

EXAMINING ORGANIZATIONAL LEGITIMACY: AN EMPIRICAL ANALYSIS OF
ORGANIZATIONAL LEGITIMACY, ISSUE LEGITIMACY, LEGITIMACY GAPS, AND
FACTORS AFFECTING THE LEGITIMACY REGARDING THE ISSUE OF DIRECT-TO-
CONSUMER ADVERTISING IN THE PHARMACEUTICAL INDUSTRY

by

JEE YOUNG CHUNG

A DISSERTATION

Submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy in the College of Communication
and Information Sciences in the
Graduate School of The
University of Alabama

TUSCALOOSA, ALABAMA

2010

Copyright Jee Young Chung 2010
ALL RIGHTS RESERVED

ABSTRACT

The purpose of this dissertation is to explore the concepts of issue legitimacy and organizational legitimacy in an issue management context, providing empirical data when little has existed previously. To do so, this dissertation used two studies to explore the trend and features of issue legitimacy of DTC-ads, construction of organizational legitimacy and issue legitimacy, and effectiveness of issues management strategies on perceptions of organizational legitimacy and issue legitimacy.

More specifically, Study 1 investigates issue legitimacy of DTC-ads on societal level employing a content analysis. Study 2 develops the measurement of organizational legitimacy and issue legitimacy on the individual level through the use of a statewide survey among Alabama residents, and examines the effect of issues management strategies on organizational legitimacy, issue legitimacy and behavioral intentions toward an organization by employing a mixed design with one within-subjects factor (pre-post test) and 2 (CSR: use of CSR versus no use of CSR) \times 2 (Issue advocacy: use of advocacy framing versus no use of advocacy framing) \times 2 (Self-regulation: use of self-regulation versus no use of self-regulation) between-subject factors.

The findings from Study 1 present the trend of issue legitimacy of DTC-ads: moderate illegitimacy – illegitimation – increasing legitimation, and confirm the gap between issue legitimacy of DTC-ads in media coverage and organizational issue advocacy of the pharmaceutical industry. From the findings from Study 2, five measurement items for

organizational legitimacy and six measurement items for issue legitimacy are found to be reliable and valid. The findings from an experiment show that the uses of CSR activity, issue advocacy, and self-regulation in corporate messages have influences on organizational legitimacy. However, only the use of self-regulation had significant differences on both perceptions of issue legitimacy and organizational legitimacy.

DEDICATION

To my father, 정진길 (Jin-Gil Chung) and my mother, 김영의 (Young-Ui Kim).

LIST OF ABBREVIATIONS AND SYMBOLS

α	Cronbach's index of internal consistency
β	Standardized multiple regression coefficient
SD	Standard deviation
M	Mean: the sum of a set of measurements divided by the number of measurement in the set
df	Degree of freedom: number of values free to vary after certain
F	Fisher's F ratio: A ration of two variances
N	Size of a cell or group
p	Probability associated with the occurrence under the null hypothesis of a value as extreme as or more extreme than the observed value; significance level
r	Pearson product-moment correlation
R^2	Multiple correlation squared; measure of strength of relationship
η_p^2	Partial eta squared: measure of effect size
$<$	Less than
$>$	Higher than
$=$	Equal to
$\%$	Percentage
CFA	Confirmatory factor analysis

EFA	Exploratory factor analysis
B	Bonferroni value
χ^2	Chi-square, the classic goodness-of-fit index
RMSEA	Root mean square error of approximation
CFI	Comparative fit index
NFI	Normed fit index
<i>S.E.</i>	Standard error

ACKNOWLEDGMENTS

I am grateful for God's provision of joys, challenges, and grace for growth. I owe everlasting gratefulness to many people who pleasantly involved in helping me complete this dissertation.

I am sincerely grateful to my dissertation chair, Dr. Bruce K. Berger, who has served as an excellent advisor and provided me great support since I first chose this topic as my dissertation. I am thankful for his challenges in choosing this topic, and insightful guidance and suggestions since then.

Each committee member has been extremely supportive throughout the process of writing this dissertation. Dr. Kimberly Bissell, who has been my research advisor, worked on research projects with me, making it possible for me to conduct the "three studies" in this dissertation. Dr. Wilson Lowrey gave me thoughtful suggestions for this dissertation. His insights and challenges helped me to refine this dissertation. Dr. James Leeper, who has been my statistics professor, gave me extra help by giving me a special independent study opportunity. Without his assistance, I might not have any interest in statistics. Dr. Eyun-Jung Ki, who has been my research advisor and mentor, offered suggestions and guidance in conducting research that became the foundation of this dissertation during my first and second years in doctoral program. I would like to express my special thanks to her for wiping away my tears so many times throughout my doctoral years.

I would like to express thanks to Dr. Jamie DeCoster, who helped me distribute a statewide omnibus survey for this dissertation and gave me suggestions for statistical analyses. I also would like to thank professors, Dr. Doowhang Lee, Dr. Hyungkoo Khang, and Dr. Yoonjae Jeong, for their encouragement and suggestions throughout my doctoral years.

I deeply appreciate the extra help and encouragement from the University of Houston. Dr. Jaesub Lee, who was my thesis advisor, provided me great academic and emotional support. Dr. Robert Heath, who inspired me to write this dissertation, helped me to develop my background in public relations, and gives ‘fatherly’ supports.

I would also like to express my thanks to my peers and colleagues in the doctoral program for their encouragement and thoughtfulness. I would like to thank Andrew Dunn for his help and patience in reading drafts and give suggestions so many times. Thanks to Hyuk-soo, JK, Seon-kyoung, Jinae, and Dr. Do-hyun An for being my good friends.

My deepest gratitude goes to my parents, who made international calls every night for past five years, my sister, my brother, my brother-in-law, my nephew, and my best friend Young-sun. They have always been incredibly supportive in all of my endeavors.

Finally, I would like to express my deepest thanks to my BB. Without his support, encouragement, and love, I would have not finished the lonely journey of completing this dissertation.

CONTENTS

ABSTRACT.....	ii
DEDICATION.....	iii
LIST OF ABBREVIATIONS AND SYMBOLS	iv
ACKNOWLEDGMENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xii
1. INTRODUCTION	1
2. LITERATURE REVIEW	9
3. METHODOLOGY	45
4. RESULTS	67
5. DISCUSSION.....	98
REFERENCES	114
APPENDIX A.....	125
APPENDIX B.....	128
APPENDIX C	130
APPENDIX D.....	131
APPENDIX E	132
APPENDIX F.....	133
APPENDIX G.....	136

LIST OF TABLES

2-1 Comparison of institutional and resource dependence perspectives ...	15
2-2 Organizational legitimacy assessment studies.....	17
2-3 Types of Legitimacy.....	20
3-1 List of Frames.....	49
3-2 Initial measurement items for legitimacy.....	54
3-3 Micro-level organizational legitimacy and issue legitimacy measurement scales.....	55
3-4 The 8 Conditions for the 2 (CSR: use of CSR versus no use of CSR) × 2 (Issue advocacy: use of advocacy framing versus no use of advocacy framing) × 2 (Self-regulation: use of self-regulation versus no use of self-regulation).....	59
3-5 Conditions for Manipulation	60
4-1 Total number of news stories and news releases and average words counts	69
4-2 Trend of news coverage, news releases, and regulatory enforcement.....	70
4-3 The issue legitimacy, organizational issue advocacy, and the differences from 1997 to 2009	72
4-4 Sample demographic description.....	74
4-5 Descriptive statistics for organizational legitimacy and issue Legitimacy	77
4-6 Factor loadings for all measures.....	78
4-7 Factor loadings for organizational legitimacy.....	79

4-8 Factor loadings for issue legitimacy	79
4-9 Factor loadings of confirmatory factor analysis	81
4-10 Fit measures	83
4-11 Variables	84
4-12 Descriptive statistics, normality, and reliability for measurements...85	
4-13 Analysis of Factorial ANOVA Analysis	88
4-14 Bonferroni comparison analyses	91
4-15 Descriptive statistics: Correlations	92
4-16 Descriptive statistics: Correlations	93
4-17 Final measurement items for organizational legitimacy.....95	
4-18 Final measurement items for issue legitimacy	95
4-19 The results of hypotheses testing.....96	

LIST OF FIGURES

2-1 Examples of negative violations of expectations	32
2-2 Conceptual model of micro-level organizational legitimacy	44
2-3 Research model.....	44
3-1 Major steps to developing a summated rating scale	53
4-1 Trend of news coverage, news releases, and regulatory enforcement.....	70
4-2 Trend of frames in news coverage.....	71
4-3 Trend of frames in news releases	71
4-4 Gaps between issue legitimacy of DTC-ads and issue advocacy	73
4-5 Path Diagram for CFA.....	82
4-6 The mean difference between the use of issue advocacy by the use of self-regulation in the condition of no-use of CSR.....	89
4-7 The mean difference between the use of issue advocacy by the use of self-regulation in the condition of no-use of CSR.....	89
4-8 Organizational legitimacy as a mediator of issue legitimacy – behavioral intention	93

CHAPTER 1

INTRODUCTION

Legitimacy is a license to operate for an organization in a society. The underlying assumption is that “business is a social institution,” which needs a society’s acceptance for survival (Sethi, 1977). The topic of legitimacy has long been of interest to management scholars and public relations scholars because organizational legitimacy plays an important role in organizational existence. Despite its importance, legitimacy has been an ambiguous concept for an organization. Many scholars in management discipline have attempted to explain organizational legitimacy based on institutional theory (DiMaggio & Powell, 1998; Ruef & Scott, 1998; Zimmerman & Zeitz, 2002) and resource-dependence theory (Dowling & Pfeffer, 1975; Suchman, 1995). Based on institutional theory, some scholars have attempted to study organizational legitimacy in terms of regulative legitimacy by governments or professional associations (Reuf & Scott, 1998). The assessments examined regulatory enforcement or industrial accreditation as a source of legitimacy leading organizations to change operating strategies to meet the regulations or industrial standards. From resource-dependence theory, scholars have suggested legitimation strategies, arguing that the legitimation should be managed strategically utilizing communication tactics (Dowling & Pfeffer, 1975; Suchman, 1995).

This notion calls attention to public relations scholarship to examine organizational legitimacy (Boyd, 2000), leading scholars to attempt conceptualizing organizational legitimacy in a corporate communication context (Boyd, 2000; Bridges, 2004; Heath, 1997). The legitimacy gap, stemmed from resource-dependence theory, refers to the discrepancy between business

behaviors and actions and societal expectations (Deephouse & Carter, 2005; Dowling & Pfeffer, 1975; Sethi, 1977). The discrepancy should be managed strategically through communication (Dowling & Pfeffer, 1975; Elsbach, 1992; Sethi, 1977; Suchman, 1995). When the gap is wide, the organization's survival is threatened. Therefore, in public relations, managing the legitimacy gap has been one of important objectives in issues management (Bridge, 2004; Heath, 1997).

In the meantime, in the public relations discipline, the concept of issue legitimacy (actional legitimacy) has been introduced in organizational legitimacy studies (Boyd, 2000; Brummer, 1991; Coombs, 1992). While organizational legitimacy focuses on the existence of an organization as a whole, issue legitimacy deals with legitimating a specific issue or an organizational behavior. Issue legitimacy is critical to getting publics' support and involvement in an issue's resolution (Boyd, 2000; Coombs, 1992). Therefore, the explication of legitimacy into issue legitimacy allows public relations practitioners actively involved in the legitimation process to gain approval from publics via ongoing issue management efforts (Boyd, 2000; Coombs, 1992). However, the concepts of organizational legitimacy and issue legitimacy and the relationship between them have not been explored empirically in public relations.

Tornikosk and Newbert (2007) argued that the concept and construct of legitimacy held by the general public has been ambiguous and unobservable, and it has been difficult to examine empirically the organizational legitimacy from the general public. However, the public, as a source of organizational legitimacy, can be the key to explain the concept of legitimacy gap and the reason for public relations to engage in the legitimation process. Accordingly, the measurement of organizational legitimacy based on the general public has not been given careful attention by researchers, and even less effort has been devoted to measuring organizational legitimacy from public. The first purpose of this dissertation is to develop reliable and valid

measurements for organizational legitimacy and issue legitimacy in the issue management process.

At the same time, if the focus of legitimacy source changes from regulatory governments or industrial associations to the general public, the goal of legitimation strategies should also change from meeting the regulations to appropriate communication with the public. Throughout issues management, the threats to organizational legitimacy would be identified and strategically managed. More specifically, issues management strategies such as Corporate Social Responsibility (CSR here after) activities, issue advocacy, which informs appropriate information about an issue or organizational behaviors to the public, and self-regulation can ease the legitimacy gap. The second purpose of this dissertation is to examine the legitimacy gap and examine factors affecting organizational legitimacy, issue legitimacy, and legitimacy gap in the issues management process.

To examine an individual's perception on expectation/evaluation for organizational activities in terms of organizational legitimacy and discrepancy between expectation and evaluation, Expectation Violation Theory (EVT here after) offers a theoretical framework for the general public's evaluation on organizational legitimacy and legitimacy gap. As the legitimacy gap acknowledges the discrepancy between social norms and organizational behavior, EVT also acknowledges the gap between an individual's expectation towards non-verbal behavior and actual behavior and factors affecting the evaluation. Therefore, EVT gives insights to see the organizational legitimacy gap, issue legitimacy and legitimation strategies narrowing the gap.

The pharmaceutical industry is an appropriate area of study for this dissertation. It is subject to many laws and regulations regarding patenting, orphan drugs, or testing new drugs. It also has been accused of lobbying healthcare providers (Ismail, 2007) or urging clinical trial

doctors to report positive results for their interests (Bhandari et al., 2004). These issues result in controversies for the industry. In 2007, a nationwide survey conducted by a professional market research firm showed the general public's distrust in pharmaceutical companies (PricewaterhouseCoopers, 2007). The firm named the distrust as "perception gap" between the public's perception on the pharmaceutical industry and the industry's self-perception. The prevailing misconception and so-called "perception gap" need to be examined not only from practical perspective but also from theoretical perspective. Among many issues in the pharmaceutical industry, the issue of direct-to-consumer advertising (DTC-ads here after) has been controversial since its first appearance in the U.S. edition of *Reader's Digest* in 1981, and the issue has gained great attention since the Food and Drug Administration eased the regulation on DTC-ads in 1997 (Gellad & Lyles, 2007; Lexchin & Mintzes, 2002). Brownfield, Bernhardt, Phan, Williams, and Parker (2004) reported that based on average television viewing in the U.S., an adult is exposed to 100 minutes of DTC-ads for each minute they spend with their doctors each year. However, no research to date has attempted to examine an issue of DTC-ads in terms of organizational legitimacy in an issue management context. Therefore, this dissertation aims to examine the organizational legitimacy of the pharmaceutical industry, issue legitimacy of DTC-ads, legitimacy gap, and factors affecting organizational legitimacy of the pharmaceutical industry, and issue legitimacy of DTC-ads.

The following literature review chapter covers the concept of legitimacy, organizational legitimacy, and organizational legitimacy assessment studies, issues management literature, followed by conceptualizing organizational legitimacy and issue legitimacy in macro- and micro-level based on EVT. This review offers hypotheses, research questions, and a comprehensive research model. The third chapter explains methodological techniques and issues applied to this

dissertation and the specific methodology that followed. The fourth chapter reports the results of macro-level issue legitimacy of DTC-ads examined by a content-analysis, organizational legitimacy and issue legitimacy measurements survey, and the effects of issues management strategies (i.e., CSR, issue advocacy, and self-regulation) on organizational legitimacy and issue legitimacy regarding DTC-ads in the pharmaceutical industry. In the fifth chapter, the dissertation concludes with a discussion of the importance of the study and suggestions for further research.

Purposes and Significance of the study

The primary purposes of this dissertation are to (1) develop reliable and valid measurement scales for micro-level organizational legitimacy and issue legitimacy, (2) examine micro-level organizational and issue legitimacy gaps empirically, (3) investigate how three issues management strategies (CSR, issue advocacy, and self-regulation) in corporate messages affect micro-level organizational and issue legitimacy applying EVT, and (4) examine the causal relationships among micro-level organizational legitimacy and issue legitimacy, the public's behavioral intention toward an organization. In addition, this dissertation aims to examine macro-level issue legitimacy, which refers to societal approval for an issue, in terms of legitimacy by media endorsement, and its changes based on a sense that a societal change drives an individual's preference and expectation (Etzioni, 2002). Therefore, the research includes two separate studies. Study 1 will examine the changes in macro-level issue legitimacy employing a content analysis of news articles in four major U.S. newspapers and news releases from the pharmaceutical industry from 1997 to 2009. The first part of Study 2 will develop micro-level organizational legitimacy and issue legitimacy measurements using a statewide survey. Then, the second part of Study 2 will examine the organizational legitimacy gap and issue legitimacy gap,

and test factors affecting the legitimacy, employing a mixed design with one within-subjects factor (pre-post test) and 2 (CSR: use of CSR versus no use of CSR) \times 2 (Issue advocacy: use of advocacy framing versus no use of advocacy framing) \times 2 (Self-regulation: use of self-regulation versus no use of self-regulation) between-subject factors.

The present research is significant for both public relations academics and practice. For academics, the research will offer the initial empirical support for measuring organizational legitimacy and issue legitimacy in the issues management process based on a theoretical framework (i.e., EVT). Further, the reliable and valid measurement of organizational legitimacy will allow scholars to examine the public's perception of organizational legitimacy in a reputation management context, or to examine the public's perception on an issue or crisis in a crisis management context. Secondly, the result of causal relationships among organizational legitimacy, issue legitimacy, and the public's behavioral intention will expand the scope of organizational legitimacy discourse from organizational survival to bottom-line effect. In addition, although many scholars have asserted the importance of communication in managing organizational legitimacy, no single study showed the causal relationship between corporate messages and the public's perception of organizational and issue legitimacy.

For public relations practice, the measurement scale will be beneficial to measure the public's perception on organizational legitimacy for a specific organization and/or an issue in their day-to-day practices. Secondly, the result will show issue legitimacy of DTC-ads among public for a 12-year period, and provide understanding of the trend of issue and issue legitimacy. Thirdly, the effects of strategy types in organizational messages will benefit crafting issues management strategies. Coombs and Holladay (2007) argued that the self-regulation seemed to be successful in managing the issue of DTC-ads in 2005, but "time will tell if the issues

management effort will work” (p. 102). The result of this dissertation will show whether it was the best choice for the industry or not.

Definitions

The following terms and definitions guide this dissertation:

1) Organizational legitimacy: generalized perception or assumption that the organizational behaviors are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions.

2) Legitimation: organizational behaviors such as business strategies or operational strategies to build and maintain organizational legitimacy among publics, regulatory government, and/or industrial associations.

3) Organizational legitimacy gap: the discrepancy between organizational performances and the public’s expectation towards an organization and its performance. In this dissertation, organizational legitimacy gap is operationalized as the different perception between initial perception and perceptions exposed about an issue.

4) Macro-level issue legitimacy: societal perceptions or assumption endorsed by the media that the issue is proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions.

5) Micro-level organizational legitimacy: the public’s perception or assumption that the organizational behaviors are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions and of an individual’s interests. In this dissertation, organizational legitimacy was operationalized as the publics’ perception of organizational behaviors.

6) Micro-level issue legitimacy: the public's perception or assumption that the issue is proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions. In this dissertation, issue legitimacy was operationalized as the public's perception of an issue (DTC-ads).

7) CSR (Corporate social responsibility): how an organization companies align its mission, value and performance with the needs and expectations of public is society. In this dissertation, CSR is operationalized as philanthropic donation.

8) Issue advocacy: organizations' strategic responses to providing better information and the corporate side of the story for the public's support. In this dissertation, issue advocacy is operationalized as using advocacy framing of "DTC-ads aim to educate public" in corporate messages (i.e., news release).

9) Self-regulation: organizations' strategic responses to making adaptations needed to achieve a better relationship with the communities in which they operate (Heath, 1997). In this dissertation, self-regulation is operationalized as complying with the industrial standard (i.e., PhRMA's Guiding Principles on DTC-ads).

CHAPTER 2

LITERATURE REVIEW

This chapter aims to provide a review of extant literature pertaining to seven topics: legitimacy, organizational legitimacy, legitimacy measurement studies, organizational legitimacy in public relations, issues management, EVT, and conceptualization of the research. The first section, legitimacy, provides a concept of legitimacy across psychology, management, and political science. To understand organizational legitimacy, it is necessary to review the origin of the concept and how it has expanded to various academic disciplines. The second section explains how organizational legitimacy stemmed from a sociological perspective. This section reviews definitions of organizational legitimacy and two important theoretical underpinnings: neoinstitutionalism (known as institutional theory) and resource-dependence theory. The third section reviews legitimacy strategies and organizational legitimacy measurement studies with a guideline suggested by Ruef and Scott (1998): types of legitimacy, unit of legitimacy, salience among elements of legitimacy, and source of legitimacy. In reviewing legitimacy measurement studies, the author argues that the legitimation strategies and the source of legitimacy should be examined in the public relations discipline.

The fourth section provides organizational legitimacy studies in public relations and the concept of issue legitimacy in issues management. The fifth section reviews issues management literature from underlying theories and research trends. Further, the author argues that CSR, self-regulation, and issue advocacy are important issues management strategies in managing organizational legitimacy and issue legitimacy. The sixth section overviews EVT to provide a

theoretical framework for this research. Based on the theory and research reviewed, the final section conceptualizes (1) macro-level organizational legitimacy, (2) micro-level organizational legitimacy and issue legitimacy, and (3) a research model applying EVT.

Legitimacy

The concept of legitimacy has long been the focus of interest among philosophers, and has expanded its scope to sociology, political science, and organizational management (Hegtvedt, 2004). The concept of legitimacy has been vague for decades in that the concept is a predominantly fluid idea that changes and shapes norms in society (Kumar & Sunan, 2008). Zelditch (2001) asserted that “something, including a polity, power or authority, rewards, status, inequality, is legitimate if it is in accord with the norms, values, beliefs, practices, and procedures accepted by a group” (p. 33). Kelman (2001) argued that legitimacy is the moral basis of social-interaction, and legitimation is “the process of recategorizing an action, policy or claim—or a system, group, or person—such that what was previously illegitimate now becomes legitimate, or what was previously optional now becomes obligatory” (p. 57). Although processes surrounding each entity may be distinct, the result of legitimation (i.e., legitimacy) is the voluntary acceptance of something as right and the stability of the structure that supports it (Hegtvedt, 2004).

Scholars in psychology have studied an individual’s motive system to examine why an individual judges an action or group as legitimate or illegitimate (Tyler, 1997). Many scholars argued that legitimacy is judged by an individual’s internalized social values, which not only guide one’s own behavior but are also expected to affect others, groups, or authorities (Hoffman, 1977; Tyler, 1997). The feeling of obligation to defer or obey is labeled as “legitimacy,” a voluntary deference behavior (Tyler, 1997). Therefore, legitimacy is important in that it

influences the degree to which group authorities are or are not effective. In the same line of reasoning, Yzerbyt and Rogier (2001) argued that an individual tends to invoke the group to be a tight and cohesive unit assigning dispositional characteristics to the group, and ultimately legitimate social arrangement of the group. Consequently, the concept of legitimacy has been operationalized as the degree to which people voluntarily follow group rules (Rodgers & Lewis, 1974), or the extent of people's positive evaluation of group authorities (Easton, 1965; Parsons, 1963). Further, scholars link the concept of legitimacy to injustice and inequality in society (e.g., Jost & Major, 2001). Jost and Major (2001) argued that the concept of legitimacy explains social inequality as "the ways in which people construct ideological rationalizations for their own actions and actions of others taken on behalf of valued groups and systems" (p. 3). The rationalization forms attitudes and beliefs, which provide ideological support (i.e., legitimacy) for a person, structure, or policy (Hegtvedt, 2004).

From a sociological perspective, Max Weber was the first scholar who asserted the importance and the process of legitimation for both government and private organizations (Reuf & Scott, 1998). Weber (1968) asserted the importance of legitimacy in power structures. He argued that the administrative system depends on whether the subordinate actor legitimates the orders and structures. From his initial work, many scholars in political science and social science have developed the concept of legitimacy during the past decades. For example, Etzioni (1987) argued that entrepreneurship is one of societal functions promoting "societal reality testing," and the degree of social changes is driven by its legitimacy in the society (p. 175). In political science, legitimacy is one of the central concepts of political science across the world (Weatherford, 1992). The government should be legitimated by "wide public participation and ensure procedural regularity, especially provisions dealing with majority rule, minority rights,

and accountability in regular and frequent election” (Dahl, 1956). Then, legitimacy can be resources to maintain the belief that existing political institutions are appropriate and proper for the society (Lipset, 1983).

Organizational legitimacy: Definition and Theories

Similar with Zelditch’s (2001) definition of legitimacy, Dowling and Pfeffer (1975) wrote that an organization could be legitimate when its activities were congruent with social values. Social values are appropriateness and norms (Hegtvedt, 2004), and those are forms of normative rules, regulative processes, and cognitive meanings (Reuf & Scott, 1998) and must be accredited by publics (Ashforth & Gibbs, 1990). Then, legitimacy evokes the expectation of voluntary acceptance or compliance from audiences (Etzioni, 1987; Hegtvedt, 2004; Suchman, 1995). Among these, Suchman’s (1995) definition adopted a more inclusive and broad-based definition, incorporating evaluative and cognitive dimensions. He argued that “legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (p. 574). From these various definitions of organizational legitimacy, there are three important elements in organizational legitimacy: 1) conformity, 2) acceptance (approval), and 3) expectation of social norms, values, rules, and meanings (Deephouse & Carter, 2005). These elements and definitions could be theoretically explained based on the neoinstitutionalism (i.e., institutional theory) and resource-dependence theory perspectives.

Neoinstitutionalism - Institutional Theory

With the advent of neoinstitutionalism, which focuses on the institutional environment interacting with competitors and affecting society, organizations need to survive economically and establish legitimacy within the environment (Reuf & Scott, 1998). Organizations seek

legitimacy and support by conforming their structures and procedures to widely accepted cultural models or rules specifying appropriate structures and procedures (Meyer & Rowan, 1977; Reuf & Scott, 1998). DiMaggio and Powell (1983) named the conformity as isomorphism, by which the organizational legitimacy can be achieved.

While Weber (1968) asserted the reason for bureaucratization was competition in the marketplace, which increases leaders' need to control their staff, citizenry, and bourgeois demands for equal protection under the law. DiMaggio and Powell (1983) expanded on this idea by suggesting that the reason for bureaucratization and homogeneity of organizations is institutionalization. They defined isomorphism as “a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions” (p. 149). An organization competes not just for resources and customers but also for political power and institutional legitimacy and for social as well as economic fitness (DiMaggio & Powell, 1983). Therefore, an organization must take into account other organizations whether it complies with others (i.e., isomorphism) or not.

Isomorphism is a multifaceted concept of institutional theory (Deephouse & Carter, 2005; DiMaggio & Powell, 1983), attributed to organizational structures, strategies (Deephouse & Carter, 2005), and legal contracts (Suchman, 1995). In other words, organizations conforming to commonly used strategies, structures, and practices appear rational and prudent to the social system and, therefore, are generally considered acceptable (Deephouse & Carter, 2005). Isomorphism has three types of pattern: coercive isomorphism, mimetic process, and normative pressure (DeMaggio & Powell, 1983). Coercive isomorphism results from formal and informal pressures exerted on organizations by other organizations. Mimetic process means that organizations model themselves after similar organizations in their field that they perceive to be

more legitimate or successful. Organizations also follow normative pressures within its professionalization. Many scholars have tested isomorphism in terms of strategies (Deephouse & Carter, 2005), structures (Reuf & Scott, 1998), and practices (Deephouse, 1996). For example, Deephouse and Carter (2005) showed the impact of isomorphism in terms of strategic conformity (bank asset allocations) on financial legitimacy and public legitimacy.

Resource-dependence theory

Based on the assumptions about organizational environment, which is collective and interconnected, resource-dependence theory argued that organizations must be responsive to external demands and expectations in order to survive (Oliver, 1991). The underlying assumption in resource-dependence theory is that organizations have relationships with the environment that are open to negotiation and the exchange of concessions (Oliver, 1991). Parsons (1963) argued that if organizations are to have a legitimate claim on scarce resources, the goals they pursue should be congruent with wider societal values. This notion has affected Dowling and Pfeffer's (1975) definition on legitimacy, as "congruence between the social values associated with or implied by organizational activities and the norms of acceptable behavior in the larger social system" (p. 122). Then, organizational legitimacy could be resources for organizations to grow. It enables organizations to overcome constraints and access resources needed to grow simultaneously (Deephouse & Carter, 2005; Etzion, 1987; Starr & MacMillan, 1990; Stinchcombe, 1965; Suchman, 1995; Zimmerman & Zietz, 2002). Suchman (1995) argued that legitimacy supports organizations' continuity and credibility. For the organizations' persistence, audiences tend to allocate their resources to desirable, proper, or appropriate organizations (Suchman, 1995). Therefore, legitimacy provides a basis for decision making that is different from means-ends rationality (Zimmerman & Zeitz, 2002).

While institutional theory advises conformity and passivity within the environment, resource-dependence theory stresses some degree of control or influence over external criteria (Oliver, 1991), asserting that an organization negotiates environments (Pfeffer & Salancik, 1978). This notion has led scholars to explore strategic approaches to manage the legitimation process. Table 2-1 shows the comparison of institutional and resource-dependence perspectives in the context of legitimacy.

Table 2-1. Comparison of institutional and resource dependence perspectives

Explanatory factor	Convergent assumption	Divergent Foci	
		Institutional perspective	Resource Dependence perspective
Organizational behavior	Organizational choice is constrained by multiple external pressure	Institutional environment	Take environment
		Non-choice behavior	Active choice behavior
	Organizational environments are collective and interconnected	Conforming to collective norms and beliefs	Coping with interdependencies
		Organizational survival depends on responsiveness to external demands and expectations	Adherence to rules and norms
Motives of organizational behavior	Organizations seek legitimacy	Social worthiness Conformity to external criteria	Resource mobilization Control of external criteria

Note. From “Strategic Response to Institutional Process,” by C. Oliver, 1991, *Academy of Management Review*, 16, p. 147. Copyright 1991. Adopted without permission.

Legitimacy Measurement Studies

Many scholars have attempted to explain and conceptualize organizational legitimacy and legitimation from theoretical perspectives. However, only a few scholars have attempted to measure legitimacy empirically. Citing the difficulty of legitimacy assessment, Ruef and Scott (1998) called attention to four legitimacy measurement issues: types of legitimacy, source of

legitimacy, unit of legitimacy, and the salience among elements of legitimacy. Unit of legitimacy can be (1) an entire organizational population, (2) individual organizations, or (3) subunits and specialized aspects of organizations (Reuf & Scott, 1998, p. 880). Most legitimacy measurement studies have focused on organizational populations (i.e., industry) such as the bank industry (Deephouse & Carter, 2005), cattle industry (Elsbach, 1992), day care centers (Barter, 1998), or hospitals (Reuf & Scott, 1998). Salience of legitimacy assessment depends on institutional environments that have been confronted by currently dominant beliefs, values, and expectations from constituencies, since legitimacy may vary over time and place (Reuf & Scott, 1998). Therefore, the important issues in legitimacy measurement are types of legitimacy and source of legitimacy at a given time and place. At the same time, legitimation strategies are of researchers' interests as well, since the scholars should not only examine the current phenomenon but also provide solutions and implications for practice. The following sections review legitimacy measurement studies based on types of legitimacy, legitimation strategies, and sources of legitimacy and explore what is missing in legitimacy measurement studies. Table 2-2 summarizes previous research that measured organizational legitimacy.

Table 2-2. Organizational Legitimacy Assessment Studies

Author(s)	Type of organization	Approach	Types of Legitimacy	Used term and Operationalization	Legitimation strategies	Sources of legitimacy	Design
Elsbach (1994)	California Cattle industry		Normative (moral) legitimacy	Organizational legitimacy: Organizational endorsement (internal and external) Organizational normativity (organizations should or do have, and organization's operating procedure)	Impression management	General publics	Experiment
Reuf & Scott (1998)	Hospitals	Institutional theory	Normative (moral) legitimacy	Managerial legitimacy: Normative support for organizational managers Technical legitimacy: Normative support for technical staff	Conformity to credentialing association's rules	Credential associations	Secondary
Massey (2001)	Airline industry	Integrated	Pragmatic legitimacy	The perception of whether organization is good, credible, and honest, and has a right to continue operations	Dialogic approach	General publics	Experiment
Bansal & Clelland (2004)	Polluting industrial sectors	Institutional theory	Normative (moral) legitimacy	Corporate environmental legitimacy: generalized perception that a firm's corporate environmental performance is desirable, proper, or appropriate	Impression management: voluntary disclosure of environmental liability and expressing environmental commitment	Media accountants	Content analysis
Deephouse & Carter (2005)	Banks	Institutional theory	Regulatory Legitimacy & Normative legitimacy	Financial legitimacy: federal government's regulatory ratings Public legitimacy: norms and values reflected in media	Isomorphism (conformity)	Media endorsement, regulatory enforcement	Content analysis

Types of Legitimacy

Many researchers have agreed on three types of legitimacy based on institutional theory: regulatory legitimacy, normative (moral) legitimacy, and cognitive legitimacy (Reuf & Scott, 1998; Scott, 1995; Zimmerman & Zeitz, 2002). First, the regulative legitimacy stresses regulatory process, rules, standards, and expectations created by governments, professional associations, and even leading organizations within formal structures (Suchman, 1995; Zimmerman & Zeitz, 2002). Therefore, an organization is legitimated when it is consistent with laws by doing registration with governmental bodies such as Securities and Exchange Commission (SEC) or obtaining professional certification (Zimmerman & Zeitz, 2002). Deephouse and Carter (2005) examined regulatory legitimacy in terms of financial legitimacy by federal government's regulatory ratings on banks.

Second, normative (moral) legitimacy emphasizes normative rules and values of society (Scott, 1995; Zimmerman & Zeitz, 2002). This overarching definition is explained from two different perspectives (i.e., institutional theory and resource-based theory). First from institutional theory, the normative (moral) legitimacy can be achieved by applying generalized social norms in terms of occupational and professional standards (Reuf & Scott, 1998). Therefore, an organization is legitimated when it complies to norms and values such as fair treatment of employees (Zimmerman & Zeitz, 2002). They specified industrial legitimacy as a type of normative legitimacy, defining that "entire industries can have more or less legitimacy that can be conferred upon the firms operating within them, industry's standards, norms, practices, and technology" (p. 420). Reuf and Scott (1998) examined managerial legitimacy and technical legitimacy, which were accredited by credentialing association. Secondly, from resource-dependence theory, the normative (moral) legitimacy is achieved by "right things to do"

judged by the general public (Suchman, 1995, p. 579). Therefore, an organization is legitimated when it does right things, such as apologizing to publics for its operational mistakes. Massey (2001) examined normative (moral) legitimacy (whether an organization is good to exist) in the case of air crash crisis among the general public. Deephouse and Carter (2005) examined normative (moral) legitimacy as a form of media endorsement within bank industry.

Thirdly, Scott (1995) explained cognitive legitimacy as “widely held beliefs and taken-for-granted assumptions that provide a framework for everyday routines, as well as the more specialized, explicit and codified knowledge and belief systems promulgated by various professional and scientific bodies” (p. 81). According to Scott (1995), a social system provides roles and rules of action so that actors learn who they are and what is expected of them within the system. The roles and rules preselect appropriate and instrumentally effective actions, and those actions are taken-for-granted among publics. This belief and taken-for granted frameworks also produce shared social meanings related those actions (Reuf & Scott, 1998). Suchman (1995) argued that cognitive legitimacy does not involve the public’s judgment; the public’s acceptance is necessary and inevitable based on comprehensibility and taken-for-grantedness. Consequently, cognitive elements are more basic, providing frameworks on which normative and regulative systems are constructed (p. 879). Therefore, the taken-for-granted legitimacy is the most important to an organization (Suchman, 1995).

Along with these types of legitimacy, Suchman (1995) added pragmatic legitimacy, which emphasizes the general public’s perception, expectation, evaluation, and acceptance. Pragmatic legitimacy considers the public’s directed interests to the organization. Therefore, there are immediate interactions between them. He divided pragmatic legitimacy into three types by the degree in which individuals engage in exchange legitimacy, influence legitimacy, and

dispositional legitimacy. Social values and norms are important in exchange legitimacy, but it is more “materialistic power-dependence relations” (Suchman, 1995, p. 578). Influence legitimacy is more socially constructed than the exchange legitimacy. Publics support the organization not for their individual interest but for larger interests. Dispositional legitimacy is somewhat different from the previous two in that it does not require materialistic exchange. When publics have dispositions toward the organization, such as liking, they support the organization or prefer the organization to its competitors. Overall, pragmatic legitimacy is based on an individual’s own evaluation on an organization. Table 2-3 summarizes types of legitimacy suggested by numerous scholars.

Table 2-3. Types of Legitimacy

Types of Legitimacy	Operationalization	Applied
Regulatory Legitimacy	An organization is legitimated when it follows regulatory process, rules, standards, and expectations created by governments, or professional associations.	Financial legitimacy (Deephouse & Carter, 2005)
Pragmatic Legitimacy	An organization is legitimated when it satisfies an individual or the public’s interests.	N/A
Normative (Moral) Legitimacy	An organization is legitimated when it follows social values and standards in which the organization exists.	Managerial legitimacy & technical legitimacy (Reuf & Scott, 1998) Organizational legitimacy (Massey, 2001)
Cognitive Legitimacy	An organization is legitimated when it is perceived as taken-for-granted.	N/A

The agreement on types of legitimacy is that “those can apply to different types of organizations, and it is possible for an organization to be judged as legitimate in terms of one set of elements but not another” (Ruef & Scott, 1998, p. 879). In other words, an organization could be regulatory legitimated, but it might not be normatively legitimated. Reuf and Scott (1998) argued that hospitals are cognitively legitimated for their existence by publics, but their

existences must be legitimated by regulative authority. Therefore, this dissertation incorporates the concept and elements of pragmatic legitimacy, normative (moral) legitimacy, and cognitive legitimacy by the general public. In other words, this dissertation operationalizes organizational legitimacy as the public's perception or assumption that the organizational behaviors are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions and of an individual's interests based on Suchman's (1995) definition.

Legitimation strategies

Suchman (1995) argued that there is an agreement on the notion that legitimacy management can be seen in two broad approaches: a strategic approach based on resource-dependence theory and an institutional approach based on institutional theory. From the strategic approach, Dowling and Pfeffer (1975) suggested three strategies: conforming to the prevailing definition of legitimacy, altering the definition through communication, and communicating symbolic meanings. The first strategy means that an organization actually changes its operation or decision conforming to the prevailing norms. The second strategy means that an organization communicates its decision to change prevailing norms or opinions. The last strategy means that an organization communicates its decisions by portraying it to be congruent with social values (Ashforth & Gibbs, 1990). Based on the strategic approach, many scholars have examined the impact of impression management strategies on legitimacy in terms of the use of a spokesperson (Elsbach, 1992) or voluntary disclosure of information (Bansal & Clelland, 2004).

The institutional approach explains that legitimacy is a function of the external influence on an organization. Therefore, compliance to the widely accepted institutional standard, which is called isomorphism, is the most important strategy in legitimation process (Suchman, 1995). Ashforth and Gibbs (1990) suggested substantive management in legitimation, which involves

real changes in organizational operations such as organizational structures, goals, or socially institutionalized practices.

The two perspectives have been dominant in explaining and examining legitimacy (Deephouse & Carter, 2005; Reuf & Scott, 1998; Suchman, 1995). Some scholars have attempted to integrate the two perspectives in designing strategies to enhance legitimacy (e.g., Ashforth & Gibbs, 1990; Elsbach & Sutton, 1992). For example, Elsbach and Sutton (1992) suggested the process model applying institutional theory and impression management strategies to mitigate unlawful organizational actions and gain public endorsement to the legitimacy. They reasoned that decoupling illegitimate activities from legitimate structures and conformity to the structure bolster the impression management strategies. Once the organization conforms to the legitimacy structure, spokesperson's tactics, which shift attention away from those activities and toward the normative goals endorsed by publics, are more likely to be pursued (Elsbach & Sutton, 1992). As such, Suchman (1995) asserted the importance of incorporation of the two perspectives to make "a larger picture that highlights both the way in which legitimacy acts like a resource and the ways in which it acts like a taken-for-granted belief system" (p. 577). At the same time, Suchman (1995) emphasized the role of communication in legitimation leading attention to public relations and corporate communication scholarship (Boyd, 2000). The two types of legitimation strategies lead the current research, and they will be elaborated deliberately in an issue management context later in this chapter.

Sources of Legitimacy

Etzioni (1987) argued that the immediate source of legitimation is the value of the society. From institutional theory, Ruef and Scott (1998) asserted sources of legitimacy are external observers (e.g., licensing boards, funding agencies, unions) and internal observers (e.g.,

workers, managers, staff specialists) of the organization who assess its conformity to a specific standard or model. From this stand point, many studies have tested normative (moral) legitimacy which comes from credentialing associations (Ruef & Scott, 1998) or industry media endorsements as a whole (Deepphouse & Carter, 2005).

However, as the idea of legitimacy is value, the source of legitimacy could not be clearly defined or operationalized. For example, Tornikoski and Newbert (2007) conceptualized organizational competence as organizational legitimacy in terms of human capital, organizational capital, market attractiveness, and networking. In their view, a skilled (competent) organization will be legitimated by audiences (customers or competitors) by their engagement in voluntary resource exchanges, such as purchasing goods with them. However, the assumption that “an organization will be legitimated if customers purchase products” could be problematic. For example, if an organization is the only provider in the marketplace, customers have no choice regardless of their favorable or unfavorable endorsement. In the meantime, from institutional theory, while an organization might be legitimated by other organizations in the industry or government, it is questionable whether the organization could be legitimated by the public.

What are missing in organizational legitimacy measurement studies are the public’s perceptions or expectations toward organizations. Do publics really perceive an organization as legitimated although professional associations accredited it? How they perceive an organization? Can media endorsement be “public legitimacy?” Tornikoski and Newbert (2007) argued the difficulty of legitimacy assessment from the public is that legitimacy is an unobservable perception. Despite difficulty, the general public as a source of organizational legitimacy should be examined empirically in that the public forms favorable or unfavorable business climates in society. In political science, it is important to gain legitimacy from the general public because

people do not obey the rules if they think the government is illegitimate. Revolutions against and obedience to governments are frequently justified if not partially caused by people's ideas about what constitutes legitimate government (Stillman, 1989). In organizational legitimacy, although an organization can be legitimated by conforming to the regulations and adhering industrial standards, the organization can face various activist groups. Boyd (2000) argued that public support cannot directly affect organizational survival, but the public's confrontation can be constrained to the business. The regulatory legitimacy or normative (moral) legitimacy credited by other organizations calls managers to change or examine business strategy. However, the public as a source of legitimacy calls on public relations, which maintains mutually beneficial relationship between an organization and its public.

Legitimacy in Public Relations

Many scholars in legitimacy research have asserted that communication is important in gaining and maintaining legitimacy from resource-dependence theory. Dowling and Pfeffer (1975) pointed out the importance of communication between an organization and its publics because social values and expectations are reflected in communications. Bussy (2007) argued that public relations activities are categorized into a strategic legitimation process. Therefore, the attention to the concept of legitimacy calls on public relations scholars to analyze the organizational legitimacy. There are two streams to examine organizational legitimacy in public relations: crisis communication and maintaining legitimacy gap through issues management. Boyd (2000) argued that most legitimacy research in public relations has focused on crisis communication in that crises immediately threaten organizational survival. Therefore, the ultimate goal of crisis communication aims to reestablish organizational legitimacy (Hearit,

1995). Massey (2001) showed the effects of crisis message design, employing consistent messages and an organizational image, on organizational legitimacy.

When examining legitimacy in issues management, there are two important concepts: legitimacy gap and issue legitimacy. First, it is important to consider the concept of “legitimacy gap” in that it represents the source of legitimacy (i.e., general public) and the role of communication. The concept of legitimacy gap is based on resource-dependence perspective. In other words, the perceptions held by the general public can be managed through communication. If an organization is not legitimated by the general public, the organization must know what their expectations are. Dowling and Pfeffer (1975) argued that the disparity between social value and organizational behaviors is a threat to organizational legitimacy. This notion has developed into the “legitimacy gap.” Sethi (1979) introduced the concept of legitimacy gap to explain “the logic of business actions,” and argued that the gap should be managed strategically (p. 58). Meyer and Scott (1983) argued that if an organization violates cultural expectations, it is subject to legitimacy challenges and may be deemed unacceptable by stakeholders. Therefore, managing the legitimacy gap is one of importance in public relations and for issues management.

Secondly, a few previous studies in issues management have addressed the concept of issue legitimacy. Coombs’s (1992) case study showed the role of legitimacy in issues management as focusing on the legitimacy of the issue itself, issue managers, and policy proposal. Bortree (2009) examined the impact of CSR activity (green initiatives) on environmental legitimacy. Accordingly, Boyd (2000) argued that “institutional legitimacy has provided a basis for many areas of public relations research” leading the concept of actional legitimacy which means legitimation on organizational actions (p. 342). Coombs (1992) asserted the importance of issue legitimacy to gain publics’ support on an issue, and ultimately, to gain

organizational legitimacy. Boyd's (2000) concept of actional legitimacy is the same as Coombs's (1992) issue legitimacy. At the same time, the concept of issue legitimacy seems to be congruent with the concept of "salience of legitimacy," which examines institutional environments in terms of beliefs, values, and expectations from stakeholders in management literature (Reuf & Scott, 1998). In this regard, the concept of issue legitimacy is also important to understand how publics perceive an issue and how issue legitimacy affects organizational legitimacy in the issues management process. The following sections elaborate on issues management in the public relations literature.

Issues Management

Academic literature regarding the history of issues management can be traced back to 1970s, when public issues management was given its name by a veteran of public relations, W. Howard Chase. During 1960s and 1970s, corporations adopted policy changes in response to political activism, which is crucial for an organization's existence, and those changes led to the emergence of issues management. In the subsequent three decades, issues management developed both professionally and academically. In its early stages, issues management was defined as a program that companies use to improve their involvement in the public policy process (Heath, 1997). However, in this turbulent society, the issues organizations deal with are diverse, ranging from issues related to the corporate level to issues related to the societal level, such as the environment or inflation. The public's support toward issues helps not only the policy-making process, but also supports the business climate. Consequently, among many public relations theories and practices, issues management plays a significant role in corporate communication by influencing the public agenda (Berger, 2001; Reynolds, 1997) or public policy (Heath, 1997). Heath (1997) said that issues management is to manage emerging public

issues, and ultimately it fosters the interests of the stakeholders by helping an organization achieve its goals in a community of complementary and competing interests. Apparently, these definitions have been developing under theoretical underpinnings.

Theoretical Underpinnings for Issues Management

Literature pertaining to issues management has been examined using three distinct approaches —the systems approach, the strategic reduction of uncertainty approach, and the rhetorical approach (Heath, 1990). The systems approach has its roots in systems theory and business management principles focusing on organizations' environments; therefore, the systems approach to issues management provides environmental scanning and feedback for decision-making and promotes more systematic and effective responses as a coordinating and integrating force within the organization. Many scholars have suggested models of issues management using the systems approach (e.g., Ansoff, 1980; Frederick, 1986; Jones & Chase, 1979; Heath, 1989). Since the systems approach takes a global view of the organization-environment relationship, communication is regarded as a tactical response to environmental concerns.

Meanwhile, the strategic reduction of uncertainty approach is grounded in a cognitive orientation toward organizational action and individual decision-making behavior; its general concern focuses on how individual and collective interpretations of an issue relate to organization-level actions. Given that the strategic approach is theorized from a business perspective, communication is incidental to the structures and processes of organizational behavior and individual decision-making.

Finally, the rhetorical approach has developed through the efforts of rhetorical scholars interested in corporate discourse and public relations. Crable and Vibbert (1985) advocated the “catalytic” strategy in which an organization attempts to “take an issue through its life cycle so

that it can be resolved in directions favorable to the organization” (p. 12). Issues management, then, becomes a proactive organizational activity to influence and formulate public policy. Elwood (1995) argued for a rhetorical approach to studying issues management, claiming that it was “dedicated to the examination of rhetoric and its influence in public relations” (p. 9). Many of the research efforts of the rhetorical approach utilize case study techniques to explicate one of the intervention activities or the life cycle (“issues evolving”) status of an issue (Taylor, Vasquez, & Doorley, 2003)

Research trend

In management literatures, there are three perspectives to examine issues: a strategy perspective, a business and society perspective, and a public policy perspective (Wartick & Mahon, 1994). “The strategy literature pays particular attention to the impact that strategic issues may have on a company. The business and society literature on strategic issues focuses on the potential gap between the company’s actual performance and the performance perceived or expected by the company’s stakeholders. The public policy perspective traditionally stresses the controversial aspect of strategic issues, (Wartick & Mahon, 1994) “looking at these elements in a sequential way suggests that companies can be involved in managing strategic issues from the very beginning (the gap stage), from the controversy stage, or at the impact stage” (Oomens & van den Bosch, 1999, p. 50). However, the three stages could be not sequential since they affect one another. Recent interests started focus on issues management and globalization (Oomens, & van den Bosch, 1999).

In public relations, Coombs (1992) summarized three objectives in issues management literature: managing issues in the public policy process, corporate social responsibility discourse, and general responses to disagreement on issues. The first objective was the origin of issues

management as Jones and Chase (1979) asserted—that the objective is to affect public policy process. Since then, scholars have examined how issues management results in favorable policymaking or strategies to manage issues, suggesting the process of identifying, scanning, monitoring, analyzing, and prioritizing issues (Heath, 1997). The second objective has expanded issues management research to the corporate social responsibility discourse. Researchers have argued that issues management should meet the standard of corporate social responsibility (Heath, 1997). The third objective is a generalization of previous two objectives (Coombs, 1992). Coombs explained that the third objective of issues management is to respond to any discontinuities dealing with internal and external issues.

When an issue violates societal expectations, managing the legitimacy gap, which is the discrepancy between societal expectation and a business's actual performance, is as important as gaining favorable support from the public. Bridge (2004) explained the legitimacy gap approach as one of the most important theoretical underpinning in issues management. Therefore, it is critical to considering the concept of issue legitimacy in managing an issue, the legitimacy gap, and organizational legitimacy ultimately.

Expectancy Violation Theory

In the previous section, a legitimacy gap occurs between the public's expectations and a business's performance. Legitimacy gap is based on the notion that there is discrepancy between the social norm and the public's expectations. In other words, when publics feel discrepancy between the social norm and organizational behavior or performance, a legitimacy gap grows wider. The concept of expectation and violation is consistent with the Expectancy Violation theory (EVT). To understand how the general public evaluates an organizational issue and an organization, it is useful to know how an individual evaluates the problem and the outcome of

evaluation. This section reviews EVT literature and its applications to provide theoretical frames for examining legitimacy and the legitimacy gap. This theoretical framework guides this dissertation project.

Overview

The premise of EVT is that unexpected behaviors make people aroused to appraise cognitive and affective evaluation as positive or negative for the behavior, and communicator reward such as attractive appearance mediates the appraisal (Burgoon, Newton, Walther, & Baesler, 1989). Burgoon and Hale (1988) argued that an individual has an expectation toward the non-verbal behavior of others. When expectations are violated to a certain degree, the victims are aroused. The violation is either positive or negative based on (1) the evaluation of the communicator (communicator reward), (2) implicit messages with the behavior, and (3) the behavior itself. Some nonverbal behaviors inherently produce either negative or positive evaluations. Moreover, there are some nonverbal behaviors that carry implicit messages; therefore, the violation can be understood differently in a different context. At the same time, the communicator reward, such as an individual's appearance, affects both the evaluation of the behavior itself and the interpretation of the violation (Burgoon & Hale, 1988). Later, Burgoon (1990) charged that communicator reward influences interpretation and evaluation of violation process. The process of interpretations and evaluations is more likely to be placed on an evaluative continuum (Burgoon & Hale, 1998) rather than the sequential process. Communicator reward refers to "the reward value of the violator," which means a function of all characteristics of a communicator such as personality, gender, or physical attractiveness (Burgoon & Hale, 1988, p. 62). The positive valence violation leads to positive attitudinal or behavioral outcomes. For example, when an individual's expectation toward physical distance from others is violated

by interrupting his/her private boundary, he/she evaluates the valence of violations as either positive or negative based on the behavior itself, violator's reward (e.g., physical attractiveness), and implicit message (violator's motivation to engaging communication). When the evaluation is a positive violation, he/she is likely to have a positive attitude towards the violator. When it is a negative violation, he/she is likely to have negative attitude towards the violator, such as assuming the violator is rude.

Research Trend

Based on this premise, many researchers have tested various types of violations regarding conversational involvement (Burgoon et al., 1989; LePoire & Burgoon, 1994), touch, conversational distance, and posture (Burgoon & Walther, 1990), and affectionate behaviors (Floyd & Voloudakis, 1999) within the interpersonal communication context. In addition, the mediating variable, communicator reward, has been tested in terms of physical attractiveness, socioeconomic status, and task expertise (Burgoon et al., 1989). Although EVT has been started and applied to the interpersonal communication (e.g., Bachman & Guerrero, 2008; Floyd & Voloudakis, 1999), it is also applicable to other disciplines such as marketing, classroom setting or emotional communication (Burgoon, 1999; Burgoon, Dunbar, & Segrin, 2002). Recently, Campo, Cameron, Brossard, and Frazer (2004) examined health messages (alcohol, smoking, and exercise) processing among college students utilizing social norms marketing and EVT.

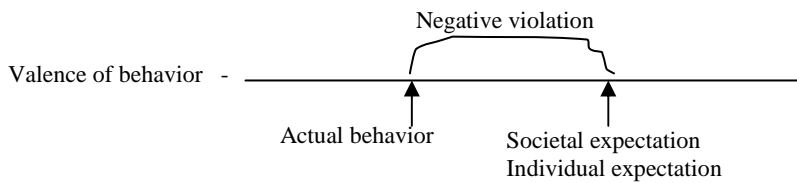
Conceptualization

Levels of legitimacy for this study

Burgoon and Hale (1988) argued that the discrepancy arises among societal expectations, personal expectations, and the actual violation. For example, the largest negative violation occurs between positive individual expectation, which is greater than societal expectation, and the actual

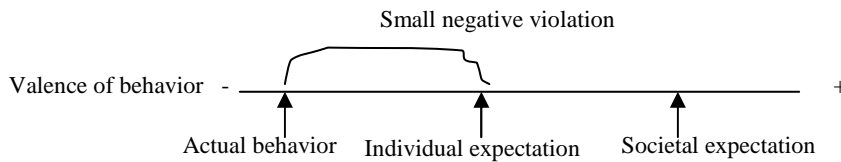
behavior, which is negative with a high reward for the communicator. After examining the violation valence, a positively evaluated violation produces favorable communication patterns and consequences (Burgoon & Hale, 1998). Figure 2-1 shows examples of negative violation expectation.

Negative violation, No prior knowledge of communicator



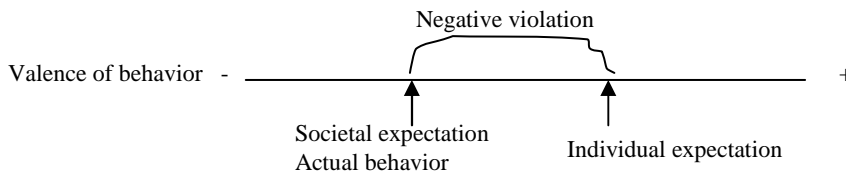
When an individual has no prior knowledge of communicator, an individual's expectation is the same as societal expectation. Moderate negative violation occurs when societal expectation is higher than actual behavior.

Small negative violation, Low reward communicator



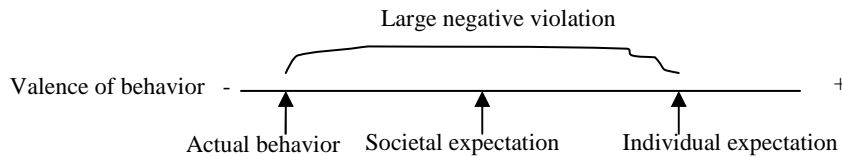
When an individual perceives the communicator with low reward and an individual's expectation is lower than societal expectation, a small negative violation occurs.

Small negative violation, High reward communicator



Moderate negative violation occurs when an individual perceives the communicator with high reward but the societal expectation is the same as actual behavior.

Large negative violation, High reward communicator



Large negative violation occurs when an individual perceives the communicator with high reward and societal expectation proceeds actual behavior.

Note. From “Nonverbal Expectancy Violations: Model Elaboration and Application to Immediacy Behaviors,” by J. K. Burgoon and J. L. Hale, 1998, *Communication Monograph*, 55, p. 66. Copyright 1988. Adopted without permission.

Figure 2-1. Examples of negative violations of expectations

When the case comes to the relationship between an organization and its public, it is assumed that publics have certain expectations toward issues or organizational behaviors for the issue. This notion is congruent with the concept of legitimacy. When the expectation is violated, the public is aroused, and they evaluate the issue and the related organization. Whereas the positive violation produces benefits to the organization, negative violations produce negative evaluations on issues or organizations, which could be the legitimacy gaps. Three elements causing gaps are personal expectation, societal expectation, and actual behavior, and the gaps can occur among them. Burgoon and Hale (1998) explained that violated behaviors are examined by the interpretation, by societal norm, or evaluation by “the recipient for this particular occasion” (p. 63). Then, two types of gaps occur. First, the legitimacy gap occurs when there is discrepancy between the interpretation by social norm (i.e., societal expectation) toward an organization and an organization’s behavior. Second, the legitimacy gap occurs when there is discrepancy between the public’s personal expectation toward an organization and an organization’s behavior. It is worthy to note that Weatherford (1992) argued that scholars must consider both a macro perspective emphasizing formal system properties and a micro view emphasizing citizens’ attitudes and actions in political science.

Study 1: Macro-level legitimacy and legitimacy gap

Macro-level Normative Legitimacy

Interpreted societal expectation is important when the public is not familiar with the rewards from a communicator or an issue. In most cases, no public knows every issue. They are guided to think about certain issues by media (i.e., agenda-setting theory, McCoomb & Shaw, 1972). Even more, publics might be primed for certain issues by media (i.e., priming theory, Iyengar, Peters, & Kinder, 1982). Priming and framing are important in shaping social issues and subsequent judgments (Gergen, 1992). Therefore, it is assumed that interpreted societal expectation could be ideas or thoughts in media contents. In this line of reasoning, previous research has shown that media endorsements, for certain industries, can be regarded as normative legitimacy supported by the general public (Bansal & Clelland, 2004; Deephouse, 1996; Deephouse & Carter, 2005). However, although norms and values are reflected in the communications in society, it is not necessarily possible that media contents reflect the general public's exact expectation and evaluation. This notion requires analyzing different level of legitimacy. Therefore, the macro-level legitimacy is operationalized as "societal perceptions or assumption that the organizational behaviors are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions." The macro-level legitimacy is important in that "a change in societal legitimation is a major reason individual preferences changes" (Etzioni, 1987, p. 28). In other words, the macro-level legitimacy may affect individuals' legitimacy evaluation, but it is not exact evaluation by the general public.

To conceptualize the legitimacy gap between societal expectation and businesses' actual performance, businesses' actual performance should be conceptualized. Issues or organizational behaviors are presented to the public in the way they want to be by public relations through news

releases, advertisements, special events, or other channels. Issues are perceived as problematic (Hallahan, 2001) so that the media represent them as violations in society. Their expectation violation can be different from the relevant organizations' viewpoints. Lindblom (1994) argued that an organization might use some types of social disclosure to help or close legitimacy gaps between society's expectations and business practice or reputation. Therefore, the macro-level of legitimacy gap can occur between societal expectation presented in mass media and organizational self-presentation as a form of issue advocacy.

Therefore, the following research questions are posed:

RQ 1: How has the macro-level issue legitimacy of DTC-ads and organizational issue advocacy changed in a period between 1997 and 2010?

RQ 2: Is there a gap between the macro-level issue legitimacy of DTC-ads and organizational issue advocacy regarding DTC-ads in the pharmaceutical industry?

In the pharmaceutical industry, the safety of drugs and accurate information of drugs and the protection of consumers from inaccurate information are central concerns of FDA regarding DTC ads. An important tool used by regulators is the evaluation of a pharmaceutical company's violations on DTC ads. Regulators' use of the term "enforcement activities" fits the view of being "illegitimated."

Therefore, the following research question is posed:

RQ 3: What are the relationship among the macro-level normative legitimacy of the pharmaceutical industry, regulatory enforcements on DTC-ads, and pharmaceutical companies' issue advocacy?

Study 2: Micro-level legitimacy

People have different expectations toward an organization, and people perceive organizational behaviors or messages from an organization as the same as an organization's identity. Therefore, the micro-level legitimacy gap can be examined between personal expectation and perception of organizational behaviors at the individual level. The micro-level is here defined as “the public's perception or assumption that the organizational behaviors are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions and of an individual's interests” based on Suchman's (1995) definition. In addition, based on a previous literature review, the micro-level legitimacy is explicated into organizational legitimacy and issue legitimacy in this dissertation.

Organizational Legitimacy and Issue Legitimacy Measurement

Based on EVT, the legitimacy gap can be defined as the discrepancy between initial expectation and evaluation of an organization and an issue when an issue occurs. It is apparent that developing valid and reliable multiple-item self-report scales is a major priority to test further the effects of issues management strategies on micro-level organizational legitimacy. However, as seen in the previous chapter, the extant literature does not offer reputable or standard measurement for the organizational legitimacy. Even, no single study has attempted to measure issue legitimacy. Organizational legitimacy has been measured on an ad hoc basis. Elsbach (1992) developed a legitimacy scale among industrial experts, but the legitimacy she tested was focusing on external and internal endorsement of an organization. Massey (2001) developed the perception of organizational legitimacy based on his own operationalization as “an organization is good, credible, and honest, and has a right to continue operations” (p. 165).

Therefore, the following research questions are posed:

RQ 4: What is a reliable and valid organizational legitimacy measurement?

RQ 5: What is a reliable and valid issue legitimacy measurement?

Conceptualization for constructs of research model

The primary purpose of this dissertation is to measure micro-level organizational legitimacy, issue legitimacy, and factors affecting the legitimacy. To understand the mechanism, this section conceptualizes the micro-level legitimation process based on EVT frameworks.

Violation - An issue and legitimacy gap

Burgoon and Hale (1998) argued that violation is inherently negative. In addition, many researchers argued that an issue is created when the public perceives it as problematic (Cheney & Vibbert, 1987; Heath, 1997). Therefore, when an issue is regarded as a problematic , which arises publics' attention, it can be a violation.

Therefore, the following hypotheses will be tested:

H1: When an issue of DTC-ads occurs, discrepancies arise between individual's initial expectation towards a pharmaceutical company and evaluation on micro-level organizational legitimacy of a pharmaceutical company.

H2: When an issue of DTC-ads occurs, discrepancies arise between individual's initial expectation towards an issue and evaluation on issue legitimacy of DTC-ads.

Evaluations on behavior and overall evaluation – Issue legitimacy and Organizational legitimacy

According to EVT, the violation is evaluated based on the behavior itself and its implicit messages. As some nonverbal behaviors inherently produce either negative or positive evaluations and they carry implicit messages simultaneously, therefore, the process of interpretations and evaluations is more likely to be placed on an evaluative continuum (Burgoon

& Hale, 1998) rather than the sequential process. Then, the evaluation and interpretation on the behavior is operationalized as an evaluation on an issue and an organization at the same time. To understand better the concept of organizational legitimacy based on the previous literature review, investigating an issue should be evaluated in terms of issue legitimacy in this research. Therefore, the following research question is posted:

RQ 6: How does issue legitimacy evaluation on DTC-ads relate to organizational legitimacy of a pharmaceutical company?

Communicator Reward – CSR, Issue Advocacy, Self-regulation

In EVT frameworks, the primary assumption of EVT is that communicator rewards mediate violation evaluation and interpretation when the negative violation occurs. In this line of reasoning, it is important to understand what factors affect violation evaluation and interpretation. While most EVT research has examined the impact of communicator reward as physical attractiveness, which is intrinsic characteristic, some have examined task expertise, which has achieved by performing one's ability. Therefore, in an issue management context, strategies rather than an organizational intrinsic characteristic are more appropriate to examine the effect on legitimacy. This dissertation argues that three strategies (i.e., CSR activity, issue advocacy, and self-regulation) are important in managing the issue of DTC-ads in the pharmaceutical industry.

CSR. Heath (1990) noted that the underpinning principle of issues management is not to avoid legislation or regulation, but to balance the interests of all segments of the community so that each enjoys the proper amount of reward or benefit in proportion to the cost of allowing industry free rein to impose its own operating standards. This notion has dominated the discussion of issues management in terms of corporate social responsibility. These “values” and

“expectations” obligate corporations to develop corporate social responsibilities. Wartick and Cochran (1985) asserted that issues of corporate responsibility could add value to the organization’s operations by fostering mutual interests with key stakeholders. Insofar as organizations have corporate social responsibility, issues management can reduce the legitimacy gap by changing the organization’s behavior rather than alternating public expectations. Surely, corporate social responsibility gives organizations not only legitimacy in society, but also profit margins. Corporate social responsibility reduces health, safety, and environment risk profiles by anticipating and responding to emerging issues and engaging with stakeholders; pursues new market opportunities and innovation in products by extending or facilitating licenses to operate; and reduces the cost of crises. Bakan (2004) suggested, “Enron’s story shows just how wide a gap can exist between a company’s cleverly crafted do-gooder image and its actual operations, and suggests, at a minimum, that skepticism about corporate social responsibility is well warranted” (p. 58). From organizational legitimacy studies, CSR activities should be considered as both institutional strategies (i.e., institutional theory) and symbolic meaning management (i.e., resource-dependence theory). Moreover, Campbell (2003) argued that “social disclosure can be used to narrow the legitimacy gap between how the organization wishes to be perceived and how it actually is” (p. 83).

Therefore, the following hypotheses will be tested:

H3a: CSR activity is positively related to micro-level organizational legitimacy evaluation on a pharmaceutical company regarding DTC-ads.

H3b: CSR activity is positively related to micro-level issue legitimacy evaluation of DTC-ads.

Issue advocacy. Corporate communication is essential for a company in order to communicate with its publics. In the process of issues management, an organization determines various ways to communicate issues with publics such as by media relations, lobbying, mailing to constituencies, issues workshops, or issues advertising (Heath, 1997). Berger (2001) showed how engaging private issues through lobbying affects the media agenda and the public agenda. Media relations are the most effective way to gain news coverage in the public relations field, and they are considered important in the issues communication process.

Sethi (1977) explained that the need for explanation of complex issues has two aspects. One is to explain more fully the corporate side of the story, which the company feels has been ignored or misrepresented by the news media or spokespersons for other interested groups. The second is to provide better information to the public, because poorly informed publics could press for the adoption of measures that would worsen the situation. Therefore, Sethi (1977) encouraged issue advocacy to narrow the legitimacy gap.

H4a: Issue advocacy is positively related to micro-level organizational legitimacy evaluation on a pharmaceutical company regarding DTC-ads.

H4b: Issue advocacy is positively related to micro-level issue legitimacy evaluation of DTC-ads.

Self-regulation. Issues management has become one of the most crucial factors for firms. Heath (1997) said that issues management is the “strategic use of issues analysis and strategic responses to help organizations make adaptations needed to achieve harmony and foster mutual interests with the communities in which they operate” (p. 34). Issues management allows firms to monitor issues, sharpen their strategic business plan, improve their operations, and communicate in an effort to build and strengthen relationships with key publics. Self-regulation

is one type of issues management strategy in that “if an industry regulates itself, there is no reason for the government to get involved” (Coombs & Holladay, 2007). On the other hand, self-regulation can be explained from an institutional theory standpoint. Ashforth and Gibbs (1990) suggested to alter organizational practices to conform to seek organizational legitimacy. As seen in previously, corrective actions and/or altering organizational practices are considered as institutional management.

Therefore, the following hypotheses and research questions are offered:

H5a: Self-regulation is positively related to micro-level organizational legitimacy evaluation on a pharmaceutical company regarding DTC-ads.

H5b: Self-regulation is positively related to micro-level issue legitimacy evaluation of DTC-ads.

RQ7a: Are there interaction effects among CSR, issue advocacy, and self-regulation on micro-level organizational legitimacy evaluation of a pharmaceutical company regarding DTC-ads?

RQ7b: Are there interaction effects among CSR, issue advocacy, and self-regulation on micro-level issue legitimacy evaluation of DTC-ads?

Communication outcome - Outcome of legitimacy.

Burgoon and Hale (1988) argued that expectation violation predicts communication outcomes such as violator attractions, messages, relational quality, types of communication strategies and tactics (Bachman & Guerrero, 2007), or affection (Floyd & Voloudakis, 1999). For the purpose of legitimation, which is the approval or acceptance toward issues or organizational behaviors, the outcome of the legitimacy should be examined. Suchman (1995) argued that legitimacy supports organizations’ continuity and credibility. Audiences tend to

allocate their resources to desirable, proper, or appropriate organizations (Suchman, 1995). This behavioral tendency can be operationalized as the public's purchasing intention toward organizations' products and services. In addition, legitimacy affects how publics perceive and understand organizations in society (Suchman, 1995).

Therefore, the following hypotheses will be tested:

H6: Micro-level organizational legitimacy on a pharmaceutical company regarding DTC-ads positively relates to publics' behavioral intention towards an organization.

H7: Micro-level issue legitimacy evaluation of DTC-ads positively relates to publics' behavioral intention towards an organization.

Types of Public.

In addition to testing organizational legitimacy based on an EVT framework, this research tests the influence of types of public on issue legitimacy and organizational legitimacy. Heath (1997) noted that issues communication involves getting the message to the appropriate audiences and working to satisfy the needs of key publics to understand and appreciate the organization's point of view. The appropriate audiences should be segmented by the opinions they hold and their communication patterns, rather than by their demographic groups (Berkowitz & Turnmire, 1994). In this vein, Grunig (1975) suggested using situational theory to categorize publics in terms of their involvement in and awareness of problems (i.e., problem recognition and constraint recognition). According to Grunig, these variables lead publics to seek information (active communicators) or process information (passive communicators). In the same line of research, Hallahan (2001) suggested an issues processes model to identify and classify publics based on their level of knowledge about an issue and their involvement with that issue. From Hallahan's (2001) Issues Activation model, publics can be identified and classified

into one of five categories: active (high knowledge and low involvement), inactive (low knowledge and low involvement), aware (high knowledge and low involvement), aroused (low knowledge and high involvement) and non-publics. As such, types of publics are important to understand their communication behaviors on the issue. As such, it is assumed that types of publics are also important to understand their perceptions on organizational legitimacy and issue legitimacy.

Therefore, the following research question is posed:

RQ8: How does the public's problem recognition, problem constraint, and issues involvement relate to each of micro-level organizational legitimacy of a pharmaceutical company and micro-level issue legitimacy of DTC-ads, respectively?

Drawn from previous literature and theoretical conceptualizations, the conceptual model below (Figure 2-2) illustrates the logic of Study 2 (i.e., organizational legitimacy, issue legitimacy, legitimacy gap, and behavioral intention). Also, regarding factors affecting organizational legitimacy, issue legitimacy, and behavioral intention (i.e., H 3, 4, 5, and 6 and RQ 7 and 8), the research model below (Figure 2-3) proposes linking issues management strategies (CSR activities, issue advocacy, and self-regulation), organizational legitimacy, issue legitimacy, and behavioral intention.

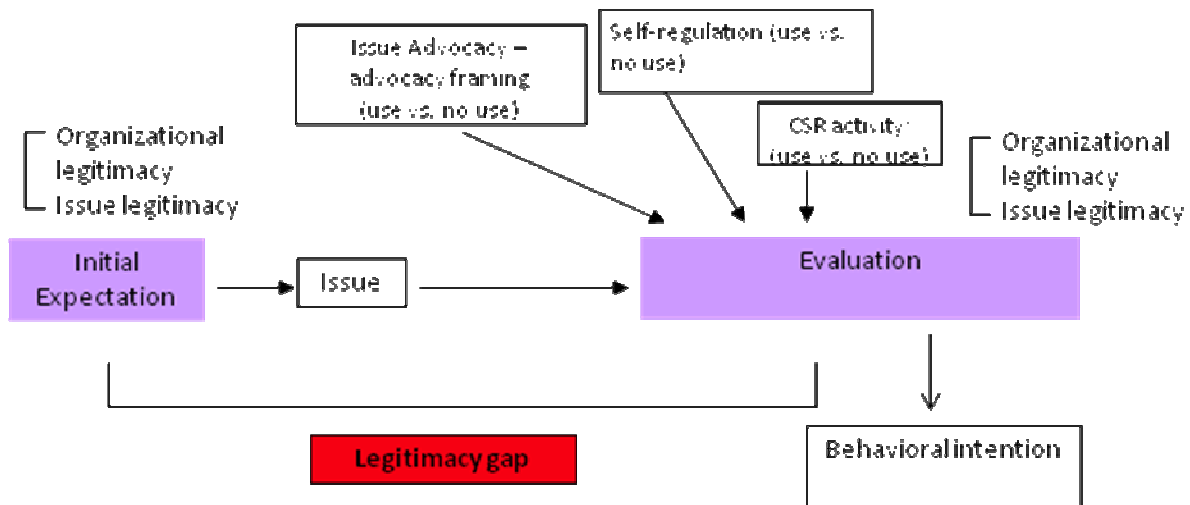


Figure 2-2. Conceptual model of micro-level organizational legitimacy

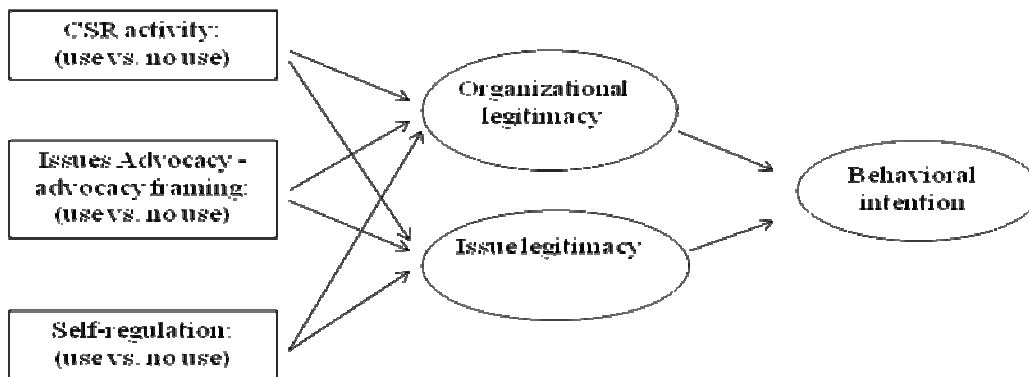


Figure 2-3. Research model of examining factors affecting micro-level organizational legitimacy

CHAPTER 3

METHODOLOGY

This chapter presents the methodologies utilized to test hypotheses and answer research questions. The Study 1 section first addresses the research design of a content analysis, which is appropriate to examine the macro-level issue legitimacy of DTC-ads and its changes over 12 years. The Study 2 section addresses the micro-level organizational legitimacy and issue legitimacy measurements development. The methodological procedure is explained in detail. Secondly, for testing the effects of issues management strategies on the micro-level organizational legitimacy and issue legitimacy, the methodological issues of quasi-experimental design are addressed. Then, the research methods for a mixed design with one within-subjects factor (pre-post test) and 2 (CSR: use of CSR versus no use of CSR) \times 2 (Issue advocacy: use of advocacy framing versus no use of advocacy framing) \times 2 (Self-regulation: use of self-regulation versus no use of self-regulation) between-subject factors are described.

Study 1: Macro-level Legitimacy

The purpose of Study 1 is to examine the macro-level issue legitimacy of DTC-ads regarding RQ 1, 2, and 3. Macro-level issue legitimacy is operationalized here as “media endorsements that the issue is proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions” based on Suchman’s (1995) definition. Previously, several scholars have attempted to measure organizational legitimacy or environmental issue legitimacy examining media endorsement using content analysis for newspapers (e.g., Bansal & Clelland, 2004; Deephouse, 1996; Deephouse & Carter, 2005).

Therefore, it is reasonable to examine macro-level issue legitimacy of DTC-ads, investigating news articles on DTC-ads from newspapers, and organizational issue advocacy based on news releases from the pharmaceutical industry. Then, the legitimacy gap can be defined by the discrepancy between media endorsement and organizational issue advocacy.

Research Design: Quantitative Content Analysis

To answer RQ 1 through RQ 3 (i.e., review macro-level issue legitimacy of DTC-ads and its changes), a content analysis is the most appropriate approach, as Krippendorff (1980) said the purpose of content analysis is to provide “knowledge, new insights, a representation of facts, and a practical guide to action” (p. 23). The purpose of Study 1 is to measure whether the media contents are legitimating or illegitimating the issue of DTC ads in the pharmaceutical industry.

The unit of analysis

The unit of analysis is the major entity analyzed, and coding units have three types: sampling units, context units, and recording units (Krippendorff, 1980). Sampling units are defined physically in terms of their natural borders such as news articles or letters. For this dissertation, sampling units are the same as the description of samples. Context units are defined syntactically, created by the author, such as words, sentences, or paragraphs. In this dissertation, context units (the unit of analysis) are each news article or news release to capture descriptive features and recording units. Recording units are “the specific segments of content characterized by placing it in a given category,” rather than physical borders (Holsti, 1969, p. 116). Therefore, this dissertation applies recording units as framings used by media contents and news releases from the pharmaceutical industry, and this unit of analysis is to examine the valence of the news coverage and news releases.

Research Methods

Samples

This research examined the issue legitimacy of DTC-ads, which is operationalized as media endorsement on DTC-ads, and organizational issue advocacy in terms of industrial news releases about DTC-ads for the period from January 1997 to December 2009. This period was selected to see the trend of media framing and issues framing of DTC-ads because the Federal Drug Administration has allowed broadcast DTC-ads of prescription drugs since August 1997. Therefore, it is reasonable to see the trend of news coverage and the industry's news releases on the issue of DTC-ads since the year of 1997. News articles were examined because past research showed that newspapers had a stronger effect than television in setting the public's agenda (McComb & Shaw, 1972). As explained in the previous chapter, issues advocacy is performed in terms of media relations or advocacy advertising. Therefore, news releases can best serve the issue advocacy by organizations.

News articles were examined from four leading newspapers: *The Wall Street Journal*, *USA Today*, *Washington Post*, and *The New York Times*. The relevant articles and industrial news releases were examined from the *Proquest* newspapers database. The decision for selection of newspapers is based on the notion that the issue of DTC-ads is not a local issue; the nationwide newspapers can be the best media source of public knowledge and opinions about it. The news content of *The New York Times* has been frequently used because it has been known as an elite press (Coleman, Hartley, & Kennamer, 2006). To capture a fuller range of discourse, the *Washington Post* (representing Eastern and Southern region of the U.S.), *The Wall Street Journal* (a leading business newspaper), *USA Today* (representing national daily newspaper) are included (Coleman et al., 2006).

The key terms to find the retrieved articles contained the words “direct-to-consumer,” “drug advertising,” and the abbreviation of “DTC” from January 1997 to December 2010 in pharmaceutical industry. This resulted in 759 articles in all available newspapers, but news stories, which were irrelevant to DTC-ads, were excluded through screening the abstracts of news stories. Therefore, a total of 355 news stories were analyzed: 117 (33%) from *The New York Times*, 117 (33%) from *The Wall Street Journal*, 55 (15.5%) from *Washington Post*, and 66 (18.5%) from *USA Today* were analyzed.

For organizational issue advocacy, the industrial news releases were collected from two news releases sources: *Businesswire* and *PRwire*. The key terms to find the retrieved articles contained the words “direct-to-consumer,” “drug advertising,” and the abbreviation of “DTC” in pharmaceutical industry. A total of 93 releases were found. News releases from private marketing firms or public relations firms were also included when it was stated to be presenting a certain pharmaceutical company, otherwise, news releases from private marketing firms or public relations firms were excluded. Therefore, 32 (60.4%) news releases from *PRNewswire* and 21 (39.6%) news releases from *BusinessNewswire* were selected.

In addition, to answer RQ 3, the study examined the frequency of warning letters and notice of violation letters regarding DTC-ads was analyzed from FDA website for the period from January 1997 to November 2009. The FDA’s warning letters and notice of violation letter to pharmaceutical companies are one of the enforcement activities by FDA. The letters are issued by the Division of Drug Marketing, Advertising, and Communications and by Headquarters. The contents of warning letters and notice of violation letters were not examined because it is beyond the purpose of this dissertation.

Coding Procedure and Recording Units

There are two approaches to coding the data: emergent coding and *a priori* coding (Stemler, 2001). *A priori* coding is to follow the categories already established prior to the analysis based on theory. On the other hand, emergent coding follows some preliminary examination of data. This dissertation applied emergent coding procedure. To construct a list of recording units (i.e., framings), the researcher made a list of checklists including descriptive features and ideas to construct recording units, based on reviewing news stories and news releases, then examined by a public relations professor.

The recoding unit was defined as the media framings in which the media represent its stance for the certain issue (Hallahan, 1999). The framings (i.e., recording units) were identified through; first, PhRMA's position statement (available on its website, www.phrma.org) was analyzed to identify the industry's preferred frames; and second, news articles dealing with DTC ads were reviewed to examine media frames. The initial checklist was discussed with a public relations professor based on previous research. A list of framings is consistent with past research except "pharmaceutical companies self-regulate DTC-ads" (Coleman et al., 2006) and covering issues of DTC-ads raised by other researchers such as "FDA regulation," "Risk & Benefit information," "Education value," "Other concern – marketing" (e.g., Lexchin & Mintzes, 2002). Table 3-1 shows the final list of frames from the media and the industry.

Table 3-1. List of Frames

Framing	Description
Frame 1.	The issue of DTC-ads is under investigation.
Frame 2.	DTC-ads aim to educate consumers.
Frame 3.	DTC-ads are marketing.
Frame 4.	Customers should be careful about DTC-ads.
Frame 5.	Pharmaceutical companies self-regulate DTC-ads.

The final coding list contained the frequency of news articles, types of newspapers, year of publication, month of publication, section of news stories (financial/economy/money, editorial/opinion, health/fitness/life, book review), types of news stories (news, editorial, opinion/op-ed, letters, interview), and number of words. For news releases, the coders coded the frequency of industrial news releases, type of industrial materials, year of publication, month of publication, and number of words. Then, coders determined whether the news article and news release attributed to the themes, captured by the five a priori frames. The judgment was based on whether the headline exerts one of five frames and whether whole story implies one of the five frames. If the two criteria was not consistent, coders determined the attribution of the whole story. Then, the valence of the framing was determined as positive (1), neutral (0), or negative (-1). Coders rated the frame as positive when the story contained “positive outcome” or “benefits to customers.” The frame was rated as negative when the story contained the expression of “deceptive” or “misleading information.” Otherwise, frames were judged as neutral.

Janis-Fadner Coefficient of Imbalance

To measure macro-level organizational legitimacy and organizational issue advocacy, the valences of framing were calculated as Janice-Fadner coefficients of imbalance. Each recoding unit (i.e., each framing) was given equal weight in the analysis and rated as negative, positive, or neutral, consistent with previous legitimacy assessment research (Deephouse, 1996; Deephouse & Carter, 2005; Pfeffer & Salancik, 1978). To perform statistical analysis, the present research utilized Janis-Fadner coefficient of imbalance (Coombs, 1992; Janis & Fadner, 1965). Then, annual measures were created using the Janis-Fadner coefficient of imbalance (Coombs, 1992; Janis & Fadner, 1965). This measures the relative number of positive and negative codes in a

given year. The range of coefficient is (-1, 1), where 1 indicates all positive coverage, -1 indicates all negative coverage, and 0 indicates a balance between the two.

The formula is:

f = the sum of positive coverage
u = the sum of negative coverage
n = the sum of neutral coverage
r = f + u + n

If $f > u$

$$C(f) = (f^2 - fu) / r^2 \quad \text{Answer lies between 0 and +1} \quad (1)$$

If $f < u$

$$C(u) = (fu^2 - u) / r^2 \quad \text{Answer lies between 0 and -1} \quad (2)$$

Intercoder reliability

Two trained coders coded 75 news stories (21.1%) and 36 news releases (67.9%) to examine the intercoder reliability. For news articles, Holsti's reliability coefficient was 0.936 and Scott's (1955) *pi* was 0.823. For news releases, Holsti's reliability coefficient was 0.911. Scott's (1955) *pi* was 0.799. Coefficients of 0.90 or greater are always acceptable, 0.80 or greater is acceptable in most situations, and 0.70 may be appropriate in some exploratory studies for some indices (Lombard, Snyder-Duch, & Bracken, 2004). Higher criteria should be used for liberal indices (i.e., percent agreement) and lower criteria can be used for indices known to be more conservative (e.g., Cohen's kappa, Scott's *pi*, and Krippendorff's alpha). Therefore, 0.936 (news articles) and 0.911 (news releases) of Holsi's reliability coefficients and 0.823 (news articles) and 0.80 (news releases) of Scott's *pies* are acceptable levels of intercoder reliability. The coding book can be seen in Appendix A.

Study 2: Micro-level Legitimacy

The purpose of the second study is two-fold: to develop measurement for the micro-level organizational legitimacy and issue legitimacy (i.e., RQ 5 and 6), and to test the influence of CSR, issue advocacy, and self-regulation on the micro-level organizational legitimacy and issue legitimacy (i.e., H 3, 4, 5, and 6, and RQ 7 and 8). Based on previous literature, micro-level organizational legitimacy is operationalized as the public's perception or assumption that the organizational behaviors are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions and of an individual's interests. Micro-level issue legitimacy is operationalized as "the public's perception or assumption that the issue is proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions, and of an individual's interests."

Measurement Development

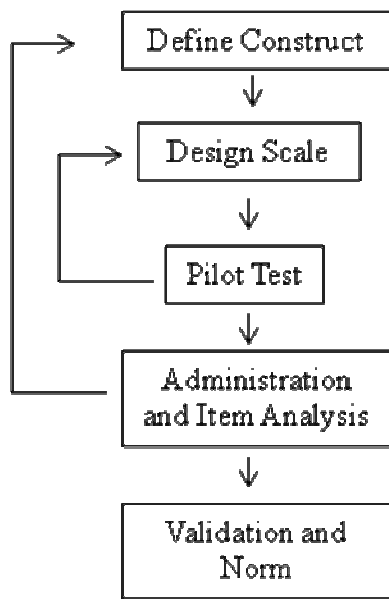
To examine micro-level organizational legitimacy and issue legitimacy by the general public, the measurements for legitimacy are necessary. Generally, researchers have employed a scale that has been extensively tested in previous research (Churchill, 1979; Hair, Anderson, Tatham, & Black, 1998; Spector, 1997). However, as seen in the previous chapter, the extant literature does not offer reputable or standard measurement for the organizational legitimacy and issue legitimacy. Since this dissertation attempts to examine micro-level organizational legitimacy and issue legitimacy, considerations that are more deliberate are needed.

Scale Development

The first step to examining micro-level organizational legitimacy and issue legitimacy by the general public is to create a reliable and valid measurement scales. Measurement is important in accurately representing the concept of interest and is instrumental in the selection of the appropriate multivariate method of analysis (Hair et al., 1998). With single-item measures, it is

not possible to estimate empirically the reliability, therefore, popular way to make measurement scales are summated scales. The summated scale means method of combining several variables that measure the same concept into a single variable in an attempt to increase the reliability of the measurement (Spector, 1997). In most instances, several variables are summed to represent composite variables, and the total or its average is used in the statistical analysis (Hair et al., 1998).

Therefore, this dissertation utilized Likert's Method of Summated Ratings (Crano & Brewer, 2000) adopting the scale development procedure suggested by Churchill (1979) and recent work of Spector (1992). Figure 3-1 visualizes four steps.



Note. From “Summated rating scale construction: An introduction,” by P. E. Spector, 1992, Newbury Park, CA: Sage, p. 8. Copyright 1992. Adopted without permission.

Figure 3-1. Major steps to developing a summated rating scale

The first step to develop measurement scales is to conceptualize clearly the construct of interests (Churchill, 1979; Spector, 1992; Hair et al., 1998). This dissertation employed the definition from Suchman's (1995), which stated that organizational legitimacy as “the public's perception or assumption that the organizational behaviors are desirable, proper, or appropriate

within some socially constructed system of norms, values, beliefs, and definitions and of an individual's interests." For issue legitimacy, both the concept and the measurement of issue legitimacy have not been examined empirically. This dissertation operationalizes issue legitimacy as "the public's perception or assumption that the issue is proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions." The next step is to generate items (Churchill, 1979) so as to design actual scales (Spector, 1992). For this step, Churchill (1979) suggested techniques such as literature search, experience survey, insight stimulating examples, critical incidents, and focus groups. The extant literature offers how the variables have been defined or how many dimensions or constructs it has (Churchill, 1979). The emphasis of this step should be to develop a set of items that tap each dimensions of the construct (Churchill, 1979). Accordingly, based on a review of the literature, the researcher made statements based on Suchman's (1995) work, incorporating previous measurements such as Elsbach's (1992), Massey's (2001), and Shoemaker's (1982). Table 3-2 shows the initial list of statements for each legitimacy.

Table 3-2. Initial measurement items for legitimacy

Organizational legitimacy

- I like pharmaceutical companies
 - The pharmaceutical company is beneficial to my personal well-being
 - The pharmaceutical company is beneficial to community's well-being
 - The pharmaceutical company is a trustworthy organization (Massey, 2001)**
 - The pharmaceutical company is a credible organization (Massey, 2001)**
 - The pharmaceutical company comply within the industrial standard (Shoemaker, 1982)**
 - The pharmaceutical company add value to the society (Shoemaker, 1982)**
 - The pharmaceutical company work within the law (Shoemaker, 1982)**
 - The pharmaceutical company is highly organized and efficient (Shoemaker, 1982)**
 - The pharmaceutical company cooperate with other companies (Shoemaker, 1982)**
 - Most consumers in the general public approve of the organization's operating practices (Elsbach, 1992)**
 - The organization is concerned with meeting acceptable standard for environmental protection, drug safety, warning for side-effects (Elsbach, 1992)**
 - The organization is viewed by business writers as one of the top firms in the industry (Elsbach, 1992)**
-

The pharmaceutical company has expertise in producing and informing drugs
 The benefits of the pharmaceutical company would be greater than problems
 The pharmaceutical company make profits for its stakeholders
 The pharmaceutical company make beneficial drugs in society
The pharmaceutical company is a legitimate organization (Massey, 2001)
 The pharmaceutical company benefits sick people in society
 The pharmaceutical company is necessary and would last long in society
 The pharmaceutical company is plausible in society
The pharmaceutical company should do the right things (Shoemaker, 1982)

Issue legitimacy

Information in the prescription drug advertising is not trustworthy.
 Prescription drug advertising should be banned.
 Information in the prescription drug advertising is informative to me.
 Prescription drugs advertising would be necessary to sick people.
 Overall, I am favorable to prescription drug advertising.
 The benefits from prescription drug advertising would be greater than problems.
 The problems caused by prescription drug advertising would be solved.

Note. Bolded statements indicate that they were adapted from previous research.

The initial list was examined by a public relations professor for content validity to ensure that it tapped some aspect of the construct being measured, and by two psychology professors for face validity. Their comments and revisions yielded a list of six issue legitimacy questions and five organizational legitimacy questions (see Table 3-3). Then, the researcher administrates measurement items to purify the scale items (Churchill, 1979; Spector, 1992). The following research methods section explains the procedure of full administration.

Table 3-3. Micro-level organizational legitimacy and issue legitimacy measurement scales

Organizational legitimacy

I have a positive opinion about prescription drug companies.
 I believe that the prescription drug companies follow government regulations.
 The prescription drug companies do a good job making their drugs.
 I think that the prescription drug companies are honest.
 I think that the prescription drug industry is a necessary part of our society.

Issue legitimacy

I have a positive opinion about advertisements for prescription drugs.
 Prescription drug advertisements have helped me.
 Prescription drug advertisements have helped other people I know.
 Prescription drug advertisements help people learn about the symptoms for different medical problems.
 I think that any problems associated with prescription drug advertisements could be solved.
 Overall, the benefits from prescription drug advertisements outweigh the problems.

Research Methods

Research Design

Given the purpose of developing measurement scales for organizational legitimacy and issue legitimacy, the survey research is most appropriate in that 1) the major critical focus of survey research is with external validity (i.e., generalizability) rather than testing the theory, 2) survey research has the value of “real-world” context and the availability of mass data in developing information about human actions, and 3) it shows the underlying perceptions or feelings of the population (Crano & Brewer, 2002).

Data collection and sampling

As a part of a statewide omnibus survey conducted by Institute for Social Science Research at The University of Alabama, the sample was composed of individuals participating in a survey on social issues in Alabama. Therefore, the population of the survey is residents in the state of Alabama, and a simple random sampling was employed. The respondents were collected via a modified random digit sample of Alabama phone numbers. For each combination of area code and telephone exchange used in Alabama, the residential blocks of telephone numbers in use in Alabama were identified from a database of current working residential telephone exchanges and working banks. The sample of phone numbers was drawn by appending a two-digit random number to these working blocks.

Several procedures were applied to the raw sample to increase dialing efficiency. First, a large number of business numbers were eliminated by reference to a database of known business numbers. Second, a large number of disconnected numbers were detected and removed from the sample. A total of 3,298 phone numbers were called to establish contact with a household. For each successful household contact, a respondent was randomly selected by asking for the adult

whose birthday was most recent. If the selected respondent was available, an survey was attempted. If the selected respondent was not available, the interviewer recorded identifying information about the selected respondent on the call record and attempted to determine an appropriate time to call again. If no call could be scheduled, the phone number was recalled randomly until another contact was made. Data were collected through telephone survey equipped with a computer-assisted telephone interviewing (CATI) system, allowing for a high degree of accuracy and rapid turn-around for data analysis. The survey were conducted by experienced telephone interviewers employed by the Capstone Poll. The interviewers received additional training specific to the questionnaire used in the project.

Measures and Data Analysis

The final list consisting of six issue legitimacy questions and five organizational legitimacy questions (see Table 3-2) are included in the omnibus survey. The internal consistency (reliability) is measured by coefficient alpha, which is the most popular one to assess the quality of the instrument (Churchill, 1979). The data were analyzed using exploratory factor analysis to develop summated measurements for organizational legitimacy and issue legitimacy. In exploratory factor analysis, there are two types of analyses: principal component factor analysis and common factor analysis. The first analysis aims to predict validity of factors whereas common factor analysis aims to construct conceptual dimensions (Hair et al., 1998). Therefore, this research employs a principal component factor analysis, which aims to predict validity of factors, with a varimax rotation. In addition, confirmatory factor analysis will be employed to ensure construct validity.

Factors Affecting Legitimacy

Research Design: Quasi-Experimental Design

To examine factors affecting organizational legitimacy and issue legitimacy, this study employed quasi-experimental design. Experiments include observational studies in which data collected under conditions where behavioral choices are limited or in some way constrained by the controlled manipulation of variables and measures selected by the researcher (Crano & Brewer, 2002). Many social scientists asserted that the most powerful way to prove the causal relationship is the experiment (Crano & Brewer, 2002).

This dissertation employs factorial between-subject design in which the researcher investigates the simultaneous effects of two or more factors. The advantage of it is to examine multiple causalities. Therefore, to investigate the effects of CSR activities, issue advocacy, self-regulations, and their interactions on organizational legitimacy, factorial between-subject design is best suited. When conducting the experiments, the important issue is the sample size (Crano & Brewer, 2002). Colton and Covert (2007) suggested that the current experiments generally assign between 20 to 30 subjects to each of the conditions, so at least 20 subjects will be assigned to each experimental condition.

Although college students are not appropriate to generalize the results (i.e., external validity) (Crano & Brewer, 2002), their use in this dissertation could be justified in that DTC advertising is an issue for large “normal” populations to identify individuals with experience with prescription drugs. In addition, in organizational research, Greenberg (1987) claimed that theoretically oriented studies require greater attention to the internal validity using homogeneously defined groups of subjects than to the representativeness of samples (Berkowitz

& Donnerstein, 1982; Calder, Phillips, & Tybout, 1981). Therefore, the use of college student population is appropriate for purpose of this dissertation, which tests organizational legitimacy based on EVT.

Research Methods

Participants

A total of 267 respondents participated in this experiment recruited from three different classes at a major Southeast university during the Spring 2010 semester. The participants were enrolled in an introductory course in mass communication classes and were offered extra course credit for their participation. One hundred fifty eight participants were female (59.2%) and 108 participants were male (40.4%). A majority of participants were Caucasian ($N = 229$, 85.8%), followed by African-American ($N = 29$, 10.9%), Latino ($N = 3$, 1.1%), Native American ($N = 1$, .4%) and other ($N = 2$, .7%). The mean age was 20.0 ($SD = 1.79$).

Experimental design

Participants were randomly assigned to one of eight experimental conditions of a 2 (CSR: use of CSR versus no use of CSR) \times 2 (Issue advocacy: use of advocacy framing versus no use of advocacy framing) \times 2 (Self-regulation: use of self-regulation versus no use of self-regulation) between-subject design. Table 3-2 shows eight conditions of the study.

Table 3-4. The 8 Conditions for the 2 (CSR: use of CSR versus no use of CSR) \times 2 (Issue advocacy: use of advocacy framing versus no use of advocacy framing) \times 2 (Self-regulation: use of self-regulation versus no use of self-regulation)

Condition	CSR	Advocacy	Self-regulation
1	Use	Use	Use
2	Use	No Use	Use
3	Use	Use	No Use
4	Use	No Use	No Use
5	No Use	Use	Use
6	No Use	No Use	Use
7	No Use	Use	No Use
8 (Control)	No Use	No Use	No Use

Stimulus Material

The news article stimulus was based on an actual news story about an issue of DTC-ads (see Appendix D). The researcher combined two sentences, which best represent news framings (FDA regulation and consumers should pay attention to DTC-ads) from preliminary results of Study 2, from two news articles appeared in *USA Today* on December 11, 2001, and January 6, 2003. For news release stimuli, eight scenarios were created with different combinations of CSR activities, issues advocacy, and self-regulation. The company is a fictitious pharmaceutical company named as VITAL Inc. Table 3-5 shows manipulations for each variable, and Appendix E shows eight combined scenarios. For the CSR manipulation, the sentences were collected from existing pharmaceutical companies' news releases on their web sites. For the issue advocacy manipulation, the sentences were collected and modified from PRwire news releases. For the self-regulation manipulation, the news release was actually produced by *Johnson & Johnson* in 2004 (Coombs & Holladay, 2007).

Table 3-5. Conditions for Manipulation

Factors	Manipulation
CSR	VITAL Inc. has donated 20% of annual profit to non-profit organizations dedicated to providing public health, managing diseases, and monitoring medical problems. We are dedicated to maintaining and enhancing our citizenship and social responsibility activities despite challenging global economic conditions.
Issue advocacy: advocacy framing	According to research led by the Medical University of South Carolina (MUSC), TV advertising of prescription drugs are prompting more people to visit their doctors. Studies show prescription drug advertisements bring patients into their doctors' offices and starts important doctor-patient conversations about health that might otherwise take place. VITAL Inc. is certain that prescription drug advertisements help to educate consumers by diagnosing symptoms, initiating doctor-patient relationship, and facilitating doctor-patient communication for raising awareness of disease and treatments.
Self-regulation	VITAL Inc. strongly supports the Pharmaceutical Research and Manufacturers of America (PhRMA) Guiding Principles for direct-to-consumer advertising. VITAL Inc. is especially pleased with the

unambiguous commitment of these principles to better meet patients' needs with improved communication of risks and benefits. We voluntarily comply with PhRMA's Guiding Principles for our drug advertisements. Our new advertising campaign for *Sleep Pill* is conducted based on the principles and we will be keeping cautious about getting accurate information to patients and consumers.

Procedure

Each participant was randomly assigned to one of the eight conditions. The packet consisted of six parts: official information sheets, study description, pre-test questionnaire, news story about an issue, news release about an issue from VITAL Inc., and post-test questionnaire (see Appendix B through G). The packet was given to all conditions except experimental condition #8 (i.e., control group, no use of CSR, issue advocacy, Self-regulation). For condition #8, a news release stimulus was excluded.

The introduction page briefly explained the purpose and procedure of the research. The pre-test questionnaire page consisted of questions for participants' general perceptions on pharmaceutical companies. Next, parts of the packet instructed participants to read a news story about an issue from the newspaper and a news release from VITAL Inc. Participants were asked to focus on the subject of the messages. This instruction is necessary in that much natural language processing is more like skimming than studying. Therefore, standard laboratory practice involves "instructing" respondents by drawing attention (Massey, 2001, p. 163). The final part is a set of post-test questionnaires for problem recognition, issues involvement, organizational legitimacy, issue legitimacy, behavioral intentions, and demographic information.

Measurements

Organizational legitimacy. Organizational legitimacy was measured using five questions from the result of previous measurement scales survey in this section. Five questions were "I

have a positive opinion about advertisements for prescription drugs” “I believe that the prescription drug companies follow government regulations” “The prescription drug companies do a good job making their drugs” “I think that the prescription drug companies are honest” “I think that the prescription drug industry is a necessary part of our society.” All questions were measured on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Reliability analysis for these five items yielded Cronbach’s α values of .84 and .87 for the pre-test and the post-test, respectively.

Issue legitimacy. Issue legitimacy was measured using six questions from the result of previous measurement scales survey in this section. Six questions were “I have a positive opinion about advertisements for prescription drugs,” “Prescription drug advertisements have helped me,” “Prescription drug advertisements have helped other people I know,” “Prescription drug advertisements help people learn about the symptoms for different medical problems,” “I think that any problems associated with prescription drug advertisements could be solved,” and “Overall, the benefits from prescription drug advertisements outweigh the problems.” All questions were measured on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Reliability analysis for these six items yielded Cronbach’s α values of .83 and .84 for the pre-test and the post-test, respectively.

Behavioral intention. The questions were adopted from previous research (Cronin, Brady, and Hult, 2000; Claes, & Larcker, 1981). The questions were: “Assume that you are definitely considering the purchase of prescription drugs or over-the-counter drugs, how likely or probable is it that you would be interested in purchasing the product of VITAL Inc.?” and “How likely is it that you will recommend the product of VITAL Inc. to a friend?” All questions are

measured on a 7-point bipolar scale ranging from 1 (*not at all likely*) to 7 (*extremely likely*). Reliability analysis for these two items yielded Cronbach's α values of .88.

Problem recognition. The following three questions were asked to measure problem recognition adopted from previous research (Cameron, 1992; Hamilton, 1992): "How much of a problem for society are prescription drug advertisements?" The question was measured on a 7-point bipolar scale ranging from 1 (*very unproblematic*) to 7 (*very problematic*). "How important is it to solve the issue of prescription drug advertisements in society?" The question was measured on a 7-point bipolar scale ranging from 1 (*very unimportant*) to 7 (*very important*). "I think about the issue of prescription drug advertisements a great deal." The question was measured on a 7-point Likert-scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Reliability analysis for these three items yielded Cronbach's α values of .56.

Constraint recognition. The following four questions were asked to measure constraint recognition adopted from previous research (Cameron, 1992; Grunig & Hung, 2002; Hamilton, 1992): "How much could you do to influence decisions about the issue of prescription drug advertisements?" The question was measured on a 7-point bipolar scale ranging from 1 (*nothing much*) to 7 (*a great deal*). "How important do you think your decision will be regarding the issue of prescription drug advertisements?" The question was measured on a 7-point bipolar scale ranging from 1 (*very unimportant*) to 7 (*very important*). "How often do you think about the issue of prescription drug advertisements?" The question was measured on a 7-point semantic scale ranging from 1 (*never*), 2 (*rarely*), 3 (*a few times*), 4 (*several times*), 5 (*often*), 6 (*frequently*), to 7 (*always*). "I feel considering the issue of prescription drug advertisements takes too much of my time" The question was measured on a 7-point Likert-scale ranging from 1

(*strongly disagree*) to 7 (*strongly agree*). Reliability analysis for these four items yielded Cronbach's α values of .69.

Issue-involvement. The following four questions were asked to measure problem recognition adopted from previous research (Cameron, 1992; Grunig & Hung, 2002; Hamilton, 1992): "I consider myself at risk if the issue of prescription drug advertisements is not solved" "The issue of prescription drug advertisements is a personally relevant topic for me." These two questions were measured on a 7-point Likert-scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). "To what extent do you think the issue of prescription drug advertisements can affect the nation?" "To what extent do you think the issue of prescription drug advertisements can affect your future?" "These two questions were measured on a 7-point bipolar scale ranging from 1 (*not at all*) to 7 (*a great deal*). Reliability analysis for these four items yielded Cronbach's α values of .73.

Data analysis

First, several preliminary tests were conducted to check the normality of measure to confirm the appropriate use of analysis of variance (ANOVA), factorial ANOVA, multiple regression analyses and mediation analyses. To examine H1 and H2, two paired t-tests were conducted. To test H3 through H5, several factorial ANOVA tests were conducted and to answer to the RQ 8, a three-way interaction effect was examined using several factorial ANOVA and post-hoc Bonferroni comparison tests were calculated. To test H6 and H7, several multiple regression analyses and mediation analyses were conducted.

Manipulation Check

The following questions were designed to assess the effectiveness of the experimental manipulation. To check effectiveness of the CSR manipulation, the participant were asked,

“Based on the news release from VITAL Inc., to which extent do you think VITAL Inc. contribute resources to support public health programs?” and “Based on the news release from VITAL Inc., to which extent do you think VITAL Inc. contribute resources to socially responsible activities?” Two questions were measured on a 7-point bipolar scale ranging from 1 (*not at all*) to 7 (*absolutely*). Reliability for the two items yielded Cronbach’s α value of .92. For the issues advocacy manipulation check, participants were asked to answer two questions: “Based on the news release from VITAL Inc., I am acknowledged that prescription drug advertisements educate consumers by diagnosing symptoms, initiating doctor-patient relationship, and facilitating doctor-patient communication” and “Based on the news release from VITAL Inc., I am acknowledged the result of research on prescription drug advertisements conducted by MUSC” on a 7-point Likert-type scale ranging from 1 (*not at all*) to 7 (*fully acknowledged*). Reliability for the two items yielded Cronbach’s α value of .84. For self-regulation strategy manipulation check, participants were asked to answer one questions using one item: “Based on the news release from VITAL Inc., how likely is it that VITAL Inc. would comply with PhRMA’s Guiding Principles for prescription drug advertisements?” on a 7-point bipolar scale ranging from 1 (*not at all likely*) to 7 (*extremely likely*). Independent sample t-tests were conducted with each manipulation check variable as the dependent variables and with each group as the independent variables. For CSR manipulation, the result showed that there was a significant mean difference on manipulation variables between the control group ($M = 3.00$, $SD = 1.37$) and the experiment group ($M = 4.64$, $SD = 1.06$), $t(264) = 10.81$, $p < .001$. For issue advocacy manipulation, the result showed that there was a significant mean difference on manipulation variables between the control group ($M = 3.02$, $SD = 1.44$) and the experiment group ($M = 4.89$, $SD = 1.24$), $t(264) = 11.25$, $p < .001$. For self-regulation manipulation, the

result showed that there was a significant mean difference on manipulation variables between the control group ($M = 2.80$, $SD = 1.39$) and the experiment group ($M = 5.15$, $SD = 1.46$), $t(265) = 13.42$, $p < .001$. Therefore, the manipulation checks for three issue management strategies indicated that the manipulation was effective.

CHAPTER 4

RESULTS

Since this dissertation examines two levels of organizational and issue legitimacy regarding DTC-ads in pharmaceutical industry, this chapter consists of two parts: results of Study 1 and results of Study 2. Study 1 reports the macro-level issue legitimacy as obtained through a content analysis for news coverage and news releases during the period 1997 - 2009. Specifically, issue legitimacy of DTC-ads presented in four leading newspapers and issue advocacy of DTC-ads from the pharmaceutical industry presented in news releases, are reported along with descriptive trends of DTC-ads. These results address RQ 1 to RQ 3.

Study 2 presents the measurement development results of micro-level organizational legitimacy and issue legitimacy as gathered through questions on a state-wide omnibus survey, and the effects of issues management strategies on the micro-level organizational legitimacy and issue legitimacy of DTC-ads as gathered through an experiment. For the measurement development results, a description of the data in terms of respondents' demographic information is first presented. Then, the descriptive statistics for the measurement scales are reported, followed by the results of the two measurement models (i.e., organizational legitimacy measurement and issue legitimacy measurement) to answer RQ 4 and RQ 5. The second part presents the effects of issues management strategies on micro-level organizational legitimacy and issue legitimacy. These are the results of a mixed design with one within-subjects factor (pre-post test) and 2 (CSR: use of CSR versus no use of CSR) \times 2 (Issue advocacy: use of advocacy framing versus no use of advocacy framing) \times 2 (Self-regulation: use of self-regulation

versus no use of self-regulation) between-subject factors. This addresses RQ 6 and RQ 7, and associated hypotheses. All research questions, hypotheses, and results are summarized at the end of this chapter.

Study 1: Macro-level Legitimacy

To examine the macro-level issue legitimacy of DTC-ads in pharmaceutical industry and the relationships among issue legitimacy, organizational issue advocacy and regulatory enforcement, RQ 1, 2, and 3 were posited. To address these research questions, a content analysis was employed to examine news coverage and news releases. The first part of this section reports descriptive statistics to show the trend of news coverage among four leading newspapers and news releases from the pharmaceutical industry. The second part reports Janis-Fadner coefficients of imbalance for issue legitimacy endorsed by the media and organizational issue advocacy endorsed by the pharmaceutical industry. Then, the coefficients are compared to examine the statistical significance in differences during the period 1997 - 2009. The last part shows the relationship among issue legitimacy of DTC-ads, organizational issue advocacy, and regulatory enforcement.

Descriptive statistics: The trend of news coverage and news releases

To examine the trend of issue legitimacy, descriptive features of news coverage and news releases were analyzed. As mentioned in Chapter 3, 359 news stories and 54 news releases appeared from 1997 to 2009. The difference in numbers of news stories and news releases were statistically significant, ($\chi^2(1, N = 412) = 225.24, p < .001$). During the study period, a total of 119 (33.1%) appeared in *Wall Street Journal*, followed by *New York Times* (N = 118, 32.8%), *USA Today* (N = 67, 16.2%), and *Washington Post* (N = 56, 13.6%). There were significant differences in the number of news stories among four newspapers ($\chi^2(3, N = 357) = 36.78, p <$

.001). Among 53 reviewed news releases, a total of 32 news releases appeared in *PRNewswire* (59.3%). Table 4-1 shows the distribution of news stories among four newspapers and news releases of *PRNewswire* and *BusinessNewswire*.

Table 4-1. Total number of news stories and news releases and average words counts

	Stories	Story Length
<i>The New York Times</i>	118	790.71
<i>USA Today</i>	67	593.18
<i>The Wall Street Journal</i>	119	776.23
<i>The Washington Post</i>	56	881.69
<i>PRNewswire</i>	32	668.56
<i>BusinessNewswire</i>	21	684.52

Most news stories appeared in the Financial/Money/Business sections ($N = 258, 71.9\%$), followed by the Health/Fitness/Life sections ($N = 56, 15.6\%$) and Editorial/Opinion sections ($N = 37, 10.3\%$). In addition, 315 news stories were news articles (87.7%), 32 stories were types of editorial/opinion/op-ed/letters (8.9%), two stories were interviews (0.6%), and nine articles were letters from audiences (2.5%).

In terms of the frequency of news coverage, news releases, and regulatory enforcements during the years between 1997 and 2009, almost 30 percent of news coverage appeared in 2004 ($N = 46, 12.8\%$) and 2005 ($N = 54, 15.0\%$). In addition, 44 percent of news releases appeared in 2005 ($N = 24$). However, the regulatory enforcement was most frequent in the year of 2000. Table 4-2 shows the frequency of news coverage, news releases, and regulatory enforcements from 1997 to 2009, and Figure 4-1 shows the graphical changes throughout the years.

The most frequent frame in news coverage was “DTC-ads are marketing” ($N = 128, 35.7\%$). The second most frequent frame in news coverage was “Customers should be careful about DTC-ads” ($N = 85, 23.7\%$). The next frequent frame in news coverage was “The issue of DTC-ads is under regulatory investigation” ($N = 69, 19.2\%$) followed by the frame of “DTC-ads

aim to educate consumers” ($N = 49, 13.6\%$). The frame of “Self-regulations” appeared least ($N = 22, 6.1\%$).

Table 4.2 Trend of news coverage, news releases, and regulatory enforcement

	News coverage	News releases	Regulatory enforcement
1997	21	5	13
1998	24	1	18
1999	25	4	6
2000	25	2	17
2001	29	6	10
2002	35	4	8
2003	35	2	9
2004	46	1	8
2005	54	24	9
2006	14	0	0
2007	19	3	2
2008	29	2	3
2009	3	0	3

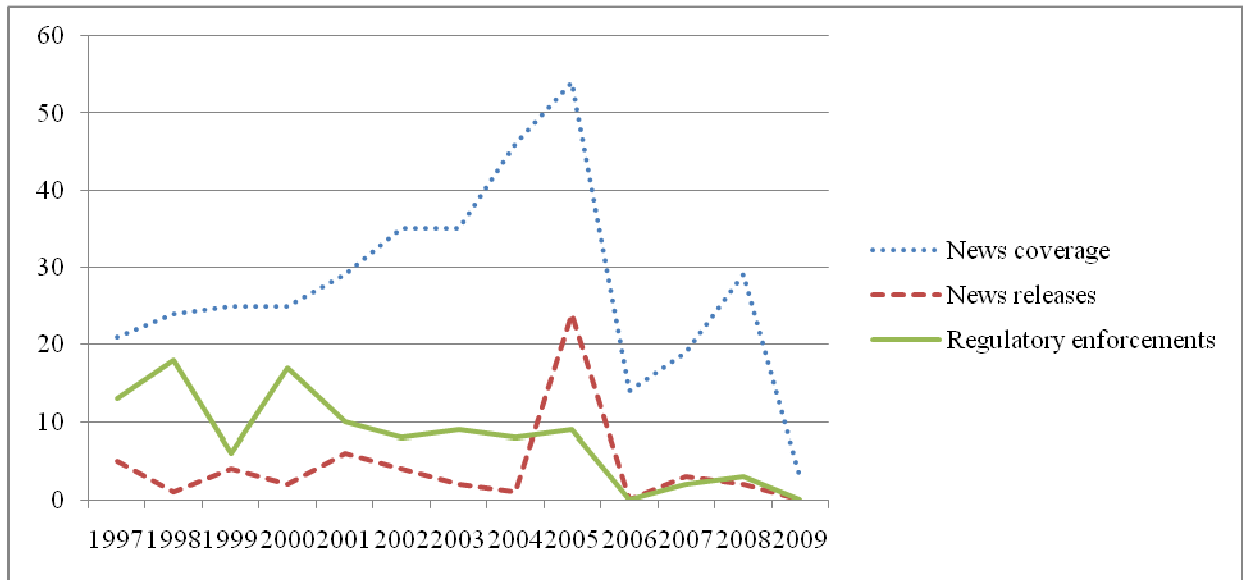


Figure 4-1. Trend of news coverage, news releases, and regulatory enforcement

Among frames in news releases, the issue frame of “Pharmaceutical companies self-regulate DTC-ads” was most frequent ($N = 23, 42.6\%$). The next frequent frame was “DTC-ads are marketing” ($N = 20, 37\%$). The frame of “DTC-ads aim to educate consumers” was next frequent ($N = 11, 20.4\%$). The frames of “The issue of DTC-ads is under investigation” and

“Customers should be careful about DTC-ads” did not appear. Figure 4-2 shows the trend of frames in news coverage and Figure 4-3 shows the trend of frames in news releases.

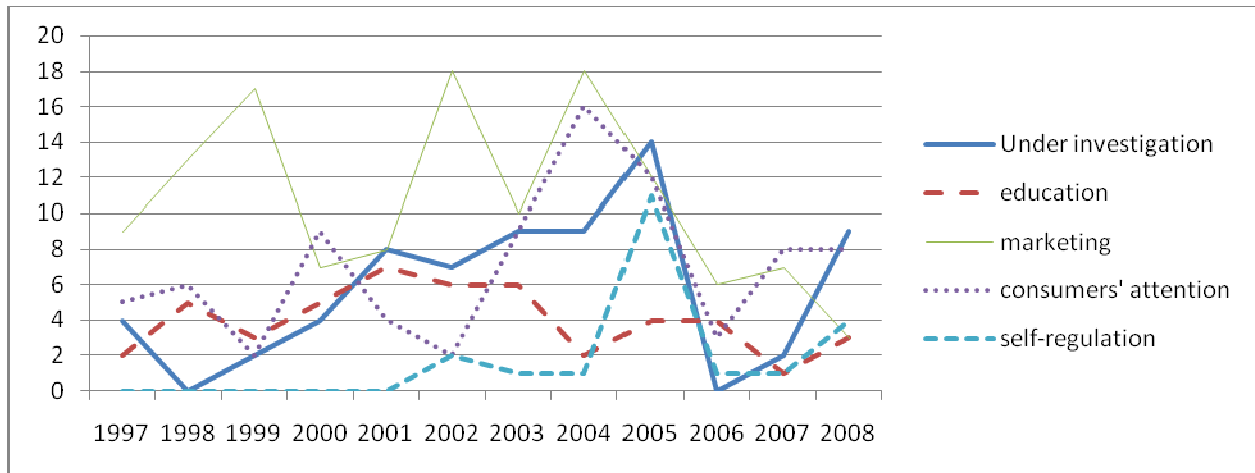


Figure 4-2. Trend of frames in news coverage

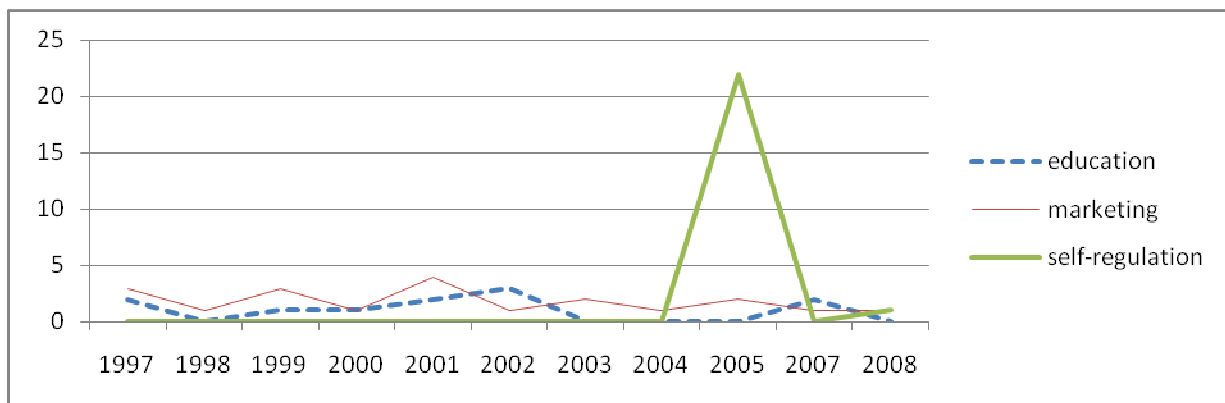


Figure 4-3. Trend of frames in news releases

Issue Legitimacy, Organizational Issue Advocacy, and the Gap

RQ1 examined the trend of issue legitimacy of DTC-ads and organizational issue advocacy in the period 1997 - 2009. The previous descriptive features showed the trend of news coverage and news releases in terms of frames. Along with these descriptive features, to answer RQ1, Janis-Fadner coefficients of imbalance for five frames were calculated. During the study period, the overall mean of Janis-Fadner coefficient of imbalance for news coverage was $-.50$ ($SD = .63$). Table 4-3 shows the changes of Janis-Fadner coefficients of imbalance for news

coverage. As seen previously, the amount of news coverage was most frequent in the years of 2004 and 2005. Concurrently, the Janis-Fadner coefficients of imbalance in 2004 and 2005 were most negative. In other words, during 2004 and 2005, newspapers featured many news stories with a negative valence or perspective on the DTC-ads issue, and may have threatened issue legitimacy of DTC-ads for pharmaceutical companies.

RQ2 explored the gap between issue legitimacy of DTC-ads and organizational issue advocacy. To answer the second research question, Janis-Fadner coefficients of imbalance for five frames, appeared in news releases, were calculated. During the study period, the overall mean of Janis-Fadner coefficient of imbalance for news releases was .51 ($SD = .51$). The good-of-fitness t-test was conducted to examine the mean difference between the two coefficients. The results showed that there was a significant difference between the coefficient of news coverage and news releases, $t = 8.52, p < .001$. In other words, the gap between issue legitimacy of DTC-ads and organizational issue advocacy is statistically significant. Table 4-3 shows the trend of issue legitimacy of DTC-ads, organizational issue advocacy, and the differences during the study period.

Table 4-3. The issue legitimacy, organizational issue advocacy, and the differences from 1997 to 2009

	Janis-Fadner coefficient of imbalance for News Coverage	Janis-Fadner coefficient of imbalance for News Releases	<i>t</i>	<i>p</i>
1997	M = -.60, SD = .54	M = .68, SD = .58	3.11	.02
1998	M = -.30, SD = .67	M = .33, SD = .58	NS	NS
1999	M = -.56, SD = .45	M = .67, SD = .58	3.39	.02
2000	M = -.50, SD = .70	M = .68, SD = .58	NS	NS
2001	M = -.62, SD = .53	M = .67, SD = .58	3.23	.02
2002	M = -.69, SD = .70	M = .50, SD = .71	NS	NS
2003	M = -.53, SD = .87	M = .33, SD = .58	NS	NS
2004	M = -.80, SD = .45	M = .33, SD = .58	3.14	.02
2005	M = -.66, SD = .48	M = .67, SD = .58	3.56	.01
2006	M = -.20, SD = .84	M = 0, SD = 0	NS	NS
2007	M = -.31, SD = .84	M = .67, SD = .58	NS	NS
2008	M = -.56, SD = .61	M = .68, SD = .58	2.78	.03
2009	M = -.20, SD = .84	M = 0, SD = 0	NS	NS

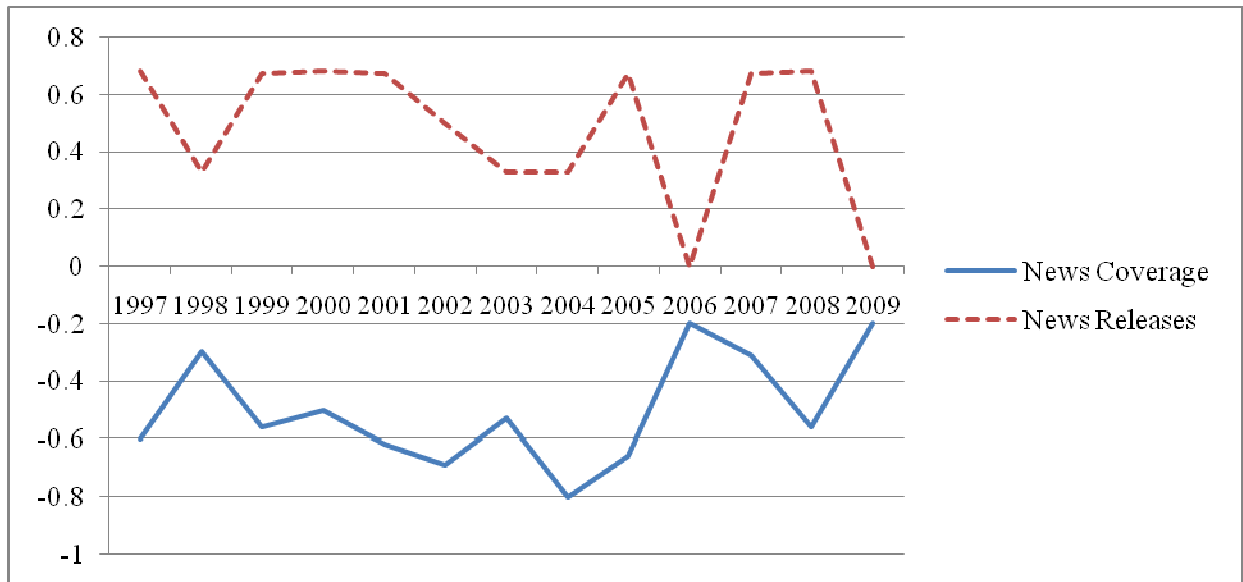


Figure 4-4. Gaps between issue legitimacy of DTC-ads and issue advocacy

Issue legitimacy, organizational issue advocacy, and regulatory enforcement

RQ 3 explored the relationship among issue legitimacy of DTC-ads, organizational issue advocacy, and regulatory enforcement. The relationship among three variables was measured in terms of the amount of each variable. Correlation analysis of Spearman’s rho was conducted since the three variables were not normally distributed. However, there were no significant relationships among them.

Study 2: Micro-level Legitimacy

Study 2 has two purposes: measurement development for organizational legitimacy of the pharmaceutical company and issue legitimacy of DTC-ads, and testing the effects of CSR, issue advocacy, and self-regulation on the micro-level organizational legitimacy, issue legitimacy, and behavioral intentions toward an organization. Accordingly, this section presents the results of measurement development followed by the results of the effects of CSR activities, issue

advocacy, and self-regulation on organizational legitimacy, issue legitimacy, and behavioral intention.

Organizational Legitimacy and Issue Legitimacy Measurements

Sample Description - Demographics

A total of 3,298 phone numbers collected, a total of 484 adult Alabama residents were interviewed by telephone during September and October of 2009. Response rate was 14.68%. Percentages based on the entire sample have a margin of error of plus or minus 4.5 percentage points with a 95% confidence level. In other words, it gives 95% confidence that the sample characteristics differ by no more than 4.5 percentage points from the characteristics of the whole population from which the sample was drawn.

A statewide omnibus survey was conducted by Institute for Social Science Research at The University of Alabama during September and October of 2009. A total of 484 adult Alabama residents were interviewed by telephone. Demographic information was examined in terms of gender, age, education, race, religion, income, marital status, and employment. Table 4-4 shows demographic descriptions for respondents.

Table 4-4. Sample demographic description

Variables	Category	Frequencies	Percentage
Gender	Male	205	42.4
	Female	278	57.4
	No answer	1	.2
	Total	484	100
Age	18 - 24	7	1.4
	25-34	43	8.9
	35-44	66	13.6
	45-54	113	23.3
	55-64	94	19.4
	65 and up	158	32.6
	Don't know/no answer	3	.6
	Total	484	100
Education	8 th grade or less	11	2.3
	Grade 9 – 11	37	7.6

	12 th grade, high school, or GED	159	32.9
	Any college or technical school	134	27.7
	Completed B.A., B.S., or any other 4-year degree	87	18.0
	Any graduate or professional school	56	11.6
	Total	484	100
Race	White/Caucasian	381	78.7
	African-American	75	15.5
	Native-American	5	1.0
	A member of another racial group	6	1.2
	Don't know/Refused	2	.4
	Mixed race	15	3.1
	Total	484	100
Religion	Protestant	382	78.9
	Catholic	27	5.6
	Jewish	1	.2
	Non-denominational,	37	7.6
	Something else or	20	4.1
	none	15	4.1
	Don't know/no answer	2	.4
	Total	484	100
Income	Less than \$10,000	26	5.4
	\$10,000 to \$20,000	63	13.0
	\$20,000 to \$30,000	64	13.2
	\$30,000 to \$40,000	51	10.5
	\$40,000 to \$50,000	48	9.9
	\$50,000 to \$70,000	63	13.0
	\$70,000 to \$90,000	45	9.3
	More than \$90,000	80	16.5
	Don't know	19	3.9
	/no answer	25	5.2
	Total	484	100
Married	Never Married	39	8.1
	Currently Married	292	60.3
	Separated	13	2.7
	Widowed	67	13.8
	Divorced	72	14.9
	Don't know/no answer	1	.2
	Total	484	100
Employment	Yes	229	47.3
	No	255	52.7
	Retired	185	38.2
	Not retired	70	14.5
	Total	255	100
	Total	484	100

Descriptive Statistics for measures

For the descriptive statistics, mean and standard deviation were examined because all measures were numeric variables. Table 4-5 shows the means and standard deviations for five measures for organizational legitimacy and six measures for issue legitimacy that were included as questions in this study. As stated previously, 7-point Likert scales ranging from (1) strongly disagree to (7) strongly agree were used in all measures.

The overall mean score for organizational legitimacy was 4.50 ($SD = 1.49$) and that of issue legitimacy was 4.09 ($SD = 1.61$). In other words, while respondents rated organizational legitimacy of the pharmaceutical company moderately, they rated issue legitimacy of DTC-ads less than average. Among five organizational legitimacy measures, respondents rated the highest on “I think that the prescription drug industry is a necessary part of our society” ($M = 5.75$, $SD = 1.86$), while they rated the lowest on “I think that the prescription drug companies are honest” ($M = 3.32$, $SD = 2.01$). The next highly rated measure was “The prescription drug companies do a good job making their drugs” ($M = 4.97$, $SD = 2.05$), followed by “I believe that the prescription drug companies follow government regulations” ($M = 4.30$, $SD = 2.26$), and “I have a positive opinion about prescription drug companies” ($M = 4.20$, $SD = 2.15$). In other words, respondents rated more favorably the pharmaceutical companies’ ability to make good products and comply with regulations than they did their opinions about those companies.

Among six issue legitimacy measures, respondents rated highest the claim that “Prescription drug advertisements help people learn about the symptoms for different medical problems” ($M = 4.42$, $SD = 2.22$). However, they rated the lowest the statement that “Prescription drug advertisements have helped me” ($M = 3.29$, $SD = 2.45$). The next highly rated measure was “Prescription drug advertisements have helped other people I know” ($M = 4.18$, SD

= 2.47), followed by “Overall, the benefits from prescription drug advertisements outweigh the problems” ($M = 3.94, SD = 2.31$); “I have a positive opinion about advertisements for prescription drugs” ($M = 3.64, SD = 2.25$); and “I think that any problems associated with prescription drug advertisements could be solved” ($M = 3.32, SD = 2.07$). In other words, respondents rated highly the notion that the DTC-ads benefit other people, though they do not seem to benefit themselves. The initial reliability for organizational legitimacy was 0.76 and that of issue legitimacy was 0.79.

Table 4-5. Descriptive statistics for organizational legitimacy and issue legitimacy

Variables	Mean	SD
Organizational legitimacy		
I have a positive opinion about prescription drug companies.	4.20	2.15
I believe that the prescription drug companies follow government regulations.	4.30	2.26
The prescription drug companies do a good job making their drugs.	4.97	2.05
I think that the prescription drug companies are honest.	3.32	2.01
I think that the prescription drug industry is a necessary part of our society.	5.75	1.86
Issue legitimacy		
I have a positive opinion about advertisements for prescription drugs.	3.64	2.25
Prescription drug advertisements have helped me.	3.29	2.45
Prescription drug advertisements have helped other people I know.	4.18	2.47
Prescription drug advertisements help people learn about the symptoms for different medical problems.	4.41	2.22
I think that any problems associated with prescription drug advertisements could be solved.	3.32	2.07
Overall, the benefits from prescription drug advertisements outweigh the problems.	3.94	2.31

Measurement Models - Exploratory Factor Analysis

To develop measurements for organizational legitimacy and issue legitimacy, a principal component factor analysis was conducted including all measures. Since this dissertation first attempts to develop organizational legitimacy and issue legitimacy, the first step is to perform factor analysis including all measures. As predicted, two factors appeared as significant (see

Table 4-6). All five items of organizational legitimacy loaded to Factor 1, and five out of six items of issue legitimacy loaded to Factor 2. An item of “I think that any problems associated with prescription drug advertisements could be solved” had factor loading of .275 for issue legitimacy and .306 for organizational legitimacy. Therefore, to confirm the dimensionality and appropriateness of measures for each latent variable (i.e., organizational legitimacy and issue legitimacy), a separated factor analysis was conducted.

Table 4-6. Factor loadings for all measures

Items	Factor 1	Factor 2
I have a positive opinion about prescription drug companies.	.681	.283
I believe that the prescription drug companies follow government regulations.	.681	.187
The prescription drug companies do a good job making their drugs.	.750	.113
I think that the prescription drug companies are honest.	.615	.295
I think that the prescription drug industry is a necessary part of our society.	.645	.153
I have a positive opinion about advertisements for prescription drugs.	.251	.749
Prescription drug advertisements have helped me.	.112	.732
Prescription drug advertisements have helped other people I know.	.181	.732
Prescription drug advertisements help people learn about the symptoms for different medical problems.	.306	.742
I think that any problems associated with prescription drug advertisements could be solved.	.395	.275
Overall, the benefits from prescription drug advertisements outweigh the problems.	.403	.580
Eigenvalues	4.456	1.148
Percentage of variance explained	40.51	10.44

Organizational legitimacy: RQ 4. To assess the dimensionality and the appropriateness of the measurement variables for the latent variable (i.e., organizational legitimacy), a principal component factor analysis was conducted (Hair et al., 1998). For organizational legitimacy, five items were examined to determine whether they are appropriate for the measurement. As seen in Table 4-7, the result showed that all five measures had high factor loadings.

Table 4-7 Factor loadings for organizational legitimacy

Items	Factor loading
I have a positive opinion about prescription drug companies.	.760
I believe that the prescription drug companies follow government regulations.	.712
The prescription drug companies do a good job making their drugs.	.744
I think that the prescription drug companies are honest.	.716
I think that the prescription drug industry is a necessary part of our society.	.637
Eigenvalues	2.56
Percentage of variance explained	51.10
Cronbach's α	.76

Issue legitimacy: RQ 5. For issue legitimacy, six items were examined for their appropriateness for the measurement. As seen in Table 4-8, the result showed that all six measures had high factor loadings. Previously, an item of “I think that any problems associated with prescription drug advertisements could be solved” had factor loading of .275 for issue legitimacy when including all measures. However, the separated analysis confirmed that the item had appropriate factor loading for the latent variable. The Cronbach's α was .792. And if the item is excluded, it becomes .802. The change is not significant, so the researcher decided to include the item in the dimension.

Table 4-8. Factor loadings for issue legitimacy

Items	Factor loading
I have a positive opinion about advertisements for prescription drugs.	.775
Prescription drug advertisements have helped me.	.664
Prescription drug advertisements have helped other people I know.	.747
Prescription drug advertisements help people learn about the symptoms for different medical problems.	.803
I think that any problems associated with prescription drug advertisements could be solved.	.482
Overall, the benefits from prescription drug advertisements outweigh the problems.	.711
Eigenvalues	2.98
Percentage of variance explained	49.69
Cronbach's α	.79

Correlations Analysis

Further, to explore the relationship between organizational legitimacy and issue legitimacy, a Pearson's correlation was calculated. The result showed that the two variables are strongly positively correlated to one another, $r(484) = .604, p < .001$.

Measurement Models - Confirmatory Factor Analysis

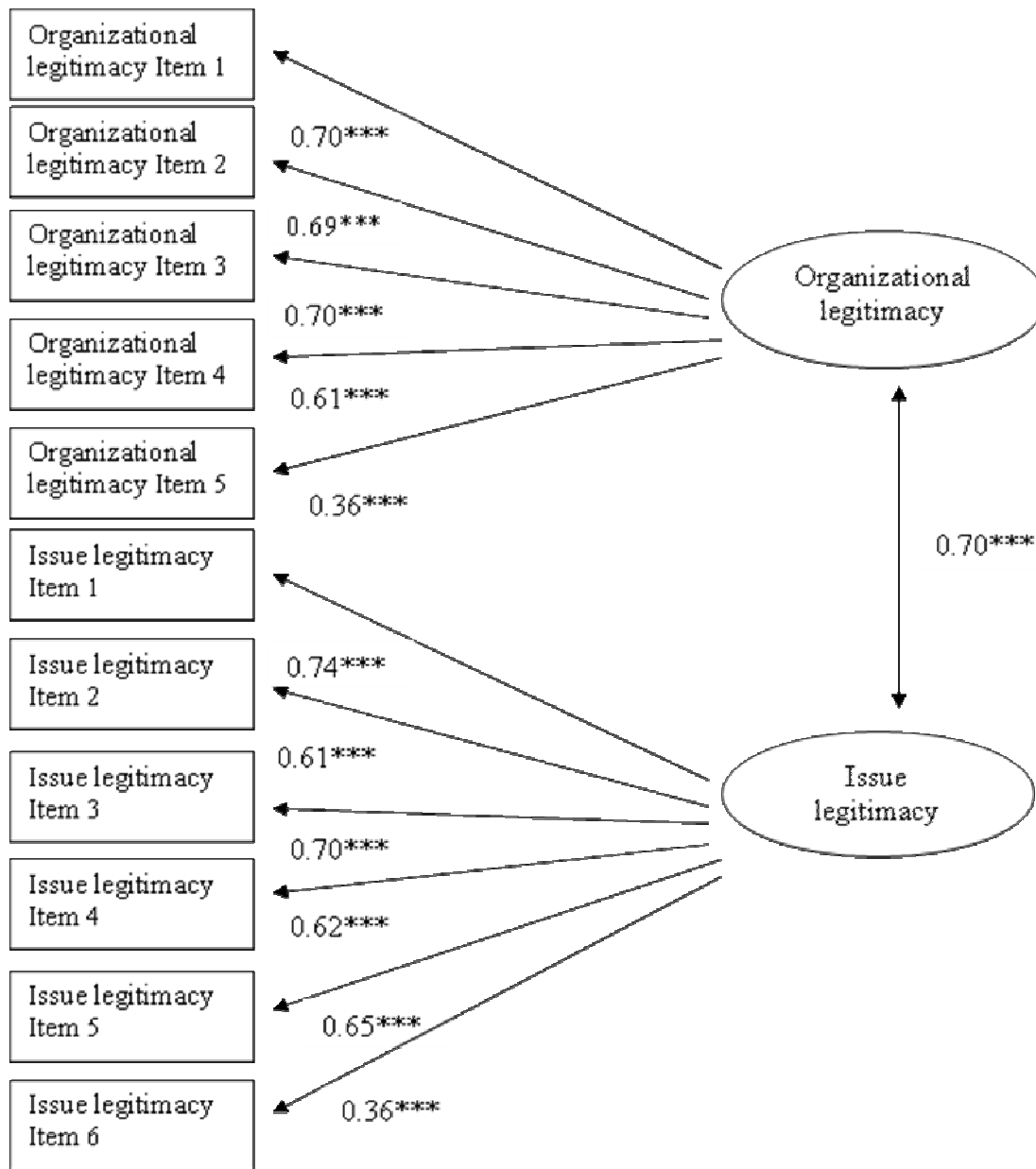
To validate the results of the exploratory factor analysis, the most direct method is to utilize a confirmatory perspective (Hair et al., 1998). Confirmatory factor analysis affords the advantages of being able to examine the validity of measures. Before conducting the main analysis, missing data was handled by listwise deletion (i.e., all cases with missing observations on any indicator are removed), resulting in dropping 109 of the original 483 observations, leaving a sample size of 374.

The results of confirmatory factor analysis are presented in Table 4-9 and Figure 4-4. Standardized loadings represent the correlation between each observed variable and the corresponding factor. All five items of organizational legitimacy had significant loadings on the organizational legitimacy construct, and all six items had significant loadings on the issue legitimacy construct. The results were similar to previous EFA. In addition, the correlation between organizational legitimacy and issue legitimacy increased from $r(484) = .60, p < .001$ to $r(374) = .70, p < .001$. This is due to the estimation process accounting for the measurement error of the two factors, which will increase the estimated parameters, implying that the "true" relationship between organizational legitimacy and issue legitimacy is greater (Hair et al., 1998). A good deal of the variance in each observed item was accounted for each construct (see Table 4-3).

Table 4-9. Factor loadings of confirmatory factor analysis

Items	Standardized loading	Estimate	<i>S.E.</i>	<i>t</i>	<i>R</i> ²
Organizational legitimacy					
I have a positive opinion about prescription drug companies.	.70***	1.43	0.10	13.92	0.49
I believe that the prescription drug companies follow government regulations.	.69***	1.27	0.11	11.88	0.38
The prescription drug companies do a good job making their drugs.	.70***	1.39	0.099	14.02	0.49
I think that the prescription drug companies are honest.	.61***	1.23	0.10	15.61	0.39
I think that the prescription drug industry is a necessary part of our society.	.36***	1.00	0.10	10.07	0.29
Issue legitimacy					
I have a positive opinion about advertisements for prescription drugs.	.74***	1.57	0.10	15.66	0.55
Prescription drug advertisements have helped me.	.61***	1.59	0.11	13.97	0.46
Prescription drug advertisements have helped other people I know.	.70***	1.57	0.11	14.89	0.51
Prescription drug advertisements help people learn about the symptoms for different medical problems.	.62***	1.62	0.10	15.61	0.55
I think that any problems associated with prescription drug advertisements could be solved.	.65***	0.74	0.11	6.75	0.13
Overall, the benefits from prescription drug advertisements outweigh the problems.	.36***	1.36	0.10	13.48	0.42

Note. *** $p < .001$



Note: *** $p < .001$

Figure 4-5. Path Diagram for CFA

Model fit was judged by the CFI (Comparative Fit Index), NFI (Normative Fit Index), and RMSEA (Root Mean Square Error of Approximation) indices. Non-significant Likelihood ratio χ^2 statistics values usually indicate a good fit (Hair et al., 1998). However, the χ^2 test is widely recognized to be problematic (Joreskog, 1969), because it is sensitive to sample size. CFI and NFI values should exceed .90, and values ranging from .50 to .80 are deemed acceptable

(Hair et al., 1998). As noted earlier, the significant Likelihood ratio χ^2 statistics value was probably due to the study's sample size. Statistical non-significance only guarantees that the proposed model fits the observed covariances and correlations well (Hair et al., 1998). However, the RMSEA value represents the goodness-of-fit that could be expected if the model were estimated in the population, not just the sample (Hair et al., 1998). Further, Marsh, Balla and Hau (1996) suggested that the *Chi/df* index as a useful ratio for assessing model fit rather than using chi-square alone. If this statistic is less than the value 5, the model fits reasonably well. The *Chi/df* for this measurement model was 3.21, thus, the data fit the model well.

Table 4-10. Fit measures

Fit Index		Criteria	Fit Statistics	Acceptability
Absolute Fit Measures	Nonsignificant Likelihood ratio χ^2 statistics	$\geq .05$	$\chi^2 = 141.42$, $p < .01$	Marginal
	Root Mean Squared Error Residual (RMSEA)	$\leq .8$.077	Acceptable
Incremental Fit Measures	Comparative Fit Index (CFI)	$\geq .9$.96	Acceptable
	Normed Fit Index (NFI)	$\geq .9$.95	Acceptable

Note. The criteria is based on Hair et al. (1998, p. 660)

The modification indices indicate that some items might be indicators on the second construct as well as the first (i.e., multiloading). However, theoretical support for such a structure cannot be found; thus, the model is not respecified. If model respecification is based only on the values of the modification indices, the researcher is capitalizing on the uniqueness of these particular data, and the result will most probably be an atheoretical, but statistically significant, model that has little generalizability and limited use in testing causal relationships (Hair et al., 1998).

Factors affecting legitimacy

Descriptive Statistics and Preliminary Test for Data Analysis

Before conducting main statistical analyses, descriptive statistics and preliminary tests were checked to confirm the appropriate use of analysis of variance (ANOVA), Factorial ANOVA, multiple regression analyses and mediation analyses. From the research model (see Figure 2-3), independent variables, mediating variables, and dependent variables were seen in Table 4-11.

Table 4-11. Variables

IV	Mediator	DV
CSR, Issue Advocacy, Self-regulation	Issue legitimacy, organizational legitimacy	Behavioral intention

Regarding the normality of variables, the most fundamental assumption in F and t statistics is normality, and a simple test for normality is a rule of thumb based on skewness and kurtosis values (Hair et al., 1998). Skewness measures the symmetry of a distribution, and values falling within the range of -1 to +1 indicate a substantially normal distribution (Hair et al., 1998). Kurtosis refers to the peakedness or flatness of the distribution, and values falling within the range of -1 to 2 indicate a substantially normal distribution. All measures were assumed normal distribution based on values of Skewness and Kurtosis (see Table 4-12). Table 4-12 shows descriptive statistics and summarizes results for preliminary test.

Table 4-12. Descriptive statistics, normality, and reliability for measurements

	M	SD	Normality		Reliability	
			Skewness	Kurtosis	# of items	Cronbach's α
Pre-issue legitimacy	4.24	1.07	.143	.021	6	.83
Pre-organizational legitimacy	4.57	1.04	-.001	-.230	5	.84
Issue legitimacy (Post-test)	4.02	1.06	.261	.514	6	.84
Organizational legitimacy (Post-test)	4.05	1.03	-.059	.895	5	.87
Behavioral intention	3.77	1.32	-.008	-.126	2	.88
Problem recognition	4.17	1.29	-.193	-.481	4	.55
Constraint recognition	2.76	1.04	.484	.182	3	.69
Issue involvement	3.46	1.12	.425	-.252	4	.74

Hypotheses Testing and research Questions

Legitimacy gaps between pre-perception and post-perception of organizational legitimacy and issue legitimacy: H1 and H2

To examine the difference between initial perceptions of organizational legitimacy and perceptions of organizational legitimacy after being exposed to a violation, a paired-t test was conducted. The result showed that there was a significant difference between initial perceptions on organizational legitimacy ($M = 4.57$, $SD = 1.03$) and perceptions after the violation ($M = 4.05$, $SD = 1.04$), $t(264) = 7.75$, $p < .001$, $\eta_p^2 = .19$. Regarding issue legitimacy, the result showed that there was a significant difference between initial perceptions of issue legitimacy ($M = 4.23$, $SD = 1.07$) and perceptions after the violation ($M = 4.01$, $SD = 1.06$), $t(264) = 4.52$, $p < .001$, $\eta_p^2 = .07$. Therefore, H1 and H2 were supported.

Relationships between organizational legitimacy and issue legitimacy: RQ 6

RQ 6 examined the relationship between organizational legitimacy and issue legitimacy. To answer this research question, Pearson's correlation analyses were conducted for pre-tests and post-tests on organizational legitimacy and issue legitimacy. As predicted, organizational

legitimacy and issue legitimacy were strongly correlated to one another for both pre-test, $r(264) = .60, p < .01$, and post-test, $r(264) = .62, p < .01$.

CSR activity and organizational legitimacy and issue legitimacy: H3

To test the group differences between use of CSR activity and no use of CSR activity on organizational legitimacy and issue legitimacy, two independent t-tests were conducted.

Regarding organizational legitimacy, the result showed that there was a significant difference between participants who were exposed to CSR activity ($M = 4.26, SD = .91$) and participants who were not exposed to CSR activity ($M = 3.83, SD = 1.11$), $t(264) = 3.45, p = .001, \eta_p^2 = .04$.

Regarding issue legitimacy, the result showed that there was no significant difference between participants who were exposed to CSR activity and participants who were not exposed to CSR activity. In other words, CSR activity affected perceptions of organizational legitimacy, but not of issue legitimacy. Therefore, H3a was supported, but H3b was not supported.

Issue advocacy and organizational legitimacy and issue legitimacy: H4

To test the group differences between use of issue advocacy and no use of issue advocacy on organizational legitimacy and issue legitimacy, two independent t-tests were conducted.

Regarding organizational legitimacy, the result showed that there was a significant difference between participants who were exposed to issue advocacy ($M = 4.19, SD = 1.02$) and participants who were not exposed to issue advocacy ($M = 3.92, SD = 1.03$), $t(264) = 2.09, p = .038, \eta_p^2 =$

$.02$. Regarding issue legitimacy, the result showed that there was no significant difference between participants who were exposed to issue advocacy and participants who were not exposed to issue advocacy. In other words, issue advocacy affects perceptions of organizational legitimacy, but not of issue legitimacy. Therefore, H4a was supported, but H4b was not supported.

Self-regulation and legitimacy: H5

To test the group differences between use of self-regulation and no use of self-regulation on organizational legitimacy and issue legitimacy, two independent t-tests were conducted. Regarding organizational legitimacy, the result showed that there was a significant difference between participants who were exposed to self-regulation ($M = 4.33$, $SD = .97$) and participants who were not exposed to self-regulation ($M = 3.76$, $SD = 1.02$), $t(264) = 4.62$, $p < .001$, $\eta_p^2 = .08$. Regarding issue legitimacy, the result showed that there was a significant difference between participants who were exposed to self-regulation ($M = 4.20$, $SD = 1.08$) and participants who were not exposed to self-regulation ($M = 3.83$, $SD = 1.01$), $t(264) = 2.92$, $p = .004$, $\eta_p^2 = .03$. Therefore, H5a and H5b were supported. In other words, compared to the CSR activities and issue advocacy, self-regulation affects both organizational legitimacy and issue legitimacy.

Interactions on legitimacy: RQ 7

As seen in the results of previous hypotheses testing, each issue management strategy affected organizational legitimacy, and only self-regulation affected both organizational legitimacy and issue legitimacy. RQ 7 explored the interaction effects of CSR activity, issue advocacy, and self-regulation on organizational legitimacy and issue legitimacy. To answer this research question, two factorial ANOVA test were conducted. For issue legitimacy, only CSR activity had a main effect, $F(1, 258) = 8.353$, $p = .004$. However, there were no interaction effects. In other words, only CSR activity has an effect on issue legitimacy after averaging the use of issue advocacy and self-regulation.

For organizational legitimacy, the results of a factorial ANOVA showed that there were each of three main effects (see Table 4-13).

Table 4-13. Analysis of Factorial ANOVA Analysis

Effects	Variables	<i>F</i>	<i>p</i>
Main Effect	CSR	10.991	.001
	Issue advocacy	5.286	.022
	Self-regulation	21.184	<.001
Two-way interactions	CSR × issue advocacy	6.434	.012
	Issue advocacy × Self-regulation	4.931	.027
Three-way interactions	CSR × issue advocacy × Self-regulation	4.327	.039

A three-way interaction effect indicates that there might be two-way interaction between two variables that varies by the level of a third variable (Bruin, 2006). Therefore, two-way interaction at the level of a third variable should be examined. In examining a three-way interaction effect of an $A \times B \times C$ factorial design, one of three separate two-way interactions is needed; a) the $A \times B$ interaction at each level of C , b) the $A \times C$ interaction at each level of B , or c) the $B \times C$ interaction at each level of A (Karpinski, 2006). The researcher examined the interaction effects of issue advocacy and self-regulation at each level of CSR. The analysis followed suggestions by Bruin (2006) and Karpinski (2006).

First, since the analysis of three-way interaction is complicated, it is recommended to see graphical differences on means before the main analysis (Karpinski, 2006). Figure 4-5 and Figure 4-6 show the interactions (i.e., issue advocacy and self-regulation) depicted separately for each condition of third variable (i.e., the use of CSR and no-use of CSR condition). Graphs indicate that the two-way interaction is probably significant for the absence of CSR, but not for the use of CSR.

Estimated Marginal Means of Organizational Legitimacy

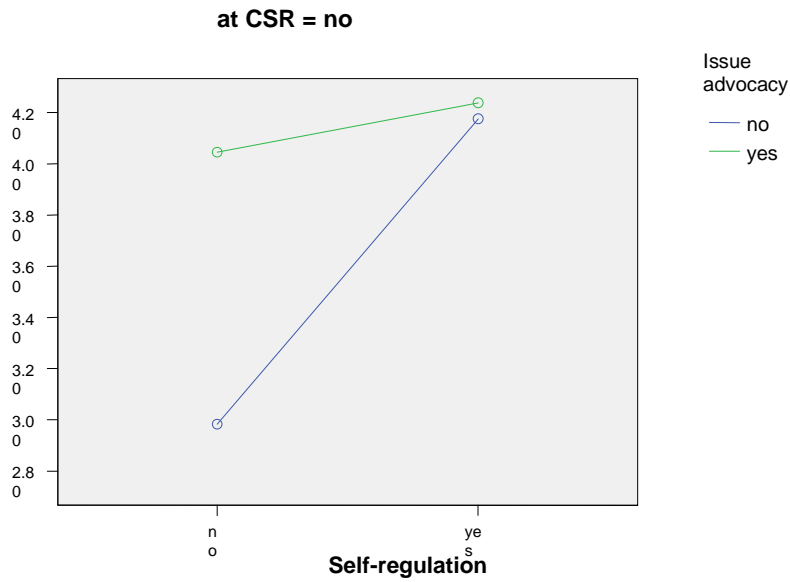


Figure 4-6. The mean difference between the use of issue advocacy by the use of self-regulation in the condition of no-use of CSR

Estimated Marginal Means of Organizational Legitimacy

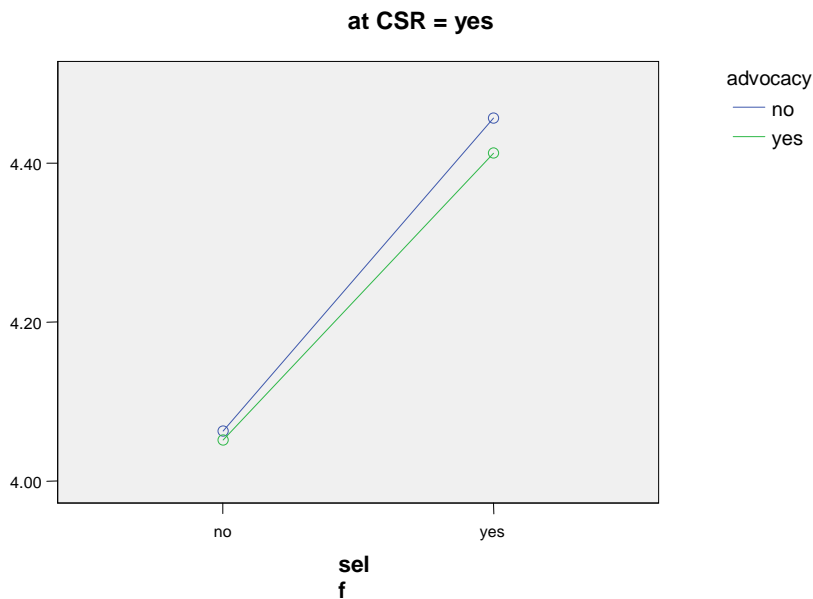


Figure 4-7. The mean difference between the use of issue advocacy by the use of self-regulation in the condition of no-use of CSR

Second step is to determine the significance of two simple interaction effects between two variables at each level of the third variable (Bruin, 2006). To compare simple interaction effects for each level of the third variable, *F*-ratios for simple interaction effects were computed. To analyze the two-way interactions between issue advocacy and self-regulation at each level of CSR, a Factorial ANOVA test for organizational legitimacy between self-regulation and issue advocacy was conducted, splitting the data file by CSR. The simple interaction effect of issue advocacy \times self-regulation for the no-use of CSR condition was statistically significant, $F(1,125) = 8.22, p = .004$, but the simple interaction effect of issue advocacy \times self-regulation for the use of CSR condition was not significant, $F(1,133) = .0092$. Therefore, as predicted previously, the three-way interaction seemed to be occurring due to the significant interaction effect between issue advocacy and self-regulation in the absence of CSR.

Next, to examine the specific conditions where the significant interactions between issue advocacy and self-regulation in the absence of CSR came from, post-hoc comparisons were examined. The result showed that there were each of two factors' main effects: issue advocacy, $F(1, 125) = 10.391, p = .002$ and self-regulation, $F(1, 125) = 15.782, p < .001$. The interaction effect for this analysis (i.e., under the use of CSR) indicates that under the no use of CSR condition, the interaction effect between issue advocacy and self-regulation was significant, $F(1, 125) = 8.219, p = .005$. The model explained 21% of issue legitimacy, with an adjusted R^2 of .24. To find out the underlying significant effects, Bonferroni comparison tests were calculated. Bonferroni values (B) were calculated by using 125 degree of freedom, and .05 level of α , .974 of *MSE* for four conditions. The calculation was followed by the Equation 3.

$$B = t_{df, \frac{\alpha}{2c}} \sqrt{MSE \left(\frac{1}{N_i} + \frac{1}{N_j} \right)} \quad (3)$$

If the mean differences on comparisons are smaller than B, the comparison is not statistically significant. The results of Bonferroni comparison analyses showed that there are two statistically significant differences among four conditions (see Table 4-14). First, there was significant mean difference on organizational legitimacy between the use of issue advocacy ($M = 4.05$, $SD = 1.03$) and no-use of issue advocacy ($M = 2.98$, $SD = .97$) under the no-use of self-regulation. In other words, in absences of CSR and self-regulation, exposure to issue advocacy had more positive effects on perceptions of organizational legitimacy than on the no-use of issue advocacy. Second, there was significant mean difference on organizational legitimacy between the use of self-regulation ($M = 4.18$, $SD = .99$) and no-use of self-regulation ($M = 2.98$, $SD = .97$) under the no-use of issue advocacy. In other words, in absences of CSR and issue advocacy, self-regulation has more positive effect on perceptions of organizational legitimacy than to the no-use of self-regulation. However, under the condition of the use of CSR, there were not statistically significant interaction effects of issue legitimacy and issue advocacy. Therefore, when an organization is unable to use CSR to communicate with publics regarding a certain issue, the self-regulation alone can be most effective.

Table 4-14. Bonferroni comparison analyses

Condition		Bonferroni value	Mean difference between use of issue advocacy and no-use of issue advocacy
No use of CSR	Use of self-regulation	.387	0.0621
	No use of self-regulation	.372	1.0619*
		Mean difference between use of self-regulation and no-use of self-regulation	
Use of issue advocacy		.393	.1929
No-use of issue advocacy		.366	1.1925*

Note. The * indicates that the mean difference between the two conditions is statistically significant.

Relationships among legitimacy and behavioral intention: H 6 and H 7

To test H6 and H7, multiple regression analyses were conducted. Before conducting the main analysis, Table 4-15 indicates the correlation among three variables.

Table 4-15. Descriptive statistics: Correlations

	Organizational legitimacy	Issue legitimacy	Behavioral intention
Organizational legitimacy	-		
Issue legitimacy	.62**	-	
Behavioral intention	.66**	.46**	-

Note. ** correlations are significant at the .01 level (2-tailed).

For the relationship between organizational legitimacy and behavioral intention, a simple linear regression was conducted. The result showed that organizational legitimacy is a significant predictor for behavioral intention, $R^2 = .437$, adjusted $R^2 = .435$, $F(1, 264) = 205.113$, $p < .001$. Standardized beta coefficient was .661. Therefore, H6 was supported. For the relationship between issue legitimacy and behavioral intention, the result of a simple linear regression showed that issue legitimacy is a significant predictor for behavioral intention, $R^2 = .207$, adjusted $R^2 = .204$, $F(1, 264) = 69.033$, $p < .001$. Standardized beta coefficient was .455. Therefore, H7 was supported.

Further, to see relationship among organizational legitimacy, issue legitimacy, and behavioral intention, the Sobel test was conducted. The purpose of the Sobel test is to see whether mediator carries the influence of an independent variable to a dependent variable (Preacher & Hayes, 2004). The results of a Sobel test showed that organizational legitimacy was a significant mediator of issue legitimacy on behavioral intention ($z = 8.13$, $p < .01$). In other words, there was a significant initial relationship between issue legitimacy and behavioral intention ($\beta = .455$, $p < .001$) that was non-significant after controlling for organizational legitimacy ($\beta = .073$, $p = .215$) which indicates level of organizational legitimacy mediates the

relationship between issue legitimacy and behavioral intention. Figure 4-8 shows the effect of organizational legitimacy as a mediator on issue legitimacy and behavioral intention relationship.

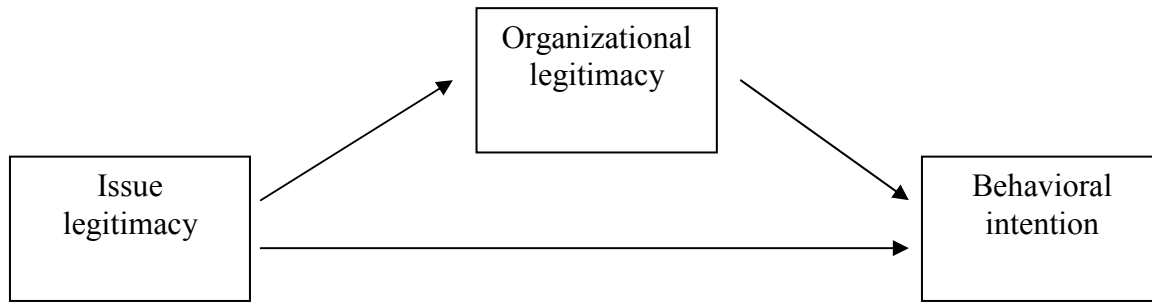


Figure 4-8. Organizational legitimacy as a mediator of issue legitimacy – behavioral intention

Relationships between the public’s problem recognition, problem constraint, and issues involvement and legitimacy: RQ 8

To answer the RQ 8, a Pearson’s correlation analysis was performed. Table 4-16 shows the correlations among variables. Organizational legitimacy had significantly negative correlations with problem recognition, constraint recognition, and issue involvement. However, issue legitimacy had a significant negative correlation with only problem recognition.

Table 4-16. Descriptive statistics: Correlations

	Organizational legitimacy	Issue legitimacy	Problem recognition	Constraint recognition	Involvement
Organizational legitimacy	-				
Issue legitimacy	.62**	-			
Problem recognition	-.37**	-.32**	-		
Constraint recognition	-.20**	-.09	.40**	-	
Involvement	-.20**	-.08	.48**	.46**	-

Note: ** correlations are significant at the .01 level (2-tailed).

Summary of Results

Study 1: Macro-level issue legitimacy of DTC-ads (Content Analysis)

RQ 1: How has the macro-level issue legitimacy of DTC-ads, issue advocacy of pharmaceutical industry, and regulatory enforcements on DTC-ads changed in a period between 1997 and 2010?

➔ During the study period, the overall means of Janis-Fadner coefficients of imbalance were $-.50$ ($SD = .63$) and $.51$ ($SD = .51$) for issue legitimacy of DTC-ads endorsed by the media and issue advocacy of pharmaceutical industry, respectively. The total number of regulatory enforcements on DTC-ads was 106.

RQ 2: Is there a gap between the macro-level issue legitimacy of DTC-ads in printed media and organizational issue advocacy of DTC-ads in the pharmaceutical industry?

➔ The gap between issue legitimacy of DTC-ads and organizational issue advocacy is statistically significant, $t = 8.52$, $p < .001$.

RQ 3: What are the relationship among the macro-level issue legitimacy of DTC-ads, organizational issue advocacy of the pharmaceutical industry, and regulatory enforcements on DTC-ads?

➔ No significant statistical relationship

Study 2: Micro-level organizational legitimacy and issue legitimacy

Through a statewide survey, following two research questions were answered.

RQ 4: What is a reliable and valid organizational legitimacy measurement?

➔ The result of a principal component factor analysis showed that five measures for organizational legitimacy were reliable, and the result of confirmatory factor analysis showed that the construct is valid.

Table 4-17. Final measurement items for organizational legitimacy

Items
I have a positive opinion about prescription drug companies.
I believe that the prescription drug companies follow government regulations.
The prescription drug companies do a good job making their drugs.
I think that the prescription drug companies are honest.
I think that the prescription drug industry is a necessary part of our society.

RQ 5: What is a reliable and valid issue legitimacy measurement?

➔ The result of a principal component factor analysis showed that six measures for organizational legitimacy were reliable, and the result of confirmatory factor analysis showed that the construct is valid.

Table 4-18. Final measurement items for issue legitimacy

Items
I have a positive opinion about advertisements for prescription drugs.
Prescription drug advertisements have helped me.
Prescription drug advertisements have helped other people I know.
Prescription drug advertisements help people learn about the symptoms for different medical problems.
I think that any problems associated with prescription drug advertisements could be solved.
Overall, the benefits from prescription drug advertisements outweigh the problems.

Through an experiment, RQ 6 through RQ 8 were answered and ten hypotheses were tested. Table 4-19 summarizes the results of hypotheses testing.

Table 4-19. The results of hypotheses testing

Hypotheses	Results
H1: When an issue of DTC-ads occurs, discrepancies arise between individual's initial expectation towards a pharmaceutical company and evaluation on micro-level organizational legitimacy of a pharmaceutical company.	Supported
H2: When an issue of DTC-ads occurs, discrepancies arise between individual's initial expectation towards an issue and evaluation on issue legitimacy of DTC-ads.	Supported
H3a: CSR activity is positively related to micro-level organizational legitimacy evaluation on a pharmaceutical company regarding DTC-ads.	Supported
H3b: CSR activity is positively related to micro-level issue legitimacy evaluation of DTC-ads.	Not supported
H4a: Issue advocacy is positively related to micro-level organizational legitimacy evaluation on a pharmaceutical company regarding DTC-ads.	Supported
H4b: Issue advocacy is positively related to micro-level issue legitimacy evaluation of DTC-ads.	Not supported
H5a: Self-regulation is positively related to micro-level organizational legitimacy evaluation on a pharmaceutical company regarding DTC-ads.	Supported
H5b: Self-regulation is positively related to micro-level issue legitimacy evaluation of DTC-ads.	Supported
H6: Micro-level organizational legitimacy on a pharmaceutical company regarding DTC-ads positively relates to publics' behavioral intention towards an organization.	Supported
H7: Micro-level issue legitimacy evaluation of DTC-ads positively relates to publics' behavioral intention towards an organization.	Supported

RQ 6: How does issue legitimacy evaluation on DTC-ads relate to organizational legitimacy of a pharmaceutical company?

➔ Organizational legitimacy and issue legitimacy were strongly correlated to one another for both pre-test, $r(264) = .60, p < .01$, and post-test, $r(264) = .62, p < .01$.

RQ7a: Are there interaction effects among CSR, issue advocacy, and self-regulation on micro-level organizational legitimacy evaluation of a pharmaceutical company regarding DTC-ads?

➔ A three-way interaction effect was found; in an absence of CSR, the interaction between issue advocacy and self-regulation was found.

RQ7b: Are there interaction effects among CSR, issue advocacy, and self-regulation on micro-level issue legitimacy evaluation of DTC-ads?

➔ No interaction effect

RQ 8: How does the public's problem recognition, problem constraint, and issue involvement relate to each of micro-level organizational legitimacy of a pharmaceutical company and micro-level of issue legitimacy of DTC-ads, respectively?

➔ Organizational legitimacy had significantly negative correlations with problem recognition, constraint recognition, and issue involvement. However, issue legitimacy had a significant negative correlation with only problem recognition.

CHAPTER 5

DISCUSSION

This dissertation used two studies to explore the trend and features of issue legitimacy of DTC-ads, construction of organizational legitimacy and issue legitimacy, and effectiveness of issues management strategies on perceptions of organizational legitimacy and issue legitimacy. The previous chapter presented and summarized the findings drawn from both Study 1 and Study 2. This chapter will discuss what these findings suggest and some key theoretical and practical implications. In addition, limitations of the project and future directions for research are presented.

Study 1: Macro-level Issue Legitimacy of DTC-ads

The trend of issue legitimacy and the legitimacy gap

The primary purpose of Study 1 was to examine the trend of issue legitimacy of DTC-ads, and the gap between issue legitimacy and organizational issue advocacy in order to understand better the issue of DTC-ads and issue legitimacy in society. The findings showed a prevalent negative perspective on issue legitimacy of DTC-ads and confirmed the gap between issue legitimacy of DTC-ads in printed media and organizational issue advocacy of the pharmaceutical industry. To better interpret the findings from Study 1, the researcher separated the results into three periods: the period 1997 -2001, the period 2002- 2005, and the period 2006 - 2009. These three periods are separated based on the rapid changes of frequencies of news coverage, news releases, and regulatory enforcements based on results presented in Chapter 4.

The rapid change seemed to occur because of the Vioxx recall, which was found to have an undetected negative side effect on the human heart in 2004 (Coombs & Holladay, 2007).

First stage – Moderate illegitimacy. During the first period, the average number of news coverage items was 24, that of news releases was 3.6, and that of regulatory enforcement was 12.8. Compared to the amounts of media coverage and regulatory enforcements, the amount of news releases from the industry was relatively low. The media started to investigate the issue questioning the success of DTC-ads with various perspectives on media. Media attention was devoted to four frames with either negative or neutral perspectives resulting in moderately illegitimate or negative perspectives on issue legitimacy of DTC-ads. From the pharmaceutical industry perspective, the information focused more on new launches of DTC-ads campaigns than the benefit of DTC-ads. Although the issue legitimacy of DTC-ads in this period was moderately negative, the gap between issue legitimacy endorsed by the media and issue advocacy endorsed by the industry was the greatest, implying that the industry did not actively respond to suspicions or questions about the DTC-ads from the media. Therefore, this inactive response might lead to growing concerns in the next stage. In addition, with a prevalent questioning of DTC-ads from the media, the numbers of regulatory enforcement were most frequent in this period. Overall, the first stage showed moderate illegitimacy of DTC-ads with a great number of regulatory enforcements in society.

Second stage – Illegitimation. During the second period, the average numbers of news coverage items and news releases were two times greater than those in the first stage. The second stage in the issue of DTC-ads was triggered by the Vioxx recall in 2004. The number of news stories during the second stage was the greatest of any period. In addition, media attention was devoted to cautioning customers about the potential side effects of prescription drugs with

negative valence, resulting in illegitimation of DTC-ads from the printed media. From the pharmaceutical industry perspective, the industry actively started to communicate about the benefit of DTC-ads (i.e., education to customers). Moreover, in 2005, PhRMA, the pharmaceutical industry's association, released "Guiding Principles for DTC-ads," introducing codes of conduct aimed at providing advertisers with guideline for DTC-ads (PhRMA, 2005). In other words, the industry was actively involved in conforming to societal expectations (i.e., regulation or restriction on DTC-ads due to the Vioxx recall) and communication about the issue, compared to the previous stage. Therefore, though the media negatively portrayed the DTC-ads, the gap between issue legitimacy and issue advocacy was the least among three periods. In addition, the regulatory enforcement decreased because the industry self-regulated their DTC-ads campaigns.

Third stage – Increasing legitimation. During the third period, the average numbers of news coverage items, news releases, and regulatory enforcement were the least. In this stage, the media coverage lessened and was less negative. Media attention focused on the need to regulate DTC-ads. However, the valence of news coverage was less negative, implying that the media started to accept the use of DTC-ads, but sought restrictions on them. From the pharmaceutical industry perspective, the information focused on the benefit of DTC-ads, but the average number of news releases was only 3.2. The gap between issue legitimacy endorsed by the media and issue advocacy endorsed by the industry was the greatest among three stages. It could be interpreted that while the issue was partially resolved through the efforts from the industry from organizational advocacy during the second stage, issue legitimacy still should be carefully monitored for the industry. The number of regulatory enforcements was the least,

implying that better industry compliance with advertising regulations (Donohue, Cevalco, & Rosenthal, 2007).

In addition to the findings of valence for news coverage and news releases, framing analyses also confirmed the gap between issue legitimacy and issue advocacy. Among five frames, two frames that were claimed by the pharmaceutical industry (i.e., DTC-ads aim to educate consumers,” and “Self-regulations”) appeared least. At the same time, most news releases included the issue frames claimed by the industry. In other words, the pharmaceutical industry tried to avoid controversial claims by the media and present its own perspective. However, media coverage seldom included these frames.

In summary, the finding of Study 1 presented the trend of issue legitimacy of DTC-ads: moderate illegitimacy – illegitimation – increasing legitimation. In addition, it confirmed the gap between issue legitimacy of DTC-ads in media coverage and organizational issue advocacy of the pharmaceutical industry. This may represent a threat to the organizational legitimacy of the pharmaceutical industry, as Moynihan and Cassels (2005) suggested, “with a little help from a headline-hungry media, the latest condition is routinely portrayed as widespread, severe, and above all, treatable with drugs” (p. 79). In other words, the media coverage threatens not only the issue legitimacy of DTC-ads, but also the organizational legitimacy of the pharmaceutical industry.

Study 2: Micro-level Legitimacy

Measures of organizational legitimacy and issue legitimacy

One important purpose of this dissertation was to attempt to construct measurement scales for both organizational legitimacy and issue legitimacy. Both measures were developed based on the conceptualization of organizational legitimacy suggested from Suchman (1995) and

three previous empirical studies (i.e., Elsbach, 1992; Massey, 2001; Shoemaker, 1982) using measurement development procedures suggested by Spector (1992). The results of factor analyses confirmed the dimensionality and appropriateness of five measures for organizational legitimacy and six measures for issue legitimacy. The finding confirmed that the concept of organizational legitimacy is different from that of issue legitimacy, though the two are related.

Issue management strategies

The primary purpose of this dissertation was to test the effects of issues management strategies (i.e., CSR activity, issue advocacy, and self-regulation) on organizational legitimacy and issue legitimacy through an experiment. The results showed that the uses of CSR activity, issue advocacy, and self-regulation in corporate messages had significant differences on perceptions of organizational legitimacy. However, only the use of self-regulation had significant differences on both perceptions of issue legitimacy and organizational legitimacy. Further, the result showed that the combination of three strategies was statistically effective, but the use of self-regulation alone was more effective than the combination of three strategies. Therefore, self-regulation may be the best strategy in managing issue legitimacy and organizational legitimacy at the same time. This finding confirms that the use of self-regulation, when the issue of DTC-ads became most controversial in 2004 and 2005, was the best strategy for the pharmaceutical industry, as Coombs and Holladay (2007) asserted.

The role of organizational legitimacy and issue legitimacy

Previous research has pointed out the importance of organizational legitimacy for organizational survival in society, and this finding empirically confirms the importance of organizational legitimacy and issue legitimacy to organizational success in terms of purchasing intention. Each separately affected purchasing intention. However, organizational legitimacy

mediates the effect of issue legitimacy on purchasing intention. In other words, although an individual has negative or neutral perceptions of issue legitimacy, if he/she has positive perceptions of organizational legitimacy, this mediates perceptions of issue legitimacy, resulting in tendencies in purchasing behaviors.

Theoretical and Practical Implications

The macro-level issue legitimacy

The first important theoretical implication of this dissertation is the findings from Study 1, which aimed to provide a big picture investigation of DTC-ads during a 12-year period. During that period, from 1997 to 2009, three stages seemed to appear, interplaying among news stories, news releases, and regulation enforcements. The patterns of frequencies and valences of news stories, news releases, and regulation enforcements provide empirical support for, and increase understanding of issue life cycle theory (Hilgartner & Bosk, 1988), which explains issues from the process of a developing issue. The theory suggests that an issue begins when it is perceived as problematic. Many scholars have suggested three broad stages for a corporate issue (Center & Jackson, 1995; Coates, Coates, Jarratt, & Heinz, 1886; Heath, 1997; Sethi, 1979): the pre-issue stage, during which the problem of begins to surface; the awareness stage, when there are expectations for action; and the final stage, during which new standards are incorporated into the organization (Bridges, 2004).

Further, Ewing (1982) divided the awareness stages into three: media coverage, pressure group awareness, and legislative discussion/action. From the trend of issue legitimacy of DTC ads (i.e., moderately illegitimation – illegitimation – start to legitimate), these three issue legitimacy stages seemed to be congruent with Ewing's (1982) categorization. During the first period, from 1997 to 2001, the issue received a large volume of news coverage exhibiting

various viewpoints, resulting in moderate illegitimation of the issue. During the second period, from 2002 to 2005, the Vioxx problem in 2004 crystallized the issue as a controversial one in the media and the industry as well. Then, in 2005, PhRMA, the industrial association, released 'Guiding Principles' for DTC-ads. After the release of these principles, the issue seemed to be far less controversial in the third period 2006-2009, but there have been debates on restrictions or regulations on DTC-ads in the media.

Secondly, scholars commonly agreed that crises could challenge organizational legitimacy and compel an organization to communicate with stakeholders to manage legitimacy (Elsbach, 1992; Massey, 2001). However, the finding of Study 1 showed that legitimacy in the emergence of an issue and after controversies could be also threatened, suggesting the importance of strategic issues management in gaining, repairing, and maintaining issue legitimacy and organizational legitimacy.

In addition, the finding from Study 1, which confirmed differences between issue legitimacy by the media and organizational issue advocacy, was similar to the results of a study by Bansal and Clelland (2004). They showed the differences between organizational legitimacy and impression management, which was similar to the concept of issue advocacy in this study, regarding environmental issues in the oil/gas industry. Therefore, the analysis of issue legitimacy based on media coverage, which is conceptualized as macro-level legitimacy, may be suitable for examining various controversial issues across the industry.

For practical implications, public relations practitioners in issues management should understand how a controversial issue changes. When gaining legitimacy upon embarking on a new line of activity, issue management should be proactive to understand stakeholders' demand and relieve questionings for the new activities from the media. For example, the findings from

Study 1 showed that both the media and the industry had competing points of view, and the industry did not respond to the media's main argument. However, the industry should have responded to the media's accusations in an appropriate way. The most frequent frame used in the media was "DTC-ads are marketing," implying that DTC-ads aim to make more profits for pharmaceutical companies. There was no responding message toward that frame; the pharmaceutical companies simply announced a new launch of DTC-ads. Possible framings or messages might emphasize how developing new products needs more effort, such as "XX product has been developed throughout a six-year effort on research, and the company is pleased to launch this product," rather than "The company is pleased to launch DTC-ads campaign to help doctor-patient relationships."

Also, the finding from Study 1 illustrated significant media attention to the issue, and a relatively small number of news releases, which may have contributed to the gap between issue legitimacy and organizational issue advocacy. When issues become controversial, organizations' media relations efforts do not necessarily work in gaining news coverage. To better provide accurate information about an issue to publics, public relations practitioners should utilize issue advertising to create a more favorable business climate by identifying a company's value. One example of this approach was the issue advertisements used by Mobil Oil Company to present its views and ideas along with established facts to attempt to influence the decision-making process in the 1970s and 1980s (Heath, 1997).

Understanding Organizational Legitimacy

The present findings have important implications for understanding organizational legitimacy from (a) the theoretical perspective of Expectancy Violation Theory (Burgoon & Hale, 1998), (b) sub-categories suggested by Suchman (1995), and (c) the role of organizational

legitimacy. First, the theoretical basis for the investigation was developed from EVT. While previous research in organizational legitimacy has focused on the importance of regulations or industrial associations for a certain industry from a management perspective, this dissertation examined the public's perceptions of legitimacy. Therefore, adopting EVT from interpersonal communication seems reasonable. In addition, this study confirmed the existence and the process of a legitimacy gap, applying EVT. As addressed in the literature review, the concept of a legitimacy gap has been ambiguous and had not been empirically examined. The framework presented here enriches organizational legitimacy and legitimacy gap theories by utilizing the framework of EVT, providing some empirical evidence.

Secondly, findings from this dissertation advance the theoretical understanding of organizational legitimacy from the viewpoint of the general public, enriching the understanding of sub-categories of organizational legitimacy. Kostova and Zaheer (1999) asserted that "there are different types of legitimacy that reflect the different types of institutions operating in the environment, such as sociopolitical, cognitive, and pragmatic legitimacy, among others" (p. 67). Suchman (1995) suggested three sub-categories in organizational legitimacy: pragmatic, normative, and cognitive (taken-for-granted) perceptions among publics. However, no empirical research has examined differences or relationships among the three types.

From the findings of a statewide survey, among five organizational legitimacy measures, respondents rated the highest the statement that "I think that the prescription drug industry is a necessary part of our society," which represents cognitive perception (Suchman, 1995). They rated lowest the statement that "I think that the prescription drug companies are honest," which represents pragmatic perception (Suchman, 1995). In other words, although respondents had the lowest pragmatic perceptions for the pharmaceutical company for their own sake, they regarded

the existence of a pharmaceutical company as taken for granted and essential in society. Thus, though the public distrusts the pharmaceutical industry, they also believe the pharmaceutical industry contributes greatly to society by improving public health.

Lastly, the findings of this dissertation enrich understanding of the role of organizational legitimacy. Suchman (1995) asserted that organizational legitimacy is important to pursue continuity and credibility of an organization and to seek passive support (take-for-grantedness) and active support. The findings showed that favorable organizational legitimacy led to higher purchase intention, suggesting that organizational legitimacy helps an organization's bottom-line as well as an organizational survival.

Taken together, these findings also suggest some practical implications. It seems important for public relations managers to understand sub-categories of organizational legitimacy and issue legitimacy. Respondents had positive perceptions of organizational legitimacy in cognitive and normative aspects, but they had less positive perceptions of organizational legitimacy in the pragmatic aspect. In other words, the public regards the existence of pharmaceutical industry as a necessary part of society (i.e., cognitive level), but they also distrust companies and held negative perceptions of the industry (i.e., pragmatic level) at the same time.

This suggests some strategic implications for corporate campaigns. For example, pharmaceutical companies might want to focus more on DTC-ads that highlight the role and importance of the pharmaceutical industry in society, rather than focusing so much on brand names. Or, there may be value in using messages that emphasize the benefits of prescription drugs directly to patients such as "XX product helps depression patients to participate in healthy daily life," rather than "XX product reduces depression symptoms by 5%." The pharmaceutical

industry overall might benefit from DTC-ads that are truly more education oriented than promotional in nature.

Managing legitimacy in issues management

The findings presented here enrich organizational legitimacy in an issues management context by suggesting the concept of issue legitimacy and examining issue management strategies for organizational legitimacy and issue legitimacy. First, this dissertation attempted to suggest the concept of issue legitimacy, which is different from organizational legitimacy, in an issues management context. In public relations scholarship, though a few scholars have suggested the concept of issue legitimacy in an issue management process (e.g., Boyd, 2000; Coombs, 1992), no empirical research to date has been conducted to test issue legitimacy along with organizational legitimacy in an issue management context. In this dissertation, the findings from measurement scales confirmed a different dimensionality between organizational legitimacy and issue legitimacy. Further, findings showed that though perception of organizational legitimacy is favorable, perceptions of issue legitimacy were not necessarily favorable. For communication practice, these measures might enhance understanding of publics' perceptions on certain issues and an organization. An organization might enhance organizational legitimacy by better understanding issue legitimacy.

Secondly, this dissertation tested the effects of issues management strategies on organizational legitimacy and issue legitimacy. No empirical research to date had examined the relationship between issue management strategies and organizational legitimacy and issue legitimacy. Regarding CSR activity, research has demonstrated the effect of CSR activity on purchase intention (Sen & Bhattacharya, 2001), brand identity (David, Kline, & Dai, 2005), or others. However, no research had examined the effect of CSR activity on perceptions of

organizational legitimacy and issue legitimacy. The findings from this dissertation suggest that CSR influences perceptions of organizational legitimacy, but it does not influence perceptions of issue legitimacy. Regarding issue advocacy, the use of issue framing has been emphasized in issues management (Hallahan, 1997). The findings showed that the use of issue advocacy influenced perceptions of organizational legitimacy. Regarding self-regulation, the use of self-regulation was effective in both issue legitimacy and organizational legitimacy, confirming that corrective action can expedite the rebuilding and management of organizational legitimacy (Coombs & Holladay, 2005; Veil, 2007).

On the other hand, communicating CSR activity and using issue advocacy framing can be considered as symbolic management, and self-regulation is considered as institutional management from management scholarship (Elsbach, 1992). As such, these findings refine the relationship between institutional management and symbolic management theories, suggested by previous research in management literature (Elsbach, 1992; Elsbach & Sutton, 1992).

For practical contribution, the findings showed that the most effective forms and contents to communicate issues with publics. While communicating CSR activity, issue advocacy frames and self-regulation are effective in organizational legitimacy. Only self-regulation is effective in increasing issue legitimacy. Therefore, when an issue becomes controversial and salient, public relations managers should communicate specific organizational actions toward an issue.

Limitations and Future Research

Limitations

As with all studies, this research project has certain limitations. First, regarding the generalizability of the results, the statewide survey gave some degree of generalizability to the measurement scales. However, both measurement scales should be further tested with different

issues in different industries. In addition, the results from the experiment could be limited in their generalizability to real-world phenomena since the study is quasi-experimental in nature. The sample is homogeneous, since most participants are Caucasians with a high level of education (i.e., university students). The statewide survey showed that the average population of respondents in Alabama had less than a university-level education and lacked ethnic diversity. Future studies that examine the effects of issue management strategies should involve diverse samples for generalizability.

Second, this dissertation examined the relationship between types of publics and organizational legitimacy, applying situational theory (Grünig, 1975). Situational theory suggests that publics' awareness of problems (i.e., problem recognition and constraint recognition) and their involvement in problems leads to communication behaviors when dealing with an issue (Grünig, 1975). To explore the relationships between three independent variables (i.e., problem recognition, constraint recognition, and issue involvement) in situational theory and organizational legitimacy and issue legitimacy, this dissertation used the three variables. However, the reliability of problem recognition and constraint recognition was at less than acceptable cut-offs, resulting in confusing relationships among the three variables and issue legitimacy and organizational legitimacy.

Thirdly, this study only examined DTC-ads through printed media and news releases. With extensive growth of the use of new media and social media, future studies could examine this issue through electronic media, too. Since interactive features of social media enable publics to participate in a debate about an issue, the dialogue about DTC-ads among publics and publics' perceptions of issue legitimacy might be different from the framings in printed media.

Fourth, regarding the scales development, although the initial items were examined by a public relations professor for content validity, this dissertation did not utilize a pilot-test for the initial measurement items to refine the measures, suggested by Spector (1992). This may cause lack of the opinions about measures from lay people.

Last, this study focuses on public perceptions, but not perceptions of the medical community (doctors and pharmacists) that exert some control on the pharmaceutical industry. As many scholars suggested, evaluation of organizational legitimacy depends on types of industry and situations (Ruef & Scott, 1998); the generalizability of findings for an issue of DTC-ads also needs to examine other important stakeholders for this issue, such as the medical community. As the FDA survey showed that about half of physicians felt some pressure to prescribe as a result of DTC-ads (Aikin, Swasy, & Braman, 2004), doctors and pharmacists should have different perceptions on issue legitimacy of DTC-ads and organizational legitimacy of the pharmaceutical industry.

Future Study

First, future research should examine issue advocacy advertising. Research has shown that news releases from an organization do not fully affect news content because they are filtered by journalists' viewpoint, though they may exert some influence on content (Kiousis, Popescu, & Mitrook, 2007). Sometimes, issues in the news are poorly explained or biased (Jamieson, 1992). This suggests, in general, that a company needs to produce advertisements not only for its products (i.e., commercial advertisements) but to attempt to create a favorable business climate (i.e., institutional advertisements). Issue/advocacy advertising aims to present the views of the company to policy-makers or publics by addressing the company's viewpoints on controversial issues. The impact of advocacy advertising has been empirically supported. Salmon, Reid,

Pokrywczynski, and Willett (1985) showed that issue/advocacy advertising is more persuasive than news stories in that it is more interesting and informative. Burgoon, Pfau, and Birk (1995) showed that issue/advocacy advertising inoculates against attitude change after exposure to an opposing position. Therefore, future studies should test the influence of issue advocacy advertising in managing issue legitimacy.

Secondly, this dissertation explored the concept of issue legitimacy, and showed its importance in an issues management process. An organization could face a variety of issues, and issues management should deal with those issues through the concept of issue legitimacy. At the same time, it is important to understand changes in an issue and how such changes influence strategies; it is also important to understand how the issue is perceived and judged by publics or the media, which is issue legitimacy. While much research was devoted to issue life-cycle theory during the late 1990s and early 2000s (Bridges, 2004), attention to the theory has been fading. With the findings of this dissertation, future research on issue legitimacy should incorporate issue life cycle theory and issue legitimacy in issues management literature.

Thirdly, as noted previously, organizational legitimacy has sub-categories. This dissertation utilized three sub-categories (i.e., pragmatic, normative, cognitive legitimacy), but Suchman (1995) suggested additional sub-categories for of three, resulting in 11 sub-categories for organizational legitimacy. Although many scholars have argued that organizational legitimacy cannot cover all these aspects, further measurement development studies might examine all 11 categories to empirically confirm and/or reduce some of those dimensions.

Despite these limitations, this dissertation advances our understanding of issue and organizational legitimacy and contributes to theory development in these areas. It also provides some empirical data where little has existed previously. First, this study provides useful insights

into the analysis of an issue and issue legitimacy at the societal level. Second, this study provides reliable and valid measurements for organizational legitimacy and issue legitimacy. Thirdly, with the measurement scales, this study showed the effects of issues management strategies on organizational legitimacy and issue legitimacy. Also, it explored the role of organizational legitimacy for an organization's bottom-line. Finally, this study supports the usefulness of EVT in analyzing organizational legitimacy and a legitimacy gap. In addition, the research has shed light on an important and timely topic – health and pharmaceuticals. The researcher hopes that this dissertation will stimulate more attention to concepts of legitimacy and public policy issues that affect many in society.

REFERENCES

- Afifi, W. A., & Burgoon, J. K. (2000). The impact of violations on uncertainty and the consequences for attractiveness. *Human Communication Research, 26*(2), 203-233.
- Aikin, K. J., Swasy, J. L., & Braman, A. C. (2004). *Patient and physician attitudes and behaviors associated with DTC promotion of prescription drugs: Summary of FDA survey research results*. Washington, DC: U.S. Department of Health and Human Services, Food and Drug Administration.
- Ansoff, H. I. (1980). Strategic issue management. *Strategic Management Journal, 1*(2), 131-148.
- Ashforth, B. E., & Gibbs, B. W. (1990). The double-edge of organizational legitimation. *Organization Science, 1*(2), 177-194.
- Bachman, G. F., & Guerrero, L. K. (2006). Relational quality and communicative responses following hurtful events in dating relationships: An expectancy violations analysis. *Journal of Social and Personal Relationships, 23*, 943-963.
- Bakan, J. (2004). *The corporation: The pathological pursuit of profit and power*. London: Constable.
- Bansal, P., & Clelland I. (2004). Talking trash: Legitimacy, impression management, and unsystematic risk in the context of the natural environment. *Academy of Management Journal, 47*(1), 93-103.
- Bhandari, M., Busse J. W., Jackowski D., Montori, V. M., Schunemann, H., Sprague, S., Mears, D., Shemitsch, E. H., Heels-Ansdell, D., & Devereaux, P. J. (2004). *Association between industry funding and statistically significant pro-industry findings in medical and surgical randomized trials*. Retrieved February 17, 2004, from PubMed Central Web site: <http://www.ncbi.nlm.nih.gov/pubmed/14970094?dopt=Abstract>
- Berens, G., & van Riel, C. B. M. (2004). Corporate associations in the academic literature: Three main streams of thought in the reputation measurement literature. *Corporate Reputation Review, 7*(2), 161-178.
- Berger, B. K. (2001). Private issues and public policy: Locating the corporate agenda in agenda-setting theory. *Journal of Public Relations Research, 13*(2), 91-126.
- Berkowitz, D., & Turnmire, K. (1994). Community relations and issues management: An issue orientation approach to segmenting publics. *Journal of Public Relations Research, 6*, 105-123.

- Berkowitz, L., & Donnerstein, E. (1982). External validity is more than skin deep: Some answers to criticisms of laboratory experiments. *American Psychologist*, *37*, 245-257.
- Bortree, D. S. (2009). The impact of green initiatives on environmental legitimacy and admiration of the organization. *Public Relations Review*, *35*, 133-135.
- Boyd, J. (2000). Actional legitimacy: No crisis necessary. *Journal of Public Relations Research*, *4*, 341-353.
- Bridges, J. A. (2004). Corporate issues campaigns: Six theoretical approaches. *Communication Theory*, *55*(3), 51-77.
- Brownfield, E. D., Bernhardt, J. M., Phan, J. L., Williams, M. V., & Parker, R. M. (2004). Direct-to-consumer drug advertisements on network television: An exploration of quantity, frequency, and placement. *Journal of Health Communication*, *9*, 491-497.
- Bruin, J. (2006). Newtest: Command to compute new test. UCLA: Academic technology services, statistical consulting group. Available at <http://www.ats.ucla.edu/stat/stata/ado/analysis/>
- Brummer, J. J. (1991). *Corporate responsibility and legitimacy: An interdisciplinary analysis*. New York: Greenwood.
- Burgoon, J. K. (1993). Interpersonal expectations, expectancy violations, and emotional communication. *Journal of Language and Social Psychology*, *12*(1&2), 30-48.
- Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communication Monographs*, *55*, 58-79.
- Burgoon, J. K., Newton, D. A., Walther, J. B., & Baesler, E. J. (1989). Nonverbal expectancy violations and conversational involvement. *Journal of Nonverbal Behavior*, *13*(2), 97-119.
- Burgoon, J. K., & Walther, J. B. (1990). Nonverbal expectancies and the evaluative consequences of violations. *Human Communication Research*, *17*(2), 232-265.
- Burgoon, J. K., Dunbar, N. E., & Segrin, C. (2002). Nonverbal influence. In J. P. Dillard & M. Pfau (Eds.), *The persuasion handbook: Developments in theory and practice* (pp. 445-473). Thousand Oaks, CA: Sage.
- Burgoon, M., Pfau, M., & Birk, T. S. (1995). An inoculation theory explanation for the effects of corporate issue/advocacy advertising campaigns. *Communication Research*, *4*(22), 485-505.
- Bussy, N. (2007). Applying stakeholder thinking to public relations: An integrated approach to identifying relationships that matter. In B. Ruler, A. T. Vercici, & D. Vercici (Eds.), *Public relations metrics: Research and evaluation* (pp. 282-300). NY: Taylor & Francis.

- Calder, B. J., Phillips, L. W., & Tybout, A. M. (1981). Designing research for application. *Journal of Consumer Research*, 8, 197-207.
- Cameron, G. T. (1992). Memory for investor relations messages: An information-processing study of Grunig's situational theory. *Journal of Public Relations Research*, 4(1), 45-60.
- Campbell, D. J. (2000). Legitimacy theory or managerial reality construction? Corporate social disclosure in Marks and Spencer Plc corporate reports, 1969-1997. *Accounting Forum*, 24(1), 80-101.
- Campbell, D. (2003). Intra-and intersectoral effects in environmental disclosures: Evidence for legitimacy theory? *Business Strategy and the Environment*, 12(6), 357-371.
- Campo, S., Cameron, K., Brossard, D., & Frazer, S. (2004). Social norms and expectancy violation theories: Assessing the effectiveness of health communication campaigns. *Communication Monographs*, 71(4), 448-470.
- Center, A. H., & Jackson, P. (1995). *Public relations practices: Managerial case studies and problems* (5th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Cheney, G., & Vibbert, S. L. (1987). Corporate discourse: Public relations and issues management. In M. H. Jablin, L. L. Putnam, K. H. Roberts, & L. W. Porter (Eds.), *Handbook of organizational communication* (pp. 165-194). Newbury Park, CA: Sage.
- Churchill, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16, 64-73.
- Claes, F., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Coates, J. F., Coates, V. T., Jarratt, J., & Heinz, L. (1986). *Issues management: How you can plan, organize and manage for the future*. Mt. Airy, NC: Lomond.
- Coombs, W. T. (1992). The failure of the Task Force on Food Assistance: A case study of the role of legitimacy in issue management. *Journal of Public Relations Research*, 4(2), 101-122.
- Coleman, C.-L., Hartley, H., & Kennamer J. D. (2006). Examining claimsmakers' frames in news coverage of direct-to-consumer advertising. *Journalism & Mass Communication Quarterly*, 83(3), 547-562.
- Coombs, W. T., & Holladay, S. J. (2006). Unpacking the halo effect: Reputation and crisis management. *Journal of Communication Management*, 10(2), 123-137.
- Coombs, W. T., & Holladay, S. J. (2007). *It's not just PR: Public relations in society*. Malden, MA: Blackwell Publishing.

- Crable, R. E., & Vibbert, S. L. (1985). Managing issues and influencing public policy. *Public Relations Review, 11*(2), 3-16.
- Crano, W. D., Brewer, M. B. (2002). *Principle and methods of social research* (2nd eds.). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cronin Jr., J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing, 76*(2), 193-218.
- Dalh, R. A. (1956). *A preface to democratic theory*. Chicago: University of Chicago Press.
- Daniels, N., & Sabin, J. (1997). Limits to health care: Fair procedures, democratic deliberation, and the legitimacy problem for insurers. *Philosophy and Public Affairs, 26*(4), 303-
- Danowski, J. A. (2008). Short-term and long-term effects of a public relations campaign on semantic networks of newspaper content: Priming and framing? *Public Relations Review, 34*, 288-290.
- David, P., Kline, S., & Dai, Y. (2005). Corporate social responsibility practices, corporate identity, and purchase intention: A dual-process model. *Journal of Public Relations Research, 17*(3), 291-313.
- Deephouse, D. L., (1996). Does isomorphism legitimate? *Academy of Management Journal, 39*(4), 1024-1039.
- Deephouse, D. L., & Carter, S. M. (2005). An examination of differences between organizational legitimacy and organizational reputation. *Journal of Management Studies, 42*(2), 329-350.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*, 147-160.
- Donohue, J. M., Cevasco, M., Rosenthal, M. B. (2007). A decade of direct-to-consumer advertising of prescription drugs. *The New England Journal of Medicine, 357*, 673-681.
- Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *Pacific Sociological Review, 18*(1), 122-136.
- Easton, D. (1965). *A systems analysis of political life*. Chicago: University of Chicago Press.
- Elsbach, K. D. (1994). Managing organizational legitimacy in the California cattle industry: The construction and effectiveness of verbal accounts. *Administrative Science Quarterly, 39*, 57-88.

- Elsbach, K. D., & Sutton, R. I. (1992). Acquiring organizational legitimacy through illegitimate actions: A marriage of institutional and impression management theories. *Academy of Management Journal*, 35(4), 699-738.
- Elwood, W. N. (1995). *Public relations inquiry as rhetorical criticism: Case studies of corporate discourse and social influence*. Westport, CT: Praeger.
- Etzioni, A. (1987). Entrepreneurship, adaptation and legitimation: A macro-behavioral perspective. *Journal of Economic Behavior and Organization*, 8, 175-189.
- Ewing, R. P. (1982). Advocacy advertising. The voice of business in public policy debate. *Public Affairs Review*, 3, 23-29.
- Floyd, K., & Voloudakis, M. (1999). Affectionate behavior in adult platonic friendships: Interpreting and evaluating expectancy violations. *Human Communication Research*, 25(3), 341-369.
- Flynn, L. R., Godsmith, R. E., & Eastman, J. K. (1996). Opinion leaders and opinion seekers: Two new measurement scales. *Journal of Academy of Marketing Science*, 24(2), 137-147.
- Fombrun, C. J., & van Riel, C.B.M. (1997). The reputational landscape. *Corporate Reputation Review*, 1, 5-13.
- Fombrun, C. J., Gardberg, N. A., & Server, J. M. (2000). The reputation quotient: A multi-stakeholder measure of corporate reputation. *Journal of Brand Management*, 7(4), 241-255.
- Fombrun, C. J., & van Riel, C. B. M. (2003). *Fame and Fortune: How successful companies build winning reputations*. New York: Prentice-Hall Financial Times.
- Frederick, W. C. (1986). Toward CSR3: Why ethical analysis is indispensable and unavoidable in corporate affairs. *California Management Review*, 28(4), 126-141.
- Gellad, Z. F., & Lyles, K. W. (2007). Direct-to-consumer advertising of pharmaceuticals. *The American Journal of Medicine*, 120, 475-480.
- Gergen, K. J. (1992). Social construction and moral action. In D. N. Robinson (Ed.), *Social discourse and moral judgment* (pp. 9-27). Sand Diego, CA: Academic.
- Gibson, K. (2000). The moral basis of stakeholder theory. *Journal of Business Ethics*, 26(3), 245-257.
- Greenberg, J. (1987). The college sophomore as guinea pig: Setting the record straight. *Academy of Management Review*, 12(1), 157-159.
- Grunig, J. E. (1975). Some consistent types of employee publics. *Public Relations Review*, 1(1), 17-36.

- Grunig, L. S., Grunig, J. E. & Dozier, D. M. (2002). *Excellent public relations and effective organizations*. Mahwah, NJ: Lawrence Erlbaum.
- Grunig, J. E., & Hung, C. F. (2002). The effect of relationships on reputation and reputation on relationships: A cognitive, behavioral study. Paper presented at the PRSA Educator's Academy 5th Annual International Public Relations Research Conference, Miami, Florida.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis (5th eds.)*. Upper Saddle River, NJ: Prentice Hall.
- Hallahan, K. (1999). Seven models of framing: Implications for public relations. *Journal of Public Relations Research*, 11(3), 205-242.
- Hallahan, K. (2001). The dynamics of issues activation and response: An issues processes model. *Journal of Public Relations Research*, 13(1), 27-59.
- Hamilton, P. K. (1992). Grunig's situational theory: A replication, application, and extension. *Journal of Public Relations Research*. 4(3), 123-149.
- Hearit, K. M. (1995). Mistakes were made: Organizational, apologia, and crises of social legitimacy. *Communication Studies*, 46(1), 1-17.
- Heath, R. L. (1990). Corporate issues management: Theoretical underpinnings and research foundations. In J. E. Grunig & L. A. Grunig (Eds.), *Publication Relations Research Annual (Vol. 2, pp.29-65)*. Hillsdale, NJ: Lawrence Erlbaum.
- Heath, R. L. (1997). *Strategic issues management: Organizations and public policy challenges*. Thousand Oaks, CA: Sage Publications, Inc.
- Hegtvedt, K. (2004). Legitimizing legitimacy: Shaping a new frontier of research. *Social Justice Research*, 17(1), 93-109.
- Hilgartner, S., & Bosk, C. L. (1988). The rise and fall of social problems: A public arenas model. *American Journal of Sociology*, 94, 53-78.
- Hoffman, M. (1977). Moral internalization: Current theory and research. *Advances in Experimental Social Psychology*, 10, 85-133.
- Holsti, O. L. (1969). *Content analysis for the social sciences and humanities*. Reading, MA: Addison-Wesley Publishing Company, Inc.
- Houser, M. L. (2006). Expectancy violations of instructor communication as predictors of motivation and learning: A comparison of traditional and nontraditional students. *Communication Quarterly*, 54(3), 331-349.

- Ismail, M. A (2005). *Drug lobby second to none: How the pharmaceutical industry gets its way in Washington*. Retrieved July 7, 2005, from The Center for Public Integrity Web site: <http://projects.publicintegrity.org/rx/report.aspx?aid=723>
- Iyengar, S., Peters, M. D., & Kinder, D. R. (1982). Experimental demonstrations of the “not-so-minimal” consequences of television news programs. *American Political Science Review*, 76, 848-858.
- Janis, I. L., & Fadner, R. (1965). The coefficient of imbalance. In H. Lasswell, N. Leites, & Associates (Eds.), *Language of politics* (pp. 153-169). Cambridge, MA: MIT Press.
- Jamieson, K. H. (1992). *Dirty politics: Deception, distraction, and democracy*. New York: Oxford University Press.
- Jones, B. L., & Chase, W. H. (1979). Managing public policy issues. *Public Relations Review*, 5(2), 3-23.
- Joreskog, K. G. (1969). A general approach to confirmatory maximum likelihood factor analysis. *Psychometrika*, 34, 183-202.
- Jost, J. T., & Major, B. (2001). *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations*. Cambridge: Cambridge University Press.
- Karpinski, A. (2006). Chapter 8: Factorial ANOVA: Higher order ANOVAs. Retrieved from http://astro.temple.edu/~andykarp/psych522524/08_Factorial2.pdf
- Kelman, H. C. (2001). Reflections on social and psychological processes of legitimation and delegitimization. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (p. 54-76). Cambridge: Cambridge University Press.
- Kiousis, S., Popescu, C., & Mitrook, M. (2007). Understanding influence on corporate reputation: An examination of public relations efforts, media coverage, public opinion, and financial performance from an agenda-building and agenda-setting perspective. *Journal of Public Relations Research*, 19(2), 147-165.
- Kostova, T., & Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, 24(1), 64-81.
- Krippendorff, K. (1980). *Content analysis: An introduction to its methodology*. London: Sage.
- Kumar, S. and Sanan, M. , 2008-05-27 "The Test for Legitimacy in an Era of Democracy" *Paper presented at the annual meeting of the The Law and Society Association, Hilton Bonaventure, Montreal, Quebec, Canada* <Not Available>. 2009-05-23 from http://www.allacademic.com/meta/p236583_index.html

- Leigh, B. C., & Aramburu, B. (1994). Responsibility attributions for drunken behavior: The role of expectancy violation. *Journal of Applied Social Psychology, 24*(2), 115-135.
- LePoire, B. A., & Burgoon, J. K. (1994). Two contrasting explanations of involvement violations: Expectancy violations theory versus discrepancy arousal theory. *Human Communication Research, 20*(4), 560-591.
- Lexchin, J., & Mintzes, B. (2002). Direct-to-consumer advertising of prescription drugs: The evidence says no. *Journal of Public Policy & Marketing, 21*(2), 194-201.
- Liddle, R. (1995, August 4). Good grief. *The Economist, 335*(7909), 57.
- Lindblom, C. K. (1994). The implications of organizational legitimacy for corporate social performance and disclosure. Paper presented at the Critical Perspectives on Accounting Conference, New York.
- Lipset, S. M. (1983). *Political man: The social bases of politics* (2nd ed.). London: Heinemann.
- Lombard, M., Snyder-Duch, J., & Bracken, C. C. (2004). Practical resources for assessing and reporting intercoder reliability in content analysis research projects. Retrieved from http://www.slis.indiana.edu/faculty/hrosenba/www/Research/methods/lombard_reliability.pdf
- Marsh, H. W., Balla, J. R., & Hau, K. T. (1996). An evaluation of incremental fit indices: A clarification of mathematical and empirical processes. In G. A. Marcoulides & R. E. Schumacker (Eds.), *Advanced structural equation modeling techniques* (pp. 315-353). Hillsdale, NJ: Erlbaum.
- Massey, J. E. (2001). Managing organizational legitimacy: Communication strategies for organization in crisis. *The Journal of Business Communication, 38*(2), 153-183.
- McComb, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly, 36*, 176-187.
- Meyer, J., & Rowan, B. (1977). Institutionalized organization: Formal structure as myth and ceremony. *American Journal of Sociology, 83*, 340-363.
- Motion, J. (2005). Participative public relations: Power to the people or legitimacy for government discourse? *Public Relations Review, 31*, 505-512.
- Moynihan, R., & Cassels, A. (2005). *Selling sickness: How the world's biggest pharmaceutical companies are turning us all into patients*. New York: National Books.
- Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review, 16*(1), 145-179.
- Oomens, J. J. H., & van den Bosch, F. A. J. (1999). Strategic issue management in major European-based companies. *Long Range Planning, 32*(1), 49-57.

- Parsons, T. (1963). On the concept of influence. *Public Opinion Quarterly*, 27, 63-82.
- Patten, D. M. (1991). Exposure, legitimacy, and social disclosure. *Journal of Accounting and Public Policy*, 10, 297-308.
- Patten, D. M. (1992). Intra-industry environmental disclosures in response to the Alaskan oil spill: A note on legitimacy theory. *Accounting Organizations and Society*, 17(5), 471-475.
- Pfeffer, J., & Salancik, G. R. (1978). Organizational decision making as a political process: The case of a university budget. *Administrative Science Quarterly*, 19, 135-151.
- Plowman, K. D., Ostrom-Blonigen, J., & Bornsen, S. (2008). Stakeholder theory: Antidote to a drug company's market health? A case study of Synthroid. *Journal of Communication Management*, 12(1), 2008.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavioral Research Methods, Instruments, & Computers*, 36(4), 717-731.
- PricewaterhouseCooper. (2007). Consumers and pharmaceutical companies far apart on views of pharma industry, finds PricewaterhouseCoopers survey: Perception gap is eroding public's trust, industry's reputation. Retrieved January, 10. in LexisNexis Academics
- Ramirez, Jr., A., & Wang, Z. (2008). When online meets offline: An expectancy violations theory perspective on modality switching. *Journal of Communication*, 58, 20-39.
- Reynolds, C. (1997). Issues management and the Australian gun debate. *Public Relations Review*, 23(4), 343-360.
- Rodgers, H. R., & Lewis, E. (1974). Political support and compliance attitudes. *American Politics Quarterly*, 2, 61-77.
- Ruef, M., & Scott, M. (1998). A multidimensional model of organizational legitimacy: Hospital survival in changing institutional environments. *Administrative Science Quarterly*, 43, 877-904.
- Salmon, C. T., Reid, L. N., Pokrywczynski, J., & Willett, R. W. (1985). The effectiveness of advocacy advertising relative to news coverage. *Communication Research*, 12, 546-567.
- Sana L. J., & Turley, K. J. (1996). Antecedents to spontaneous counterfactual thinking: Effects of expectancy violation and outcome valence. *Personality and Social Psychology*, 22(9), 906-919.
- Scott, W. A. (1955). Reliability of content analysis: The case of nominal scale coding. *The Public Opinion Quarterly*, 19(3), 321-325.
- Scott, W. R. (1995). *Institutions and organizations*. Thousand Oaks, CA: Sage.

- Sen, S., & Bhattacharya, C. B. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. *Journal of Marketing Research*, 38, 225-243.
- Sethi, S. P. (1977). *Advocacy advertising and large corporations: Social conflict, big business image, the news media, and public policy*. Lexington, MA: D. C. Heath.
- Shoemaker, P. J. (1982). The perceived legitimacy of deviant political groups: Two experiments on media effects. *Communication Research*, 9(2), 249-286.
- Spector, P. E. (1992). *Summated rating scale construction: An introduction*. Newbury Park, CA: Sage.
- Starr, J. A., & MacMillan, I. A. (1990). Resource cooptation via social contracting: Resource acquisition strategies for new ventures. *Strategic Management Journal*, 11, 79-92.
- Stinchcombe, A. L. (1965). Social structure and organizations. In J. G. March, (Ed.), *Handbook of organizations* (pp. 142-193). Chicago: Rand McNally.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571-610.
- Taylor, M., Vasquez, G. M. & Doorley, J. (2003). Merch and AIDS activists: engagement as a framework for extending issues management, *Public Relations Review*, 29, 257-270.
- Tornikoski, E. T., & Newbert, S. L. (2007). Exploring the determinants of organizational emergence: A legitimacy perspective. *Journal of Business Venturing*, 22, 311-335.
- Tyler, T. R. (1997). The psychology of legitimacy: A relational perspective on voluntary deference to authorities. *Personality and Social Psychology Review*, 1(4), 323-345.
- Veil, S. (2007). Mayhem in the magic city: Rebuilding legitimacy in a communication train wreck. *Public Relations Review*, 33, 337-339.
- Wartick, S. L., & Cochran, P. L. (1985). The evolution of the corporate social performance model. *Academy of Management Review*, 10(4), 758-769.
- Wartick, S. L., & Mahon, J. F. (1994). Toward a substantive definition of the corporate issue construct. *Business & Society*, 33, 293-311.
- Weatherford, M. S. (1992). Measuring political legitimacy. *American Political Science Review*, 86(1), 149-166.
- Weber, M. (1968). *Economy and society: An interpretive sociology*. (First published in 1922). Guenther Roth and Claus Wittich, eds. New York: Bedminister Press.
- Wood, D. (1991). Corporate social performance revisited. *Academy of Management review*, 16(4), 691-718.

Yzerbyt, V., & Rogier, A. (2001). Blame it on the group: Entitativity, subjective essentialism, and social attribution. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (p. 103-133). Cambridge: Cambridge University Press.

Zelditch Jr., M. (2001). Theories of legitimacy. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (p. 33-53). Cambridge: Cambridge University Press.

Zimmerman, M. A., & Zeitz, G. J. (2002). Beyond survival: Achieving new venture growth by building legitimacy. *Academy of Management Review*, 27(3), 414-431.

APPENDIX A

Coding Book

News articles & News releases about DTC-ads: Content analysis protocol

General guidelines:

-- When you code framings of a story, try your best to code elements, but if you find yourself simply unable to decide about a particular element, code it as an “Other.”

-- When you code valences of a headline, story, and overall theme, try your best to judge based on words and expressions, but if you find yourself simply unable to decide about a particular element, code it as an “Other.”

BEGIN CODING:

1. Type of article

Coding instructions: Record a type of article (1 = News coverage, 2 = News Release). existence of a stated mission or description (Yes = 1, No = 0).

2. Type of Newspaper

Coding instructions: Record a type of article (1 = the New York Times, 2 = Washington Post, 3 = Wall Street Journal, 4 = USA Today).

3. Date: Record a date on which the article was published.

4. Section of news coverage

Coding instructions: Record a section of a news coverage (1 = Financial/economy/money, 2 = Editorial, 3 = Health/fitness/life, 4 = Book review, 5 = Other).

Look for a section description of the news coverage. If you do not find a specific description of the news coverage or find different name from the coding variables, record it as ‘5 = other.’

5. Number of words: Record a number of words if it is specified in the news article.

6. Type of industrial material

Coding instructions: Record a type of a news release (1 = PRwire, 2 = Bizwire).

7. Headline valence

Coding instructions: Record a valence of a headline of an article (-1 = Negative, 0 = Neutral, 1 = Positive).

8. Type of framing

Coding instructions: Record a type of framing of a news coverage or news release (1 = Political/regulatory action, 2 = Education, 3 = Marketing, 4 = Consumers' attention, 5 = Self-regulation, 6 = Other).

If you record it as '1 = Political/regulatory action,' please go to Variable 9 – Political sub-framing.

If you record it as '2 = Education,' please go to Variable 10 – Education sub-framing.

If you record it as '3 = Marketing,' please go to Variable 11 – Marketing sub-framing.

If you record it as '4 = Consumers' attention,' please go to Variable 12 – Consumer sub-framing.

If you record it as '5 = Self-regulation,' please go to Variable 13 – Self-regulation sub-framing.

9. Political sub-framing

Coding instructions: Record a type of political sub-framing of a news coverage or news release (1 = Congress will take actions against DTC-ads, 2 = FDA will take actions against DTC-ads, 3 = Activist groups will take actions against DTC-ads, 4 = Other).

10. Education sub-framing

Coding instructions: Record a type of education sub-framing of a news coverage or news release (1 = DTC-ads educate consumers to diagnose early symptoms, 2 = DTC-ads initiate doctors-patients relationships, 3 = DTC-ads help elders to diagnose early symptoms, 4 = A pharmaceutical company launch DTC-ads for educating consumers, 5 = Other).

11. Marketing sub-framing

Coding instructions: Record a type of marketing sub-framing of a news coverage or news release (1 = DTC-ads are one of marketing tool, 2 = DTC-ads increase profits, 3 = Pharmaceutical companies spend too much money for DTC-ads, 4 = A pharmaceutical company launches DTC-ads spending too much money, 5 = Other).

12. Consumer sub-framing

Coding instructions: Record a type of consumer sub-framing of a news coverage or news release (1 = DTC-ads lack of informing side effects, 2 = Effects of DTC-ads are questionable, 3 = DTC-ads makes consumers to overuse drugs, 4 = Other).

13. Self-regulation sub-framing

Coding instructions: Record a type of self-regulation sub-framing of a news coverage or news release (1 = A pharmaceutical company bans DTC-ads voluntarily, 2 = A pharmaceutical company complies with Pharma's principle, 3 = A pharmaceutical company bans DTC-ads forced by FDA, 4 = Other).

14. Story valence

Coding instructions: Record a valence of a story of an article (-1 = Negative, 0 = Neutral, 1 = Positive).

15. Overall valence

Coding instructions: Record a valence of an overall theme of an article (-1 = Negative, 0 = Neutral, 1 = Positive).

APPENDIX B

THE UNIVERSITY OF ALABAMA Participant Information Sheet

You are invited to participate in a research study. The purpose of this study is to investigate publics' perception on prescription drug advertisements and the pharmaceutical industry. Further, the study aims to better understand how news coverage and news releases from a prescription drug company influence viewers' perceptions about the issue and the company. Your participation will contribute to better understanding of how news coverage and news releases influence viewers' perceptions on social issues and the company. Participation in this research project is on a scholarly basis, and no pressure will be exerted to induce you to take part in this study. You are free to withdraw from the research process at any time without penalty.

INFORMATION

This study consists of three parts taking 20 minutes.

For the first part, you will complete 11 questions designed to assess your opinions on prescription drug advertisements and the pharmaceutical company in general. For the second part, you will be asked to read one news article from *USA Today* and one news release from a prescription drug company about prescription drug advertisements. For the last part, you will be asked to answer 29 questions designed to assess your opinions on the same issue and the company. This is an off-line study. Participants need to visit room 473 in the fourth floor of Reese Phifer Hall anytime between 9:00 a.m. to 5:00 p.m. during the day.

RISKS & HARMS

Participation in this study does not propose any foreseeable risks to you. There are no direct benefits to you for participating but your participation in this study can contribute valuable information to advance knowledge on an influence of news coverage and news releases on social issues among viewers. No harms are expected from this study.

COMPENSATION & BENEFITS

You will receive compensation in the form of extra credits in the course from which you were recruited as your instructor advised. Also, your participation in this study can contribute valuable information to advance knowledge on public relations research. If you want to participate in other research in order to obtain the same amount of extra credits, you can check on CCIS Research Participation System (<http://ccis.sona-systems.com/>).

CONFIDENTIALITY

All data will be kept confidential. Data will be recorded anonymously and reported as aggregates.

CONTACT

If you have questions at any time about the study or the procedures, you may contact the researcher, Jee Young Chung at 832-964-4512 or at jchung@bama.ua.edu. You can also contact her advisor, Dr. Bruce K. Berger at berger@apr.ua.edu.

If you have any questions about your rights as a research participant you may contact Ms. Tanta Myles, The University of Alabama Research Compliance Officer, at 205-348-5152.

PARTICIPATION

Your participation in this study is voluntary; you may refuse to participate without penalty. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before your data collection session is completed your data will be destroyed.

CONSENT

Consent to participate is given by volunteering for this particular study. If this sheet has not answered all of your questions, please let the researcher know at this time and ask for additional information.

APPENDIX C

Study description

Perceptions of Pharmaceutical Company

Thank you for your participation!

The present research examines your perception and thoughts about the pharmaceutical industry and the issue of prescription drug advertisements.

First, you will be asked to answer questions about your perception of prescription drug advertisements and a pharmaceutical company in general. There are no right or wrong answers, and it will be fine if you don't have any knowledge about the issue. So, please feel free to be honest.

On the following pages, you will read two articles. One is a news article about prescription drug advertisements from *USA Today*, and the next is a news release produced by VITAL Inc. about the issue. VITAL Inc. is a leading pharmaceutical company producing a variety of prescription drugs as well as over-the-counter drugs. The two stories are based on actual stories. It takes about 5 - 8 minutes to finish reading.

Finally, you will be asked to answer questions about your thoughts on prescription drug advertisements based on what you read from two stories. Again, there are no right or wrong answers, and it will be fine if you don't have any knowledge about the issue. Please feel free to be honest.

Your participation in this research is voluntary. By completing the questionnaire, you are giving your consent that your responses to these questions be used as data for this research. Your responses are entirely anonymous.

If you have any questions, feel free to contact Jee Young Chung at jchung@crimson.ua.edu

Thank you for your participation!

Please turn the page.

APPENDIX D

Pre-test Questionnaire

1. Please provide your thoughts on the following statements regarding prescription drug companies and prescription drug advertisements in general. The answers range from strongly disagree (1) to strongly agree (7).

question	answer
I have a positive opinion about prescription drug companies.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦ Strongly agree
I believe that the prescription drug companies follow government regulations.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦ Strongly agree
The prescription drug companies do a good job making their drugs.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦ Strongly agree
I think that the prescription drug companies are honest.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦ Strongly agree
I think that the prescription drug industry is a necessary part of our society.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦ Strongly agree
I have a positive opinion about advertisements for prescription drugs.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦ Strongly agree
Prescription drug advertisements have helped me.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦ Strongly agree
Prescription drug advertisements have helped other people I know.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦ Strongly agree
Prescription drug advertisements help people learn about the symptoms for different medical problems.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦ Strongly agree
I think that any problems associated with prescription drug advertisements could be solved.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦ Strongly agree
Overall, the benefits from prescription drug advertisements outweigh the problems.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦ Strongly agree

APPENDIX E

Stimulus – News Story

News article from a newspaper

Now, you will read a news story about prescription drug advertisements appeared in the *USA Today*.

“DTC ads” here mean prescription drug advertisements.

Spotlight falls on drug ads

Some consumer advocates and managed-care plans claim that DTC ads spur patients to demand prescriptions for expensive, newer drugs when cheaper, older medications would do. The Food and Drug Administration says some of the ads are misleading patients into thinking a medication is better or safer than it really is.

On the other hand, the pharmaceutical industry argues that DTC ads play an important role in motivating patients to seek needed medical attention.

Turn the page.

APPENDIX F

Stimuli – News releases

News release from VITAL Inc.

Now, you will read a news release from VITAL Inc.

Condition #1. Issue advocacy (use) x Self-regulation (use) x CSR (use)

According to research led by the Medical University of South Carolina (MUSC), TV advertising of prescription drugs are prompting more people to visit their doctors. Studies show prescription drug advertisements bring patients into their doctors' offices and starts important doctor-patient conversations about health that might otherwise take place. VITAL Inc. is certain that prescription drug advertisements help to educate consumers by diagnosing symptoms, initiating doctor-patient relationship, and facilitating doctor-patient communication for raising awareness of disease and treatments.

VITAL Inc. strongly supports the Pharmaceutical Research and Manufacturers of America (PhRMA) Guiding Principles for direct-to-consumer advertising. VITAL Inc. is especially pleased with the unambiguous commitment of these principles to better meet patients' needs with improved communication of risks and benefits. We voluntarily comply with PhRMA's Guiding Principles for our drug advertisements. Our new advertising campaign for *Sleep Pill* is conducted based on the principles and we will be keeping cautious about getting accurate information to patients and consumers.

VITAL Inc. has donated 20% of annual profit to non-profit organizations dedicated to providing public health, managing diseases, and monitoring medical problems. We are dedicated to maintaining and enhancing our citizenship and social responsibility activities despite challenging global economic conditions.

Condition #2. Issue advocacy (no use) x Self-regulation (use) x CSR (use)

VITAL Inc. strongly supports the Pharmaceutical Research and Manufacturers of America (PhRMA) Guiding Principles for direct-to-consumer advertising. VITAL Inc. is especially pleased with the unambiguous commitment of these principles to better meet patients' needs with improved communication of risks and benefits. We voluntarily comply with PhRMA's Guiding Principles for our drug advertisements. Our new advertising campaign for *Sleep Pill* is conducted based on the principles and we will be keeping cautious about getting accurate information to patients and consumers.

VITAL Inc. has donated 20% of annual profit to non-profit organizations dedicated to providing public health, managing diseases, and monitoring medical problems. We are dedicated to maintaining and enhancing our citizenship and social responsibility activities despite challenging global economic conditions.

Condition #3. Issue advocacy (use) x Self-regulation (no use) x CSR (use)

According to research led by the Medical University of South Carolina (MUSC), TV advertising of prescription drugs are prompting more people to visit their doctors. Studies show prescription drug advertisements bring patients into their doctors' offices and starts important doctor-patient conversations about health that might otherwise take place. VITAL Inc. is certain that prescription drug advertisements help to educate consumers by diagnosing symptoms, initiating doctor-patient relationship, and facilitating doctor-patient communication for raising awareness of disease and treatments.

VITAL Inc. has donated 20% of annual profit to non-profit organizations dedicated to providing public health, managing diseases, and monitoring medical problems. We are dedicated to maintaining and enhancing our citizenship and social responsibility activities despite challenging global economic conditions.

Condition #4. Issue advocacy (no use) x Self-regulation (no use) x CSR (use)

VITAL Inc. has donated 20% of annual profit to non-profit organizations dedicated to providing public health, managing diseases, and monitoring medical problems. We are dedicated to maintaining and enhancing our citizenship and social responsibility activities despite challenging global economic conditions.

Condition #5. Issue advocacy (use) x Self-regulation (use) x CSR (no use)

According to research led by the Medical University of South Carolina (MUSC), TV advertising of prescription drugs are prompting more people to visit their doctors. Studies show prescription drug advertisements bring patients into their doctors' offices and starts important doctor-patient conversations about health that might otherwise take place. VITAL Inc. is certain that prescription drug advertisements help to educate consumers by diagnosing symptoms, initiating doctor-patient relationship, and facilitating doctor-patient communication for raising awareness of disease and treatments.

VITAL Inc. strongly supports the Pharmaceutical Research and Manufacturers of America (PhRMA) Guiding Principles for direct-to-consumer advertising. VITAL Inc. is especially pleased with the unambiguous commitment of these principles to better meet patients' needs with improved communication of risks and benefits. We voluntarily comply with PhRMA's Guiding Principles for our drug advertisements. Our new advertising campaign for *Sleep Pill* is conducted based on the principles and we will be keeping cautious about getting accurate information to patients and consumers.

Condition #6. Issue advocacy (no use) x Self-regulation (use) x CSR (no use)

VITAL Inc. strongly supports the Pharmaceutical Research and Manufacturers of America (PhRMA) Guiding Principles for direct-to-consumer advertising. VITAL Inc. is especially pleased with the unambiguous commitment of these principles to better meet patients' needs with improved communication of risks and benefits. We voluntarily comply with PhRMA's Guiding Principles for our drug advertisements. Our new advertising campaign for *Sleep Pill* is conducted based on the principles and we will be keeping cautious about getting accurate information to patients and consumers.

Condition #7. Issue advocacy (use) x Self-regulation (no use) x CSR (no use)

According to research led by the Medical University of South Carolina (MUSC), TV advertising of prescription drugs are prompting more people to visit their doctors. Studies show prescription

drug advertisements bring patients into their doctors' offices and starts important doctor-patient conversations about health that might otherwise take place. VITAL Inc. is certain that prescription drug advertisements help to educate consumers by diagnosing symptoms, initiating doctor-patient relationship, and facilitating doctor-patient communication for raising awareness of disease and treatments.

Condition #8. Issue advocacy (no use) x Self-regulation (no use) x CSR (no use)
No news release is provided by VITAL Inc.

APPENDIX G

Post-test Questionnaire

1. Please provide your thoughts on the following questions about the issue of prescription drug advertisements **based on what you read of a news release from VITAL Inc.** The answers range from not at all/not at all likely (1) to absolutely/fully acknowledged, extremely likely (7).

question	answer
Based on the news release from VITAL Inc., to which extent do you think VITAL Inc. contribute resources to support public health programs?	Not at all absolutely ①-----②-----③-----④-----⑤-----⑥-----⑦
Based on the news release from VITAL Inc., to which extent do you think VITAL Inc. contribute resources to socially responsible activities?	Not at all absolutely ①-----②-----③-----④-----⑤-----⑥-----⑦
Based on the news release from VITAL Inc., I am acknowledged that prescription drug advertisements educate consumers by diagnosing symptoms, initiating doctor-patient relationship, and facilitating doctor-patient communication.	Not at all acknowledged ①-----②-----③-----④-----⑤-----⑥-----⑦
Based on the news release from VITAL Inc., I am acknowledged the result of research on prescription drug advertisements conducted by MUSC.	Not at all acknowledged ①-----②-----③-----④-----⑤-----⑥-----⑦
Based on the news release from VITAL Inc., How likely is it that VITAL Inc. would comply with PhRMA's Guiding Principles for prescription drug advertisements?	Not at all likely very likely ①-----②-----③-----④-----⑤-----⑥-----⑦

2. Please provide your thoughts on the following questions about the issue of prescription drug advertisements based on what you read of a news article and a news release from VITAL Inc. The answers range from unproblematic/very unimportant/nothing much/not at all/strongly disagree (1) to problematic/very important/a great deal/strongly agree (7).

question	answer
How much of a problem for society are prescription drug advertisements?	Unproblematic Problematic ①-----②-----③-----④-----⑤-----⑥-----⑦
How important is it to solve the issue of prescription drug advertisements in society?	very unimportant very important ①-----②-----③-----④-----⑤-----⑥-----⑦

How often do you think about the issue of prescription drug advertisements?	never rarely a few times several times often frequently always ①-----②-----③-----④-----⑤-----⑥-----⑦
How much could you do to influence decisions about the issue of prescription drug advertisements?	Nothing much A great deal ①-----②-----③-----④-----⑤-----⑥-----⑦
How important do you think your decision will be regarding the issue of prescription drug advertisements?	very unimportant very important ①-----②-----③-----④-----⑤-----⑥-----⑦
I feel considering the issue of prescription drug advertisements takes too much of my time.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
I think about the issue of prescription drug advertisements a great deal.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
I consider myself at risk if the issue of prescription drug advertisements is not solved.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
The issue of prescription drug advertisements is a personally relevant topic for me.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
To what extent do you think the issue of prescription drug advertisements can affect the nation?	Not at all A great deal ①-----②-----③-----④-----⑤-----⑥-----⑦
To what extent do you think the issue of prescription drug advertisements can affect your future?	Not at all A great deal ①-----②-----③-----④-----⑤-----⑥-----⑦

3. Please provide your thoughts on the following statements based on what you read of a news article and a news release from VITAL Inc. The answers range from strongly disagree (1) to strongly agree (7).

question	answer
I have a positive opinion about VITAL Inc.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
I believe that VITAL Inc. follows government regulations.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
VITAL Inc. does a good job making their drugs.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
I think that VITAL Inc. is honest.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
I think that VITAL Inc. is a necessary part of our society.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
I have a positive opinion about advertisements for prescription drugs.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
Prescription drug advertisements have helped me.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
Prescription drug advertisements have helped other people I know.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦
Prescription drug advertisements help people learn about the symptoms for different medical problems.	Strongly disagree Strongly agree ①-----②-----③-----④-----⑤-----⑥-----⑦

I think that any problems associated with prescription drug advertisements could be solved.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦	Strongly agree
Overall, the benefits from prescription drug advertisements outweigh the problems.	Strongly disagree ①-----②-----③-----④-----⑤-----⑥-----⑦	Strongly agree

4. Please provide your thoughts on the following questions about the issue of prescription drug advertisements. The answers range from very unlikely (1) to very likely (7).

question	answer
If you were to see a program about prescription drug advertisements on TV, how likely would you pay attention to the story?	Very unlikely ①-----②-----③-----④-----⑤-----⑥-----⑦ very likely
If you were to see a news story about prescription drug advertisements on newspapers, how likely would you pay attention to the story?	Very unlikely ①-----②-----③-----④-----⑤-----⑥-----⑦ very likely
If you were to see a news story about prescription drug advertisements on the Internet, how likely would you pay attention to the story?	Very unlikely ①-----②-----③-----④-----⑤-----⑥-----⑦ very likely
Are you willing to talk about prescription drug advertisements with your family?	Very unlikely ①-----②-----③-----④-----⑤-----⑥-----⑦ very likely
Are you willing to talk about prescription drug advertisements with your friends?	Very unlikely ①-----②-----③-----④-----⑤-----⑥-----⑦ very likely
Are you willing to talk about prescription drug advertisements with others who are concerned about the issue?	Very unlikely ①-----②-----③-----④-----⑤-----⑥-----⑦ very likely
In the near future, I intend to search for more information about prescription drug advertisements.	Very unlikely ①-----②-----③-----④-----⑤-----⑥-----⑦ very likely

5. Based on what you read of a news release from VITAL Inc., my impression of VITAL Inc. is
bad good
①-----②-----③-----④-----⑤-----⑥-----⑦

Unfavorable favorable
①-----②-----③-----④-----⑤-----⑥-----⑦

Negative positive
①-----②-----③-----④-----⑤-----⑥-----⑦

6. Assume that you are definitely considering the purchase of prescription drugs or over-the-counter drugs, please answer the following question.

1) How likely or probable is it that you would be interested in purchasing the product of VITAL Inc.?

Very unlikely very likely
①-----②-----③-----④-----⑤-----⑥-----⑦

2) How likely is it that you will recommend the product of VITAL Inc. to a friend?

Very unlikely very likely

①-----②-----③-----④-----⑤-----⑥-----⑦

7. Please provide the following demographic information:

1) Gender: Male Female

2) What year were you born?

3) Which of the following categories best describe your racial or ethnic identification?

White/Caucasian Latino/Hispanic African American Native American

Asian American Pacific Islander Other: _____ (please specify)

4) What is your current level in college?

Freshman Sophomore Junior Senior Graduate Other (please specify _____)