, D., & Wang, Z. (2000, January). Wag the press: How changes in us foreign policy toward China were reflected in prestige press coverage of China, 1979 vs. 1997. *Web Journal of Mass Communication Research*, 3(1). Retrieved from <http://www.scripps.ohiou.edu/wjmcr/vol03/3-1a-B.htm>
- MacDonald, M., & Hoffman-Goetz, L. (2001). Cancer coverage in newspapers serving large and small communities in Ontario. *Canadian Journal of Public Health-Revue Canadienne De Sante Publique*, 92(5), 372-75.
- Magzamen, S., Charlesworth, A., & Glantz, S. A. (2001). Print media coverage of California's smokefree bar law. *Tobacco Control*, 10, 154-60.
- Marcos, L. R. (1989). Media power and public mental health policy. *Am J Psychiatry*, 146(9), 1185-9.

- Maxwell, K., Huxford, J., Borum, C., & Hornik, R. (2000). Covering domestic violence: How the OJ Simpson case shaped reporting of domestic violence in the news media. *Journalism and Mass Communication Quarterly*, 77(2), 258-72.
- McCaw, B., Berman, W., Syme, L., & Hunkeler, E. (2001). Beyond screening for domestic violence: A systems model approach in a managed care setting. *American Journal of Preventive Medicine*, 21(3), 170-76.
- McCombs, M. (1997). Building consensus: The news media's agenda-setting roles. *Political Communication*, 14(4), 433-&.
- McCombs, M., & Shaw, D. (1993). The evolution of agenda-setting research - 25 years in the marketplace of ideas. *Journal of Communication*, 43(2), 58-67.
- McDevitt, S. (1996). The impact of news media on child abuse reporting. *Child Abuse & Neglect*, 20(4), 261-74.
- McLendon, M., & Peterson, M. (1999). The press and state policy making for higher education. *Review of Higher Education*, 22(3), 223-45.
- Meadow, C., Boyce, B., & Kraft, D. (Eds.). (2000). *Text information retrieval systems* (Second ed.). San Diego: Academic Press.
- Mebane, F. (2001). Want to understand how Americans viewed long-term care in 1998? Start with media coverage. *Gerontologist*, 41(1), 24-33.
- Menashe, C., & Siegel, M. (1998). The power of a frame: An analysis of newspaper coverage of tobacco issues-United States, 1985-1996. *Journal of Health Communication*, 3, 307-25.



- Mercado-Martinez, F. J., Robles-Silva, L., Moreno-Leal, N., & Franco-Almazan, C. (2001). Inconsistent journalism: The coverage of chronic diseases in the Mexican press. *Journal of Health Communication, 6*(3), 235-47.
- Meyer, P. (1990). News media responsiveness to public health. In C. Atkin & L. Wallack (Eds.), *Mass communication and public health* (Chapter 3). Newbury Park: Sage Publications.
- Meyers, M. (1994). News of battering. *Journal of Communication, 44*(2), 47-63.
- Meyers, M. (1997). *News coverage of violence against women*. Newbury Park: Sage Publications.
- MMWR (2000a). Role of victims' services in improving intimate partner violence screening by trained maternal and child health-care providers-Boston, Massachusetts, 1994-1995. *MMWR, 49*(6), 114-17.
- MMWR (2000b). Use of medical care, police assistance, and restraining orders by women reporting intimate partner violence-Massachusetts 1996-97. *JAMA, 284*(5), 558-59.
- Mooney, C. (2001). Modeling regional effects on state policy diffusion. *Political Research Quarterly, 54*(1), 103-24.
- Muelleman, R., & Feighny, K. (1999). Effects of an emergency department-based advocacy program for battered women on community resource utilization. *Annals of Emergency Medicine, 33*(1), 62-66.
- Munro, B. (2001). *Statistical methods for health care research* (Fourth ed.). Philadelphia: Lippincott.

- Murphy, P. (1997). Domestic violence legislation and the police: The role of socio-economic indicators, political factors and women's political activism on state policy adoption. *Women and Politics*, 18(2), 27-53.
- National Coalition Against Domestic Violence (NCADV). (1999). 1999-2000 national directory of domestic violence programs. Denver, Colorado: NCADV.
- Nelkin, D. (1987). *Selling science: How the press covers science and technology*. New York: WH Freeman.
- Nelson, B. (1984). *Making an issue of child abuse: Political agenda setting for social problems*. Chicago: University of Chicago press.
- Nelson, B. (1991). Making an issue of child abuse. In D. Proress & M. McCombs (Eds.), *Agenda setting: Readings on media, public opinion, and policymaking* (pp. 161-70). Hillsdale, NJ: Lawrence Erlbaum, Associates.
- Neuendorf, K. A. (2002). *The content analysis guidebook*. Thousand Oaks: Sage.
- Newman, S. C. (2001). *Biostatistical methods in Epidemiology*. New York: John Wiley and Sons, Inc.
- Nielsen Media Research. (1990). *U.S. TV household estimates*. USA. (1990 SRI Microfiche B6670-2).
- Nielsen Media Research. (1992). *U.S. TV household estimates*. USA. (1992 SRI Microfiche B6670-2).
- Nielsen Media Research. (1993). *U.S. TV household estimates*. USA. (1993 SRI Microfiche B6670-2).
- Nielsen Media Research. (1994). *U.S. TV household estimates*. USA. (1994 SRI Microfiche B6670-2).

- Nielsen Media Research. (1995). *U.S. TV household estimates*. USA. (1995 SRI Microfiche B6670-2).
- Nielsen Media Research. (1996). *U.S. TV household estimates*. USA. (1996 SRI Microfiche B6670-2).
- Nielsen Media Research. (1997). *U.S. TV household estimates*. USA. (1997 SRI Microfiche B6670-2).
- Nielsen Media Research. (1998). *U.S. TV household estimates*. USA. (1998 SRI Microfiche B6670-2).
- Nudelman, J., & Trias, H. R. (1999). *Building comprehensive solutions to domestic violence: Publication # 6, a policy and practice paper*. Minnesota: National Resource Center on Domestic Violence. Retrieved from <http://www.vaw.umn.edu/FinalDocuments/bridges.asp#addressing>.
- Oliver, P. (2002). *Codebook for content analysis of stories about protest events*. Retrieved June 11, 2002, from University of Wisconsin: <http://www.ssc.wisc.edu/~oliver/PROTESTS/ArticleCopies/codebook2000.htm>
- Olson, L., Anctil, C., Fullerton, L., Brillman, J., Arbuckle, J., & Sklar, D. (1996). Increasing emergency physician recognition of domestic violence. *Ann Emerg Med*, 27(6), 741-6.
- Osattin, A., & Short, L. (1998). *Intimate partner violence and sexual assault: A guide to training materials and programs for health care providers*. Atlanta: Centers for Disease Control. Retrieved from <http://www.cdc.gov/ncipc/pub-res/pdf/newguide.pdf>

- Otten, A. L. (1992). The influence of the mass media on health policy. *Health Affairs (Millwood)*, 11(4), 111-8.
- Paalman, M. (1997). How to do (or not to do)...Media analysis for policy making. *Health Policy and Planning*, 12(1), 86-91.
- Pan, Z., & Kosicki, G. M. (1993). Framing analysis: An approach to news discourse. *Political Communication*, 10, 55-75.
- Patterson, T. E., & Donsbach, W. (1996). News decisions: Journalists as partisan actors. *Political Communication*, 13(4), 455-68.
- Paulozzi, L.J., Saltzman, L.E., Thompson, M.P., Holmgreen, P. (2001). Surveillance for homicide among intimate partners-United States, 1981-1998. *MMWR*, 50(SS03), 1-16.
- Piotrow, P. T., Kincaid, D. L., II, J. G. R., & Rinehart, W. (1997). *Health communication: Lessons from family planning and reproductive health*. Westport, CT: Praeger.
- Powers, A., & Andsager, J. L. (1999). How newspapers framed breast implants in the 1990s. *Journalism & Mass Communication Quarterly*, 76(3), 551-64.
- Pritchard, D. (1992). The news media and public policy agendas. In J. D. Kennamer (Ed.), *Public opinion, the press, and public policy* (pp. 103-30). Westport, CT: Praeger.
- Protest, D., SC Brooks, MT Gordon, and DR Leff. (1985). Uncovering rape: The watchdog press and the limits of agenda setting. *Public Opinion Quarterly*, 49(1), 19-37.

- Ramsay, J., Richardson, J., Carter, Y., Davidson, L., & Feder, G. (2002). Should health professionals screen women for domestic violence? Systematic review. *British Medical Journal*, 325(10), 314-26.
- Rennison, C. M., & Welchans, S. (May 2000). *Intimate partner violence*. Bureau of Justice Statistics. Available: <http://www.ojp.usdoj.gov/bjs/pub/pdf/ipv.pdf> [Last accessed: February 8, 2003].
- Rhodes, K., Lauderdale, D., He, T., Howes, D., & Levinson, W. (2002). "Between me and the computer": Increased detection of intimate partner violence using a computer questionnaire. *Annals of Emergency Medicine*, 40(5), 476-84.
- Rhodes, K., & Levinson, W. (2003). Interventions for intimate partner violence against women: Clinical applications. *Journal of the American Medical Association*, 289(5), 601-05.
- Riffe, D., Lacy, S., & Fico, F. G. (1998). *Analyzing media messages: Using quantitative content analysis in research*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Roberts, C. (1997). *Text analysis for the social sciences: Methods for drawing statistical inferences from texts and transcripts*. Mahwah, NJ: Lawrence Erlbaum.
- Rodgers, S., & Thorson, E. (2001). The reporting of crime and violence in the Los Angeles Times: Is there a public health perspective? *J Health Commun*, 6(2), 169-82; discussion 89-92.
- Rodriguez, M., Bauer, H., McLoughlin, E., & Grumbach, K. (1999). Screening and intervention for intimate partner abuse: Practices and attitudes of primary care physicians. *JAMA*, 282(5), 468-74.

- Rodriguez, M., McLoughlin, E., Nah, G., & Campbell, J. (2001). Mandatory reporting of domestic violence injuries to the police: What do emergency department patients think? *JAMA*, *286*(5), 580-83.
- Rodriguez, M., Szkupinski, S., & Bauer, H. (1996). Breaking the silence: Battered women's perspectives on medical care. *Archives of Family Medicine*, *5*, 153-58.
- Rogers, E., & Dearing, J. (1996). *Agenda-setting* (Vol. 6). Thousand Oaks, CA: Sage Publications.
- Rogers, E. M., Dearing, J. W., & Bregman, D. (1993). The anatomy of agenda-setting research. *Journal of Communication*, *43*(2), 68-84.
- Rogers, E. M., Hart, W. B., & Dearing, J. W. (1997). A paradigmatic history of agenda-setting research. In S. Iyengar & R. Reeves (Eds.), *Do the media govern?* (pp. 225-236). Thousand Oaks: Sage Publications.
- Rothman, A., Salovey, P., Antone, C., Keough, K., & Martin, C. (1993). The influence of message framing on intentions to perform health behaviors. *Journal of Experimental Social Psychology*, *29*, 408-33.
- Ryan, C. (1991). *Prime time activism: Media strategies for grassroots organizing*. Boston: South End Press.
- SAS Institute Inc. (1999). *SAS/STAT statistical software: Release 8.0*. Cary, NC: SAS Institute, Inc.
- Savage, R. L. (1978). Policy innovativeness as a trait of American states. *The Journal of Politics*, *40*(1), 212-24.

- Schlesselman, J. J. (1982). *Case-control studies: Design, conduct, analysis*. New York: Oxford University Press.
- Schooler, C., Sundar, S. S., & Flora, J. (1996). Effects of the Stanford five-city project media advocacy program. *Health Education Quarterly*, 23(3), 346-64.
- Schudson, M. (1989). The sociology of news production. *Media, Culture and Society*, 11, 263-82.
- Sharps, P. W., Koziol-McLain, J., Campbell, J., McFarlane, J., Sachs, C., & Xu, X. (2001). Health care providers' missed opportunities for preventing femicide. *Preventive Medicine*, 33, 373-80.
- Shelov, S. P. (1995). The use of media to impact on legislation. *Pediatr Ann*, 24(8), 419-20, 22-5.
- Shepard, M. F., Elliott, B. A., Falk, D. R., & Regal, R. R. (1999). Public health nurses' responses to domestic violence: A report from the enhanced domestic abuse intervention project. *Public Health Nursing*, 16(5), 359-66.
- Short, L. M., Hadley, S. M., & Bates, B. (2002). Assessing the success of the Womankind program: An integrated model of 24-hour health care response to domestic violence. *Women Health*, 35(2-3), 101-19.
- Siegel, M., Wallack, L., Dorfman, L., Jernigan, D., & Themba, M. (1996). Media advocacy and public health: Power for prevention. *International Quarterly of Community Health Education*, 16(3), 288-90.
- Sisley, A., Jacobs, L., Poole, G., Campbell, S., & Esposito, T. (1999). Violence in America: A public health crisis-domestic violence. *Journal of Trauma*, 46(6), 1105-12.

- Soothill, K., & Grover, C. (1997). A note on computer searches of newspapers. *Sociology-the Journal of the British Sociological Association*, 31(3), 591-96.
- Spitzer, R. J. (1993). Introduction: Defining the media-policy link. In R. J. Spitzer (Ed.), *Media and public policy* (pp. 1-15). Westport, CT: Praeger.
- StataCorp. (1999). *Stata statistical software: Release 6.0*. College Station, TX: Stata Corporation.
- Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research, and Evaluation*, 7(17).
- Stenson, K., Saarinen, H., Heimer, G., & Sidenvall, B. (2001). Women's attitudes to being asked about exposure to violence. *Midwifery*, 17(1), 2-10.
- Stillman, F. A., Cronin, K. A., Evans, W. D., & Ulasevich, A. (2001). Can media advocacy influence newspaper coverage of tobacco: Measuring the effectiveness of the American stop smoking intervention study's (ASSIST) media advocacy strategies. *Tobacco Control*, 10, 137-44.
- Stokes, M. E., Davis, C. S., & Koch, G. G. (2000). *Categorical data analysis using the SAS system* (Second ed.). Cary, NC: SAS Institute.
- Stone, G. (1987). *Examining newspapers: What research reveals about America's newspapers* (Vol. 20). Newbury Park, CA: Sage Publications.
- Straus, M. (1992). Sociological research and social policy: The case of family violence. *Sociological Forum*, 7(2), 211-37.
- Sugg, D., Health Reporter for the Baltimore Sun. (2001, April 30, 2001). *The making of the news*. Paper presented at Good News/Bad News: What Makes News. Johns Hopkins School of Public Health; Baltimore, MD.



- Sugg, N., & Innui, T. (1992). Primary care physicians' response to domestic violence: Opening Pandora's box. *Journal of the American Medical Association*, 267(23), 3157-60.
- Sylvester, J., Wu, H. D., & Hamilton, J. M. (1999). *A content analysis of the Philadelphia Inquirer's Israeli/Palestinian coverage*. Retrieved January 12, 2002, from Louisiana State University: <http://www.lsu.edu/faculty/hdeniswu/inquirer.html>
- Taylor, C., & Sorenson, S. (2002). The nature of newspaper coverage of homicide. *Injury Prevention*, 8, 121-27.
- Terkildsen, N., & Schnell, F. (1997). How media frames move public opinion: An analysis of the women's movement. *Political Research Quarterly*, 50(4), 879-900.
- Terkildsen, N., Schnell, F. I., & Ling, C. (1998). Interest groups, the media, and policy debate formation: An analysis of message structure, rhetoric, and source cues. *Political Communication*, 15(1), 45-61.
- Tewksbury, D., Jones, J., Peske, M. W., Raymond, A., & Vig, W. (2000). The interaction of news and advocate frames. Manipulating audience perceptions of a local public policy issue. *Journalism & Mass Communication Quarterly*, 77(4), 804-29.
- Thompson, R. S., Meyer, B. A., Smith-DiJulio, K., Caplow, M. P., Maiuro, R. D., Thompson, D. C., Sugg, N. K., & Rivara, F. P. (1998). A training program to improve domestic violence identification and management in primary care: Preliminary results. *Violence Vict*, 13(4), 395-410.

- Thompson, R. S., Rivara, F. P., Thompson, D. C., Barlow, W. E., Sugg, N. K., Maiuro, R. D., & Rubanowice, D. M. (2000). Identification and management of domestic violence: A randomized trial. *American Journal of Preventive Medicine, 19*(4), 253-63.
- Tjaden, P., & Thoennes, N. (1998). *Prevalence, incidence and consequences of violence against women: Findings from the national violence against women survey: Research in brief*. Atlanta: CDC/NIJ.
- Tjaden, P., & Thoennes, N. (2000). *Extent, nature, and consequences of intimate partner violence: Findings from the national violence against women survey* (NCJ181867). Washington DC: National Institute of Justice/Centers for Disease Control.
- Treno, A. J., Breed, L., Holder, H., Roeper, P., Thomas, B., & Gruenwald, P. (1996). Evaluation of media advocacy within a community trial to reduce alcohol-involved injury. *Evaluation Review, 20*(4), 404-23.
- U.S. Census Bureau. (1991). *Statistical abstract of the United States: 1990* (111th Edition ed.). Washington DC.
- U.S. Census Bureau. (1992). *Statistical abstract of the United States: 1991*. Washington DC.
- U.S. Census Bureau. (1993). *Statistical abstract of the United States: 1992*. Washington DC.
- U.S. Census Bureau. (1994). *Statistical abstract of the United States: 1993*. Washington DC.

- U.S. Census Bureau. (1995). *Statistical abstract of the United States: 1994*. Washington DC.
- U.S. Census Bureau. (1996). *Statistical abstract of the United States: 1995*. Retrieved May 20, 2002 from <http://www.census.gov/prod/www/statistical-abstract-us.html>
- U.S. Census Bureau. (1997). *Statistical abstract of the United States: 1996*. Retrieved May 20, 2002 from <http://www.census.gov/prod/www/statistical-abstract-us.html>
- U.S. Census Bureau. (1998). *Statistical abstract of the United States: 1997*. Retrieved May 20, 2002 from <http://www.census.gov/prod/www/statistical-abstract-us.html>
- U.S. Census Bureau. (1999). *Statistical abstract of the United States: 1998*. Retrieved May 20, 2002 from <http://www.census.gov/prod/www/statistical-abstract-us.html>
- U.S. Census Bureau. (2000). *Statistical abstract of the United States: 1999*. Retrieved May 20, 2002 from <http://www.census.gov/prod/www/statistical-abstract-us.html>
- U.S. Census Bureau. (2001). *Statistical abstract of the United States: 2000*. Retrieved May 20, 2002 from <http://www.census.gov/prod/www/statistical-abstract-us.html>
- U.S. Census Bureau. (2002). *Statistical abstract of the United States: 2001*. Retrieved May 20, 2002 from <http://www.census.gov/prod/2002pubs/01statab/stat-ab01.html>

Ulrich, Y., Cain, K., Sugg, N., Rivara, F., Rubanowice, D., & Thompson, R. (2003).

Medical care utilization patterns in women with diagnosed domestic violence.

*American Journal of Preventive Medicine*, 24(1), 9-15.

Vantrigt, A. M., Dejongvandenbergh, L. T. W., Voogt, L. M., Willems, J., Tromp, T. F. J.,

& Haaijerruskamp, F. M. (1995). Setting the agenda - does the medical

literature set the agenda for articles about medicines in the newspapers. *Social*

*Science & Medicine*, 41(6), 893-99.

Waelen, J., Goodwin, M., Spitz, A., Petersen, R., & Saltzman, L. (2000). Screening for

intimate partner violence by health care providers: Barriers and interventions.

*American Journal of Preventive Medicine*, 19(4), 230-37.

Wallack, L. (1994). Media advocacy: A strategy for empowering people and

communities. *J Public Health Policy*, 15(4), 420-36.

Wallack, L., & Dorfman, L. (1996). Media advocacy: A strategy for advancing policy

and promoting health. *Health Educ Q*, 23(3), 293-317.

Wallack, L., Dorfman, L., Jernigan, D., & Themba, M. (1993). *Media advocacy and*

*public health: Power for prevention*. Newbury Park: Sage Publications.

Waller, A. E., Hohenhaus, S. M., Shah, P. J., & Stern, E. A. (1996). Development and

validation of an emergency department screening and referral protocol for

victims of domestic violence. *Ann Emerg Med*, 27(6), 754-60.

Walsh-Childers, K. (1994a). "A death in the family": A case study of newspaper

influence on health policy development. *Journalism Quarterly*, 71(4), 820-29.

Walsh-Childers, K. (1994b). Newspaper influence on health policy development.

*Newspaper Research Journal*, 15(3), 89-104.

- Wathen, C., & MacMillan, H. (2003). Interventions for violence against women: Scientific review. *JAMA*, 289(5), 589-600.
- Weber, R. P. (1990). *Basic content analysis* (Vol. 49). Newbury Park: Sage Publications.
- Weissert, C., & Weissert, W. (1996). *Governing health: The politics of health policy*. Baltimore: Johns Hopkins University Press.
- Winett, L. (1997). Advocate's guide to developing framing memos. In S. Iyengar & R. Reeves (Eds.), *Do the media govern?* (pp. 420-434). Thousand Oaks: Sage Publications.
- Wood, F., Chapman, S., & Lupton, D. (1995). The fight for public health: Principles & practice of media advocacy. *Sociology of Health and Illness*, 17(4), 571-73.
- Woodruff, K. (1996). Alcohol advertising and violence against women: A media advocacy case study. *Health Educ Q*, 23(3), 330-45.
- Woolley, J. T. (2000). Using media-based data in studies of politics. *American Journal of Political Science*, 44(1), 156-73.
- Wray, R., Maxwell, K., & Hornik, R. (2001). Evaluation of on-line search phrases for content analysis: The case of news reporting on domestic violence. Draft.
- Yamaguchi, K. (1991). *Event history analysis* (Vol. 28). Newbury Park: Sage Publications.
- Yan, W. J. (1998). A structural analysis of the changing image of China in the New York Times from 1949 through 1988. *Quality & Quantity*, 32(1), 47-62.
- Yanovitsky, I., & Bennett, C. (1999). Media attention, institutional responses, and health behavior change: The case of drunk driving, 1978-1996. *Communication Research*, 26(4), 429-53.

- Yanovitsky, I., & Blitz, C. (2000). Effect of media coverage and physician advice on utilization of breast cancer screening by women 40 years and older. *Journal of Health Communication, 5*(2), 117.
- Yanovitzky, I. (2002). Effect of news coverage on policy attention and actions. *Communication Research, 29*(4), 422-51.
- Zakocs, R. C., Earp, J. A., & Runyan, C. W. (2001). State gun control advocacy tactics and resources. *American Journal of Preventive Medicine, 20*(4), 251-7.

## **CURRICULUM VITA**

**Jennifer A. Manganello, M.P.H.**  
624 North Broadway-Box H690  
Baltimore, MD 21205

---

## **EDUCATION**

**Johns Hopkins Bloomberg School of Public Health.** Baltimore, MD  
*Doctoral Candidate for PhD in Health Policy and Management*  
*Faculty of Health and Public Policy*  
*Comprehensive Examinations passed, June 2000*  
*Preliminary Oral Examinations passed, December 2001*

**Boston University School of Public Health.** Boston, MA  
*Masters in Public Health, May 1996*  
Concentrations in Health Services and Epidemiology

**Pomona College.** Claremont, CA  
*Bachelor of Arts, May 1993*  
Concentration in Politics  
Senior Project completed with honors

## **PROFESSIONAL EXPERIENCE**

**Johns Hopkins Bloomberg School of Public Health.** Baltimore, MD (2000-present)  
*Research Analyst*

- Oversee data set development, coding of data, and data management for a study related to the evaluation of minimum age gun laws in the United States.
- Assist with the analysis of data and preparation of manuscripts.

**Johns Hopkins Bloomberg School of Public Health.** Baltimore, MD (1999-present)  
*Research Analyst*

- Oversee coding of data and data management for a national, multi-site study on risk factors for intimate partner homicide.
- Assist with the analysis of data and preparation of manuscripts.

**Massachusetts General Hospital,** Boston, MA (1998-1999)  
*Assistant Project Director*

- Supervised and trained research staff.
- Oversaw program evaluation for a hospital-based domestic violence program and a substance abuse community coalition.

**Massachusetts General Hospital,** Boston, MA (1997-1998)  
*Project Manager*

- Managed the design and implementation of program evaluation activities for the programs listed below.



**Massachusetts General Hospital, Boston, MA (1996-1997)**

*Research Analyst*

- Assisted with quantitative and qualitative data collection and analysis for several research projects including the development of survey instruments, data collection tools, codebooks, and databases.
- Coded and cleaned data and manage statistical analysis for several research projects, including program evaluations for a hospital based domestic violence program, an asthma care program, a substance abuse coalition and a child witness to violence program.
- Worked with senior staff to prepare papers for publication.
- Compiled literature reviews for a variety of projects, papers, and grant proposals.

**ADDITIONAL RESEARCH EXPERIENCE**

**Johns Hopkins Bloomberg School of Public Health, Baltimore, MD (2002)**

- Conduct literature reviews, prepare presentations, and oversee quantitative and qualitative data analysis for projects at the Center for Communication Programs.

**John Snow Institute, Arlington, VA (2000-2001)**

- Assisted with qualitative analysis, including coding of interview transcripts, for the Empowerment of Women project focusing on reproductive health in Bangladesh.
- Performed literature reviews related to cost of reproductive health care in developing countries and utilization of health care in Bangladesh.

**Massachusetts Department of Public Health, Boston, MA (1998-1999)**

- Cleaned and analyzed NIBRS police data for WATCH (state-wide domestic violence program).
- Generated a final report for public release presenting statistics about intimate partner crimes.

**Massachusetts Department of Public Health, Boston, MA (Spring 1996)**

- Performed statistical analysis, presented data, and generated a final report regarding oral health care of youth in Massachusetts.

**FELLOWSHIPS AND AWARDS**

**Doctoral Student Conference Presentation Award (2002-2003)**

Health Policy and Management Department award for conference presentations

**Victor P. Raymond Memorial Award in Public Policy Development (2001-2002)**

Health Policy and Management Department award for a dissertation focusing on health care policy

**National Institute of Mental Health (2000-2002)**

Pre-doctoral Fellowship, Interdisciplinary Research Training on Violence, T32 MH20014

**Johns Hopkins Bloomberg School of Public Health (1999-2003)**

Department of Health Policy and Management Endowed Fellowship Fund Recipient

## **TEACHING EXPERIENCE**

**Johns Hopkins Bloomberg School of Public Health.** Baltimore, MD (Spring 2002)  
*Teaching Assistant* for 'Understanding and Preventing Violence'

**Johns Hopkins Bloomberg School of Public Health.** Baltimore, MD (Spring 2002)  
*Teaching Assistant* for 'Research Ethics'

**Johns Hopkins Bloomberg School of Public Health.** Baltimore, MD (Fall 2001)  
*Teaching Assistant* for 'Introduction to Health Policy and Management'

## **PUBLICATIONS**

Campbell J, Webster D, Koziol-McLain J, Block C, Campbell D, Curry M, Gary F, Glass N, McFarlane J, Sachs C, Sharps P, Ulrich Y, Wilt SA, Manganello J, Xu X, Schollenberger J, Frye V, Laughon K. Risk Factors For Femicide in Abusive Relationships: Results From A Multi-Site Case Control Study. Paper accepted for publication at the American Journal of Public Health.

Ferris TG, Perrin JM, Manganello JA, Chang Y, Causino N, Blumenthal D. Switching to Gatekeeping: Changes in Expenditures and Utilization for Children. *Pediatrics* 2001; 108(2): 283-290.

## **CONFERENCE PRESENTATIONS**

"Evaluation of a Hospital-Based Domestic Violence Program: Baseline Findings on Knowledge, Attitudes and Practices of Health Care Providers." Presented as member of a panel on "Domestic Violence Interventions in the Health Care Setting." Annual Meeting of American Public Health Association, Washington DC. November, 1998.

"The Pediatrician as Gatekeeper." Presented as member of a panel on "Managed Care and Its Impact on the Delivery System." Annual Meeting of American Public Health Association, Washington DC. November, 1998.

"The Primary Care Physician as Gatekeeper: Effects on Use and Cost of Health Care in an Employed Population." Presented as member of a panel on "Gatekeeper. Usual Physician. Primary Care: Access and Utilization in the Health Service Market." Annual Meeting of American Public Health Association, Washington DC. November, 1998.

"HAVEN at MGH: A Model for Collaborative Evaluation Design." Presented as a member of a panel on "Collaborative Evaluation Research". International Family Violence Conference, Durham, NH, Summer 1998.

## **POSTER PRESENTATIONS**

"Intimate Partner Violence And Health Care Issues in the News: What's the Story?" Poster Session. Annual Meeting of American Public Health Association, Philadelphia, PA. November, 2002.

**"Paternity and Its Relationship to Femicide." Poster Session. Annual Meeting of American Public Health Association, Boston, MA. November, 2000.**

**"Community Based Coalitions and the Evaluation Process." Poster Session. Annual Meeting of American Public Health Association, Washington DC. November, 1998.**

**"Comparing Gatekeeping with Traditional Care: A Survey of Patients' Attitudes and Experiences." Poster Session. Annual Meeting of American Public Health Association, Washington DC. November, 1998.**