

The University of Southern Mississippi
The Aquila Digital Community

Dissertations

Summer 8-2015

**Public Relations in Government-Based Public Health: Testing
Contingency Theory During H1N1 Response, 2009-2010**

Terri Lea Sasser
University of Southern Mississippi

Follow this and additional works at: <https://aquila.usm.edu/dissertations>



Part of the [Arts and Humanities Commons](#), [Medical Education Commons](#), and the [Public Health Commons](#)

Recommended Citation

Sasser, Terri Lea, "Public Relations in Government-Based Public Health: Testing Contingency Theory During H1N1 Response, 2009-2010" (2015). *Dissertations*. 141.
<https://aquila.usm.edu/dissertations/141>

This Dissertation is brought to you for free and open access by The Aquila Digital Community. It has been accepted for inclusion in Dissertations by an authorized administrator of The Aquila Digital Community. For more information, please contact Joshua.Cromwell@usm.edu.

The University of Southern Mississippi

PUBLIC RELATIONS IN GOVERNMENT-BASED PUBLIC HEALTH:
TESTING CONTINGENCY THEORY DURING H1N1 RESPONSE, 2009-2010

by

Terri Lea Sasser

Abstract of a Dissertation
Submitted to the Graduate School
Of The University of Southern Mississippi
In Partial Fulfillment of the Requirements
For the Degree of Doctor of Philosophy

August 2015

ABSTRACT

PUBLIC RELATIONS IN GOVERNMENT-BASED PUBLIC HEALTH: TESTING CONTINGENCY THEORY DURING H1N1 RESPONSE 2009-2010

by Terri Lea Sasser

August 2015

The primary purpose of this study is to *describe* public relations programs in state and local government-based health departments nationwide. Using the H1N1 communications and public relations activities as a frame, or basis of comparison, this study will further seek to *identify* if Contingency Theory of public relations may be an apt descriptor of public relations activities during this particular response effort. This study uses Contingency Theory as a theoretical perspective to explain the strategic management of the organization-public relationships and add to the body of knowledge about Contingency Theory of public relations in the field of health communications. Contingency Theory has been tested in other areas of for-profit and nonprofit sectors, but not specifically in the field of health communication.

While the practice of public relations in the field of health care has been studied extensively, most work has centered on pharmaceutical companies, hospitals, and other health care facilities. The work performed in state and local public health departments has been rarely examined, other than to review which campaigns prove effective in what areas, primarily in the development of campaigns to measure or improve a particular health indicator. Previous studies in the area of public health have tended to focus on specific aspects of campaigns rather than the general practice of public relations in public health. This study examines the practice of public relations in public health to describe

and explain the approach taken with various publics and to determine if Contingency Theory proves appropriate as a descriptor of practice. This study will add to the body of knowledge by linking public relations to public health and in building public relations theory by beginning to test Contingency Theory in the area of public health.

DEDICATION

Sincere thanks go to my myriad friends and family as well as my colleagues at Georgia Regents University who have alternately listened to me cry, wail, and bemoan this task but who have nonetheless stuck with me, loved me, and pushed me when most needed. I also appreciate so very much the support from my students; I am blessed to play a role in your lives and for the lessons you teach me every day. Appreciation also goes to those who were generous enough to help fund my education through scholarships. Your gifts made all the difference.

Most importantly, I dedicate this to you, Mom, for believing in me long after I stopped believing in myself. I love you with all my heart, and could not have done this without your love, prayers, and support.

ACKNOWLEDGMENTS

A sincere and heartfelt thank you goes to all of my professors and the faculty in the School of Mass Communication for their time and attention to me as a returning student. You modeled for me how professors should interact with their students, which I strive to emulate now as a professor myself.

Thank you so very much to the members of my Committee, Dr. Chris Campbell, Dr. Fei Xue, Dr. Dave Davies, Dr. Vanessa Murphree, and most especially, to Dr. Jae-Hwa Shin, my Committee Chair. I have caused you much concern and worry these last few years, but thank you for sticking with me and encouraging me through the process and through my profound anxiety. A special thank you to two original members of my Committee who are no longer with us, Dr. Gene Wiggins and Dr. Art Kaul. You are both sorely missed.

Thank you also to the National Public Health Information Coalition for their cooperation in this project.

TABLE OF CONTENTS

ABSTRACT	ii
DEDICATION	iv
ACKNOWLEDGMENTS	v
LIST OF TABLES	viii
LIST OF ILLUSTRATIONS	ix
CHAPTER	
I. INTRODUCTION	1
II. LITERATURE REVIEW	10
Public Health and Public Relations	
The Role of the Public Relations Professional	
Defining Publics	
Organizational Characteristics	
III. THEORETICAL FRAME: CONTINGENCY THEORY OF PUBLIC RELATIONS	41
Development of the Contingency Theory	
It Depends: Contingency Theory	
Continuum: Advocacy vs. Accommodation	
Conflict and Crisis in Contingency Theory	
IV. RESEARCH QUESTIONS AND HYPOTHESIS	53
V. METHODOLOGY	64
Web-based Survey	
Sampling Method	
Survey Instrument	
Survey Procedure	
VI. RESULTS AND ANALYSIS	75
Results	

VII. DISCUSSION	98
Practical Implications	
Theoretical Implications	
Limitations	
Future Research	
APPENDIXES	120
REFERENCES	130

LIST OF TABLES

Table

1.	Timeline of H1N1 Events	19
2.	Percentages and Frequencies, Research Question 1	76
3.	Means and Standard Deviations, Research Question 2	80
4.	Percentages and Frequencies, Research Question 3	81
5.	Percentages and Frequencies, Research Question 4	85
6.	Percentages and Frequencies, Research Question 6	91
7.	Percentages and Frequencies, Research Question 7	93
8.	Means of Stances, Hypothesis 1	95
9.	Percentages and Frequencies, Research Question 8	97

LIST OF ILLUSTRATIONS

Figure

1.	Contingency Theory illustrated	48
2.	Contingency Theory illustrated	62

CHAPTER I

INTRODUCTION

The primary purpose of this study is to *describe* public relations programs in state and local government-based health departments nationwide. Using the H1N1 communications and public relations activities as a frame, or basis of comparison, this study will further seek to *identify* if Contingency Theory of public relations may be an at descriptor of public relations activities during this particular response effort. This study uses Contingency Theory as a theoretical perspective to explain the strategic management of the organization-public relationships and add to the body of knowledge about Contingency Theory of public relations in the field of health communications. Contingency Theory has been tested in other areas of for-profit and nonprofit sectors, but not specifically in the field of health communication.

Public relations may be defined as the “strategic management of competition in the best interests of one’s own organization and, when possible, also in the interests of key publics” (Cameron, Wilcox, Reber, & Shin, 2008, p. 35). More succinctly, public relations may be defined as the strategic management of the relationships between an organization and its publics. The term “relationships” in public relations generally refers to the various publics with which one must interact, sustain, and cultivate as part of the daily work of the public relations professional. Specific publics, in fact, may “come and go and change as situations change” (Grunig & Huang, 2000, p. 35). Based on this view of public relations, one could purport that the practice of public relations may be made more complex as the number and variety of publics with whom one must sustain relationships increases.

Public relations practitioners may be found in almost every segment of business and society. From small non-profit organizations to major international corporations and everywhere in between, public relations practitioners are practicing their craft, managing relationships between organizations and their publics. How public relations is practiced varies widely, from the very simple and basic to wildly complex iterations based in part on the type and number of publics with which the organization interacts, the complexity of those relationships, and the relative importance of the organization.

Health – in all its facets – is a field usually faced with numerous complex organization-public relationships. The practice of public relations in the area of health faces increased importance in the lives of Americans in the wake of sweeping national health care reform legislation – the Affordable Care Act – passed in 2010. The need to manage the relationships among different types of publics such as health care providers, insurers, patients, and government entities that both provide and regulate health care services grows increasingly more complex as the provision of and access to health care changes (Zezza & Nacinovich, 2011, p. 152). In addition to managing relationships, “successful public health campaigns must increase both the amount of information on a topic available for publics and the salience of and attention to a campaign while providing a solution to the health topic of interest” (Avery, 2010, p. 380).

Consequently, the *practice* of public relations in the field of public health touches every person in some way. The *public* becomes all people, divided into groups and sub-groups of various sizes and complexities, each focusing on a specific area of public health and requiring skills and knowledge of public relations strategies and tactics, closely tied with the basic functions and practices of public health to adequately manage

the relationships. This study explores the practice of public relations in public health, more specifically, in state and local public health departments in the United States. The multiplicity of audiences – both internal and external – with which public relations practitioners must interact on a daily basis, necessitates a variety of approaches to achieve communication goals and objectives.

While the practice of public relations in the field of health care has been studied extensively, most work has centered on pharmaceutical companies, hospitals, and other health care facilities. The work performed in state and local public health departments has only recently begun to be examined (Avery, 2010; Avery & Lariscy, 2011; Avery, Lariscy, Amador, Ickowitz, Primm, & Taylor, 2010; White & Wingenbach, 2013). Health communication studies primarily focus on reviews of which campaigns prove effective in what areas, primarily in the development of campaigns to measure or improve a particular health indicator. Previous studies in the area of public health have tended to focus on specific aspects of campaigns rather than the general practice of public relations in public health. This study examines the practice of public relations in public health in an attempt to describe and explain the variety of approaches taken with various publics and to determine if Contingency Theory of public relations proves appropriate as a descriptor of practice. This study seeks to add to the body of knowledge by linking public relations to public health and building public relations theory by explaining how contingent factors affect the development and practice of public health.

Public relations, as a distinct field of academic study, is relatively new, but public relations techniques can be traced historically to as early as the civilizations of Babylonia, Greece, and Rome. In America, early examples of the use of strategies and tactics to gain

public consent – including the Boston Tea Party, the *Federalist Papers*, and Thomas Paine’s “Common Sense” – helped lay the foundation for the American Revolution. During the 1800s, P.T. Barnum and the railroads led the way in the development of what has become known as the press agency model of public relations, which exists solely to promote the client’s view and position. By the 20th century, public relations included concerted efforts on the part of the federal government to *sell* World War I and World War II to the American people. Instead of just disseminating information, public relations practitioners began to focus on psychological and sociological aspects of communication. Lessons learned from those efforts helped shape the role of public relations in managing not just public consent but also public opinion regarding companies and organizations. During the latter half of the past century, public relations became a distinct and important management function in corporate America, and the management of relationships between and among organizations and their publics became recognized as both valuable and necessary (Cameron et al., 2008, pp. 72-76).

According to Grunig’s Excellence Theory model, public relations practices fall into one of four categories based on two matrixes: one-way vs. two-way communication and symmetry vs. asymmetry. Grunig purports that the two-way symmetrical model serves as not just the normative model but also as the most ethical way to practice public relations (Grunig, 1984, p. 27). Seeing limitations in that assumption, Cameron and his colleagues proposed Contingency Theory as an alternative. While recognizing the validity of Grunig’s models, Contingency Theory does not support a normative model but instead says that an organization’s stance toward its publics will and should change as the

situation matures and develops. In other words, the practice of public relations may be characterized as “it depends” (Cancel, Cameron, Sallot & Mitrook, 1997, pp. 32-33).

This study seeks to discover whether Contingency Theory of public relations may accurately describe the practice of public relations in state and local public health departments. The complexity of the daily practice of public relations is reflected in Contingency Theory, which provides flexibility in the stance not only with which practitioners may choose to use with the various publics, but also within each individual situation (Cancel et al., 1997, p. 35). The stance of a public relations practitioner within any given situation and with any given public moves and changes to adapt to current conditions along a continuum of strategic stances (Cancel et al., 1999, p. 190). This illustrates not only the flexibility of Contingency Theory, but also its power to accurately describe and explain the complex nature of relationships that exist within the practice of public relations. In other words, one would have difficulty pigeonholing their work into any of Grunig’s four neat models of public relations (Cameron et al., 2008, p. 73). Instead, the savvy practitioner in public health picks and chooses from among the models based on the audience, topic, risk, and other factors. The variability in the public health field seems to point to the need for a flexible model, such as Contingency Theory, as the best option for public relations professionals in public health.

In a 2004 study of health communications surveying the years 1990-2000, Beck et al. found that articles focusing on health communications comprised some five percent of total articles published in communications journals, excluding those journals specifically dedicated to health communication such as *Health Communication* and *Journal of Health Communication*. Beck and her colleagues suggest that “the low percentage of health

communication articles in mainstream communication journals indicates a lack of prioritizing of such articles by editors and reviewers and/or of mainstream communication journals as possible outlets for this type of research” (Beck et al., 2004, p 483). Those classifications included health information, focusing on how individuals acquire or seek health information; health campaigns, which focused on the efficacy of health information on the targeted population; and physician-health care seeker interactions, with a necessary focus on interpersonal communication. No other area could be identified as receiving enough emphasis to be classified as a category (pp. 484-485).

A more recent study compared the content of two major health communication journals over a 10-year period to describe the current field of research and identify trends and gaps in the research. The authors noted gaps – less than 3% of articles – specifically with topics related to important public health areas such as “health services, educational and community based programs, public health infrastructure, health inequalities, and global health” (Nazione, Pace, Russell, & Silk, 2013, p. 237).

Some health communication areas are closely tied with public relations practice in public health, but the role of public relations professionals and the public relations practice are not fully explained. While public relations practitioners in public health certainly meet all three classifications identified by Beck and her colleagues, they also go far beyond those areas. One important first step in addressing this lack of information about what public relations does in public health is to first look at *how* public relations *works* in public health.

Particularly in public health, public relations practitioners are challenged to use all their skills in a complex practice that includes serving not just as a communicator but also

facilitating education, regulation, and provision of health care. Their public relations role is also often one of risk communication in which practitioners work to “communicate scientific and medical information in a way that the public can understand and provide clear information about the concepts of risk and how to apply them” (IOM, 2003, p. 317). Public relations practitioners may become intimately involved in settling disputes and working with the media during public health crises such as disease outbreaks or natural disasters that disrupt provision of safe drinking water and food supplies (p. 318). At other times, public health requires communication and accommodation to gain support from the various publics they serve, to gain support for programs, and to secure funding for important health initiatives (Cameron et al., 2008, p. 427).

Public relations practitioners in public health function in a variety of roles and must constantly seek to balance the interests of the various publics they serve through a negotiation of advocacy and accommodation, granting and ceding power within relationships as needed to reach their objectives. The variety and complexity of relationships in the field of public health provides an excellent testing ground for Contingency Theory principles and applications. Public health is often defined as what we, as a society, do collectively to assure “conditions in which all people can be healthy” (IOM, 1988, p. 53). Since the practice of public health ranges from health care facility inspections to childhood immunizations to health education programs, it is easy to imagine the veritable plethora of publics with which a public relations practitioner in public health must interact on a daily basis. Add to that the fairly regular need for crisis communication plans – as illustrated during the 2009-2010 H1N1 epidemic – and public health becomes an attractive area in which to test the principles of Contingency Theory.

While the H1N1 epidemic is an example of the need for public relations tactics and strategies in public health, numerous examples exist. For instance, natural disasters such as Hurricane Katrina in 2005 required the use of an array of mass media and social media communication strategies to disseminate information to the largest number of people as efficiently and as quickly as possible. More recently, the perceived threat of an Ebola outbreak in 2014 required the use of public relations tactics to quell fears of risk of infection among the population at large.

Long-term challenges also exist that require concerted campaigns to counter negative and often misleading information, such as the purported link between some childhood immunizations and autism spectrum disorders which recently has been proven to be false (Currie, 2010, p. 8). In using H1N1 as a frame for this study, we focus on an issue that occurs infrequently in public health: a true pandemic. The evolution of this pandemic was not static but evolved over time as more was learned about the virus, its causes and effects, and how it migrated across the world from population to population. Consequently, communication and public relations efforts to manage relationships between and among the players – including the World Health Organization, the Centers for Disease Control, state and local health departments, hospitals and physicians – and the various publics – including the general public, the news media, schools, local and state governments and many others – become an excellent testing ground for Contingency Theory, which basically posits that strategies and tactics used evolve and change as the situation in question evolves and changes.

Using a theoretical perspective of Contingency Theory within a framework of the H1N1 epidemic, 2009 – 2010, this study begins to fill an identified gap in public relations

study, specifically in the area of government-based state and local public health. As noted earlier, many of the first public relations practices studied and cited as the beginning of public relations as a profession were performed under the auspices of the federal government to engineer public consent for war efforts. With the advent of Grunig's Excellence Theory and the four models of public relations practice, the role of government public relations seems to have been categorized into what could be perceived as a *basic* public health function, that of the one-way symmetrical model of public information in which public relations professionals serve as "journalists in residence" for their respective organizations (Grunig, 1984, p. 8). This study seeks to show that – in the area of public relations – the work performed by public relations professionals in government-based public health programs and departments does not fit neatly into the public information model, but instead utilizes a broad spectrum of strategies and tactics to meet the needs of their organizations.

CHAPTER II

LITERATURE REVIEW

Public Health and Public Relations

Perhaps public relations professionals can make themselves most valuable to public health by becoming students of public health. As with any other profession, the *language* of public health is unique and requires study. The importance of learning the language of public health is made greater because the stakes are greater; the ability to influence the health of the population as a whole with appropriately framed and disseminated public health messages is not to be taken lightly. Public relations professionals in public health should also work with scientists, health care professionals, and policy experts to assure the subject matter experts receive appropriate training in public communication to facilitate not just clearer and more accurate messages but also better relationships with the media partners (IOM, 2003, pp. 318-319).

Conversely, those assigned roles as communicators within the public health arena may have the predominance of their academic training in health care – such as nursing, social work, and health education – rather than the skills, tactics, and strategies emphasized in public relations academic curricula. Perhaps those communicators may best serve public health by becoming students of public relations.

The importance of the public relations practitioner's relationship with mass media partners cannot be underestimated. Shin and Cameron (2005) described it as “a mixed relationship with elements of both mutual dependency and mutual mistrust” (p. 318). In her 2004 study, Tanner surveyed health reporters about the sources of their story ideas and found that most of them came from personal contacts with public relations

spokespersons, with news releases sent by practitioners the second most frequently cited (Tanner, 2004). While journalists and public relations practitioners may have “mixed” relationships, health reporters clearly need public relations practitioners as a trusted source of information. In a 2006 study of the power of public relations in media relations that focused on health public relations practitioners, Cho said “because of the complex nature of the subject and the need for specialized expertise, the health beat is one in which reporters rely on a source’s expertise and public relations efforts” (Cho, 2006, p. 563).

White and Wingenbach (2013) conducted a study of potential barriers to mass media coverage of health issues. “Significant barriers between the two professions contribute to disparities in their viewpoints. Such barriers include differences in organizational structures of media corporations, institutions and agencies employing journalists and PIOs; dissimilarities in journalists’ and PIOs’ education and training’ disparities in ways each group sees its own role; and disconnects produced by inaccurate perceptions each group has of the other” (p. 124).

Contributing to the need for public relations practitioners well versed in public health to manage the relationship with mass media is the daily role public health plays in the lives of people. Public relations practitioners in Mississippi and many other states, for instance, have worked effectively for years to encourage the broadcast of basic health messages such as restaurant inspection scores and boil water notices for community water systems. Annual stories on the importance of vaccinations coincide with back-to-school preparations in August and again in October in preparation for flu season. These are basically routine messages that require little specific knowledge. But public relations

practitioners should also be able to bridge the gap between reporters and technical experts in public health such as physicians, epidemiologists and engineers to assure accurate and factual information is provided to the public.

Public health has been defined as what we, as a society, do collectively to assure the “conditions in which people can be healthy” (IOM, 1988, p. 53). The nation’s public health system includes federal, state, and local public health entities as well as partners in private health care and the community-at-large. At the federal level, the Department of Health and Human Services (HHS) includes such entities as the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), and the Health Resources and Services Administration (HRSA). Collectively, the HHS budget accounts for nearly 25 percent of all federal spending and includes more than 300 separate programs (Cameron et al., 2008, p. 427). State and local health departments vary from state to state; a few states, like Mississippi, have one statewide system where county, regional, and state level offices all operate as part of one, coordinated state agency (MSDH, 2015). But most states have city and county health departments that function independently, providing direct services to citizens and working cooperatively with the state health department (NACCHO, 2015). The public health system also includes other entities such as physicians in private practice, employers, insurers, and communities as intersectoral partners vital to creation of a healthy society (IOM, 2003).

The need for communications professionals in public health is documented, and the field of health communications continues to grow and evolve. A 2007 Association of State and Territorial Health Officials (ASTHO) workforce study found that only one percent of the entire public health workforce is categorized as public information

specialists (p. 8). While the need may be great, trained public health communicators are apparently few.

Healthy People 2010, published by CDC, included the following definition of health communication:

Health communication encompasses the study and use of communication strategies to inform and influence individual and community decisions that enhance health. It links the domains of communication and health and is increasingly recognized as a necessary element of efforts to improve personal and public health. (CDC, 1999, pp. 11-3)

The more current *Healthy People 2020* (2010) offers a somewhat different view of health communication, combining it with Health Information Technology (HIT). In doing so, CDC blurs the line between the message and the medium, focusing on the use of newer technologies, including social media, to improve and enhance health communication. The 2020 objectives for Health Communication and HIT include:

1. “Supporting shared decision-making between patients and providers.
2. Providing personalized self-management tools and resources.
3. Building social support networks.
4. Delivering accurate, accessible, and actionable health information that is targeted or tailored.
5. Facilitating the meaningful use of health IT and exchange of health information among health care and public health professionals.
6. Enabling quick and informed action to health risks and public health emergencies.

7. Increasing health literacy skills.
8. Providing new opportunities to connect with culturally diverse and hard-to-reach populations.
9. Access to online health information
10. Providing sound principles in the design of programs and interventions that result in healthier behaviors.
11. Increasing Internet and mobile access” (CDC, 2010, para 3).

While emphasizing the role of technology in creating, disseminating, and consuming health information, *Healthy People 2020* still accentuates the need for sound public relations and communications strategies and tactics. The document authors state, “Despite increased access to technology, other forms of communication are essential to ensuring that everyone, including non-Web users, is able to obtain, process, and understand health information to make good health decisions. These include printed materials, media campaigns, community outreach, and interpersonal communication” (CDC, 2010, para 9).

Health communication, as a discipline, is both an emerging and rapidly growing component of the nation’s public health system. Research in health communications “tends to emphasize public health and interpersonal interactions about health” (Beck et al., 2004, p. 488). Under normal circumstances, public health communication focuses more on improving the health of individuals and communities rather than deconstructing and analyzing the messages and mechanisms of communication. Yet, the importance of planned, coordinated, and well-executed health communication programs “have the capacity to elicit change among individuals and populations by raising awareness,

increasing knowledge, shaping attitudes, and changing behaviors” (Berndhardt, 2004, p. 2052).

Early in the 21st Century, the nation’s interest in health communication turned toward that of risk and crisis communication during and immediately following the destruction of the Twin Towers in New York City and the airplane crashes in Washington, D.C. and Shanksville, Pennsylvania on September 11, 2001. Further attention to the importance of these specialized health information messages became apparent when letters containing anthrax were mailed to several locations around the country in the ensuing months, resulting in a nationwide panic for only 20 identified cases. In 2005, CDC deployed its largest ever contingency of health communication and health education specialists following Hurricane Katrina to assist state and local health departments with creating and disseminating messages (Vanderford, Telfer, & Bono, 2007).

Public health needs the skills and resources of public relations professionals dedicated to the idea of working as part of a team to create a better, healthier society. Because public health has a duty to protect and promote the public’s health and “inform citizens of threats to their health and safety ... communication is a primary strategy of public health” (Rudd, Comingsi, & Hyde, 2003, p. 104).

In *The Future of the Public’s Health* (IOM, 2003), the importance of media in health communication receives an entire chapter and begins with a discussion of the importance of mediated messages in American culture. Noting that *life experience* is mediated through communication technologies instead of “being directly experienced or witnessed,” the authors encourage public health professionals and policy makers to

appreciate “the importance and power of the media in shaping the health of the public” (IOM, 2003, p. 307). Two strategies that receive special focus are social marketing and media advocacy. Social marketing is an attempt to *sell* positive health behaviors through use of advertising and marketing principles. It uses the four Ps of marketing – product, price, place, and promotion – adjusted for health behaviors, but also includes three Ps specifically selected because of their ability influence health behaviors: partnership, policy, and politics. Media advocacy, described more fully in the next section, is seen as part of a broader strategy that focuses on four primary activities: developing an overall strategy, setting the agenda, shaping the debate, and advancing the policy. Communication theories such as agenda setting and framing are important tools during that process (IOM, 2003, p. 334).

The 2003 IOM report also lists three top priorities for research in the area of health communication. First, the authors cite the need for “basic research on how the media influence individual health decisions as well as the public’s health” (p. 347). The second identified need is research to aid in matching the message to the media, or how to effectively reach all the different publics that need health communication. Finally, they cite the need for research on “how health communication can better influence public policy” (p. 348), particularly in the areas of social marketing and media advocacy.

Communication Skills are one of eight domain areas in the Core Competencies for Public Health Professionals. First developed in 1998 by the Council on Linkages Between Academia and Public Health Practice, the current competencies were last updated and adopted in 2014 (Council on Linkages Between Academia and Public Health Practice, 2014). The Council’s mission in creating the competencies is to assure

appropriate and innovative educational opportunities for public health professionals at all stages of their careers, thereby strengthening the public health infrastructure.

Core Competencies for all domains are separated into three tiers. Tier 1 Competencies are for entry level or front line staff, Tier 2 Competencies are targeted toward program managers and other supervisors, and Tier 3 Competencies are for senior management and executives. Communication Skills include eight basic skill sets, summarized as follows:

- Identify and assess the literacy of populations served and ensure those literacy levels are addressed in the organization's policies, programs, and services.
- Ensure public health professionals communicate effectively linguistically and culturally in both written and oral communications.
- Solicit and use, as appropriate, input from individuals and organizations to improve the health of a community.
- Suggest, select, and evaluate appropriate media and communication methods for disseminating public health data and information, including social media, newspapers, journals, etc.
- Convey data and information to the publics served and to professionals using a variety of approaches.
- Communicate information and evaluate strategies for communication aimed at influencing behavior and improving health within communities.
- Facilitate communication among various public with whom public health interacts.

- Describe and communicate the role of governmental public health, health care, and other partners in creating and improving overall health status of a community (CLBAPHP, 2014, pp. 11-12).

These Core Competencies mesh well with the goals and objectives of the *Healthy People 2020* efforts, which states that the strategic combination of HIT tools and health communication efforts have “the potential to:

- Improve health care quality and safety.
- Increase the efficiency of health care and public health service delivery.
- Improve the public health information infrastructure.
- Support care in the community and at home.
- Facilitate clinical and consumer decision-making.
- Build health skills and knowledge” (CDC, 2010, para 4).

Ristino (2007) provides an excellent overview of the role of public relations in health care in managing relationships with external publics. Building on previous work, Ristino posits five specific purposes for public relations campaigns in health care that clearly complement the Core Competencies and IOM research priorities noted previously. Those purposes are to: “(1) Manage organizational image, identity and reputation; (2) Influence public policy; (3) Promote personal and public health; (4) Manage organizational change and crises; and (5) Promote fund raising and volunteerism” (p. 78).

H1N1 influenza, 2009-2010 Communication Efforts as a Frame

First identified in the United States and North America in April 2009, H1N1 influenza (flu) became a world-wide pandemic illness with some predictions stating

millions would die while millions more would be sickened, triggering massive closures of governments and businesses as well as over-taxing already burdened existing health care systems worldwide. Beginning in mid-April of 2009, health officials in Mexico identified a cluster of cases in the metropolitan area of Mexico City as H1N1, or novel influenza A. In less than six weeks, the H1N1 infection spread to what would be a normal level for six months of spread (Hansen & Carpentier, 2009).

In April 2009, the World Health Organization officially declared the spread of H1N1 a pandemic, the first such declaration in 40 years. According to CDC, in April 2009 there were approximately 18,000 cases of H1N1 in the United States alone, and the disease had spread to some 74 countries and causing a total of 144 deaths (CDC, Pandemic Summary Highlights, 2010).

The following table illustrates several key events both leading up to and during the H1N1 response efforts discussed and reviewed in this study. While these events are not comprehensive, they provide an overview of how the response efforts unfolded during the one-year period under discussion, with a focus on communication efforts. The Timeline of Events is taken from an archived CDC web-based document, *The 2009 H1N1 Pandemic: Summary Highlights, April 2009-April 2010*.

Table 1

Timeline of H1N1 Events

Date	Event
April 15, 2009	H1N1 Influenza A virus detected in 10-year-old California patient. Second patient confirmed two days later, also in California, but with no known contacts.

Table 1 (continued).

Date	Event
April 18, 2009	CDC reports H1N1 cases to the World Health Organizations (WHO).
April 21, 2009	CDC publishes MMWR, describing cases and requesting all Influenza A specimens without subtypes sent to their lab for testing.
April 21, 2009	CDC begins work on developing a virus from which to process a vaccine for H1N1 influenza
April 22, 2009	CDC activates its Emergency Operations Center to coordinate response efforts
April 23, 2009	Two additional cases confirmed in Texas; additional cases from Mexico and Canada identified. CDC conducts first formal press briefing.
April 25, 2009	WHO declares the 2009 H1N1 outbreak a Public Health Emergency of International Concern. Additional cases confirmed in New York City, Kansas, and Ohio.
April 26, 2009	CDC releases 25% of supplies in the Strategic National Stockpile (SNS) to use in treatment and prevention efforts for H1N1.
April 27, 2009	WHO raises level of pandemic alert from phase 3 to phase 4. Mexico reports widespread illnesses; U.S. issues travel health warning. CDC strongly advises basic prevention measures for all Americans.
April 28, 2009	CDC receives approval for a new diagnostic kit to aid in identifying the particular strain of H1N1.
April 29, 2009	WHO raises influenza pandemic alert from phase 4 to phase 5 and requests all countries to activate pandemic preparedness plans. U.S. government is already implementing such plans.
April 30, 2009	CDC publishes latest MMWR with updates on clusters of cases and recommended protocols. HHS announces purchase of 13 million treatment courses of antiviral drugs to aid response efforts.
May 4, 2009	CDC reports that more than 98% of probable flu virus cases were testing positive for H1N1.
May 6, 2009	CDC distributes recommendations for the use of influenza antiviral medications.
May 8, 2009	CDC updates data, indicates 57% of cases occurring among people between 5 years and 24 years of age and 41% of hospitalizations occurring among older children and young adults.
June 2009	CDC begins weekly calls to provide state and local planners updates for their response efforts.
June 11, 2009	WHO declares H1N1 a global pandemic.
June 19, 2009	All 50 states as well as U.S. territories report confirmed H1N1 cases.

Table 1 (continued).

Date	Event
June 29, 2009	The 2009 National Influenza Vaccine Summit convenes, with a focus on H1N1 efforts.
July 2009	Three drug-resistant cases of H1N1 strain reported in three countries.
July 23, 2009	Due to the overwhelming number of cases, CDC reports the number of individual cases for the last time but continues to report hospitalizations and deaths and monitor surveillance systems to track the progress of the disease.
July 29, 2009	Advisory Committee for Immunization Practices (AICP) convenes to update recommendations for H1N1 vaccine.
August 2009	A decline in cases during the summer begins to reverse as H1N1 activity increases the last two weeks of August. CDC conducts three public engagement sessions in the U.S. to solicit citizen input in vaccination planning.
September 3, 2009	CDC reports that 477 deaths from confirmed H1N1 occurred April – August 2009.
September 15, 2009	FDA announces approval of four 2009 H1N1 influenza vaccines.
October 2009	CDC works with drug manufacturers to create protocols to expand the availability and use of antiviral drug supplies.
October 23, 2009	CDC releases another round of supplies from the SNS.
December 2009	HHS joins with the Ad Council to launch a new nationwide PSA campaign called <i>Together We can Fight the Flu</i> .
January 10-16, 2010	President Obama declares National Influenza Vaccination Week.
January 15, 2010	CDC states that vaccination efforts are proving successful. While cases peaked in October, vaccination efforts have helped lower new cases.
February 18, 2010	WHO publishes recommendations for composition of the next round of influenza vaccinations.
May 2010	U.S. reports low rates of flu activity and ends the 2009-2010 season reporting.
August 10, 2010	WHO declares H1N1 pandemic ended.

Condensed from <http://www.cdc.gov/h1n1flue/cdcreponse.htm>

CDC response efforts included myriad communication efforts aimed at maintaining a flow of information to the public through media partners. In addition to a web site dedicated specifically to H1N1 response efforts, key messages were created and provided to state and local public health partners to ensure clear and consistent

communication with the public. CDC health communicators also regularly provided updates through Facebook and Twitter accounts, manned a 24-hour information line, and created and posted podcasts and information toolkits. As one instance of their campaign efforts, CDC launched a travelers' public health awareness campaign that ultimately led to more than 80 million exposures. Between April 2009 and April 2010, CDC reports they held 60 H1N1-related media events for a total of more than 35,000 participants, hosted a two-day workshop for media partners, and recorded more than 219,595,000 page views on the 2009 H1N1 web site (CDC, Pandemic Summary Highlights, 2010).

The American Public Health Association published a special edition of the *American Journal of Public Health* in 2009 that addressed the single issue of the predicted H1N1 pandemic. In a forum of analytic essays, more than 10 distinct populations were identified as being vulnerable populations deserving special communication efforts. One essay described health communication efforts about pandemic influenza for vulnerable populations in general. In it, they emphasized the need for trust between government entities and vulnerable populations as a key element for effective communication (Vaughan & Tinker, 2009). Clearly, H1N1 was an important focus of public health activities in 2009.

In responding to the H1N1 pandemic, public relations professionals at the state and local levels of government were challenged to disseminate the most current information about the pandemic to the media and the public in a clear and concise manner that would garner support for prevention and treatment goals and messages and protect the public's health. Maintaining trust was paramount in encouraging support and participation, but as the situation matured some of the information that was true early in

the pandemic became less trustworthy. Adding to the challenge, publics were diverse in their demographic composition and in their personal political and sociological views of the response efforts. Messages – most of which focused on risk management – had to be created in different languages and dialects, with varying sociological factors in mind, and they had to be disseminated widely through the use of traditional media channels such as newspapers, radio, and television and also through newer channels of communication such as web pages and social media. During the midst of the response efforts, Vaughan and Tinker (2009) proposed three broad goals as recommendations for public health planners and risk managers to enhance health risk communication preparedness efforts, particularly for vulnerable populations. Those goals were to (1) strengthen the personal relevance of communication, (2) build self-efficacy and trust regarding the various pandemic interventions, and (3) prepare for a dynamic risk event and uncertainty management (p. S328).

Framing is an important tool for public relations practitioners, and even more so in framing health messages. Through selection of attributes of a news story, public relations practitioners actively seek to influence the messages and ultimately the agenda of issues on which the media focus their efforts (Park & Reber, 2010). In using the H1N1 pandemic as a frame for this study, practitioners were given the opportunity to reflect on their relationships with not only the media but with many different publics and how those relationships changed and evolved as the situation developed. By their nature, pandemics are prolonged events fraught with uncertainties and changes throughout the life cycle of the event. As a testing ground for Contingency Theory, H1N1 provides a

clearly identified situation that challenges the assertion that one particular model of communication is *always* best as suggested by Grunig.

Media relations and media advocacy in public health

The media serve as the forum in which most of the major discussions in our society occur. Because the public is interested in health issues, newspapers are interested in covering them. However, most of the coverage focuses on personal health issues such as lifestyle, disease, and medical breakthroughs and leave public health issues like safe food and water supplies and access to care far behind (Wallack, Dorfman, Jernigan, & Themba, 1993, p. 56). Journalists maintain that the news is best served when media practitioners remain free from political and economic pressures, and when they maintain a discreet relationship with various interest groups. And yet, “news is what journalist say news is,” because they must rely on their own instincts and information to determine the trustworthiness of their sources and the value of the news story (p. 55). Therefore, how mass media outlets package the news – location, length, context, etc. – are all-important parts of how the audience eventually determines the importance of the messages.

The personal relationships public relations practitioners develop with reporters are critical to effective media relations. Tanner (2004) conducted a study to help public relations practitioners in health care fields understand how to get their messages to the public. Tanner surveyed television health reporters at network television affiliates in the United States, selecting a random sample of 139 news stations. The survey found that most health reporters – approximately 75 percent – had no type of specialized training in health reporting; only three respondents had a college degree in a science-related field.

The practice of public relations in public health necessarily involves serving as an advocate for health promotion and health marketing programs. More specifically, public relations practitioners have the skills necessary to work with the media to turn public attention toward specific issues that may influence policy and not just the personal health issues that are more often the focus of coverage. Just as public health emphasizes the health of society as a whole, the media advocacy role becomes one in which public relations practitioners seek to turn the news media's attention toward the community rather than the individual to achieve population-based changes in health policy (Substance Abuse & Mental Health Services Administration, 2006).

Traditional public health promotion efforts focused on changing individual behaviors from those considered risky – such as smoking, drug use, and poor nutrition choices – to more healthful options. As the focus of public health moves increasingly from solely personal determinants of health to more social determinants – such as physical, financial, and social environments – media advocacy becomes a more attractive tool for public relations campaigns. Media advocacy may be defined as “the strategic use of mass media for advancing social or public policy initiatives” (Bryant & Zillman, 2002, p. 442). Media advocacy can both influence news coverage and increase public awareness and recognition for an issue.

Advocacy efforts, in general, require “a set of skills used to create a shift in public opinion and mobilize the necessary resources and forces to support an issue, policy, or constituency” (Wallack et al., 1993, p. 27). While efforts and initiatives with the media are an important component of an advocacy program, they simply are not enough. Public relations practitioners must also include “coalition building, leadership development, and

extensive public participation” to any advocacy campaign to assure success (p. 27).

Social Marketing and Social Media

Parvanta, Nelson, Parvanta, and Harner (2011) cite the following definition of social marketing: “the design, implementation, and control of programs aimed at increasing the acceptability of a social idea, practice [or product] in one or more groups of target adopters. The process actively involves the target population, who voluntarily exchange their time and attention for help in meeting their health needs as they perceive them” (p. 149). As an academic field of study, social marketing emerged in the latter half of the 20th century (McKie & Toledano, 2008). While it is a distinct and separate field from public relations, many of the same principles and techniques apply to both fields, particularly when used in public health. Government agencies like the U.S. Department of Health and Human Services, the Centers for Disease Control and Prevention and the U.S. Department of Agriculture have all used social marketing techniques to promote behavior change in people. Successful campaigns to promote breastfeeding and physical activity point the way toward the creation of more programs to improve the health of American citizens (Peterson, Chandlee, & Abraham, 2008).

McKie and Toledano (2008) suggest that social marketing be included as a core part of public relations skills and training to assure the longevity and integrity of both fields and to avoid either or both fields being subsumed by marketing. They contend that the loss of either or both fields to a business environment would seriously compromise the effectiveness of both fields and for society “could mean a reallocation of resources away from disadvantaged and at risk groups” (p. 319). While the fields of public relations and social marketing both focus on the importance of building and sustaining

relationships, marketing focuses on a more *quick fix* approach, relying on expensive advertising campaigns to promote goods, services, and products. Social marketing campaigns are, by definition, “designed to achieve positive behavioral change in social and environmental areas” (p. 320).

In public health practice, social marketing techniques are used to encourage change in personal behaviors with the intent to, over time, improve overall community and national health. Like marketing, social marketing uses the four Ps of product, price, place, and promotion; additionally, social marketing adds three more Ps to the mix: partnership, policy, and politics. The Institute of Medicine (2003) described these seven variables in *The Future of the Public's Health in the 21st Century* as follows:

- Product: the behavior targeted for change in the defined population
- Price: what the consumer must “give up” to achieve the desired change; can include money, time, physiological or physical costs
- Place: the distribution channels, including social media, mass media, the community, interpersonal communication, and others
- Promotion: the means used – such as media outreach or testimonials – to reach the targeted audience
- Partnership: the creating of networks of groups with a vested interest in promoting similar behavior changes
- Policy: the need for supportive policies to support and create social and environmental changes to help support an sustain behavior changes

- Politics: the recognition that strategies are needed to navigate potential political obstacles and gain outside support to encourage the collective “political will” for change (pp. 334-335).

Social marketing professionals have also begun use of social media to enhance the reach of their campaigns and to target specific audiences and establish two-way communication between the information source and the receiver (Lin & Hullman, 2005). The expansion of social marketing into more personal and individualized communication methods mirrors the use of social media in public relations to reach wider audiences and to target information more specifically to those who are most interested (Cameron et al., 2007, p. 264).

Social media have become a part of daily life for many people. From e-mail to the internet, to Facebook and on to Twitter, society is increasingly turning away from the traditional mass media outlets of newspaper, radio, and television to digitalized media with more personalized and interactive forms of communication. The change of media environment has changed the world of public relations work to reach the audiences and communicate with the stakeholders. “The result is a changed world that forces public relations practitioners to adopt new technologies to adapt to new sociological realities” (Phillips, 2008, p. 79).

Eyrich, Padman, and Sweetser (2008) conducted a study to gauge the use of social media tools and communication technology among public relations practitioners. Using an online survey, the researchers listed 18 different social media tool and technologies and asked three simple questions: which do you use, how prevalent do you see social media being used, and are personal adoption and perceived adoption of social media

related? They found six tools identified frequently: e-mail, intranet, videoconference, podcasts, video sharing, and PDAs. Less frequently used were instant messaging, social networking, text messaging, photo sharing, and wikis; rarely used tools were virtual worlds, social bookmarking, gaming, micro-blogging/presence applications, and news aggregation. As one may expect, e-mail was perceived as the most widely adopted tool, followed by the intranets, videoconferencing, podcasting, and blogs. Those professionals who make the most use of social media tools also have a higher perception of its integration into the overall field of public relations (pp. 413-414).

The Institute of Medicine (2003) identified six benefits of interactive health communication, including the opportunity to tailor information to specific needs or characteristics, the ability to combine various media delivery methods, anonymous access to potentially sensitive information, increased access, increased opportunity to interact with health professionals, and more widespread dissemination of messages (p. 330). They also identified six distinct functions of interactive health communication:

- “Relay health information in generalized or individualized way
- Enable informed decision making
- Promote healthful behaviors
- Promote peer information exchange and emotional support
- Promote self-care
- Manage demand for health services” (p. 330).

One important caution for social media and health information is the proliferation of sites without regard to quality or validity of the information provided (IOM, 1998). For instance, a January 2015 search on the name *H1N1* on Google yielded some 26.4 million

results in .21 seconds. While social media may well be the future of health communication, professional communicators must also seek to create methods to help users of social media identify reliable sites and recognize potentially dangerous marketing ploys disguised as health information (McKie & Toledano, 2008).

A 2010 study of 281 public relations practitioners in public health departments found “overall low adoption rates for social media tools. However, significant differences were observed for adoption based on size of communities, with urban communities exhibiting highest adoption rates, followed by suburban, large town, and rural communities” (Avery et al., 2010, p. 336). Avery and her colleagues found that a small number (11%) of PR professionals in public health ranked the Internet as a primary source of information during routine or crisis situations. In turn, “practitioners may be reticent to learn how to use social media in practice, much less adopt them (p. 352).

The Role of the Public Relations Professional

Public relations professionals perform many different types of tasks that require a broad skill set. The skilled practitioner may demonstrate – singly or as part of a team – the creative function of crafting a campaign, the technical skills needed to write and design brochures, the financial skills to prepare and maintain a budget, and the managerial skills to assemble and direct a team.

Two of the most commonly delineated roles in public relations are those of manager and technician (Dozier & Broom, 1995; Grunig, 2002; Toth, Serini, Wright, & Emig, 1998). For the purposes of this study, the managerial role includes those public relations professionals who serve as a part of the dominant coalition within the business or company in which they work. In this role, they are responsible and held accountable

for making decisions regarding the communication processes and play an active role in decision-making (Grunig, 2002, pp. 13-14). The belief that public relations is, in essence, a management function elevates the practice above that of simply designing brochures, writing press releases, and organizing events. The acceptance and identification of a separate managerial role places public relations in the heart of the communication function of an organization and requires that the dominant coalition within the organization include the public relations or communications manager in the decision-making processes and function of the business (Dozier & Broom, 1995, p. 24).

The technician role is widely considered to encompass the more creative functions of public relations and includes the aforementioned brochures, press releases and, events. The technician role also includes implementing decisions made by others, disseminating messages, making telephone calls and making media contacts (Toth et al., 1998, p. 153). Particularly, in smaller firms or with smaller public relations departments, the manager and technician roles often overlap, creating a sort of agency role that also includes counseling, conducting and analyzing research, and communicating with clients (p. 158). However, the *functions* of manager and technician are still important in describing the work of public relations as well as the role of the public relations department within the organization.

The concept of *power* within the role of public relations professionals is an important one. In a 2003 study of public relations professionals, academics, and graduate students, Berger and Reber found *power* to be the number one issue among public relations professionals. In fact, they said, "Gaining a seat at the decision-making table was the first or second most important issue among most of the demographic 'groups'

represented in the survey” (Berger & Reber, 2003, p. 5). Viewed in this context, power is seen not as the ability of the individual public relations campaigns to alter, change or shape public opinion but instead as the influence of the public relations role on the decision-making processes of the organization, business, or agency. The *power* to influence the direction and management decisions enhances the role of public relations and, ergo, enhances the value and recognition of public relations as a profession, one that is vital to the success or failure of a business. Berger and Reber (2003) listed the following issues as the top ten most important to public relations professionals:

- Gaining a seat at the decision-making table,
- Measuring the value of public relations,
- Communicating with diverse publics,
- Reducing information clutter,
- Enhancing professional image,
- Strengthening critical-thinking skills in public relations,
- Resolving ethical challenges,
- Using new technologies appropriately,
- Reducing “spin” in practice, and
- Increasing cross-cultural knowledge (p. 6).

Public relations professionals continue to strive for professional recognition to avoid being subsumed by other departments, such as marketing or advertising. While there are overlaps between and among these functions, the separate and distinct role of public relations that cannot be assumed by either of these groups is the management of relationships, particularly as they relate to competition and conflict (Cameron et al., 2008,

pp. 14-16). Public relations is uniquely interested in the relationship aspect of communication and working toward resolutions in competition and conflict that are, whenever possible, mutually beneficial to all parties concerned. Increased attention to ethics, as evidenced by the creation in 2000 of the Public Relations Society of America (PRSA) Member Code of Ethics is part of this move to establish more legitimacy within the eyes of business leaders. With core values of advocacy, honesty, expertise, loyalty, and fairness, the PRSA Code of Ethics encourages professionals to keep the value of relationships foremost in the decision-making processes and to manage those relationships with integrity and professionalism, encouraging the exchange of ideas, assuring the confidentiality of the client, committing to fair competition, and disclosing information and conflicts of interest as needed to maintain trust and confidence (PRSA, 2009). In public health, the practice of public relations must make use of more than one-dimensional approaches to health communication to achieve program goals. It cannot rely solely on new technology, but must strive to include printed materials, community outreach and interpersonal communication as well (CDC, 2010). Public health requires the added elements of advocacy for policy change, assistance with community-based programs, and internal communication efforts to improve service delivery and provision. Public health also increasingly relies on the creation of public-private partnerships and collaborations to coordinate health communication messages and programs.

Health communications campaigns in public health also have one major difference from product marketing campaigns in that they have very different goals. Product marketing campaigns are usually limited in time and scope, with short-term goals. Conversely, public health campaigns seek to create change at a societal level,

encouraging large groups of people to make fundamental changes to improve their health status. These changes occur over longer periods of time – often years – and must be realistic in the presentation of the *product* (Atkin & Wallack, 1990). Public relations skills are important in creating the campaigns, but must be blended with public health techniques to create effective campaigns.

Diversity in public relations

According to the U.S. Census Bureau, America's population in 2015 is estimated to be 86.72% Non-Hispanic and 13.28% Hispanic, shifting to 74.46 % and 25.54% respectively by 2060. While Whites will continue to comprise a slight majority (57.23%) of foreign-born immigrants, Asians will become the largest minority in that category with 27.02% (U.S. Census Bureau, 2015). Changes in demographics also “suggest that the cultural landscape of the U.S. population is migrating toward a larger, older, more ethnically diverse and better-educated population” (IOM, 2002, p. 2)

A 2008 member study of the Public Relations Society of America revealed that members – functioning as a sample of the field of professionals – are primarily female (70%), White, (87%), and work in organizations with fewer than 100 employees (40%). Younger employees are more likely female, while older employees are more likely male. Only 10% of PRSA members surveyed work in government or military, and while a third (33%) have master's degrees, only 4% have earned a Ph.D. (Guth & Marsh, 2012, p. 45).

Why does diversity matter in public relations, and in particular, in health communications? “Diversity within an organization's public relations team can help ensure successful cross-cultural communication” (Guth & Marsh, 2012, p. 443). In other words, the teams creating messages that appeal to a wide cross-section of the public

should in some way reflect the recipients of the messages. While pre-testing is an effective and important tool in creating targeted health messages, first-hand knowledge cannot be discounted. Reber, Paek, and Lariscy (2013) conducted a study to determine the role race and media play in information seeking behaviors with high school students. Using health messages as the frame, researchers found that non-whites were more likely to be information-seekers, and that the less television they watched, the more likely they were to seek information. Interestingly, they also found that traditional media was still the preferred method of information seeking, though multi-media campaigns were still the most effective. They also stated that race continues to play an important role in information seeking, particularly for health messages. “The finding that non-white students were more likely to seek health information may indicate health PR practitioners should be quite sensitive to racial differences within publics. This finding reinforces the importance of considering racial diversity when planning and implementing health and other public relations campaigns” (pp. 149-150).

Public health is a field with many challenges and many opportunities to improve the world in which we live. The public relations practitioner in such a diverse and challenging field has ample opportunity to exercise the full scope of his or her skills in affecting positive changes in both individual and population-based health care.

Defining Publics

The *public* in public relations may be thought of as any group joined together with a common goal, purpose, values or interests, especially if they are willing or able to act. Publics in a recognized relationship with the organization or company in question are commonly called stakeholders. While methods of identifying and classifying publics

abound, those deemed a priority are those most important to an organization in terms of their potential impact on an organization (Newsom, Turk, & Kruckberg, 2013). But identifying publics is only the first step in managing the relationship. Public relations practitioners must also learn as much as possible about those various publics with which they interact. Toward that end, Guth and Marsh (2012) offer the following seven questions for public relations practitioners to use in studying their publics:

- How much can the public influence our organization's ability to achieve our goals?
- What is the public's stake, or value, in its relationships with our organization?
- Who are the opinion leaders and decision makers for the public?
- What is the demographic profile of the public?
- What is the psychographic profile of the public?
- What is the public's opinion of our organization?
- What is the public's opinion (if any) of the issue in question? (pp. 94-97)

Identifying, understanding, and managing relationships with publics are at the core of all public relations activities. When conducted within the sphere of public health, the importance of good working relationships with many of the identified publics takes on the added dimension of what are, at times, potential life and death informational situations.

In public health, the publics may vary greatly based on the situation in question. During the H1N1 response efforts in 2009-2010, the identified populations at risk were also the targeted publics and included: "pregnant women, people who live with or care for infants younger than 6 months of age, health care and emergency medical services

personnel, infants 6 months through young adults 24 years of age, and adults 25 through 64 years of age who are at higher risk for 2009 H1N1 complications because of chronic health disorders or compromised immune systems” (CDC Pandemic Summary Highlights, 2010, p. 11). To reach these groups would necessitate the cooperation of school officials, parents, health care providers, and state and local government officials as well as enlisting help in publicizing the message through a variety of mass media outlets.

Organizational Characteristics

Just as an individual’s characteristics will affect his or her chances of success, an organization’s characteristics may affect how public relations is practiced within the organization. In public health, organizational characteristics have the potential to affect not only the practice and role of public relations but also the overall outcome of health communication campaigns.

Kiwanuka-Tondo and Snyder (2002) conducted a study comparing organizational characteristics and communication campaign quality in Uganda AIDS campaigns focusing on four organizational characteristics: financial resources, training, organizational focus of purpose, and organizational structure. They found that “financial resources were not just related to the number of channels used but also to other crucial campaign variables – execution quality, goal specificity, and audience participation” (p. 72). While the results from training portion of these campaigns was targeted toward a specific health program, the overall finding supported the idea that a trained staff was more likely to construct and execute high quality campaigns. Similarly, while focus of purpose and organizational structure were also considered in light of a specific health issue, the results were worth noting. Organizations with one focus – AIDS – were more

successful. “Organizations with a less formal structure had more specific campaign goals,” which they note is “inconsistent with conventional wisdom” (p. 73).

While no one organizational structure is guaranteed as effective in either public health or public relations, it is important in the context of this study to briefly review the organizational structure of each. The primary public relations roles of manager and technician have been discussed, as has the issue of power in the public relations relationship within an organization. These concepts remain fairly consistent within public relations literature. Pinning down an overarching or common public health organizational structure is much more difficult.

America’s public health system is in flux. Since being deemed “in disarray” by the Institute of Medicine in 1988 (IOM, 1998, p. 19), the Nation’s public health professionals have sought to improve the system. But improving the system requires resources, creating a political battle of wills over funding sources. As noted in the Ugandan study, financial resources matter in health communication; they are also vital to the overall organizational effectiveness of state, local, and federal public health departments. When resources are low, they tend to go toward programs that have the most current identified need, which may or may not be the same as the actual need (Avery & Lariscy, 2011). Communication and public relations activities are, sadly, often the last to be funded and the first to be cut in public health. “Public agencies and institutions for which PIOs work today suffer from shrinking budgets, often resulting in staff reductions forcing employees to do the work of multiple former coworkers” (White & Wingenbach, 2013 (p. 133).

While the use of specific public relations research, strategies, and tactics can be of great value to health communication campaigns, the people conducting those campaigns may or may not have an academic background in communications. “Institutional/agency PIOs fulfill a crucial function as intermediaries in the information transfer process between their employing agencies and institutions and journalists, through interfacing with public health officials and researchers and authoring information subsidies calling attention to and explaining fundamental policies and research to journalists and editors” (White & Wingenbach, 2013, p. 124).

In most iterations of public health structure at the state, local, and federal level, the management structure includes a physician-manager who serves as the Health Officer of record. Sometimes the role is split between two people, and the emphasis may be placed on the manager for business and organizational functions while the physician is responsible for all medical and health care decisions. However, the nature of a bureaucracy is that there are several levels through which information – especially information prepared and crafted for mass media release – must pass before being approved for release. This organizational structure often leads to difficulties in working with journalists, especially during crisis situations, when journalists require information quickly and often (White & Wingenbach, 2013).

A voluntary movement toward Public Health Department Accreditation began in May 2007 when the Public Health Accreditation Board (PHAB) was formed. A non-profit organization, PHAB went through several years of identifying, testing, and revising national standards and measures and officially launched the accreditation process in September 2011. The most recent accreditations were awarded in March 2015, bringing

the total number of accredited health departments to 67 (PHAB, 2015). While accreditations standards help assure quality and uniformity within the system, the individual organizational characteristics are still myriad.

CHAPTER III

THEORETICAL FRAME: CONTINGENCY THEORY OF PUBLIC RELATIONS

Development of Contingency Theory

A theory may be defined as “a set of assumptions used to explain how a process works and to make predictions as to what will result from that process” (Bobbitt & Sullivan, 2005, p. 16). Public relations as a distinct field of research is still relatively young, leading many researchers to base their studies on theories in other fields of study, most commonly communication theories. While *communication* is a primary goal of public relations, the sphere in which these communications occur is organizational, leading other researchers to focus on the use of organizational theories to study public relations (Prior-Miller, 1989, pp. 67-68).

The development of public relations theory is an important part of defining and refining the role of public relations in society. Theories develop based on a constant process of forming and testing concepts to explain how things operate (Vasquez & Taylor, 2000, p. 151). Similarly, the field of public relations also changes. Grunig’s four models of communication, introduced in 1984, have driven much of public relations research in recent years. Grunig’s work separated the practice of public relations along two continuums, from symmetry to asymmetry and from two-way to one-way communication, creating four models of public relations to explain the various combinations. Grunig, working with Hunt, later honed his work during the Excellence Study, in which he pointed to the two-way symmetrical model of communication as the normative model for public relations.

Grunig's Excellence Theory is also useful in describing public relations in the field of health care, particularly when applied to studying the media coverage of health communication efforts. In particular the use of the models of public relations provides a useful frame for understanding the evolution of coverage through the various political and social minefields in which AIDS/HIV was introduced to society's consciousness. Bardhan (2002) conducted a study of the AIDS/HIV issue to gain a global perspective of how it is viewed. She explains that Grunig's four models of public relations loosely describe the evolution of AIDS/HIV messages over time. In the early stages, the press agency model was simply one of stating that AIDS/HIV existed without placing the issue into any real context or soliciting public opinion. Once the homosexual community became involved, reporting and government information moved more toward the public information model with an emphasis on providing factual information and disease communication risks. However, the publics most involved in the health crisis were largely ignored. The third phase evolved during the late 1980s and early 1990s, as stigma diminished and research was used to craft messages and provide direction regarding funding and communication. The one-way symmetrical model focused on research with some of the less powerful publics, but those same publics were generally still excluded from the decision-making process. Finally, Bardhan posits that the fourth phase – a two-way symmetrical model – may seem to be evolving from a global perspective, but that with this issue as with others the two-way symmetrical approach is nearly impossible. Still, the principles of this approach can lead to relationship building to help address the crisis (Bardhan, 2002).

In 1984, Grunig and Hunt proposed a new set of models to describe how public relations activities were practiced in organizations. Those models served as a basis for theory regarding the practice of public relations and began a spirited debate regarding their effectiveness, accuracy, and value in the practice and teaching of public relations. In their original inception, the four models were (1) press agency/publicity, (2) public-information, (3) two-way asymmetric, and (4) two-way symmetric. Perhaps the most debated of these models is the two-way symmetric, which Grunig originally envisioned as being practiced by regulated business firms in order to “demonstrate that they are socially responsible and that they do not need to be regulated” (Grunig, 1984, pp. 8-10).

Following the proposal of the four models of public relations, Grunig embarked on an extensive study conducted for the International Association of Business Communications (IABC) Research Foundation, commonly called the Excellence Study (Grunig, 2002, pp. 1-2). Begun in 1984, Grunig’s study was based on a request for proposals that posed the following question: How, why, and to what extent does communication affect the achievement of organizational objectives? From that guide, Grunig and his research team created two research questions to guide the study. The first question focused on the “why” and “to what extent” portion of the question. To get to the “how” part of the study, the team proposed what they termed the Excellence Question: What are the characteristics of a public relations function that are most likely to make an organization effective (Grunig, 2002, pp. 4-5)?

Based on the research for the Excellence Study, Grunig and his associates proposed an Excellence Theory to explain the characteristics and components of *excellent* public relations practice. In this theory, Grunig states that the two-way symmetrical

model of public relations should be the normative model of public relations, one in which the organizations and their publics seek relationships that balance the interests of both (Grunig, 2002, p. 27).

Much debate centers on whether the two-way symmetrical model is simply a normative model or whether it is a positive or ideal model. Generally speaking, critics equate the two-way symmetrical model with pure accommodation, asserting that public relations practitioners who seek to accommodate their publics cannot also effectively protect the interests of the organizations they serve. However, Grunig repeatedly states that the pure accommodation interpretation of his model is inaccurate. Nor does he support the idea that it is always the *best* option in any given situation. Instead, Grunig states “the symmetrical model actually serves the self-interest of the organization better than an asymmetrical model because organizations get more of what they want when they give up some of what they want” (Grunig, 2002, p. 312).

The Excellence Study generated a large set of quantitative and qualitative data to support Grunig’s models and theories, all of which he tested through multiple evaluation methods. He conducted a factor analysis to confirm or negate the need for the four models of public relations, which in the end supported the general idea. But Grunig also has also stated that the time to move beyond the basic idea of four models has come; enough study and research has been done to move beyond the basic framework. In his quest to develop a more comprehensive theory, he lists four sets of variables that – while present in the original four models – are evaluated independently to gain a more comprehensive and accurate picture of how public relations practice occurs. Those variables are (1) symmetry and asymmetry; (2) one-way or two-way communications; (3)

mediated and interpersonal forms of communication; and (4) the extent to which public relations practice is ethical (Grunig, 2002, pp. 349-356). Grunig studied these variables and found that the two most important variables are symmetry and two-way communication. From those studies, he proposes a new, more complex excellence model creating a continuum on which the dominant coalition's position is on one end and the public's position is on the other; in the middle is the "win-win zone" or the mixed motive (symmetric) position (Grunig, 2002, p. 357). This model reduces the types of practice to a pure asymmetry model, a pure cooperation model, and a two-way model. While Grunig seems to believe this new model clarifies the issues with his previous work, it fails to address who and why any organization would practice a pure cooperation model. While there may be certain issues or conditions in which pure cooperation is necessary, it seems unlikely that this would be a regular or even desirable occurrence. Certainly Grunig does not maintain that this form of practice *should* occur, merely including it as part of the new excellence model seems to indicate that there are times when it *does* occur. Rather than supporting his arguments for two-way symmetrical communication, it seems to support the many theorists who have stated that the pure accommodation aspects of that model are not realistic or even desirable.

While Grunig's various models of public relations and even this new iteration of the models contain very valuable elements, changes in society and technology may indicate the need for a new concept of public relations rather than a re-tooling of concepts proposed 30 years earlier. Certainly the concept of maintaining cooperative relationships between organizations and their publics has merit, particularly in public health; but with the changes in technology and society, it has become increasingly difficult to know or

distinguish who the *players* are among the various publics as well as within the organizations. Corporate reorganizations can lead to a new dominant culture overnight; in light of that, how does a public relations director leverage and maintain a cooperative relationship with the organization's publics? Conversely, as interest groups have increasing resources – namely through the power of the Internet and messaging – to form, marshal support, and pressure organizations, how does a public relations director keep track of who the various publics are?

Grunig's ideas have served well as a foundation on which to build future theory. Our challenge as practitioners, researchers, and leaders in the future of public relations will be to expand that foundation to embrace changes in technology and society as we propose new theories and new models on which future generations can build.

It Depends: Contingency Theory

While Grunig's theory certainly has done much to spur the study of public relations, certain limitations are apparent in his supposition that two-way asymmetrical communication should be the normative theory, or that it is *always* the best option for public relations practitioners. Partially in response to this identified dilemma, Cameron and his colleagues proposed Contingency Theory to “provide an alternative to normative theory and a structure for better understanding the dynamics of accommodation as well as the efficacy of accommodation in public relations practice” (Cancel et al., 1997, p. 56). The ability to use two-way symmetrical communication would be easy in a perfect world where all corporations were responsible and all publics were reasonable. Unfortunately, the world – and the practice of public health – does not work that way, and Contingency Theory provides the widest range of options for public relations practitioners during

potentially negative situations. In fact, Contingency Theory researchers argue, “There are times when one simply cannot engage in two-way symmetry, because of regulatory or legal issues or when it would be inappropriate, perhaps even unethical, to allow a public or stakeholder to win” (Reber & Cameron, 1993, p. 432).

Contingency Theory of accommodation in public relations can be summed up in two words: it depends. The practice of public relations – especially in public health – is fraught with multiple variables, obstacles, opportunities and challenges that make any single approach impractical. Contingency Theory takes all these many variables into account, crediting practitioners with the intelligence, education, and ability to choose the right approach for the right set of circumstances; further, it places the values of accommodation and advocacy along a continuum which “represents an organization’s possible wide range of stances taken toward an individual public” (Cancel et al., 1999, p. 172). In light of Contingency Theory, the single, normative theory suggested by Grunig – two-way symmetrical – becomes, instead, *one* way to practice public relations, but not the *only* way nor always the *best* way (Reber & Cameron, 2003, p. 431).

Cancel et al. (1999) identified 86 factors, organized into 11 different variables, which come into play in potentially negative situations, most of which are tied directly to internal or external publics (p. 31). While threat is only one of those variables, it may also be seen as the overarching theme. A threat is more than just a promise to solicit negative media coverage if demands aren’t met; it also means a potential hit to the company’s bottom line, damage to the corporation’s reputation with the general public as well as within the industry, and may even be seen as a challenge to the morals or ethics of the corporation. In such cases, Contingency Theory highlights the need for flexibility and

nimbleness in response efforts, reacting to threats *as they occur* rather than after a series of negotiations and accommodations. In public health, some recent threats have included the issues surrounding a purported link between a preservative in childhood vaccinations and autism, the rising costs of health care, and dissemination of health messages during disasters such as Hurricane Katrina.

Continuum: Advocacy vs. Accommodation

Contingency Theory also advances the idea that all communication is a process. Just as a parent changes his or her communication with a child as the child ages, corporations also change their forms of communication with their various publics as conflicts ebb and flow or the relationship evolves. In a content analysis of high-profile situations, Shin, Cheng, Jin, and Cameron (2005) found that “both an organization and its public in all of the cases moved on a continuum from advocacy to accommodation in the conflict resolution process” (p. 403). The stances of the pairs of parties studied changed over time, ranging between the two ends of the continuum between advocacy and accommodation until resolution. The basic concept of Contingency Theory may be illustrated by a very simple figure:

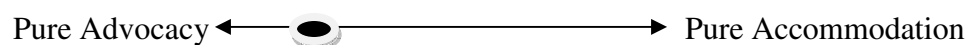


Figure 1. Contingency Theory illustrated. Stance is represented by an imaginary bead that moves on a string between the two stance options.

The *bead* on the continuum between *pure advocacy* and *pure accommodation* is a movable stance, one that slides back and forth along the continuum as the relationship between the client and the public under consideration changes (Cancel et al., 1997, p. 37). While the concepts of pure advocacy and pure accommodation exist, it is important to

note that the practice of public relations much more commonly requires some level of compromise between the two.

Public relations theorists have long disagreed about the role public relations practitioners play in the continuum between advocacy and accommodation. Total or pure advocacy is seen by some as a sign of unethical behavior; others portray total or pure accommodation as not being in the best interests of the client. Much of this conflict is based on Grunig's original four models of public relations, in which he supports the two-way symmetrical model as the normative model (Grunig, 2002, p. 27). Critics argue that the two-way symmetrical model is rarely feasible; Leichty (1997) states that "certain types of conflicts virtually require asymmetric or win-lose public relations efforts" (p. 1).

According to Edgett (2002), the pursuit of advocacy in a public relations campaign does not equate with unethical behavior as suggested by Grunig. Instead, she says that persuasion, or advocacy, has a long history as an important part of a democratic society in the form of persuasive rhetoric. But many public relations practitioners become uncomfortable functioning as advocates because they have been taught – primarily in mass communication studies – to value objectivity above all else, making advocacy a somewhat shameful pursuit (pp. 1-2). Edgett also believes that advocacy can be practiced ethically, and proposes ten criteria that must be present to do so: evaluation, priority, sensitivity, confidentiality, veracity, reversibility, validity, visibility, respect, and consent. She argues for a common sense approach to advocacy, which focuses not on whether the function (of advocacy) itself is good or bad, but how it is implemented (p. 23)

Conflict and Crisis in Contingency Theory

Public relations departments and campaigns are created for many reasons, one of the most common of which is to prevent or resolve conflict or crisis (Fearn-Banks, 2001, p. 479). From a theoretical perspective, Vasquez (1996) argues that using the two-way symmetrical model found in excellence theory provides a sound basis for negotiation as the most effective path to resolving conflict. He further posits that the use of the two-way symmetrical model for negotiation and conflict resolution has been under-utilized and largely unexplored and lists four characteristics that he believes would differentiate public relations into a viable type of communication and negotiation interaction: incompatible goals, independent parties, social interaction, and the exchange of offers and counteroffers (p. 65). When viewed through the frame of excellence theory, these four characteristics may be seen as lines along the continuum between advocacy and accommodation, which may seem more appropriate to Contingency Theory. However, Vasquez's support of the moral imperative espoused by Grunig and White, namely that one should be willing to give up some of what one wants to get more in the end, is the factor which places his proposition firmly in the Excellence Theory model.

Shin and Cameron (2004) use the long-standing conflict between public relations practitioners and journalists to illustrate measurements used to analyze conflict. Researchers used quantitative analysis, including factor analysis of the questions, to gauge the level of conflict between the two groups and also to determine whether the groups were accurate in their perceptions of what each other *thinks* about them. In other words, they quantified a methodology to study whether two opposing groups are really in conflict and, if so, to accurately describe the level and nature of that conflict. Further, use

of this methodology would allow researchers to determine whether opposing sides in a conflict have an accurate perception of each other's position. Beyond the information garnered relating to the conflict between journalism and public relations, this methodology presents an opportunity to expand on the approaches outlined in the other articles and quantify the level of conflict that exists, a useful tool in planning any crisis response activities (pp. 318-332).

A newer and more assertive definition of public relations frames the field as "the strategic management of competition in the best interests of one's own organization and, when possible, also in the interests of key publics" (Cameron et al., 2008, p. 35). This definition focuses not only on building relationships between and among an organization and its publics but also on strategically managing those relationships for the best outcomes possible. While the primary allegiance of the practitioner is always to the client, whenever possible a positive outcome for all is considered the *best* outcome. As such, the value of the continuum of stances from accommodation to advocacy supported by Contingency Theory becomes much clearer.

In fact, Contingency Theory includes two basic principles that are especially important during crisis communication. First, there are many factors that influence an organization's stance to any given public or publics during a conflict or crisis situation. Second, those factors are not static; they change, grow, or develop as the situations go through the conflict cycle. As such, the stance that practitioners choose to take must remain flexible and adaptable to the situation. Cameron et al. (2007) subscribe to a four-stage model of the life cycle of conflict: proactive phase, strategic phase, reactive phase, and recovery phase. While each phase is somewhat distinctive, "The lines between the

phases are not absolute and some techniques overlap in actual practice” (p. 43). The four cycles feature numerous activities common in the practice of public relations, including environmental scanning, issues management, crisis management, conflict resolution, and reputation management. While the process may be thought of as somewhat linear, it is important to note, “persistent issues will require that the process begins all over again” (p. 43).

The general guidelines and principles of Contingency Theory are supported by earlier research in risk communication. In the 1989 publication *Improving Risk Communication* compiled by the National Research Council identified four process objectives to managing risk communication: goal-setting, openness, balance and competence. Of these four processes, safeguarding openness provides the most support for the *it depends* approach. Communication should include an “early and sustained interchange” of ideas in an open environment. “The most productive interactions are those that treat outside parties as fully legitimate participants,” assuring a two-way exchange of information (pp. 151-152).

While risk communication may be seen as a companion to crisis communication, the two are separate functions. Seeger, Sellnow, and Ulmer (2003) define crisis communication as being more closely associated with public relations and “grounded in the effort to manage public perceptions of an event so that harm is reduced for both the organization and stakeholders” (p. 203). Here again, the concept of “*managing the conflict in the best interests of one’s own organization and, when possible, also in the interests of key publics*” is strongly supported (Cameron et al., 2008, p. 35).

CHAPTER IV

RESEARCH QUESTIONS AND HYPOTHESIS

The primary purpose of this study is to *describe* public relations programs in state and local government-based health departments nationwide. Using the H1N1 communications activities as the frame, or basis of comparison, this study will further seek to *identify* if Contingency Theory of public relations may be an apt descriptor of public relations activities during this particular response effort. A web-based survey using a combination of close-ended and open-ended questions was used to answer the research questions and hypothesis described in this chapter.

To learn more about the practice of public relations and specifically whether Contingency Theory is an apt descriptor of their work, questions regarding stances toward publics were framed in the context of response to the H1N1 influenza communication efforts from April 2009 through March 2010, encompassing one full year from the identification of the H1N1 strain and the WHO declaration of a pandemic. One hypothesis and eight research questions were proposed to gather this information. The survey questions were divided into five sections, each section including questions created to answer specific research questions or provide background information with which to analyze those questions.

RQ1: What are the demographic characteristics of public relations professionals and departments in government-based public health departments?

The first section of survey questions seek to provide a description of public relations programs in state and local government-based health departments in the United States. These questions focus on the programs themselves, and are primarily

demographic in nature. Another section provides demographic data about the individuals completing the survey. Understanding and describing the demographic make-up of the public relations or communications professionals working within public health is an important part of understanding how they interact with their various publics.

“Diversity within an organization’s public relations team can help ensure successful cross-cultural communication” (Guth & Marsh, 2012, p. 443). In other words, the teams creating messages that appeal to a wide cross-section of the public should in some way reflect the recipients of the messages. While pre-testing is an effective and important tool in creating targeted health messages, first-hand knowledge cannot be discounted. Reber, Paek, and Lariscy (2013) conducted a study to determine the role race and media play in information seeking behaviors with high school students. Using health messages as the frame, researchers found that non-whites were more likely to be information-seekers, and that the less television they watched, the more likely they were to seek information. Interestingly, they also found that traditional media was still the preferred method of information seeking, though multi-media campaigns were still the most effective. They also stated that race continues to play an important role in information seeking, particularly for health messages. “The finding that non-white students were more likely to seek health information may indicate health PR practitioners should be quite sensitive to racial differences within publics. This finding reinforces the importance of considering racial diversity when planning and implementing health and other public relations campaigns” (pp. 149-150).

The information gleaned from these two sets of questions provides an overall look at how public relations departments function, how they are staffed, and what types of

activities they perform in disseminating information. This information was slated for use in searching for correlations among and between the data gleaned from other questions that seek specifically to answer the research questions.

RQ2: What are the primary activities of public relations departments in state and local government-based health agencies?

Two of the most commonly delineated roles in public relations are those of manager and technician (Dozier & Broom, 1995; Grunig, 2002; Toth et al., 1998). For the purposes of this study, the managerial role includes those public relations professionals who serve as a part of the dominant coalition within the business or company in which they work. In this role, they are responsible and held accountable for making decisions regarding the communication processes and play an active role in decision-making (Grunig, 2002, pp. 13-14). The belief that public relations is, in essence, a management function elevates the practice above that of simply designing brochures, writing press releases, and organizing events. The acceptance and identification of a separate managerial role places public relations in the heart of the communication function of an organization and requires that the dominant coalition within the organization include the public relations or communications manager in the decision-making processes and function of the business (Dozier & Broom, 1995, p. 24).

Core Competencies for all public health professionals include a Communication Skills domain comprised of eight basic skill sets, summarized as follows:

- Identify and assess the literacy of populations served and ensure those literacy levels are addressed in the organization's policies, programs, and services.

- Ensure public health professionals communicate effectively linguistically and culturally in both written and oral communications.
- Solicit and use, as appropriate, input from individuals and organizations to improve the health of a community.
- Suggest, select, and evaluate appropriate media and communication methods for disseminating public health data and information, including social media, newspapers, journals, etc.
- Convey data and information to the publics served and to professionals using a variety of approaches.
- Communicate information and evaluate strategies for communication aimed at influencing behavior and improving health within communities.
- Facilitate communication among various public with whom public health interacts.
- Describe and communicate the role of governmental public health, health care, and other partners in creating and improving overall health status of a community (CLBAPHP, 2014).

Four open-ended questions regarding lessons learned from the H1N1 response efforts and overall role of public relations in public health were included to provide information to better inform the overall nature of the practice of public relations in public health. Public relations professionals perform many different types of tasks that require a broad skill set. The skilled practitioner may demonstrate – singly or as part of a team – the creative function of crafting a campaign, the technical skills needed to write and

design brochures, the financial skills to prepare and maintain a budget, and the managerial skills to assemble and direct a team.

RQ3: How do public relations professionals in public health perceive their public relations activities and their roles?

Three open-ended questions at the end of the survey were included to generate information regarding the role of public relations in public health. These questions also add anecdotal information to other areas of the survey, and are summarized and included as appropriate.

The need for communications professionals in public health is documented, and the field of health communications continues to grow and evolve. A 2007 Association of State and Territorial Health Officials (ASTHO) workforce study found that only one percent of the entire public health workforce is categorized as public information specialists (p. 8). While the need may be great, trained public health communicators are apparently few. The role of public relations in public health is a vital one, and based on the Literature Review one that is subject to a myriad of factors. Further documenting how public relations practitioners working in public health perceive their activities and roles adds to the body of knowledge as research continues in the field of health communication.

RQ4: Who were the primary publics during H1N1 communication efforts?

Respondents, using a pre-defined list of likely publics, were asked to identify and rate them in order of importance. Identifying, understanding, and managing relationships with publics are at the core of all public relations activities. When conducted within the sphere of public health, the importance of good working relationships with many of the

identified publics takes on the added dimension of what are, at times, potential life and death informational situations.

In public health, the publics may vary greatly based on the situation in questions. During the H1N1 response efforts in 2009-2010, the identified populations at risk were also the targeted publics and included: “pregnant women, people who live with or care for infants younger than 6 months of age, health care and emergency medical services personnel, infants 6 months through young adults 24 years of age, and adults 25 through 64 years of age who are at higher risk for 2009 H1N1 complications because of chronic health disorders or compromised immune systems” (CDC Pandemic Summary Highlights, 2010, p. 11). To reach these groups would necessitate the cooperation of school officials, parents, health care providers, and state and local government officials as well as enlisting help in publicizing the message through a variety of mass media outlets.

RQ5: What were the key messages disseminated regarding H1N1 during this specified time period?

An open-ended question was used to identify key messages. The importance of key message identification is emphasized because of the nature of the public health messaging, which seeks to not only impart information but to also change or alter behavior. Miczo, Danhour, Lester, and Brant (2013) conducted research on recall of key messages during the H1N1 response efforts focusing on *memorable* messages, which they define as those that are “attended to, stored, and easily recalled” (p. 626). Using college students as their participants, they found that the messages emphasizing vaccination and the everyday prevention measures were universally recalled, with hand washing emerging as the primary risk control measure cited.

RQ6: Which information channels do public relations departments in public health use?

Traditionally, public relations practitioners have relied on news releases as a primary contact with journalists who, in turn, relay the information to the public. However, with the advent of social media and the advancement of social marketing techniques in public health, the channels of communication are more varied than ever.

McKie and Toledano (2008) suggest that social marketing be included as a core part of public relations skills and training to assure the longevity and integrity of both fields and to avoid either or both fields being subsumed by marketing. They contend that the loss of either or both fields to a business environment would seriously compromise the effectiveness of both fields and for society “could mean a reallocation of resources away from disadvantaged and at risk groups” (p. 319). While the fields of public relations and social marketing both focus on the importance of building and sustaining relationships, marketing focuses on a more *quick fix* approach, relying on expensive advertising campaigns to promote goods, services, and products. Social marketing campaigns are, by definition, “designed to achieve positive behavioral change in social and environmental areas” (p. 320).

A 2010 study of 281 public relations practitioners in public health departments found “overall low adoption rates for social media tools. However, significant differences were observed for adoption based on size of communities, with urban communities exhibiting highest adoption rates, followed by suburban, large town, and rural communities” (Avery et al., 2010, p. 336). Avery and her colleagues found that a small number (11%) of PR professionals in public health ranked the Internet as a primary

source of information during routine or crisis situations. In turn, “practitioners may be reticent to learn how to use social media in practice, much less adopt them (p. 352).

RQ7: What are influential contingency factors associated with stances of the public health departments and their publics?

One section of the survey was devoted entirely to questions surrounding the applicability of Contingency Theory on the practice of public health in public relations. Two questions sought to identify factors associated with the stance taken with the identified publics. The stances were chosen based on the foundation of relationships as explained by Contingency Theory, a theory which can be summed up in two words: *it depends*. The practice of public relations – especially in public health – is fraught with multiple variables, obstacles, opportunities and challenges that make any single approach impractical. Contingency Theory takes all these many variables into account, crediting practitioners with the intelligence, education, and ability to choose the right approach for the right set of circumstances; further, it places the values of accommodation and advocacy along a continuum which “represents an organization’s possible wide range of stances taken toward an individual public” (Cancel et al., 1999, p. 172). In light of Contingency Theory, the single, normative theory suggested by Grunig – two-way symmetrical – becomes, instead, *one* way to practice public relations, but not the *only* way nor always the *best* way (Reber & Cameron, 2003, p. 431).

Cancel et al. (1999) identified 86 factors, organized into 11 different variables, which come into play in potentially negative situations, most of which are tied directly to internal or external publics (p. 31). While threat is only one of those variables, it may also be seen as the overarching theme. A threat is more than just a promise to solicit negative

media coverage if demands aren't met; it also means a potential hit to the company's bottom line, damage to the corporation's reputation with the general public as well as within the industry, and may even be seen as a challenge to the morals or ethics of the corporation. In such cases, Contingency Theory highlights the need for flexibility and nimbleness in response efforts, reacting to threats *as they occur* rather than after a series of negotiations and accommodations. In public health, some recent threats have included the issues surrounding a purported link between a preservative in childhood vaccinations and autism, the rising costs of health care, and dissemination of health messages during disasters such as Hurricane Katrina.

Shin, Cameron, and Cropp (2006) conducted a national study to further quantify the 86 contingent variables, organizing them into 12 factors, identifying five as external factors and seven as internal factors. Those identified factors were also taken into consideration in creating the survey questions testing contingency variables.

Because this is a simple survey and seeks primarily to *describe* and simply *begin* to test Contingency Theory within the role of public relations in public health, one simple hypothesis is included in this study.

H1: Public relations practitioners in state and local health departments changed their stance toward their identified key publics during the H1N1 response efforts.

Contingency Theory advances the idea that all communication is a process. Just as a parent changes his or her communication with a child as the child ages, corporations also change their forms of communication with their various publics as conflicts ebb and flow or the relationship evolves. In a content analysis of high-profile situations, Shin et al. (2005) found that "both an organization and its public in all of the cases moved on a

continuum from advocacy to accommodation in the conflict resolution process” (p. 403). The stances of the pairs of parties studied changed over time, ranging between the two ends of the continuum between advocacy and accommodation until resolution. The basic concept of Contingency Theory may be illustrated by a very simple figure:

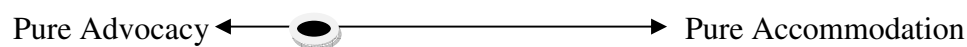


Figure 2. Contingency Theory illustrated. Stance is represented by an imaginary bead that moves on a string between the two stance options.

The *bead* on the continuum between *pure advocacy* and *pure accommodation* is a movable stance, one that slides back and forth along the continuum as the relationship between the client and the public under consideration changes (Cancel et al., 1997, p. 37). While the concepts of pure advocacy and pure accommodation exist, it is important to note that the practice of public relations much more commonly requires some level of compromise between the two.

Public relations theorists have long disagreed about the role public relations practitioners play in the continuum between advocacy and accommodation. Total or pure advocacy is seen by some as a sign of unethical behavior; total or pure accommodation is portrayed by others as not being in the best interests of the client. Much of this conflict is based on Grunig’s original four models of public relations, in which he supports the two-way symmetrical model as the normative model (Grunig, 2002, p. 27). Critics argue that the two-way symmetrical model is rarely feasible; Leichty (1997) states that “certain types of conflicts virtually require asymmetric or win-lose public relations efforts” (p. 1).

RQ8: Which was most influential in selecting a stance during H1N1 communication efforts: the identity of the public, situation maturation, or “standard” practice?

In responding to the H1N1 pandemic, public relations professionals at the state and local levels of government were challenged to disseminate the most current information about the pandemic to the media and the public in a clear and concise manner that would garner support for prevention and treatment goals and messages and protect the public's health. Maintaining trust was paramount in encouraging support and participation, but as the situation matured some of the information that was true early in the pandemic became less trustworthy. Adding to the challenge, publics were diverse in their demographic composition and in their personal political and sociological views of the response efforts. Messages – most of which focused on risk management – had to be created in different languages and dialects, with varying sociological factors in mind, and they had to be disseminated widely through the use of traditional media channels such as newspapers, radio, and television and also through newer channels of communication such as web pages and social media. During the midst of the response efforts, Vaughan and Tinker (2009) proposed three broad goals as recommendations for public health planners and risk managers to enhance health risk communication preparedness efforts, particularly for vulnerable populations. Those goals were to (1) strengthen the personal relevance of communication, (2) build self-efficacy and trust regarding the various pandemic interventions, and (3) prepare for a dynamic risk event and uncertainty management (p. S328).

CHAPTER V
METHODOLOGY
Web-Based Survey

Web-based surveys have become increasingly popular with the proliferation of technology in the workplace. Online or web-based surveys are self-administered, a methodology which has been widely used in the past to gather data for sociological research (Shropshire, Hawdon, & White, 2009). Self-administered surveys have several advantages; they are generally less expensive, they eliminate interviewer bias, and allow for a wide range of questions from very personal to complex. These surveys also carry disadvantages, such as possible misinterpretation of questions by the subject, low response rates, and possible sampling errors (Berger, 2000).

Web-based surveys tend to be limited to specific populations that are both comfortable with the medium and whose contact information is readily available (Dillman, Smyth, & Christian, 2009). For the purposes of this study, both of those assumptions are true; both public relations and public health professionals tend to be heavy users of the Internet.

A web-based survey is appropriate for this study for several reasons. First, since the primary purpose of this study is to *describe* the practice of public relations in state and local government-based health departments nationwide, the population for the study would be every person working in communications or public relations in government-based public health departments nationwide; a sample from that population was needed. The National Public Health Information Coalition (NPHIC) represents public health communication professionals at local, state, and national public health agencies and non-

profit health associations and groups; in academia; and those employed in private public relations firms and other health care fields. NPHIC was founded in 1989 during a meeting convened by the CDC for public health communication professionals at state health departments; at their 1990 meeting formal bylaws were written and adopted, and the group formally affiliated with the Association for State and Territorial Health Officers (NPHIC, 2009). It is from the NPHIC membership that the sample was drawn. While the membership does not include every person employed in public health public relations programs nationwide, it does reflect nationwide and even territorial membership.

Second, because the membership database is maintained by NPHIC, e-mail addresses are readily available for all members. The Coalition sends frequent messages to its membership, so the likelihood of valid and up-to-date web addresses for all those selected to participate in the study was very high.

Finally, since NPHIC has a particular interest in the results gleaned from this study, they agreed to help publicize the survey to its membership prior to distribution, and assisted in encouraging members to participate. Since professionals employed in health communication are the target of the survey as well as the subject, they should have an interest in learning more about the work of their peers. Therefore, the researcher expected a reasonably good rate of completion – 30 percent or more – for the survey.

However, it is important to note that since no monetary or other substantive incentive was available to encourage participation, the appeal was made to the social consciousness of the participants and proved only somewhat effective. Additionally, anecdotal information gleaned during and following the data collection revealed that this same sample group was surveyed several times on the same types of information sought

in this study, so the completion rate may also have been affected by an over-sampling bias.

The purpose of this study was to *describe* the practice of public relations in public health and *identify* if Contingency Theory serves an apt descriptor of the practice of public relations in state and local health departments during H1N1 response efforts. Contingency Theory may be described as an *it depends* theory of communication, in which the public relations practitioners' stance changes toward various publics and during any given situation as needed to adequately meet the needs of the situation. Since H1N1 response efforts matured during 2009-2010, and because many publics were involved, a survey of response efforts should show whether changes in stance occurred by self-reports of public relations professionals working for local- and state- health departments, thereby supporting Contingency Theory as a practical model.

Sampling Method

This study used a survey of public relations professionals in national, state and, local public health departments nationwide. The membership database from the National Public Health Information Coalition (NPHIC) served as the sample for the study. As noted earlier, NPHIC is the only membership organization for public relations practitioners in public health. The total sampling frame of this study would include all members of NPHIC, 423 individuals as of October 2009. For the purposes of this study, only the NPHIC members who identified themselves as being employed in local, state (and territorial) and national public health departments and agencies were surveyed. When those members who identify themselves as working in academia or for public health associations or private public relations firms were removed, a total of 313

individuals remained at both the manager and technician levels and employed at local, state (and territorial) and national public health departments and agencies to comprise the sample population.

Prior to distribution of the survey, NPHIC agreed to publicize and describe the study in their regular newsletter to members, requesting that they participate in the study. Because the members chosen to participate were employed at local, state, and national government agencies, a separate e-mail message to the membership included the researcher's name and e-mail address so that SPAM filters could be adjusted as needed to allow the message to reach the intended audience. The parameters for those selected for the study were described stated in that article so that those who fit the guidelines were prepared to receive the survey. The title of the survey was also included, so that the initial request message will be less likely to be mistaken for spam or junk e-mail and deleted or ignored.

Survey Instrument

The survey instrument (see Appendix A) consisted of 39 questions. These questions included selecting the best answer from among a list, selecting all that apply from among a list, and selecting a best answer on a Likert scale as well as listing and open-ended questions. The questions were purposefully simple, as this was an initial survey to simply describe and identify the personnel in public health and basic characteristics of their public relations response efforts in the frame of a crisis situation. Questions were written to specifically address the research questions and hypotheses of the study. Four open-ended questions solicit information specific to the practice of public

relations in public health, with results framed to present possible areas of interest for future research.

Each set of questions for the survey relate directly to information gathered for and presented in the literature review, collected during consultations with appropriate professionals, or personal experience. Sections were organized into basic demographics, questions regarding the practice of public relations in public health, questions relating specifically to H1N1 response efforts, questions that test Contingency Theory application, and open-ended questions for further explanation and to direct future studies.

Basic demographics questions

Individual, personal demographics questions included those considered basic to research efforts – gender, race, and age – but also included questions regarding education and experience in both public relations and public health. Organizational research questions requested information on the number of people working in the department, the department budget, and the labels or titles given to the department and the to the respondents completing the survey. Questions regarding both individual experience and organizational characteristics are in line with information collected in public health workforce studies and projects, including those conducted by the Council on Linkages Between Academia and Public Health (2014), Health and Human Services Office of Minority Health and National Center for Health Workforce Analysis (2015), the Institute of Medicine (2003), CDC's Healthy People series (1999, 2010), and *PR Week* (2013).

The practice of public relations in public health questions

Both close-ended and open-ended questions were used to describe the practice of public relations in public health. Close-ended questions asked respondents to select and

rank from among a prescribed list the media channels they use, how often they use them, and how effective they believe the channels are in disseminating information. The channels mentioned were taken primarily from Cameron et al. (2008). “Public relations professionals use a variety of channels to reach their target audiences. The channels they employ may combine mass media outlets – newspapers, magazines, radio, and television. Or they may include direct mail, pamphlets, posters, newsletters, trade journals, special events, and messages on the Internet” (p. 11). Some changes were made in the list to accommodate the specific public health platform. Another question asked respondents to rank – from a prescribed list – those public relations activities in which their department engages most frequently. This list was created based on a review of textbooks (Cameron et al., 2008; Bobbitt & Sullivan, 2005) and personal experience in both public relations and public health.

The open-ended questions were straightforward and open-ended. Respondents were asked to share important lessons learned during H1N1 in regards to working with publics and whether they believed the practice of public relations was different in public health, with an explanation of their answer.

H1N1 response efforts questions

In identifying key publics, participants were asked to rank order from among a list of 11 probable key publics. Those probable publics were selected based on personal experience and consultation with experts in the field.

In public health, the publics may vary greatly based on the situation in question. During the H1N1 response efforts in 2009-2010, the identified populations at risk were also the targeted publics and included “pregnant women, people who live with or care for

infants younger than 6 months of age, health care and emergency medical services personnel, infants 6 months through young adults 24 years of age, and adults 25 through 64 years of age who are at higher risk for 2009 H1N1 complications because of chronic health disorders or compromised immune systems” (CDC Pandemic Summary Highlights, 2010, p. 11). To reach these groups would necessitate the cooperation of school officials, parents, health care providers, and state and local government officials as well as enlisting help in publicizing the message through a variety of mass media outlets.

Both personal experience and consultation with experts in the field – including public relations professionals, public health nurses, and epidemiologists at state health departments around the country – contributed to identification of the publics. These consultations were conducted informally, reviewing and editing lists of probable publics, during several professional organizational meetings and telephone conversations.

An additional set of questions sought to determine which channels of information were used most often during H1N1 response efforts. These questions used categories previously delineated under the description of the practice of public relations in public health. An open-ended question was used to determine key messages disseminated during response efforts.

Contingency Theory questions

One set of questions sought to identify factors associated with the stance taken with the identified key publics. The contingency factors were chosen based on a literature review of Contingency Theory (Cancel et al., 1997; Cancel et al., 1999; Reber & Cameron, 2003; Shin et al., 2006) and informal consultations with public relations practitioners in public health in both face-to-face meetings and telephone conversations.

The factors are more specific to the situation rather than specific to prior testing of Contingency Theory. This was done intentionally, to allow for the unique quality of public relations as it is practiced in public health. In some cases, a different wording was used, such as replacing “issue under question” with “situation maturation.” In others, a piece of the identified factor was emphasized due to the organizational characteristics of public health, such as changing “internal threats” to “increase or decrease in budget.” Since Contingency Theory simply states that the stance public relations professionals take with their publics *does* change, the attempt to simplify that process for an audience likely to be more familiar with health terminology than public relations terminology seemed appropriate.

While not exhaustive, these questions were designed to identify the various publics with whom public health/public relations practitioners interact, the various stances – from advocacy to accommodation – which these practitioners use to work with their publics, and how their work in public health may differ from public relations activities in other businesses. This qualitative data may also be used as a baseline for additional studies in this area.

The addition to the survey of open-ended questions seeking qualitative data added an additional element to the study. However, the majority of the survey includes close-ended survey questions, such as Likert scale and multiple-choice questions, which are commonly used and accepted in survey methodology.

The program used to create the survey was Survey Monkey, which was chosen because it was available through the researcher’s employer for use at no charge and was suitable for creating a simple survey tool.

Survey Procedure

The University of Southern Mississippi maintains established standards and guidelines to protect individuals from risks associated with participation as subjects in research studies. The Internal Review Board (IRB) is responsible for administering safeguards and approving all planned studies to ensure they comply with Department of Health and Human Services policies and other procedures. All studies, regardless of their funding source, must be approved before the survey is begun. This review includes doctoral dissertations. The process includes a formal application approved by the dissertation director; signatures of the investigator, advisor, and department chair; and a review by the appropriate College IRB representative.

NPHIC publicized the survey through a regular newsletter to their membership prior to delivery of the survey instrument. NPHIC also followed up with an Email to their membership alerting them to the name and e-mail address of the surveyor and the title of the e-mail message so members would be more likely to open the message and participate in the survey.

A pilot survey was sent to 34 potential participants (slightly less than 10 percent of the total) prior to full distribution. The pilot survey was sent via an e-mail message containing the Survey Monkey link on July 10, 2011, with a response deadline of July 18, 2011. Every tenth name from the list was selected for the pretest. Two of those requests were returned with a *no longer employed* response attached, leaving 32 surveys received. Of those, eight (8) were returned complete (25%), and those results were used to clarify the survey before full dissemination. The data from the pilot survey was collected July 19. Specifically, the order of the questions was altered, and slight changes were made to

the technical survey structure for Q13A, which solicited the number of *hits* on web sites. The only issue noted in the pretest was a difficulty proceeding past that question on the survey because of the structure of the survey, and a reluctance to continue and complete the survey once the respondents saw that question. In the subsequent and final survey instrument and in the message that accompanied the survey to participants, they were given an option to answer that question or to skip and proceed with the survey. Since no difficulties were encountered with the delivery or collection method, no other changes were made.

The final survey was delivered via an e-mail message requesting participation on Thursday, July 21, 2011. The message, as with the pilot study, included a link to the web-based tool created on Survey Monkey. Respondents were given approximately one month – until August 17 – to respond and complete the survey instrument. Plans to send a reminder e-mail to all participants at the end of the first two weeks – encouraging them to complete the survey, thanking those who have already done so, and asking that they complete the surveys within another two weeks – was unfortunately not sent due to unforeseen health issues with the researcher. Instead, at the end of the four-week period, the total number and percentages of respondents were reviewed to determine if an adequate response had been received. Since the response rate at that point was less than 20 percent, reminder e-mails were sent on August 18 to potential respondents that also extended the due date through Friday, August 26. Since responses were anonymous, the message also included a blanket “thank you” to participants who had completed the survey.

Final data were retrieved on Monday, August 29, 2011. Of the original 313 requests sent to potential participants, 66 were returned as undeliverable or blocked, leaving a total population for the survey of 249 participants. Of those, 68 returned surveys for a response rate of 27.3 percent, slightly lower than the expected return rate of 30 percent. Of those 68, 53% completed with all questions answered.

CHAPTER VI

RESULTS AND ANALYSIS

It should be noted that the base number of people who began the survey was 68. By the time respondents arrived at Q31 – the first of the personal demographic questions – the number of people still in the survey was 36. This represents a 47.1% attrition of data throughout the survey. As a result the sample size is not constant through analysis. Sample size is noted in all statistical tests. Two questions – Q7 and Q18 – were recoded so that higher scores would indicate higher levels of engagement.

Results

RQ1: What are the demographic characteristics of public relations professionals and departments in government-based health departments?

The first section of the survey included introductory questions designed to create an organizational description of survey participants. Based on the responses to these questions, most respondents are employed in local (city or county) health departments (58.8%) and have about 12.5 years of experience in public relations (*Mean* = 12.37) and in public health (*Mean* = 12.62). The respondents were more evenly split based on their roles within the department in which they work, with 30.9% identifying as senior managers, 27.9% identifying as mid-level managers, and 23.5% identifying as technicians, which includes writers, graphic artists, media relations specialists. An additional 17.6% identified their role as *other*, and included four health educators, one nurse, two public information officers, and a special projects coordinator.

The number of people employed in public relations in these work sites ranges from 1 to 200, with two outliers at 100 and 200, both of which were federal agencies. The

median for this variable was two people. Roughly one in three agencies (30.8%) have one-person departments. The budgets of these departments ranged from less than \$100,000 to more than \$1 million, with more than half (59.7%) stating they had an annual budget less than \$100,000. It is important to note the exact wording of this question: What is the annual budget, *including salaries*, for your public relations department?

Table 2

Percentages and Frequencies, Research Question 1

Variable	Frequency	%	N
Which of the following best describes the organization in which you work?			68
Local (city or county) health department	40	58.8	
State or territorial health department	23	33.8	
Federal or Regional health agency	5	7.4	
How many people, including yourself, work in public relations in your organization?			65
1	20	30.8	
3	13	20	
2	12	18.5	
4	4	6.2	
0	3	4.6	
5	2	3.1	
7	2	3.1	
10	2	3.1	
15	2	3.1	
6	1	1.5	
12	1	1.5	
20	1	1.5	
100	1	1.5	
200	1	1.5	
What is the annual budget, including salaries, for your public relations department?			62
Less than \$100,000	37	59.7	
\$100,000 to \$250,000	11	17.7	
\$250,001 to \$500,000	8	12.9	
\$500,001 to \$750,000	4	6.5	
\$750,001 to \$1,000,000	1	1.6	
Greater than \$1,000,000	1	1.6	

The majority of respondents stated the preferred label for their department was Communications (33.8%) compared to Health Communication (14.7%) and Public Relations (5.9%). However, only 37 (54%) of the total respondents chose one of these three provided answers; the other 31 respondents chose to complete the *Other* option and provided a variety of names, including Community Relations, Health Communications and Marketing, and Office of Public Information and Community Relations. One respondent provided the following description:

There is no department. Currently, there is a .5 FTE role titled 'Health Education Coordinator.' During the height of H1N1, we had 4 FTEs redeployed to coordinate communications.

The most common words or phrases listed in the alternate labels were Public Information or Affairs (n = 9) and Risk Communication (n = 3). Others that received at least two mentions were Marketing, Media Relations, and Community Relations or Education. Receiving one mention each were Health Education and Office of Preparedness and Response.

The last set of survey questions requested personal demographic information from the respondents. As noted earlier, personal demographic analysis must take into account the attrition rate (47.1%) of survey respondents. However, it is important to understand the composition or demographics of a public health communications department to determine the mix of individuals creating and communicating critical public health information. Individual demographics indicate the respondents were predominantly female (83.3%, n = 30) versus male (16.7%, n = 6). Age ranges were almost evenly spaced, with the largest grouping in the 50-59 age range (30.6%, n = 11). The lowest

levels of diversity occur in the race/ethnicity of respondents, who were predominantly white (88.6%, n = 31). The other two race/ethnicities cited were African-American and Hispanic, each at 5.7% (n = 2). One person provided the comment “this information [race/ethnicity] should not matter.”

Respondents were also asked to provide information regarding their highest level of education earned – based on degrees – and in what field of study the degree was earned. More than half of the respondents (55.9%, n = 19) indicated an earned Bachelor’s degree, followed by those who earned a Master’s degree (35.3%, n = 12). Associate’s degree, high school diploma, and Doctoral degree each earned one affirmative response. Two respondents replied *other*, one with no additional information and the other including the comment “3+years of college, as well as numerous training and exercise certificates; evaluator for multiple public/private disaster exercises.”

For determining the field of study, respondents were given the following options: Journalism, Advertising, Public Relations, Business or Marketing, Public or Community Health, and Other. For analysis, answers were grouped into Journalism (27.3%, n=9), Advertising (3%, n=1), Public Relations (6.1%, n = 2), Public or Community Health (27.3%, n=9), and Other (36.4%, n = 12).

The information gathered supports research that indicates public relations professionals often come from areas of education and experience other than public relations. The PR Week (2013) cites several employers who intentionally seek new hires with degrees in other areas, including economics, political science, analytics, and video design. These non-traditional public relations skills sets are needed to provide an ever-increasing range of services demanded within the field of public health. With less than a

third of the respondents citing an educational background in public relations or some associated field, it appears that public health also looks *outside the box* in filling their public health communication roles. In public health, the trend appears to be teaching basic communication skills to people working in all levels of the public health workforce, as evidenced by the Communication Skills domain in the Core Competencies (CLBAPHP, 2014) and Health People 2020.

RQ2: What are the primary activities of public relations departments in state and local government-based health agencies?

Respondents were asked to rank activities from a list of seven basic public relations activities that included *other* as an additional option. This list was created using information from public relations textbooks (Cameron, Wilcox, Reber & Shin, 2008; Bobbitt & Sullivan, 2005) and personal experience working in the field, and was centered on those activities most likely to occur during response efforts and also included an *other* category. In order of ranking, on a seven point scale, The highest mean (6.97) was associated with media relations, followed by online communications, crisis management, community relations, employee communications, special events, and reputation management. Guth and Marsh (2012) list the top 10 public relations activities in order of time spent as media relations, website and online media tasks, newsletters, community relations, promotion of services, counseling senior management, employee communications, special events, working with elected officials, and crisis communication (p. 31). It is not unreasonable to expect respondents for this survey to rank crisis communication much higher, especially given the context of this survey, communication efforts in response to a public health crisis situation.

Table 3

Means and Standard Deviations, Research Question 2

Variable	<i>M</i>	<i>SD</i>	<i>N</i>
Rank the following public relations activities in which your department engages, ranking the most common practice highest.			
Media relations	6.97	1.84	66
Online communications	5.58	1.75	65
Crisis management	5.42	2.02	66
Community relations	5.23	1.91	65
Employee communications	4.56	2.05	66
Special events	4.06	1.85	65
Reputation management	3.52	1.92	63

Within the context of H1N1 responses, respondents stated primary communication activities included media relations, especially as an advocate for the agency, and updating and providing clear and timely communication regarding vaccine and the disease to the public and the media. Survey respondents also stressed the importance of *being available* for news media and using multiple media channels. “Must use all available means and all available spokespeople to communicate broadly and effectively,” said one participant. “Our website, local newspapers and email were the most consistent ways that the public found local information about H1N1. TV also covered our issues, but sometimes went with the sensational spin,” stated another.

RQ3: How do public relations professionals in public health perceive their public relations activities and their roles?

Both close-ended and open-ended questions were used to determine the public relations professionals’ perception of their activities and roles. The close-ended question asked respondents to rate the communication channels – identified previously in the survey – and how they were used specifically to disseminate information about H1N1.

Respondents were asked to select all that apply, and also to note the frequency with which they used each channel. Agency web pages were updated daily the most, with 72.5% of responding noting that they did so on a daily basis. Blogs were the least used channel to disseminate information; 86.2% of respondents noted that this was not applicable.

Table 4

Percentages and Frequencies, Research Question 3

Variable	Frequency	%	N
Rate the following media channels that your department used to disseminate information on H1N1.			
Meetings and press conferences			38
Daily	6	15.8	
Once a week	11	28.9	
Once a month	15	39.5	
Not applicable	6	15.8	
Television			40
Daily	20	50	
Once a week	11	27.5	
Once a month	5	12.5	
Not applicable	4	10	
Radio			39
Daily	20	51.3	
Once a week	15	38.5	
Once a month	2	5.1	
Not applicable	2	5.1	
Newspapers			40
Daily	20	50	
Once a week	17	42.5	
Once a month	3	7.5	
Not applicable	0	0.0	
Magazines			34
Daily	3	8.8	
Once a week	4	11.8	
Once a month	7	20.6	
Not applicable	20	58.8	
Poster/Flyers/Brochures			37
Daily	7	18.9	

Table 4 (continued).

Variable	Frequency	%	N
Once a week	18	48.6	
Once a month	9	24.3	
Not applicable	3	8.1	
Email			37
Daily	16	43.2	
Once a week	16	43.2	
Once a month	2	5.4	
Not applicable	3	8.1	
Agency web page			40
Daily	29	72.5	
Once a week	5	12.5	
Once a month	3	7.5	
Not applicable	3	7.5	
Facebook			32
Daily	5	15.6	
Once a week	3	9.4	
Once a month	1	3.1	
Not applicable	23	71.9	
Twitter			33
Daily	6	18.2	
Once a week	5	15.2	
Once a month	2	6.1	
Not applicable	20	60.6	
YouTube			34
Daily	2	5.9	
Once a week	0	0.0	
Once a month	8	23.5	
Not applicable	24	70.6	
Blogs			29
Daily	1	3.4	
Once a week	1	3.4	
Once a month	2	6.9	
Not applicable	25	86.2	

For the qualitative portion, two open-ended questions were used. First, respondents were asked to identify the most important lessons learned in dealing with

publics during H1N1 response efforts. These responses were difficult to categorize due to the variety of responses, but a few very broad themes did emerge. First was the need for consistency and accuracy of both information and messaging. This was communicated in two ways. The messages needed to be accurate and consistent; that was key. But further, the messages needed to be delivered in a timely manner, before *inaccurate* information spread, often in the form of conspiracies and rumors. The need for patience with stressed, as was their perception that the public struggled to accept and retain the messages they were given.

Another theme that emerged was that respondents felt there was a need to be repetitive of accurate information in multiple ways, but that the messaging needs to be clear and simple to reach as many publics as possible. As one respondent state, “Stay away from numbers – specific doses, specific dates – keep things general.” Along those same lines, another statement was “They [the publics] get confused more easily than I thought. Public health, even during an emergency, may not be a priority to them.”

In the second question, respondents were specifically asked if they believed their role was different in public health than in other business areas or fields; 80% stated that their work in public health *is* different. While there was some variance in the strength of the *yes* answers, two common themes emerged: the role of education as part of their efforts and the challenges they face in reaching a demographic that literally encompasses the entire population. The role of education is one they take seriously, citing “it saves lives.” The balance between educating and motivating is seen as more important than image or reputation management, though maintaining credibility is an important part of the success of education efforts. Maintaining credibility is managed through using the

most appropriate spokespersons for varying situations, as well as crafting clear, consistent messages. Demographic issues are also seen as a challenge in that health messages often transcend ages, socioeconomic levels, and race/ethnicity categories. Maintaining the integrity of those messages and yet tailoring them to reach many types of people is a special challenge for public health communicators, especially when limited by financial resources, time, and human resources issues.

RQ4: Who were the primary publics during H1N1 communication efforts?

In identifying key publics, participants were asked to rank order from among a list of 11 probable key publics. Those probable publics were selected based on personal experience and consultation with experts in the field.

In public health, the publics may vary greatly based on the situation in question. During the H1N1 response efforts in 2009-2010, the identified populations at risk were also the targeted publics and included: “pregnant women, people who live with or care for infants younger than 6 months of age, health care and emergency medical services personnel, infants 6 months through young adults 24 years of age, and adults 25 through 64 years of age who are at higher risk for 2009 H1N1 complications because of chronic health disorders or compromised immune systems” (CDC Pandemic Summary Highlights, 2010, p. 11). To reach these groups would necessitate the cooperation of school officials, parents, health care providers, and state and local government officials as well as enlisting help in publicizing the message through a variety of mass media outlets.

Both personal experience and consultation with experts in the field – including public relations professionals, public health nurses, and epidemiologists at state health departments around the country – contributed to identification of the publics. These

consultations were conducted informally, reviewing and editing lists of probable publics, during several professional organizational meetings and telephone conversations.

The key public ranked most important was local mass media, supporting the supposition that public relations practitioners relied heavily on local mass media partners to disseminate messages during the H1N1 response efforts. School officials, health care providers, and hospitals also rated high as key publics. National level mass media outlets had the lowest selection, which would be expected when only two of the respondents came from federal public health agencies.

Table 5

Means and Standard Deviations, Research Question 4

Variable	<i>M</i>	<i>SD</i>	<i>N</i>
Pease select and rank all of those with whom you interacted during your department's H1N1 communication efforts...			
Local mass media outlets	9.55	2.55	40
School officials	8.44	2.26	39
Health care providers	8.24	2.15	41
Hospitals	8.05	2.40	40
Parents of school children	7.35	2.71	40
State and/or local policy makers	6.61	3.43	41
Senior citizens	6.33	2.52	39
Pharmacies	6.10	2.66	40
Federal government	5.58	3.28	40
State level mass media outlets	5.13	3.90	39
National level mass media outlets	2.95	3.07	39

RQ5: What were the key messages disseminated regarding H1N1 during this specified time period?

One an open-ended question sought to identify key messages and provide flexibility in determining key messages; 33 of the 68 respondents answered this question.

Identifying and conveying clear and consistent messages is an important part of a coordinated public relations program. Staying on target with messaging was an overarching theme of responses from among participants. Key messages were clustered around the following more specific themes (number of times mentioned shown in parentheses):

- Get the vaccine. (23)
- Stay home if you are sick. (20)
- Wash your hands. (18)
- Cover your cough. (15)
- General prevention guidelines (10)
- Importance of the vaccine (2)

The most common message in prevention was the 3 Cs: Clean, Cover, and Contain, a message mentioned specifically seven times. Another specific message included the phrase “Sneeze in your sleeve.” Vaccination messages were key as well, with only five not specifically mentioning vaccine or vaccinations. The key message was simple: Get vaccinated! Several stressed the importance of getting vaccinated for H1N1 as well as the standard flu vaccination. In all but two responses the key themes of prevention and vaccination were concurrent. Messages keyed to logistics provided information on where one could get vaccinated, who was eligible or recommended for vaccination, and when vaccine would be available. One subject summarized nicely the full scope of the advice messages relayed:

We provided these recommendations as part of all communication efforts to various audiences throughout the course of the H1N1 event. People with

respiratory illness should stay home from work or school to avoid spreading infections, including influenza, to others in the community. Avoid close contact with people who are coughing or otherwise appear ill. Avoid touching your eyes, nose, and mouth. Wash your hands frequently to lessen the spread of respiratory illness. People experiencing cough, fever, and fatigue, possibly along with diarrhea and vomiting, should contact their physician. If you think you have influenza, please call your health care provider and discuss whether you need to be seen in their office, emergency department, or stay home.

It is important to note that continuing to provide and recommend influenza vaccination well into “flu season” is part of standard public health protocol. According to the CDC’s Key Facts About Influenza (Flu) and Flu Vaccine, “Yearly flu vaccination should begin soon after flu vaccine is available, and ideally by October. However, getting vaccinated even later can be protective, as long as flu viruses are circulating. While seasonal influenza outbreaks can happen as early as October, most of the time influenza activity peaks in January or later. Since it takes about two weeks after vaccination for antibodies to develop in the body that protect against influenza virus infection, it is best that people get vaccinated so they are protected before influenza begins spreading in their community” (cdc.gov, 2015).

A second question aimed at identifying key messages asked respondents to identify the most important issues they addressed based on the experience gained during H1N1 communication efforts. Three major themes emerged from the content analysis for this question:

- Frustration with the CDC,

- Issues with the media, and
- Public perceptions and awareness of important information.

The frustration with CDC clustered around two issues. First was that CDC had over promised vaccines when there was in actuality a shortage, leading to the need to prioritize what was considered an at-risk group. The second was the lag time in media messaging about H1N1 from the CDC, especially when trying to manage that with a lack of media budget and an additional lag in information from state level health departments. As one subject stated, “the lag time between CDC announcing availability of the vaccine to the state and actually receiving its shipments” was a very difficult issue.

The second biggest theme that emerged from the data was managing the media, including the 24-hour news cycle, which is constantly looking for new information. Several respondents wrote about trying to ensure there was accurate information in the media while faced with constant inquiries from the media and mixed messaging from CDC to the media. As one respondent stated,

The biggest challenge was that the CDC was basically calling the shots and providing the key messages. They were quite alarmist, particularly at the beginning of the event, which freaked people out. Sometimes their messages and guidance changed and we, as PIOs in small counties, did not get notified until AFTER news media. CDC came out with new info daily and sometimes multiple times each day. We were often in a reactive mode. The State Department of Health, on the other hand, was very slow with getting info approved and out the door. They got bogged down in their own political approval process. We were basically on our own (for example, we needed

phone scripts for callers, but did not get any from the state until after we had developed our own). Eventually, the State did establish phone banks and a toll free phone number in English and Spanish, which was very helpful. Finally, larger county health departments in our region were more likely to capture the interest of TV and other media outlets. It was a challenge to find a voice in all of this for the small counties, however, I think we were as successful as we could have been given these challenges.

The last theme to emerge from the data revolved around ensuring that the public had accurate and timely information. This included information about the availability of the vaccine and vaccine clinics, the safety and effectiveness of the vaccine, and the changing information about what priority groups were to be given the vaccine.

RQ6: Which information channels do public relations departments in public health use?

The determination of appropriate channels for public health messages varies based on the message. To answer this research question, respondents were asked three simple questions: which channels do they use to communicate information to the public, which channel do they believe is most effective, and which channel do they use most frequently. The frequencies and percentages are a snapshot of media channels used most commonly during the survey period in 2011.

Respondents were allowed to select all that applied for the first question, what channels do they use, and all respondents reporting stated they use an agency web page to communicate information to the public. Newspapers (n = 67) were nearly as widely

used, followed closely by posters/flyers/brochures (n = 66) and radio (n = 64). Web pages and poster/flyers/brochures are *controlled* communication channels, which have the advantage of allowing selection of exact wording and phrases as well as words and images, but communicators must also take into account the possibility of a perceived lack of credibility (Guth & Marsh, 2012). Respondents were also given an opportunity to select *other* and provide additional information. Nine respondents selected that option, and included community meetings, word of mouth, and on-hold messaging for the phone system. The other responses all described a migration toward a stronger social media presence, with two citing they had social media policies pending, one describing an upcoming launch of both Twitter and Facebook pages, and two others citing other social media programs: Flickr and WelCommons.com, a site run by a local newspaper.

Roughly four in ten respondents (42.6%) felt that television was the most effective way to communicate routine health information to the public, followed by newspapers (16.2%). Television and newspapers would both be examples of *uncontrolled* media, which generally have higher credibility with the general public. Public relations practitioners often find “that the news media can provide a third-party endorsement or independent endorsement of a news story. In public relations, news media are third parties – neither the sender nor the receiver – that can implicitly offer independent verification of a story’s newsworthiness” (Guth & Marsh, 2012).

Newspapers were the channel used most often to disseminate health information to the public (26.5%) followed closely by agency web page (25%). Twitter, radio, and meetings and press conferences were least used (4.4%). Again, an *Other* response was

allowed, and respondents unanimously referred to news releases and/or ongoing media communications through news releases, use of Associated Press and other news bureaus.

While there may appear to be a disconnect between radio being one of the top three identified channels as being used, and one of the last three actually used, the most reasonable explanation is that they all use it when they need to, they just don't need to that often.

Table 6

Percentages and Frequencies, Research Question 6

Variable	Frequency	%	N
Select all of the following channels your department uses to communicate information to the public.			68
Agency web page	68	100	
Newspapers	67	98.5	
Posters/Flyers/Brochures	66	97.1	
Radio	64	94.1	
Email	63	92.6	
Television	61	89.7	
Meetings and press conferences	60	88.2	
Facebook	41	60.3	
Twitter	36	52.9	
Magazines	31	45.4	
YouTube	21	30.9	
Blogs	11	16.2	
Of the media channels listed below which one would you say is most effective in communicating routine health information to the public?			68
Television	29	42.6	
Newspapers	11	16.2	
Agency web page	10	14.7	
Radio	5	7.4	
Email	4	5.9	
Meetings and press conferences	3	4.4	
Posters/Flyers/Brochures	3	4.4	
Facebook	1	1.5	
Magazines	1	1.5	

Table 6 (continued).

Variable	Frequency	%	N
Other	1	1.5	
Which of the media channels listed below does your department use most often in disseminating health information to the public?			68
Newspapers	18	26.5	
Agency web page	17	25.0	
Television	9	13.2	
Poster/Flyers/Brochures	6	8.8	
Email	5	7.4	
Meetings and press conferences	3	4.4	
Radio	3	4.4	
Twitter	3	4.4	
Other	4	5.9	

A brief analysis of agency websites was conducted in April 2015 to augment this data, given the time lapse between collection and reporting, to note any changes in the use of social media. State level public health agencies continue to maintain web sites in all 50 states. Each website was scanned for links to other online and social media, identifying 39 states with Twitter accounts, 36 with Facebook accounts, 28 with YouTube pages, and 16 with links to RSS feeds. All other noted online communications were identified by fewer than 10 state agencies, but included blogs, Google+, Instagram, Pinterest, Flickr, and LinkedIn.

RQ7: What are influential contingency factors associated with stances of the public health departments and their publics?

One set of questions sought to identify factors associated with the stance taken with the identified key publics and answer RQs 5 and 6. The contingency factors were chosen based on a literature review of Contingency Theory (Cancel et al., 1997; Cancel et

al., 1999; Reber & Cameron, 2003; Shin, Cameron & Cropp, 2006) and informal consultations with public relations practitioners in public health in both face-to-face meetings and telephone conversations. The factors are more specific to the situation rather than specific to prior testing of Contingency Theory. This was done intentionally, to allow for the unique quality of public relations as it is practiced in public health. In some cases, a different wording was used, such as replacing “issue under question” with “situation maturation.” In others, a piece of the identified factor was emphasized due to the organizational characteristics of public health, such as changing “internal threats” to “increase or decrease in budget.” Since Contingency Theory simply states that the stance public relations professionals take with their publics *does* change, the attempt to simplify that process for an audience likely to be more familiar with health terminology than public relations terminology seemed appropriate.

Fully one third (33.8%) of respondents stated that situation maturation was the key factor that contributed to change in stance towards the key public group; only 5.9% stated that their stance did not change. It should be noted that respondents were allowed to mark all that applied; as such, percentages in Table 7 do not equal 100%.

Table 7

Percentages and Frequencies, Research Question 7

Variable	Frequency	%	N
Please indicate any factors below that contributed to any change in your stance toward the key public group with whom your department interacts.			68
Situation maturation	23	33.8	
Increase or decrease in budget	10	14.7	
Changes to the characteristics or nature of the public	8	11.8	

Table 7 (continued).

Variable	Frequency	%	N
Increase or decrease in staff	7	10.3	
Time constraints	7	10.3	
Changes based on agency leadership directives	5	7.4	
Stance did not change	4	5.9	

Given the anecdotal information provided in the answers to the open-ended questions, it is not surprising that situation maturation rated as the most important variable. The length of H1N1 response efforts – described in Table 1: Timeline of H1N1 Events – illustrates that there was ample time for the situation to mature and change. From initial identification of a cluster of cases through the eventual declaration and resolution of a pandemic, health communication professionals were required to explain vaccine shortages, the identification of at risk publics and stay on target with standard prevention messages, all the while dealing with a media pushing for new information.

Because this is a simple survey and seeks primarily to describe and simply begin to test Contingency Theory within the role of public relations in public health, one simple hypothesis is included in this study.

H1: Public relations practitioners in state and local health departments changed their stance toward individual publics during the H1N1 response efforts.

The basic premise of Contingency Theory is simply that public relations practitioners change their stance toward a public over the course of the time working with them. As such, one could say that the results of this study – while not statistically significant – do show a tendency toward a change in stance. Three questions were posed

to participants, asking them to identify – on a scale of 1 to 7, with 1 being pure advocacy and 7 being pure accommodation – their stance toward the identified key public at the beginning, middle, and end of the H1N1 response efforts. Thirty-one participants answered the questions, and while “4” was the consistent most common answer across the time frame, the number of respondents choosing the mid-range answer varied, suggesting there was some variation. Additionally, some variation was seen in the mean among the three levels of agencies studied: Federal or Regional, Local, and State. While the Federal stance began more toward the advocacy end of the scale, it moved toward a more accommodating stance over time. Conversely, the Local and State agencies began with a more accommodating stance and moved toward more advocacy over time.

Table 8

Means of Stance Toward Publics, Hypothesis 1

Variable	Beginning	Middle	End
Federal or Regional agency	3.33	3.67	4.00
Local agency	4.13	3.75	2.94
State agency	4.17	4.08	3.83

Based on analysis of the responses, the research is inadequate – too few responses – for purposes of analysis and results cannot be generalized to the population. While public health communications professionals did report a slight stance shift, the shift was not statistically significant. Both one-way analysis of variance (ANOVA) and cross tabulations with Chi-Squares using the agency – local, state, or federal – as the unit of analysis indicated no statistically significant shifts in stance during H1N1 response efforts.

Still, the basic hypothesis question – *did the public relation practitioner's stance change?* – may provide information from respondents' answers to a question on how important they believed it was to have the option of flexibility in their stance during H1N1 communication efforts. While still not significantly significant, respondents leaned toward valuing the option of flexibility. On a scale of 1 to 7, with 1 being not important at all and 7 being extremely important, 36.7% (n = 11) respondents rated flexibility as very important, at 7; 30% (n = 9) rated the need for flexibility at a 6; and 20% (n= 6) rated the need at a 5.

RQ8: Which was most influential in selecting a stance during H1N1 communication efforts: the identity of the public, situation maturation, or “standard” practice?

Respondents were also provided a list of options and asked to select which factor was MOST associated with or influential to a change in stance toward the identified key public. These 12 factors come specifically from previous work on Contingency Theory by Shin et al. (2006) in which the 86 contingent variables associated with Contingency Theory “were grouped into 12 factors on two dimensions through an exploratory factor analysis” (p. 284). Overwhelmingly (61.5%) of respondents chose the issue under question (i.e. the changing nature of H1N1 information as the situation progressed) as the most influential factor. Conversely, the second highest response (15.4%) was from those who stated their stance *did not* change. Other factors identified with change were relationship characteristics (7.7%) and, at 3.8% each, external publics, individual characteristics, and dominant coalition. Not all factors were selected and therefore are not reflected in Table 7.

In selecting an initial stance toward the identified key public, respondents were asked to select from a short list of three options which were tied to the wording used in options in a previous question: situation maturation (74.1%), standard department procedures or organization policy (14.8%), characteristics of the public itself, including any existing relationship (11.1%). Again, situation maturation is identified – by far – as the most important factor (74.1%).

Table 9

Percentages and Frequencies, Research Question 8

Variable	Frequency	%	N
Which of the following factors was most associated with or influential to a change in stance toward the key public group with whom your department interacts?			26
Issue under question	16	61.5	
Stance did not change	4	15.4	
Relationship characteristics	2	7.7	
Characteristics of top management	1	3.8	
Dominant coalition	1	3.8	
External publics	1	3.8	
Individual characteristics	1	3.8	
Which of the following factors was most influential factor in selecting your initial stance towards the key public group during H1N1 communication efforts?			27
Situation maturation	20	74.1	
Standard department procedures or organization policy	4	14.8	
The characteristics of the public itself	3	11.1	

CHAPTER VII

DISCUSSION

The overall survey results provide some useful insights into the practice of public relations within the field of public health, and to the communication efforts during H1N1 response in 2009-2010. While the study does not statistically lend support or rejection to the supposition that Contingency Theory may be an apt descriptor of how public relations operates within the field of public health, results do describe the changing nature of communication that occurs within the field, and the need for flexibility in communicating and working with the multiplicity of publics with which public relations professionals interact on a regular basis.

This study revealed both expected and unexpected information in describing a *typical* public relations professional working in public health. As expected in both public relations and public health, the typical communicator is female. She also works – most likely – at the local level and has a college degree. She also is likely to work in a one to two person office, indicating that she performs a variety of public relations and health communication functions on a daily basis. She is also likely to work with a limited budget; with more than half of the respondents indicating an annual budget *including salaries* for their office at less than \$100,000, it would seem that public health communications professionals require a great deal of creativity and flexibility in their work.

Somewhat unexpected was the variety of academic degrees among participants, most notably that most respondents stated their terminal degree was in in Public or Community Health or some other area (n = 21) not specific to Journalism, Advertising, or

Public Relations (n = 12). Also unexpected was the lack of ethnic diversity among public health communicators responding to the survey. Whites comprised an overwhelming majority of respondents (88.6%, n = 31) with African-Americans and Hispanics next, each at 5.7% (n = 2). The demographic composition of respondents was similar, however, to that of a 2013 Salary Survey conducted by *PR Week*. In their survey, respondents were predominantly female (63%), 38 years of age, and White (85%), with Blacks accounting for 5% and Hispanics 4% (PR Week, 2013). However, given the low response rates, these results are not generalizable to the population.

Based on this survey, public relations activities in public health consists primarily of media relations (n = 66), online communications (n = 65), crisis management (n = 66), and community relations (n = 65). All of these are to be expected when responding to an ongoing public health emergency such as H1N1. When asked to identify which media channels were most often used, agency web pages (online communications) were updated on a daily basis (n = 29), while other channels of communication – while popular – were less likely to be used. Newspapers (n = 20), radio (n = 20), and television (n = 20) were cited frequently, most likely as recipients of news releases that generated coverage. Posters and brochures were also identified as frequent channels. All of these identified channels are examples of controlled media, which would indicate a pro-active or advocacy standpoint from the agency in question.

During H1N1 response efforts, publics that could be considered partners in disseminating vital information ranked as the most important publics: local mass media outlets (n = 40), school officials (n = 39), health care providers (n = 41), and hospitals (n = 40). Parents of school children (n = 40) were ranked highest among non-health or

communication publics. Key messages and lessons learned were similar: control the message and keep it short, simple, and to the point. Communicators placed their emphasis on vaccinations and basic hygiene procedures such as frequent hand washing and sneezing in your sleeve.

While the survey results do not statistically support nor reject the hypothesis that public relations practitioners' stances change toward their publics, they do provide a starting point for further study in the area. For instance, while there were no statistical differences in stances among federal, state, and local health agencies, there were some subtle differences that may be explored in future studies.

Practical Implications

The study of the practice of public relations – or at least the use of public relations strategies and tactics – becomes increasingly important as changes occur in the nation's public health system associated with the Affordable Care Act and other related legislation. To achieve success, those changes *necessitate* that communication messages become clearer and more consistent, and that those messages are crafted to appeal to a broad range of people. The further challenges with rapidly evolving technology create even more challenges to public health communicators. While the role of education in public health communication is important, there is also a more traditional use of public relations skills that can prove effective, and that is in managing relationships. Public relations stresses that no communication should occur without being tied to a plan, with clearly defined goals and objectives (Cameron et al., 2008; Guth & Marsh, 2012; Smith, 2005). The rapidly changing nature of the H1N1 response efforts illustrate that public relations practitioners in public health need to not only be flexible in their stance, but be

flexible enough in their planning to account for changing messages during crisis situations, which occur frequently in public health. While Contingency Theory would seem to be an apt descriptor or that work, further study is needed.

More specifically, this study helps explain some of the activities and roles communicators play in crisis response activities. Based on their H1N1 interactions and responses, respondents stated they worked with a multiplicity of publics, including – in descending order of importance – local mass media outlets, school officials, health care providers, hospitals, parents of school children, state and/or local policy makers, senior citizens, pharmacies, federal government, and state and national level mass media outlets. What this tells us, however, is that these are the identified publics for this particular crisis situation: a pandemic of H1N1 influenza. Other public health crisis situations would focus on a different list of publics as appropriate to the situation. So while we may describe the practice of public relations in public health *during H1N1 response efforts*, these particular publics may or may not factor into other crisis response efforts. The changing nature of who the publics are in any given situation – often from day to day or, in the case of multiple situations, hour-to-hour – is one of the major challenges to the practice of public health in public relations.

While it is true that perhaps public relations professionals can make themselves most valuable to public health by becoming students of public health, the inverse may also be true. Public health communicators can make themselves more valuable to the field of public health by becoming students of public relations. Six of the eight basic Communications Skills sets identified in the Core Competencies for Public Health Professionals (CLBAPHP, 2014) correspond with basic public health skills. These

include effective oral and written communication, working with mass media and identified publics, identifying appropriate channels and disseminating information through those channels, and serving as an advocate for the organization or professional which, in this case, is public health.

This study revealed a possible bias from those performing public relations duties in public health toward identifying strongly with the *health* aspects of their jobs, not the communication or public relations aspects. The value of public relations strategies and tactics should be emphasized with this group to aid in improving communication efforts and expanding the professional role of public relations practitioners.

The web-based survey proved a somewhat effective tool in collecting data from the chosen sample base. The NPHIC membership is representative of public relations practitioners in public health as that is the primary focus of the organization. While the attrition rate in the survey led to fewer than 35 respondents completing all or part of the individual demographic information, the information gleaned helps in describing public relations practitioners in public health. This survey reveals that, of the respondents, very few of those who are charged with communication duties within public health are actually academically trained as public relations practitioners. In fact, only one person stated that he or she earned a degree in public relations. Further, few respondents seemed loathe to be associated with the term public relations, whether through their own job title or for the title of their department. This study's finding that only one person completing the survey had an academic degree in public relations serves as a sign that the background and training for public health communicators should include public relations theory and skills.

“It appears as if the public relations profession has a public relations problem” (Guth & Marsh, 2012, p. 2). And yet, the skills and techniques taught in 21st Century public relations programs include essential abilities aimed at creating a skill set that would be particularly useful to address the special challenges in public health, including writing skills, research ability, planning expertise, and problem-solving ability. Cameron et al. (2008) state, “Today more than ever, the world needs not more information but also savvy communicators and facilitators who can explain the goals and aspirations of individuals, organizations and governments to others in a socially responsive manner” (p. 28).

This study also points out how, in many ways, the practice of public relations is similar to public relations as it is practiced anywhere. Media relations is the frequently most important activity whether in or out of public health. And while communicators are moving toward greater use of controlled communication channels through web sites and social media, they still rely heavily on the added credibility earned through cooperation with mass media as an uncontrolled channel.

The demographics of public relations practitioners in public health is similar to the profession in general in that they are predominantly white, college-educated, and female; both public health and public relations are predominantly female occupations.

The questions regarding gender and race or ethnicity are also important to the overall discussion because of the importance of the messenger in public health communications. Public health departments nationwide serve people of all ages and of all races and ethnic heritage. The demographics of a typical public health client changes based on the demographics and needs of the county, region, city, or state in which the

department is located. Further, since the services are not all directed at individuals, communications professionals within the field must be able to speak to and reach a broad spectrum of society. The U.S. Health Resources and Services Administration's National Center for Workforce Analysis published a report in January 2015 highlighting current diversity in the health care workforce. According to the study, females account for more than 80% of workers in health care, with males dominating in only five occupations: dentists, chiropractors, EMTs and paramedics, physicians, and optometrists. Whites and Asians dominate most categories of the workforce classified as *Health Diagnosing and Treating Practitioners*, while Blacks and Hispanics are greatest among *Healthcare Support Occupations* (U.S. Dept. of Health and Human Services, 2015). While diversity in health educators, doctors, nurses, social workers, and other health care professionals is the focus of the report and of an overall effort within health care to expand the diversity within the workforce, little attention is paid to the diversity of the messenger – the public relations practitioner – who often becomes the *face* of public health within communities.

Theoretical Implications

Theory building is an important part of academic study in any field. In the fields of social science, theories are “based on the assumption that all social theory is a human construction – *an active effort by communities of scholars to make sense of their social world*” (Baran & Dennis, 2006, p. 5). As such, theories rely on interpretation of data that may or may not be based on an *either/or* question. There is no public relations theory, for instance, that is always correct or that applies in every situation. Contingency Theory, however, is both flexible and descriptive and has both theoretical and practical implications for public relations research. From a practical standpoint, it supports the

concept that all public relations activities do not have to be two-way symmetrical to qualify as being ethical. This provides support to public health communicators as they strive to improve the public's health through advocating for good public health practices. Unfortunately, this survey does not meet the level of statistical rigor necessary to truly test Contingency Theory in public health. While disappointing, this study can serve as a learning ground for future study.

From a theoretical standpoint, this study shows that a simple survey sent to public relations practitioners, asking them to identify their stances, may not be an effective way of advancing theory, primarily because of the lack of public health communicators academically-trained in public relations or some closely-related field of mass media. Instead, content knowledge in public or community health is apparently more often the academic preparation.

This dissertation also fills a gap in theory-based research in public relations practiced in public health, more specifically in government-based public health departments. Previous research has focused on specific messages or social marketing campaigns, gauging their efficacy on changing behaviors or reaching the target audience. As such, those studies have used health education, health communication, and health behavior theory as their foundation. Little work has been done from a theoretical perspective on the communications side.

Framing is often used as a context for creating messages within public health studies, but generally focus on the messaging frame, or how the message is worded, rather than the media frame, or how the message is transmitted to the target audience through mass media, ignoring the role of media gatekeepers. Social marketing – an

increasingly important segment of public health communication – draws primarily from marketing strategies and theories. Change theories – such as the Health Belief Model and the Transtheoretical or Stages of Change Model – form the basis of determining how health messages are crafted. The use of these models has proved effective in crafting messages that are effective in reaching target audiences and in changing behaviors (Parvanta, Nelson, Parvanta, & Harner, 2011).

The public relations work – not just the messages – in state and local public health departments has only recently begun to be examined by communications professionals (Avery, 2010; Avery & Lariscy, 2011; Avery et al., 2010; White & Wingenbach, 2013). Avery (2010) used situational theory as the frame for a study on “audience channel selection and message reception during routine and crisis situations” (p. 378). In 2008, the Centers for Disease Control and Prevention (CDC) and the Association of State and Territorial Health Officers (ASTHO) created a 10-step approach for health communication activities during public health emergencies, focusing on cooperating and coordinating activities with the community and with faith-based organizations (Santibanez, Siegel, O’Sullivan, Lacson, & Jorstad, 2015). While that 10-step approach focuses on working within the community and within organizations, two of the steps relate directly to the work of public relations in that they focus on message development (Step 7) and “using a variety of methods to convey and amplify messages” (Step 8), (p. 131). Communications theory – and specifically Contingency Theory – could be helpful in understanding and explaining the relationships between health communicators and the media, and improving the quality of those relationships through a mix of advocacy and

accommodation, each side recognizing the needs of the other and working toward a mutually beneficial relationship rather than focusing strictly on the message.

This survey adds to the body of knowledge on Contingency Theory mainly in two ways. First, reliance on quantitative research methods works in some areas, specifically in describing the workforce and identifying public relations tactics. Identifying the basic characteristics of a workforce includes everything from traditional demographics to the size and budget of the agency or business under study. Understanding who the communicators are is just as important as identifying and understanding the targeted public. For instance, an office comprised of middle-aged, middle-income, suburban-dwelling white men would be wise to seek assistance in crafting messages catered to lower-income, teen-aged, Hispanic single mothers in an urban setting. These same communicators would face similar challenges in creating messages for any group of people, dissimilar or not. However, the fact that the messages created for H1N1 response were strikingly similar would indicate that sometimes the message is the most important factor, trumping the need for messages strictly targeted to a narrow audience.

The survey method also proved effective in identifying the public relations tactics used, focusing on media channels and using a broad definition of what constituted a media channel. Tying strategies and tactics to stances is one way of furthering study in Contingency Theory. In this study, respondents indicated a preference for using controlled over uncontrolled media channels in disseminating health messages. While this would logically seem to indicate a preference for an advocacy stance, further testing would be needed to confirm the link between the two. Cameron, Pang, and Yin (2008) state that current Contingency Theory research has established “the stance of an

organization is dynamic in response to a complex set of factors” and, as a result, future research should focus “on how that particular stance is enacted through public relations strategies and tactics” (p. 147).

Limitations

The completion rate for the survey casts an unfortunate pall over the results, emphasizing the need for caution in drawing conclusions. It is also important to note that this is a purposive sample of members of a professional organization, the National Public Health Information Coalition, which does not include all practitioners of public relations within the field of public health. Results from this small a sample are not generalizable to the larger population. More work should have been done during the collection phase of the study to gather additional data, specifically an extended response time and more reminders to the participants.

Three primary areas may be identified as contributing to the limitations of this study: attrition rate, lack of some clearer operational definitions, and a reliance on numbers-gathering activities, with the last two most likely important factors contributing to the attrition rate. What was intended to provide flexibility was interpreted as being too detailed or simply confusing to the respondents. The dearth of academically trained communicators completing the survey may also explain some of the confusion with terminology used in the survey and the frustration with the questions asking for counts of activities.

Attrition rate

There were several issues regarding the survey distribution and data collection that likely contributed to the high attrition in responses. First, the researcher failed to

recognize the level of reluctance to participate in the survey at the point where *counts* of activities were requested during the pre-test phase. Specifically the attrition began at Q11, when participants were asked to provide the number of media contacts made by their department each month during the time in question, April 2009 – March 2010, and continued through Q15. This block of questions, in addition to the media contacts, asked participants to provide the number of hits to their departmental website during that same time period. The other questions were focused on was this increase or decrease, and asked participants to estimate the amount of change due to H1N1 activities.

While this reluctance was noted during the pre-test, comments received were primarily related to the inability to proceed past these questions without answering. In response, a skip was added to the questions so that participants could move forward. Two comments were received that stated the participants did not have the information readily available. To account for that issue, the request for the numbers was included in the introductory email message, so that participants could gather the numbers prior to taking the survey. The researcher believed these issues were sufficiently addressed before the final survey was distributed. Additional testing and further changes were clearly warranted. While the *counting* aspect of public relations is standard, given that most of the respondents were not trained public relations professionals, the fact that they did not complete these questions and were even exasperated enough to leave the survey is not surprising.

Second, the researcher did not continue to solicit responses beyond a rather brief, defined period due to personal health issues. While that particular situation was unavoidable, it does serve as a reminder and forceful lesson that follow-up is essential in

research. An extended response period, at least one more reminder, and removal or re-tooling of survey questions 11-15 would have been a better approach.

Lack of some clearer operational definitions

A set of questions were designed to test Contingency Theory by asking respondents to reflect on the various publics with whom they interacted, select a single public, and describe the interaction in terms of advocacy and accommodation. The intent was to test the simplest concept of Contingency Theory: did the stance of public relations practitioners during the H1N1 response efforts *change*? While the results are helpful in describing these interactions, there are serious issues with the questions themselves. For this set of questions, both personal experience in public health and lack of experience in creating this type of research questionnaire combined to affect the overall quality of the information gathered. Inadequate operational definitions for what constituted the time frames noted – before, beginning, middle, end, and after the outbreak – yield unreliable results. The intent was to allow response flexibility for the participants, given that the wave of H1N1 infection peaked in different times for different regions and states. However, the lack of specificity in these questions brings reliability issues into question and – when coupled with low response rates – removes generalizability of the study.

Based on participant feedback on the survey, many of the respondents became confused and had difficulty completing this section of the survey. Despite the inclusion of operational definitions for *accommodation* and *advocacy*, several respondents noted difficulty understanding the concept and confusion about what a *stance* was. This may be directly related to the low number of respondents who have academic training in public relations or a related field of study.

The related comments include the following:

- I think you should have better defined ‘stance’ since it seems to be the real focus of the survey. The federal government spent far too much money on H1N1 communications without greatly impacting the outcome.
- I thought the accommodation versus advocacy questions were difficult to answer. I also would like to have seen local health departments listed specifically as a customer, like hospitals.
- The advocacy vs. accommodation questions were kind of odd. Hope that I answered them correctly.
- The wording of questions using accommodation vs. advocacy was confusing. It was difficult to understand what was being asked, even with the written definition to be used written at the top of the page.

The set of questions used to determine if a change in stance occurred were specifically related to each respondent’s *key public*. The following definitions were provided to aid respondents in answering the questions:

PURE ACCOMMODATION: The total acceptance of the terms, ideas, and positions of the other side in a conflict situation.

PURE ADVOCACY: The insistence on the other side’s total acceptance of the client’s (or department’s) terms, ideas, and positions.

Given those definitions, respondents were given a Likert scale of 1-7, with one being *pure accommodation* and seven being *pure advocacy* to indicate their overall stance toward the key public, whether their stance changed, and further to rate the stance on that same scale at the beginning, middle, and end of the defined period. The intent in

using *beginning*, *middle*, and *end* was to account for the fluidity of the H1N1 response efforts across the country rather than identifying an arbitrary set of data points that may or may not have been accurate for each area. As the outbreak traveled across the nation, case rates peaked at different times in different regions and states, sometimes even in different areas within states. In retrospect, this was not a good approach, as there is no standard by which to compare responses.

Reliance on precise number gathering

One of the basic tenets of public relations planning is to set clear, measurable, and time-limited objectives (Guth & Marsh, 2012; Hayes, Hendrix, & Kumar, 2013). As such, questions counting hits to websites and media contacts would be considered a standard practice of public relations. However, According to Weaver, Lariscy, Avery, and, Sohn, as cited in Avery and Lariscy (2011), “PIOs estimated three face-to-face and telephone contacts with reporters in an average week, many even having one to three lunches with reporters each week” and documenting that journalists contacted their local health department PIOs an average of 29 times a month (p. 694). Again, at this point in the survey, more participants dropped out, with several stating, in essence, that they had both more important and too much work to do to spend their time tracking media contacts and recording hits to their web sites. In retrospect, rather than asking respondents to enter the actual number, a range of numbers for both questions would have been a better option, and may have kept a higher percentage of respondents engaged through the entire study.

Future Research

Certainly additional studies to test the role Contingency Theory plays in describing public relations in public health are warranted. Though this study has serious issues, it also shows some promise in that the respondents did identify a need for flexibility in their role as health communicators. A study that operationalizes definitions more clearly with examples and is organized within the context of a frame (H1N1 response efforts) may provide a more accurate depiction of public relations activities. Additionally, using a clearly identified and shared public may be an effective way of testing Contingency Theory between and among public health departments. The difficulties encountered in this study in testing Contingency Theory may also indicate just how difficult it is to look at public health communications outside of a specific message frame, such as which prevention message is more effective. When the study focuses on the *actions* and *reactions* of both the department and the publics, testing becomes much more complex in health care settings.

Testing theories in different fields of public health practice are important to theory development. This study should not be considered a sign that Contingency Theory is *not* an apt descriptor of the practice of public relations within public health, but instead that it is inconclusive and requires further study, especially in light of the value placed on the need for flexibility in stances toward publics. Contingency Theory, as a dynamic and flexible model, deserves further study not only within the field of public health but also within the field of public relations.

Perhaps the most promising result from the survey is in identifying areas in which further study could be useful. The basic description of public health departments and the

people who work in them is a good, basic foundation on which to build. Specific areas that deserve attention are the relative values of education, the types of education, and training for public relations professionals in public health; studies to compare and contrast the use of social media in public health communication efforts; and to further explore the value of media relations in public health.

Education, fields of study, and training

The lack of trained public relations professionals working in the public health field is one area of interest. Several respondents noted in their comments that gaining respect from medical personnel within the realm of public health without academic training in a medical field is difficult. A larger survey to gain a better understanding of what specific education and training exists within the ranks of public health communicators would be a good first step. Are they public relations personnel turned public health practitioners? Or are they medical or public health personnel turned into communicators? Replicating that part of the study that deals strictly with demographics and augmenting it with one-on-one interviews that focus on the identified internal variables of Contingency Theory could advance the work toward an identified need to link stances to strategies and tactics (Cameron et al., 2008; Wilcox, Cameron, Reber, & Shin, 2013).

This avenue of questions could also lead to a study with upper-level public health administrators, also using interviews, to solicit any inherent bias either for or against the use of public relations in public health. Given that “public relations has a PR problem” (Guth & Marsh, 2012, p. 2), it is reasonable to hypothesize that upper-level administrators making the decisions regarding the organization and duties of state, local,

and federal public health agencies as well as private businesses and organizations are unaware of the special skill set that trained public relations professionals could bring to the field. There may also exist a conflict within the field of public health regarding the use of terminology. The term Health Communication, for instance, is all-encompassing to some, large enough to subsume public relations functions. To others, it is more narrow and focused on health education activities rather than those of a public relations professional. Again, a study focused on the internal variables, specifically organization characteristics and characteristics of the dominant coalition, would be helpful beyond the field of public relations, in establishing skills, strategies, and tactics useful in the growing field of health communications.

Within the field of public health lie numerous fields of study that include medicine and health care but also include social work, environmental health, and regulatory and record-keeping responsibilities, such as birth and death certificates. Each of these fields of study has its own unique set of issues relating to communication. Guidotti (2013) created a review of communication models in environmental health that addresses many of the same issues addressed in this dissertation. Specifically, he addresses how environmental health – a part of a “big picture” view of public health – uses communication models from other fields, including risk communication, crisis communication, corporate communication, environmental health education, and social marketing. His discussion of corporate communication is most closely linked to what we would term public relations in that it involves “both internal communication among employees and external communication with stakeholders and the public” (p. 1171). In using public relations terminology, he sees the value for and role of such a model within

public health. However, in discussing the weaknesses of the model he notes the many “compromises and tradeoffs” that can make messages seem “heavily scripted, condescending, and phony. Because of this conundrum, corporate communications can be risky and can easily backfire” (p. 1171). In the end, he sees the value of corporate communications for reputational defense rather than ongoing management of relationships with stakeholders and publics.

In a 2014 commentary for the *Journal of Science Communication*, Carver addressed the idea that most science communication is, in fact, public relations. She states that the activities practiced in communication and PR departments at research institutes – focusing on the value of news releases – are vital to the dissemination of information to the media and the public. “The most important tool for PR work is the press release. Indeed it is also the most commonly used tool in institutional science communication. It is therefore through the press release that both PR and science communication inevitably become entwined” (p. C01).

The challenge in future studies will be to show the value of public relations strategies and tactics *beyond* the basic press release in improving and enhancing health communication efforts. Public health is embracing the concept of interdisciplinary study. Recent work at the University of South Carolina combined clinical and population health education activities (Addy, Browne, Blake, & Bailey, 2015) while the University of Iowa is focusing its efforts in IPE, or interprofessional education, to prepare students for team-based health care delivery in the wake of the changes to the nation’s health care system with the Affordable Care Act (Uden-Holman, Curry, Benz, & Aquilino, 2015). Further study on the value of including public relations professionals as part of the health care

team of the future would help pave the way for the integration of the fields of public relations and public health.

Social media usage in public health communication

As the methods and channels of communication rapidly evolve and change, so must the strategies and tactics of public relations practitioners. Academia must also seek to expand the growth of communication theories to encompass these new technologies as a part of the mass media communication process. Avery et al. (2010) conducted a survey of public relations practitioners in public health departments to study the diffusion of social media in the field, focusing on variances in community population sizes. While participants in that study did not identify a heavy reliance on social media – as indicated in this study as well – since that time, social media has ballooned in both use and options, and an additional study to examine the use of social media in a more current health crisis could combine the information from both to serve as a baseline. The identification of participants prior to the survey in the Avery et al. (2010) study proved much more effective as a methodology, as did the hosting of the web-based survey through an established research center. The focus on population size of the community could be expanded to the organizational structure reflected in this study – federal, state, and local – to determine if internal variables of an organization (discussed previously) contribute to the use of social media. The study could also serve to link stance to strategies and tactics.

A 2014 study of hospital use of social media may provide a framework for similar studies in public health, focusing on state and local public health departments. In their study Richter, Muhlestein, and Wilks looked at social media use in 471 hospitals in America to determine if they were using social media, how they were using it, and

delving specifically into their use of Facebook. An interesting tidbit from the study states that the reason many hospitals do not use social media more often is a fear of the cost of implementation. The authors note that one person dedicated to social media can be all that is needed (p.457). While this may be a small barrier to hospital staffing, in light of the fact that most public relations departments in state and local public health departments are one or two-person entities, committing a person to create and maintain a robust social media program is beyond the scope of most departments.

Media relations in public health

One of the primary functions of public relations is media relations. Public relations professionals and journalists have a long-standing, love/hate relationship, each relying on the other as part of their work. PR professionals rely on journalists to provide the objective voice, the uncontrolled media that validates their messages. Journalists rely on PR professionals to find out what's going on, to get the latest information quickly from whatever field they are covering. PR professionals learn – as part of their academic education – how to manage the relationship with media. But, as this study shows, many of the people serving public relations roles have no academic or other training in public relations skills. Further study to illustrate the value a robust media relations program would fill a needed gap in understanding the value of using public relations professionals as part of the public health team.

Friedman, Tanner, and Rose (2013) conducted a series of interviews with health journalists to gauge their “perceptions of their target communities, the content and delivery of their health-related stories, and the current state of health journalism” (p. 378). Their study revealed that one of the primary concerns of health journalists is

reporting stories using culturally competent language and at a reading level that makes them accessible to their target audience. While the study found that the journalists “felt that current collaborations between health journalists and public health practitioners were *good*” some still cited it as lacking (p. 382). Journalists also reported personal difficulties in understanding public health information when presented to them, stating “many people with public health degrees become epidemiology-focused and not media-focused which makes it difficult to translate the data” (p. 383). Additional studies such as these would help illustrate the value of media relations and trained public relations professionals.

A review of literature available in academic, peer-reviewed journals available through academic databases reveals a limited but growing number of published studies in the last five years conducted within the United States as they relate to public relations, public health, and Contingency Theory. Studies in public health communication still tend toward specific message reception rather than overall approaches and the use of public relations strategies and tactics to create and disseminate those messages. The emerging fields of health communication and strategic communication can also be included to further expand the boundaries of research in public relations in public health

APPENDIX A

INSTITUTIONAL REVIEW BOARD NOTICE OF COMMITTEE ACTION



THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

118 College Drive #5147
 Hattiesburg, MS 39406-0001
 Tel: 601.266.6820
 Fax: 601.266.5509
 www.usm.edu/irb

**HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE
 NOTICE OF COMMITTEE ACTION**

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **10072608**

PROJECT TITLE: **Public Relations in Government-Based Public Health: Testing Contingency Theory During H1N1 Response 2009-2010**

PROPOSED PROJECT DATES: **06/01/2010 to 04/01/2011**

PROJECT TYPE: **Dissertation**

PRINCIPAL INVESTIGATORS: **Terri Sasser**

COLLEGE/DIVISION: **College Arts & Letters**

DEPARTMENT: **Mass Communication & Journalism**

FUNDING AGENCY: **N/A**

HSPRC COMMITTEE ACTION: **Expedited Review Approval**

PERIOD OF APPROVAL: **10/18/2010 to 10/17/2011**

Lawrence A. Hosman

 Lawrence A. Hosman, Ph.D.
 HSPRC Chair

10-20-2010

 Date

APPENDIX B

SURVEY INSTRUMENT

Public Relations in Public Health Survey Questions

The purpose of this survey is to describe the practice of public relations in government-based health care, focusing on state and local public health agencies. You were selected to participate in this survey because of your role as a public relations practitioner, health communicator, or other public health communication activity as identified through your membership in the National Public Health Information Coalition. Only those members self-identifying as employed in a government agency were selected for this survey.

Please answer the following questions as accurately as possible. The results will be used in a study to inform the practice of public relations in public health being conducted as part of a doctoral dissertation work at The University of Southern Mississippi. Your answers are anonymous and cannot be tied back to you as an individual. Your participation in this survey is completely voluntary; no incentives are provided for participation. You may withdraw from this survey at any time throughout the process. If you have any concerns or questions regarding the purpose of the survey or about individual questions within the survey, please contact the researcher, Terri Sasser, at 601-260-2495 or tl_sasser@yahoo.com.

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, and (601) 266-6820.

1. Which of the following best describes the organization in which you work?
 - a. State or territorial health department
 - b. Local (city or county) health department
 - c. Regional health department
 - d. Federal health agency
 - e. Other (please specify)
2. How many years have you worked
 - a. In public health?
 - b. As a public relations professional?
3. Which of the following best describes your role in office/department in which you work?

- a. Senior manager
 - b. Mid-level manager
 - c. Technician (writer, graphic artist, media relations, etc.)
4. How many people, including yourself, work in public relations in your organization?
5. What is the annual budget, including salaries for your public relations department?
 - a. Less than \$100,000
 - b. \$100,001 to \$250,000
 - c. \$250,001 to \$500,000
 - d. \$500,000 to \$750,000
 - e. \$750,001 to \$1,000,000
 - f. Greater than \$1,000,000
6. Which of the following is the preferred *label or name* used by your department?
 - a. Public Relations
 - b. Communications
 - c. Health Communication
 - d. Other
7. Rank the following public relations activities in which your department engages, ranking the most common practice first (1) and the least common practice last (8).
 - a. Media relations
 - b. Crisis management
 - c. Employee communications
 - d. Online communications
 - e. Special events
 - f. Community relations
 - g. Reputation management
 - h. Other
8. Select all of the following channels your department *currently* uses to communicate information to the public.
 - a. Meetings and gatherings
 - b. Television
 - c. Radio
 - d. Newspapers
 - e. Magazines
 - f. Poster/Flyers/brochures
 - g. Emails
 - h. Agency web page
 - i. Facebook
 - j. Twitter

- k. YouTube
 - l. Blogs
 - m. Other (please specify)
9. Of the media channels selected, which one would you say is *most effective* in communicating health information to the public?
- a. Meetings and gatherings
 - b. Television
 - c. Radio
 - d. Newspapers
 - e. Magazines
 - f. Poster/Flyers/brochures
 - g. Agency web page
 - h. Emails
 - i. Facebook
 - j. Twitter
 - k. YouTube
 - l. Blogs
 - m. Other (please specify)
10. Which of the channels does your department use most often in disseminating health information to the public?
- a. Meetings and gatherings
 - b. Television
 - c. Radio
 - d. Newspapers
 - e. Magazines
 - f. Poster/Flyers/brochures
 - g. Emails
 - h. Agency web page
 - i. Facebook
 - j. Twitter
 - k. YouTube
 - l. Blogs
 - m. Other (please specify)

Please answer the following block of questions based on your department's communication efforts during the H1N1 crisis from April 1, 2009 through March 31, 2010. This constitutes one year from the initial identification of H1N1 and the WHO

declaration of a pandemic. If exact numbers are unavailable, please answer using the best information available.

11. From April 1, 2009, through March 31, 2010, approximately how many contacts did your department staff make each month with mass media outlets? Contacts would include interviews, press releases, information retrieval, etc.
 - a. April 2009
 - b. May 2009
 - c. June 2009
 - d. July 2009
 - e. August 2009
 - f. September 2009
 - g. October 2009
 - h. November 2009
 - i. December 2009
 - j. January 2010
 - k. February 2010
 - l. March 2010
12. During the specified time period, did your department maintain a website for your agency?
 - a. Yes
 - b. No
13. If yes, how many hits did your website receive each month during this time?
 - a. April 2009
 - b. May 2009
 - c. June 2009
 - d. July 2009
 - e. August 2009
 - f. September 2009
 - g. October 2009
 - h. November 2009
 - i. December 2009
 - j. January 2010
 - k. February 2010
 - l. March 2010
14. Was the average number of hits different from the previous year?
 - a. Yes, it was in increase
 - b. Yes, it was a decrease
 - c. No, it remained about the same

15. If the answer is “yes, it was an increase,” what percentage of that increase can you attribute to H1N1?
- Less than 10%
 - 11% to 20%
 - 21% to 30%
 - 31% to 40%
 - 41% to 50%
 - Greater than 50%
16. On a scale of 1 to 3, with “1” being daily, “2” being once/week, and “3” being once/month, rate the following media channels that your department used to disseminate information on H1N1. If the media channel was not used, please rate as “NA.”
- Meetings and press conferences
 - Television
 - Radio
 - Newspapers
 - Magazines
 - Poster/Flyers/brochures
 - Email
 - Agency web page
 - Facebook
 - YouTube
 - Blogs
 - Other (please specify)
17. What were the key messages your department chose to disseminate regarding H1N1 during this specified time period?
18. Of the following publics, please select and rank all of those with whom you interacted during your department’s H1N1 communication efforts. Please rank them from 1 to 11, with “1” being the group you considered most important and “11” being the group you considered least important.
- Local mass media outlets
 - State level mass media outlets
 - National level mass media outlets
 - Parents of school children
 - Senior citizens
 - School officials (includes public, private, and post-secondary)
 - Hospitals
 - Health care providers (physicians, nurse practitioners, nurses, etc.) in private practice

- i. Pharmacies
- j. Federal government (CDC, etc.)
- k. State and/or local policy makers (governors, state legislators, mayors, etc.)
- l. Other

Please use the following definitions when considering your responses for advocacy vs. accommodation questions.

Pure Advocacy: *The total acceptance of the terms, ideas, and positions of the other side in a conflict situation.*

Pure Accommodation: *The insistence of the other side's total acceptance of the client's (or department's) terms, ideas, and positions.*

19. On a scale of 1 to 7, with "1" being pure accommodation and "7" being pure advocacy, what would you say most closely describes your overall stance toward the public identifies as your most important (number 1) above?

Stance 1 2 3 4 5 6 7

20. For this same key public – which ranked as most important – would you say that your stance changed between accommodation and advocacy during H1N1 communication efforts?

- a. Very often
- b. Occasionally
- c. Rarely
- d. Never
- e. Unsure
- f. No, it did not change

21. On a scale of 1 to 7, what was your stance toward the key public in the **beginning** of H1N1 communication efforts?

Stance 1 2 3 4 5 6 7

22. On a scale of 1 to 7, what was your stance toward the key public in the **middle** of H1N1 communication efforts?

Stance 1 2 3 4 5 6 7

23. On a scale of 1 to 7, what was your stance toward the key public in the **end** of H1N1 communication efforts?

Stance 1 2 3 4 5 6 7

24. On a scale of 1 to 7, which stance do you believe was most effective in your overall relationship with this key public during H1N1 communication efforts?

Stance 1 2 3 4 5 6 7

25. Please check any factors below that contributed to a change in your stance toward this public.

- a. Increase or decrease in budget

- b. Increase or decrease in staff
- c. Situation maturation (for instance, the situation itself changed over time in terms of response efforts)
- d. Changes to the characteristics or nature of the public
- e. Time constraints
- f. Changes based on agency leadership directives
- g. Stance did not change
- h. Other: _____

26. Which of the following factors was most associated with or influential to a change in stance toward this key public?

- a. External threats (i.e. legal or media institutions, federal agencies)
- b. Industry Environment (i.e. influence from other health departments)
- c. Political, social and cultural environment (external groups)
- d. External publics (i.e. parents, schools, business community)
- e. Issue under question (i.e. the changing nature of H1N1 information as the epidemic progressed)
- f. Your organization's characteristics (i.e. local vs. state agency, size, mission)
- g. Public relations department's characteristics (i.e. education, experience, size, budget)
- h. Characteristics of top management (i.e. management style, perceived value of PR, etc.)
- i. Internal threats (i.e. budget or funding issues, "turf" wars, etc.)
- j. Individual characteristics (i.e. your experience, education, etc.)
- k. Relationship characteristics (with the public or publics in question as well as within the agency)
- l. Dominant coalition (support from state or local health officer, epidemiology, etc. and PR department inclusion in decision-making)

27. In selecting an initial stance toward this key public during H1N1 communication efforts, which of the following was the most influential factor?

- a. The characteristics of the public itself, including any existing relationship
- b. Situation maturation
- c. Standard department procedures or organization policy
- d. Other (please specify)

28. On a scale of 1 to 7, with 1 being no flexibility at all and 7 being total flexibility, how much flexibility did your department have in altering your stance toward any given public?

Opportunity for change 1 2 3 4 5 6 7

29. On a scale of 1 to 7, with 1 being not important at all and 7 being extremely important, how important do you believe flexibility in stance was in working with any given public during H1N1 communication efforts?
- Opportunity for change 1 2 3 4 5 6 7
30. If your stance toward ANY of your publics did NOT change during the H1N1 communication efforts, please briefly explain why that was the case.

Please answer the following demographic questions to aid in describing the public health public relations/communications workforce. Your responses are completely anonymous and will not be tied back to you in any way.

31. What is your sex?
- Male
 - Female
32. What is your age range?
- Less than 30
 - 30-39
 - 40-49
 - 50-59
 - 60 or higher
33. Which of the following most closely describes your race or ethnicity?
- African-American
 - Asian
 - Hispanic/Latino
 - White
 - Mixed race
 - Other (please specify)
34. What is the highest degree you earned?
- High school
 - Some college
 - Bachelor's degree
 - Master's degree
 - Doctoral degree
 - Other (please specify)
35. In what area or field did you earn your highest degree?
- Journalism
 - Advertising
 - Public relations
 - Business or marketing
 - Public or community health
 - Other (please specify)

Please answer the following open-ended questions briefly based on your public relations work within the field of public health.

36. Based on the experience gained during the H1N1 situation, what were the most important issues with which you had to handle?
37. Based on the experience gained during the H1N1 situation, what was the most important lesson you learned in dealing with publics?
38. Do you believe the role of public relations is different in public health than in other business areas or fields? Why or why not?
39. Please provide any comments regarding this survey or the information solicited. Your feedback will be used to plan future research efforts into the practice of public relations in the field of public health.

Thank you for taking the time to complete this survey.

REFERENCES

- Addy, C.L., Browne, T., Blake, E.W., & Bailey, J. (2015). Enhancing interprofessional education: Integrating public health and social work perspectives. *American Journal of Public Health, (105)* S1, S106-S108.
- Association of State and Territorial Health Officials. (2007). *General information*. Retrieved from www.astho.org.
- Atkin, C., & Wallack, L., ed. (1990). *Mass communication and public health: Complexities and conflicts*. Newbury Park, CA: Sage Publications.
- Avery E. (2010). Contextual and audience moderators of channel selection and message reception of public health information in routine and crisis situations. *Journal of Public Relations Research, 22*(4), 378-403. doi: 10.1080/106272261003801404
- Avery, E. J., & Lariscy, R.W. (2011). Public information officers' perceived control in building local public health agendas and the impact of community size. *Health Communication, 26*, 691-700. doi: 10.1080/10410236.2011.563351.
- Avery, E., Lariscy, R., Amador, E., Ickowitz, T., Primm, C., & Taylor, A. (2010). Diffusion of social media among public relations practitioners in health departments across various community population sizes. *Journal of Public Relations Research, 22*(3), 336-358. doi: 10.1080/106272261003614427
- Baran, S.J., & Davis, D.K. (2006). *Mass communication theory: Foundations, ferment, and future*. Belmont, CA: Thomson Wadsworth.
- Bardhan, N.R. (2002). Accounts from the field: A public relations perspective on global AIDS/HIV. *Journal of Health Communication, 7*, 221-244.

- Beck, C.S., Benitez, J.L., Edwards, A., Olson, A., Pai, A., & Torres, M.B. (2004). Enacting “health communication”: The field of health communication as constructed through publication in scholarly journals. *Health Communication, 16* (4), 473-492.
- Berger, A.A. (2000). *Media and communication research methods: An introduction to qualitative and quantitative approaches*. Thousand Oaks, CA: Sage Publications, Inc.
- Berger B., & Reber, B. (2006). *Gaining influence in public relations: The role of resistance in practice*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Berndhardt, J.M. (2004). Communication at the core of effective public health. *American Journal of Public Health, 94*(12), 2051-2052.
- Bobbitt, R., & Sullivan, R. (2005). *Developing the public relations campaign*. Boston, MA: Pearson Education, Inc.
- Bryant, J., & Zillman, D. (Eds.) (2002). *Media effects: Advances in theory and research*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Cameron, G.T., Pang, A., & Yin, Y. (2008). Contingency theory: Strategic management of conflict in public relations. In T.L. Hansen-Horne & B.D. Neff (Eds.), *Public relations: From theory to practice* (pp. 134-157). Boston, MA: Pearson Education, Inc.
- Cameron, G., Sallot, L., & Lariscy, R. (1996). Developing standards of professional performance in public relations. *Public Relations Review, 22*(1), 43-46.
- Cameron, G.T., Wilcox, D.W., Reber, B.H., & Shin, J.H. (2008). *Public relations today: Managing competition and conflict*. Boston, MA: Pearson Education, Inc.

- Cancel, A.E., Cameron, G.T., Sallot, L.M., & Mitrook, M.A. (1997). It depends: A contingency theory of accommodation in public relations. *Journal of Public Relations Research*, 9(1), 31-63.
- Cancel, A.E., Mitrook, M.A., & Cameron, G.T. (1999). Testing the contingency theory of accommodation in public relations. *Public Relations Review*, 25(2), 171-197.
- Carver, R.B. (2014). Comment. Public communication from research institutes: is it science communication or public relations? *Journal of Science Communication*, 03, p. C01-C03.
- Centers for Disease Control and Prevention (1999). *Healthy People 2010*. Retrieved from <http://www.healthypeople.gov/document/HTML/Volume1/11HealthCom.htm>
- Centers for Disease Control and Prevention. (2010). *Healthy People 2020*. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/health-communication-and-health-information-technology>
- Centers for Disease Control and Prevention. (2010). *The 2009 H1N1 Pandemic: Summary Highlights, April 2009-April 2010*. Retrieved from <http://www.cdc.gov/h1n1flu/cdcresponse.htm>
- Cho, S. (2006). The power of public relations in media relations: A national survey of health PR practitioners. *Journalism & Mass Communication Quarterly*, 83(3), 563-580.
- Council on Linkages Between Academia and Public Health Practice. (2014). *Core Competencies for Public Health Professionals*. Retrieved from http://www.phf.org/resourcestools/Documents/Core_Competencies_for_Public_Health_Professionals_2014June.pdf

- Currie, D. (2010). Nation in brief: Court rules against vaccine-autism link. *The Nation's Health*, 40 (4), 8.
- Dillman, D.A., Smyth, J.D., & Christian, L.M. (2009). *Internet, mail and mixed-mode surveys: The tailored design method*. Hoboken, NJ: John Wiley & Sons, Inc.
- Dozier, D., & Broom, G. (1995). Evolution of the manager role in public relations practice. *Journal of Public Relations Research*, 7(1) 3-26.
- Edgett, R. (2002). Toward an ethical framework for advocacy in public relations. *Journal of Public Relations Research*, 14(1), 1-26.
- Eyrich, N., Padman, M., & Sweetser, K. (2008). PR practitioners' use of social media tools and communication technology. *Public Relations Review*, (34), 412-414.
- Fearn-Banks, K. (2001). Crisis Communication: A review of some best practices. In R.L. Heath and G. Vasquez, Jr., (eds.), *Handbook of public relations* (pp. 479-486). Thousand Oaks, CA: Sage Publications.
- Friedman, D.B., Tanner, A., & Rose, I.D. (2014) Health journalists' perceptions of their communities and implications for the delivery of health information in the news. *Journal of Community Health*, 39, 378-385. doi: 10.1007/s10900-013-9744-x
- Grunig, J.E. (1984). Organizations, environments, and models of public relations. *Public Relations Research & Education*, 1(1), 6-29.
- Grunig, J.E. (2002). *Excellence in public relations and communications management*. Hillsdale, NJ: Lawrence Erlbaum
- Grunig, J.E., & Huang, Y.H. (2000). From organizational effectiveness to relationship indicators: Antecedents of relationships, public relations strategies and relationships outcomes. In J.A. Ledingham & S.D. Brunig (eds.), *Public relations*

as relationship management: A relational approach to the study and practice of public relations. Mahwah, NJ: Lawrence Erlbaum Associates, 55-69.

Grunig, J.E., & Hunt, T. (1984). *Managing public relations.* New York: Holt, Rinehart, Winston.

Guth, D.W., & Marsh, C. (2012). *Public relations: A values-driven approach.* Boston, MA: Pearson Education, Inc.

Guidoti, T.L. (2013). Communication models in environmental health. *Journal of Health Communication, 18*, 1166-1179. doi: 10.1080/10810730.2013.768725

Hansen, J.C., & Carpentier, J.P. (2009). Preparing staff for the swine flu pandemic: Information and communication channels. *Journal of Communication in Healthcare, 2*(4), 316-327.

Institute of Medicine. (1988). *The future of public health.* Washington, D.C.: National Academy Press.

Institute of Medicine. (2002). *Speaking of health: Assessing health communication strategies for diverse populations.* Washington, D.C.: National Academies Press.

Institute of Medicine. (2003). *The future of the public's health in the 21st century.* Washington, D.C.: National Academies Press.

Kiwanuka-Tondo, J., & Snyder, L.B. (2002). The influence of organizational characteristics and campaign design elements on communication campaign quality: Evidence from 91 Ugandan AIDS campaigns. *Journal of Health Communication, 7*, 59-77. doi: 1081-0730/02

- Leitch, S., & Neilson, D. (2001). Bringing publics into public relations: New Theoretical frameworks for practice. In R.L. Health and G. Vasquez, Jr. (eds), *Handbook of public relations* (pp. 127-138) Thousand Oaks, CA: Sage Publications.
- Leichty, G. (1997). The limits of collaboration. *Public Relations Review*, 23(1), 47-56.
- Lin, C., & Hullman, G. (2005). Tobacco-prevention messages online: Social marketing via the web. *Health Communication*, 18(2), 177-193.
- McKie, D., & Toledano, M (2008). Dangerous liaison or perfect match? Public relations and social marketing. *Public Relations Review*, 34, 318-24.
- Miczo, N., Danhour, E., Lester, K.E., & Bryant, J. (2013). Memorable messages and the H1N1 flu virus. *Western Journal of Communications*, 77(5), 625-644. DOI: 10.1080/10570314.2013.776099
- Mississippi State Department of Health. (2015). *General information*. Retrieved from <http://www.msdh.state.ms.us>
- National Association of County and City Health Officials. (2015). *General information*. Retrieved from <http://www.naccho.org>
- National Public Health Information Coalition. (2009). *General information*. Retrieved from <https://www.nphic.org>
- National Research Council. (1989). *Improving risk communication*. Washington, D.C.: National Academy Press.
- Nazione, S., Pace, J.R., Russell, J., & Silk, K. (2013). A 10-year content analysis of original research articles published in *Journal of Health Communication* (2000-2009), 18, 223-240. doi: 10.1080/10810730.2012.688253

- Newsom, D., Turk, J.V., & Kruckeberg, D. (2013). *This is PR: The realities of public relations*. Boston, MA: Wadsworth Cengage Learning
- Park, H., & Reber, B.H. (2010). Using public relations to promote health: A framing analysis of public relations strategies among health associations. *Journal of Health Communication, 15*, 39-54.
- Parvanta, C., Nelson, D.E., Parvanta, S.A., & Harner, R. N. (2011). *Essentials of public health communication*. Sudbury, MA: Jones & Bartlett Learning.
- Peterson, M., Chandlee, M., & Abraham, A. (2008). Cost-effectiveness analysis of a statewide media campaign to promote adolescent physical activity. *Health Promotion Practice (9)4*, 426-433.
- Phillips, D. (2008). The psychology of social media. *Journal of New Communications Research, 3*(1), 79-85.
- Prior-Miller, M. (1989). The four major social scientific theories and their value to the public relations researcher. In C.H. Botan & V. Hazelton, Jr. (eds.), *Public relations theory* (pp. 67-81). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Public Health Accreditation Board. (2015). www.phab.org
- Public Relations Society of America. (2000). *Public Relations Society of America Member Code of Ethics*. Retrieved from <http://www.prsa.org/AboutPRSA/Ethics/CodeEnglish/#.VNfByCm4mX0>
- Reber, B.H., & Cameron, G.T. (2003). Measuring contingencies: Using scales to measure public relations practitioner limits to accommodation. *Journalism & Mass Communication Quarterly, 80*(2), 431-446.

- Reber, B.H., Paek, H.J., & Lariscy, R.W. (2013). Race, digital and traditional media and public relations health campaigns. *Public Relations Journal*, 7(2), 128-156.
- Richter, J.P., Muhlestein, D.B., & Wilks, C.E.A. (2014). Social media: How hospitals use it, and opportunities for future use. *Journal of Healthcare Management*, 59(6), p. 447-460.
- Ristino, R.J. (2007). Communicating with external publics: Managing public opinion and behavior. *Health Marketing Quarterly*, 24(3/4), 55-80.
- Rudd, R.E., Comingsi, J.P., & Hyde, J.H. (2003). Leave no one behind: Improving health and risk communication through attention to literacy. *Journal of Health Communication*, 8, 104-115.
- Santibanez, S., Siegel, V., O'Sullivan, M., Lacson, R., & Jorstad, C. (2015). Health communications and community mobilization during an Ebola response: Partnerships with community and faith-based organizations. *Public Health Reports*, 130 (March-April), 128-133.
- Seeger, M.W., Sellnow, T.L., & Ulmer, R.R. (2003). *Communication and organizational crisis*. Westport, CT: Praeger Publishers.
- Shavelson, R.J. (1996). *Statistical reasoning for the behavioral sciences*. Needham Heights, MA: Allyn & Bacon.
- Shin, J.H., & Cameron, G.T. (2004). Conflict measurements: analysis of simultaneous inclusion in roles, values, independence, attitudes, and dyadic adjustment. *Public Relations Review*, 30(8), 401-410.

- Shin, J.H., & Cameron, G.T. (2005). Different sides of the same coin: Mixed views of public relations practitioners and journalists for strategic conflict management. *Journalism & Mass Communication Quarterly*, 82(2), 318-338.
- Shin, J.H., Cameron, G.T., & Cropp, F. (2006). Occam's Razor in the contingency theory: A national survey on 86 contingent variables. *Public Relations Review*, 32(3), 282-286.
- Shin, J.H., Cheng, I.H., Jin, Y., & Cameron, G.T. (2005). Going head to head: Content analysis of high profile conflicts as played out in the press. *Public Relations Review*, 31, 399-406.
- Shropshire, K.O., Hawdon, J.E., & Witte, J.C. (2009). Web survey design: Balancing measurement, response, and topical interest. *Sociological Methods Research*, 37, 344-370.
- Substance Abuse & Mental Health Services Administration. (2001). *Social marketing and health communications*. Retrieved from <http://p.2001.health.org/THEORY/communications.htm>
- Tanner, A. (2004). Agenda building, source selection, and health news at local TV stations: A nationwide survey of local television health reporters. *Science Communication*, 25(6), 350-363.
- Tanner, A. (2004). Communicating health information and making the news: Health reporters reveal the PR tactics that work. *Public Relations Quarterly*, 49(1), 24-27.
- Toth, E., Serini, S. Wright, D., & Emig, A. (1998). Trends in public relations roles: 1990-1995. *Public Relations Review*, 24(2), 145-163.

- Uden-Holman, T.M., Curry, S.J., Benz, L., & Aquilino, M.L. (2015). Public health as a catalyst for interprofessional education on a health sciences campus. *American Journal of Public Health, 105*(S1), p. S104-S105.
- U. S. Census Bureau. (2015). *Population Projects*.
<http://www.census.gov/population/projections/data/national/2014/summarytables.html>
- U. S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Workforce, National Center for Workforce Analysis. (2015). *Sex, race, and ethnic diversity of U.S. health occupations (2010-2012)*. Retrieved from
<http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/diversityushealthoccupations.pdf>
- Vanderford, M.L., Nastoff, T., Telfer, J.L., & Bono, S.E. (2007). Emergency communication challenges in response to Hurricane Katrina: Lessons from the Centers for Disease Control and Prevention. *Journal of Applied Communication Research, 35*(1), 9-25.
- Vasquez, G.M. (1996). Public relations as negotiation: An issue development perspective. *Journal of Public Relations Research, 8*(1), 57-77.
- Vasquez, G.M., & Taylor, M (2000). Public relations: An emerging social science enters the new millennium. In M.E. Gudykunst (ed.), *Communication yearbook*. Hillsdale, NJ: Lawrence Erlbaum Associates, 3-15.

- Vaughan, E., & Tinker, T. (2009). Effective health risk communication about pandemic influenza for vulnerable populations. *American Journal of Public Health, 99*(S2), S324-S332.
- Venette, S.J., Veil, S. R., & Sellnow, T. L. (2005) Essential communication resources for combating bioterrorism: Some practical and generalizable recommendations. *Communication Research Reports, 22*(1), 29-37.
- Wallack, L., Dorfman, L. Jernigan, D., & Themba, M. (1993). *Media advocacy and public health*. Newbury Park, CA: Sage Publications.
- White, J. M., & Wingenbach, G. (2013). Potential barriers to mass media coverage of health issues: Differences between public information officers and journalists regarding beliefs central to professional behaviors. *Journal of Public Relations Research, 25*, 123-140. doi: 10.1080/1062726X.2013.758582
- Wilcox, D. L., Cameron, G.T., Reber, B.H., & Shin, J.H. (2013). *Think public relations*. Boston, MA: Pearson.
- Zeza, M., & Nacinovich, M. (2011). Confounding constituents: Complicated health care communications and the Affordable Care Act in the United States. *Journal of Communication in Health Care, 4*(3), 152-156. DOI: 10.1179/1753807611Y.0000000011