

**Examining Legitimacy Gap in Issues Management Applying Expectancy
Violation Theory:
An Empirical Analysis of Legitimacy Gap in an Issue of Direct-to-Consumer
Advertising in Pharmaceutical Industry**

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The pharmaceutical industry is subject to many laws and regulations regarding patenting, orphan drugs, or testing new drugs. No matter how the industry manage issues well enough, these issues have resulted in debates and misconception toward the industry among publics. Among others, the issue of direct-to-consumer advertising (DTC ads) has been controversial since its first appearance in the U.S. edition of *Reader's Digest* in 1981. (Woloshin, Schwartz, Tremmel, & Welch, 2001). More importantly, the issue has gained great attention since the Food and Drug Administration loosened the regulation on DTC ads since 1997 (Gellad, Kenneth, & Lyles, 2007).

While a significant amount of research has endeavored to examine the effects of DTC ads on consumers and the impact on health providers (Donohue, Cevalco, & Rosenthal, 2008), the nature of controversy among publics have not been discovered. A nationwide survey conducted by a professional market research firm showed general publics' distrust in pharmaceutical companies in 2007 (PricewaterhouseCoopers, 2007). The firm named the discrepancy as 'perception gap' between the public's perception on pharmaceutical industry and the industry's actual performance. The prevailing misconception and so-called 'perception gap' need to be examined not only from practical perspective but also from theoretical perspective.

Legitimacy is a license to operate in a society for an organization. The underlying assumption is that 'business is a social institution,' which needs a society's acceptance for survival (Sethi, 1977). Despite of its importance, legitimacy has been an ambiguous goal for an organization. To better understand the concept of legitimacy practically, it is necessary to break down the concept to what is called the 'legitimacy gap,' which is the discrepancy between business behaviors and actions and societal expectation (Sethi, 1977). When the gap is wide, the organization's survival is threatened. As Heath (1997) defined an issue as a dispute between parties because of the gaps in facts, values, or policies, the legitimacy gap occurs when the issue becomes controversial in society. Therefore, managing the legitimacy gap is one of the goals in issues management.

Legitimacy gap acknowledges the discrepancy between social norms and organizational behavior. By applying Expectation Violation Theory (EVT), which also acknowledges the gap between an individual's expectation towards non-verbal behavior and actual behavior, the legitimacy gap can be theoretically explained. Derived from EVT, the present paper conceptualizes the violated interpretation in the media as a macro-level of legitimacy gap. This gap exists between societal expectations interpreted in media and organizations' self-representation.

The present study aims to examine a macro-level of legitimacy gap in the issue of DTC ads and the discourse on the issue. The paper first (1) reviews the literature on legitimacy gap and issues management regarding the legitimacy gap; (2) conceptualizes the macro-level of

legitimacy gaps applying EVT, and later (2) examines macro-level of legitimacy gap and the discourse on the issue examining a discrepancy between media framings and industrial issues framing on DTC ads for a period between 1997 and 2008 utilizing EVT and framing theory.

Literature Review

Organizational Legitimacy and Legitimacy Gap

Organizational legitimacy has gained attention from many researchers in the management literature (Ashforth & Gibbs, 1990). Despite of its popularity, the definition of legitimacy is not clear (Bussy, 2007; Suchman, 1995). Dowling and Pfeffer (1975) explained that an organization can be legitimate when its activities are congruent with social values. Many researchers agree that legitimacy is an acceptance from audiences (Keable, Landry, & Banville, 1998). Ashforth and Gibbs (1990) argued that legitimacy is a social judgment and accredited to the organization by its public. Among these, Suchman's (1995) definition adopts a more inclusive and broad-based definition by 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). Overall, legitimacy acknowledges the approval or acceptance from the public.

However, it is hard to measure legitimacy empirically. To better understand legitimacy and attempt to measure it, the concept of legitimacy gap needs to be considered. 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).

Although little research has attempted to measure the legitimacy gap, several scholars have suggested the ways to manage legitimacy gap or legitimacy. Dowling and Pfeffer (1975) suggested three strategies: conforming to the prevailing definition of legitimacy, altering the definition through communication, and communicating symbolic meanings. Ashforth and Gibbs (1990) explained two types of legitimacy management: substantive management and symbolic management. Substantive management involves real changes in organizational operations such as organizational structures, goals, or socially institutionalized practices. Symbolic management is to portray them to be congruent with social values and expectations. Suchman (1995) argued that there is an agreement on the notion that legitimacy management can be seen in two broad approaches: strategic and institutional. The strategic approach adopts a management perspective in that organizations can manage and manipulate legitimacy. Public relations activities can be categorized into this approach (Bussy, 2007). To the contrary, the institutional approach explains that legitimacy is a function of the external influence on an organization. In most cases, the role of communication is important in management of the legitimacy gap. 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.

The Role of Issues Management: Managing Legitimacy Gap

Research interest in issues management began in the 1960s when corporations adopted policy changes in response to political activism. The change in societal climate was crucial for an organization's existence, and it led to the emergence of issues management. In its early stages,

issues management was defined as a program that companies used to improve their involvement in the public policy process (Public Affairs Council, 1978). However, in this turbulent society, the issues organizations deal with are diverse, ranging from issues related to the corporate level to societal level issues such as the environmental or inflation. Publics' support towards issues help not only the policy-making process, but also support the business climate. Consequently, among many public relations theories and practices, issues management plays a significant role in corporate communications that influence the public agenda (Berger, 2001; Reynolds, 1997) or public policy (Heath, 1997). Heath (1997) stated that issues management helps an organization in managing emerging public issues and ultimately helps an organization achieve its strategic business goals.

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's (1979) asserted that the objective is to affect public policy process. Since then, scholars have examined how issues management results in favorable policy making or strategies to manage issues suggesting the strategic 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 (1992) explained that the third objective of issues management is in response to any discontinuities dealing with internal and external issues.

Managing the legitimacy gap encompasses the third objective. Although responses to any issues are important in issues management, the notion that the issue produces *the legitimacy gap* has been disregarded. When the issue violates societal expectations, managing the legitimacy gap is as important as gaining favorable support from the public. Bridge (2004) explained the legitimacy gap approach as one of the important theoretical underpinnings in issues management. Coombs (1992) applied the concept of legitimacy to analyze the issues management process of President Ronald Reagan's Task Force on Food Assistance, thereby showing that the failure in establishing legitimacy on the hunger issue resulted in the failure of policy proposal. However, although abundant research has emphasized defining the concept and explaining its importance, not many studies have tried to measure the legitimacy gap. Without clear understanding, it is meaningless to keep emphasizing legitimacy in organizational discourse. The following section analyzes the concept of legitimacy gap by applying Expectancy Violation Theory (EVT).

Theoretical Framework

Micro- and Macro-level of Legitimacy gaps Applying Expectancy Violation Theory

Legitimacy gap is based on the notion that there is discrepancy between the social norm and publics' expectation. 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). Although EVT has been applied to the interpersonal communication (e.g., Bachman & Guerrero, 2008), it is also applicable to other disciplines such as marketing (Brugoon, Dunbar, & Segrin, 2002). Recently, Campo, Cameron, Brossard, and Frazer (2004) examined health messages (alcohol,

smoking, and exercise) processing among college students using social norms marketing and EVT.

Burgoon and Hale (1988) argued that an individual has an expectation toward the non-verbal behavior of others. When the expectation was violated to a certain degree, the victims are aroused. The violation was either positive or negative based on (1) the evaluation of the communicator (communicator rewardingness), (2) implicit messages with the behavior, and (3) the behavior itself. There are some nonverbal behaviors which inherently produce either negative or positive evaluations. Also, there are some nonverbal behaviors that carry implicit messages; therefore, the violation can be understood differently in a different context. The first evaluation of behavior itself and second interpretation of implicit meaning of behavior can be affected by communicator rewardingness (Burgoon & Hale, 1988). Communicator rewardingness 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 regarding physical distance from others is violated by invading his/her private boundary, he/she evaluates the valence of violations as either positive or negative based on behavior itself, violator’s rewardingness (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. Burgoon and Hale (1988) argued that the discrepancy arises among societal expectations, personal expectations, and the actual violation. The largest negative violation gap occurs between positive individual expectation which is greater than societal expectation and the actual behavior is negative with high reward communicator. After examining the violation valence, positively evaluated violation produces favorable communication patterns and consequences (Burgoon & Hale, 1998).

When the theory is applied to the relationship between an organization and its public, it is reasonable to assume that publics have certain expectations toward issues or organizational behaviors toward the issue. When the expectation is violated, the public is aroused and they evaluate the issue and the related organization as either positive or negative. This notion is congruent with the concept of legitimacy. Whereas the positive violation produces benefits to the organization, the negative violation produces negative evaluations on issues or organizations as EVT predicts. As the legitimacy gap implies negative perceptual discrepancy held by publics between organizational behavior and societal norms (Suchman, 1995), negative violations in EVT can be explained as legitimacy gaps in public relations context.

Three important elements in gaps are personal expectation, societal expectation, and actual behavior, and the gaps occur among them. Also, as aforementioned, there are three variables to affect evaluation of violations in the interpersonal communication context: implicit messages, behavior itself, and communicator rewardingness. Burgoon and Hale (1998) explained that violated behaviors are examined by either the interpretation of societal norm (i.e., implicit messages) or evaluation by “the recipient for this particular occasion” (i.e., behavior itself) (p. 63). Through this process, communicator rewardingness mediates the evaluation. Then, violation interpretation by societal norm is one of important factors in expectation violation. If violation interpretation is evaluated negative, a negative violation occurs when an individual has no prior information about the communicator. Even an individual perceives rewardingness of communicator and evaluate the behavior later on, initial violation interpretation also important as

Burgoon and Hale (1998) said communicator rewardingness mediates overall expectancy violation.

In most cases, no public knows every issue. They are guided to think about certain issues by media (i.e., agenda-setting theory). Even more, publics might be primed for certain issues by media (i.e., priming theory). Priming and framing are important in shaping social issues and subsequent judgments (Gergen, 1992). Danowski (2008) argued that public relations campaigns can have a priming effect on shaping news contents among journalists. Therefore, the public would evaluate expectation violation based on violation interpretation from the media. At the same time, in a societal level, the discrepancy occurs when society considers the issues or organizational behavior as violations. This macro level gap should be examined to further assess individual level of gaps. 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' view points. Issues or organizational behaviors are presented to the public in a desired way via public relations efforts such as news releases, advertisements, special events or other channels. Then, the macro-level of legitimacy gap can occur between societal expectation presented in mass media and organizational self-presentation.

Macro Level Legitimacy Gap: Gap between Expectation Interpreted as Media Framing and Organizational Behavior as Issues Framing

Expectation Interpreted as Media Frames. Societal interpretation in the media is important in that publics are guided to think about certain issues by media (i.e., agenda-setting theory) or publics "learn of themselves and others" (Tuchman, 1978, p. 1). Framing is a means of organizing "disparate facts into a coherent story" (Barnett, 2005, p. 342) or "packaging of information" (Scheufele, 2000a). Scheufele (2000b) differentiated media frames from audience frames. Whereas media frames, utilized by journalists, are defined as a central idea or story line that gives meaning to an unknown events (Gamson & Modigliani, 1987), the audience frame refers to the individual's mental schemas of ideas that guide his/her information processing (Entman, 1993). Media frames are a means to convey complex issues to make sense of an event for audiences who have limited prior information (Scheufele, 2000a). Price and Tewksbury (1997) argued that these two frames interact to influence an individual's perception and attitudes. At the same time, scholars have argued that publics can be primed for certain issues by media. In other words, publics form a standard toward issues provided by media (i.e., priming theory). Priming and framing play pivotal roles in shaping social issues and subsequent judgments in dealing with them (Gergen, 1992). Therefore, media framing can not only be a tool to make sense of complex issues, but it also guides standards for judging the issue and forming publics' perception and attitudes toward the issue. In this regard, societal expectation can be operationalized as media framings which influence publics' perception and attitudes.

Organizational Actual Behavior as Issues Framing. As media framing is important among journalists, many public relations scholars argued that framing in public relations is an important tool to shape news frames (Darmon, Fitzpatrick, & Bronstein, 2008; Esrock, Hart, D'Silva, 2002; Hallahan, 1999; Vasquez, 1996). Danowski (2008) examined that public relations campaigns can have both short-term and long-term priming effects on shaping news coverage among journalists. From an issues management perspective, issues framing is important in the issue communication process. Vasquez (1996) argued that public relations practitioners should engage in information-assembling, information-promotion, and information-consuming activities as boundary spanners. In the issues management process, Vasquez (1996) asserted that

information-assembling and information-promotion are “the construction of frames” and presenting the frames to the public (p. 71). Frames enable organizations to negotiate the relationship between an organization and its key publics (Vasquez, 1996). Hallahan (1999) suggested seven models of framing applicable to public relations: situation, attributes, choices, actions, issues, responsibility, and news. Among them, issues framing aims to explain “in alternative terms by different parties who vie for their preferred definition a problem or situation to prevail” (p. 210). Hallahan (1999) suggested a concept of “frame strategists” for public relations practitioners. Therefore, issues framing and media framing on the same issue exist concurrently. Hence, the following research questions are suggested to examine media framing and issues framing.

RQ 1: How have media coverage and industrial news releases about DTC ads appeared in the period between 1997 and 2008?

RQ 2: What types of media framings and issues framings have appeared in news coverage and industrial news releases of DTC ads between 1997 and 2008?

At the same time, many researchers argued that public relations’ efforts do not directly affect news content because they are filtered by journalists’ viewpoints (Kioussis, Popescu, & Mitrook, 2007; Turk, 1983). Curtin (1999) argued that although public relations is a key news source, public relations materials are used when they do not support the agenda-building goals of the sponsoring organization. Sometimes, many issues in the news were often poorly explained or biased (Jamieson, 1992). This might result in important consequences for public policy decisions and legislation (Kosicki, 1993). Therefore, when issues become controversial, organizations’ media relations efforts do not necessarily work in gaining news contents. Consequently, the macro-level of legitimacy gap between organizational issue position (issue framing) and news contents (media framing) occurs. Hence, the following hypothesis will lead this study to examine the macro-level of legitimacy gap.

RQ 3: What types of violations (either negative or positive) have appeared in news contents and news releases?

RQ 4: What are the gaps on valences between news contents and news releases?

As the negative violation in EVT leads unfavorable communication patterns and consequences, the negative violation (legitimacy gap) will lead negative evaluation on issues or organizational behaviors. In issues management context, the negative results could be regulatory enforcement by policy makers. Therefore, the following hypothesis is suggested to examine the result of macro-level legitimacy gap.

H: The greater number of negative violations (i.e., legitimacy gap) between news coverage and news releases on an issue of DTC ads relates to the greater regulatory enforcement towards pharmaceutical industry.

Method

Samples

The study examined the discrepancy between news coverage about DTC ads and pharmaceutical companies' news releases for the period from January 1997 to November 2008. This period was selected to see the trend of media framing and issues framing of DTC ads because FDA 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. 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 key terms to find the retrieved articles contained the name of 'direct-to-consumer,' 'drug advertising,' and the abbreviation of 'DTC' 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, 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 industrial news releases, a total of 93 releases was found, but 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. To see the trend of regulatory enforcement actions, the frequency of warning letters and untitled letters regarding DTC ads was analyzed from FDA website (www.fda.gov/cder/ddmac/lawsregs.htm).

Coding Procedure

Descriptive Features. The coders coded the frequency of both news articles and industrial news releases. Type of stories (news coverage and news releases), types of newspapers, type of industrial materials, 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.

The lists of framings. To analyze media framings and issues framings, first, PhRMA's position statement (available in its website, www.phrma.org) was analyzed to identify the industry's preferred issue frames. Second, news articles dealing with DTC ads were reviewed to examine media frames. The frames identified both in news articles and PhRMA's position statement were units of analysis in the present study. Several framings from both media frames and issue frames from the pharmaceutical industry were identified. Within each frame, sub-frames were developed to specify different points associated with a particular frame. Table 1. shows frames and sub-frames from the media and the industry.

Table 1. List of Frames

Framing	Description
Frame 1.	The issue of DTC ads is under investigation.
Sub-frame 1-1.	Congress investigates the issue of DTC ads.
Sub-frame 1-2.	FDA warns/regulates the issue of DTC ads.
Sub-frame 1-3.	Advocacy groups appeal the danger of the issue of DTC ads.
Frame 2.	DTC ads aim to educate consumers.

Sub-frame 2-1.	DTC ads are helpful to educate consumers to diagnose symptoms.
Sub-frame 2-2.	DTC ads help initiating doctor-patient relationship.
Sub-frame 2-3.	DTC ads are beneficial to the elders for their health.
Sub-frame 2-4.	A company lunches new DTC ads aiming education for consumers.
Sub-frame 2-5.	DTC ads hurt doctor-patient relationship.
Frame 3.	DTC ads are marketing.
Sub-frame 3-1.	DTC ads are another marketing tool.
Sub-frame 3-2.	DTC ads increase profits.
Sub-frame 3-3.	Pharmaceutical industry spends too much money on DTC ads.
Sub-frame 3-4.	A company launches new DTC ads spending much money
Frame 4.	Customers should be careful about DTC ads.
Sub-frame 4-1.	DTC ads do not give information about risks or side-effects.
Sub-frame 4-2.	The industry's argument of educating consumers is questionable.
Sub-frame 4-3.	DTC ads lead consumers to overuse drugs.
Sub-frame 4-4.	DTC ads are deceptive and misleading.
Frame 5.	Pharmaceutical companies self-regulate DTC ads.
Sub-frame 5-1.	Pharmaceutical companies regulate DTC ads voluntarily.
Sub-frame 5-2.	Pharmaceutical companies comply to DTC ads guideline of PhRMA.
Sub-frame 5-3.	Pharmaceutical companies regulate DTC ads forced by FDA.

Headline/Story Valence. Headline valence and story valence for both news coverage and news releases were coded as negative (-1), neutral (0), or positive (+1).

Intercoder Reliability. Two trained coders coded 75 news stories (21.1%) and 36 news releases (67.9%) to examine the intercoder reliability. Hosti's reliability coefficient was 0.936 (newspapers) and 0.911 (news releases). Scott's (1955) *pi* was 0.823 for newspapers and 0.799 for news releases.

Results

The Trend of News coverage and News releases

Regarding the first research question, descriptive features of news coverage and news releases were analyzed. For the amount of news stories, there was a significant difference in numbers of stories between news contents and news releases ($\chi^2(1, 407) = 220.588, p < .001$). Also, there were significant differences in the number of stories among four newspapers ($\chi^2(3, 352) = 36.651, p < .001$). Table 2. shows the distribution of news articles among four newspapers and news releases of *PRNewswire* and *BusinessNewswire*.

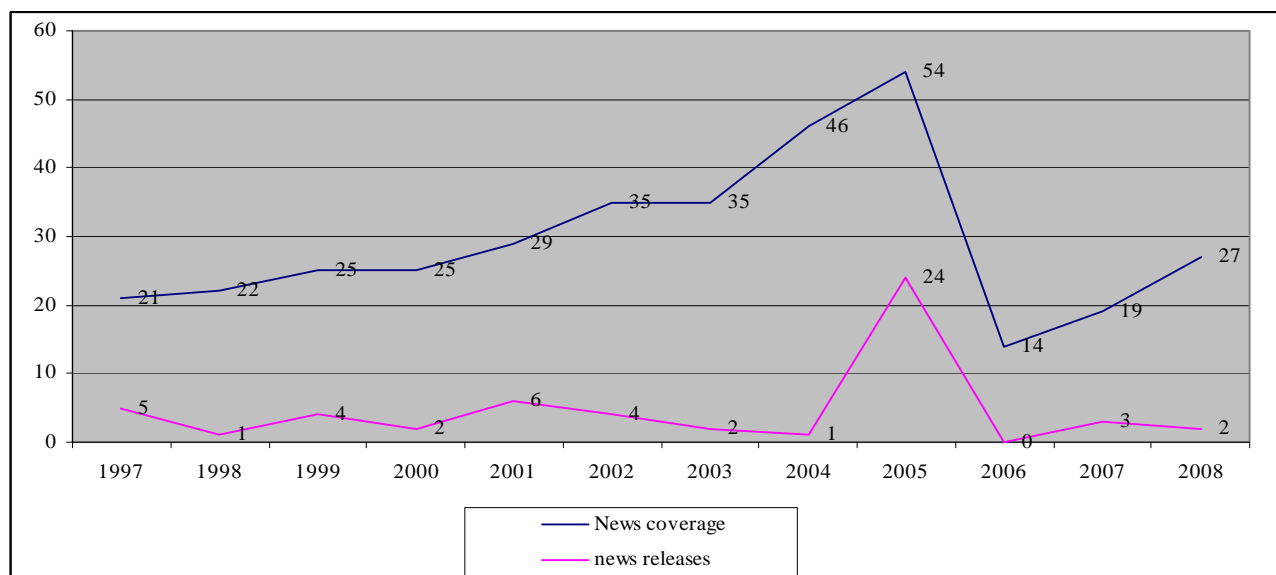
Table 2. Total Number of Stories and Average Words counts

	Stories	Story Length
<i>The New York Times</i>	117	795.56
<i>USA Today</i>	66	590.62
<i>The Wall Street Journal</i>	117	777.28
<i>The Washington Post</i>	55	883.11
<i>PRNewswire</i>	32	668.56
<i>BusinessNewswire</i>	21	684.52

Among news coverage, most news articles appeared in Financial/Money/Business section (n = 253, 71.3%), Health/Fitness/Life section (n = 57, 16.1%), Editorial/Opinion (n = 37, 10.4%). Also, 364 news stories are a type of news article (89.2%), 42 stories are types of editorial/opinion/op-ed/letter (10.3%), two stories were a type of interview (0.5%), and nine articles were letters from audiences (2.2%). In terms of word count for measuring story length, there was a significant difference among them due to the difference between *The Washington Post* and *USA Today* ($F = 3.494, p = .016$).

Figure 2 shows the trend of the news coverage and news releases over the study period. During the years between 1997 and 2008, most news articles appeared in 2005 (n = 54, 15.3%) and most news releases appeared in 2005 concurrently (n = 24, 44.4 %).

Figure 2. Trend of news stories



Trend of media frames and issue frames

In answering the second research question, the most frequent media frame in news coverage was ‘DTC ads are marketing’ (n = 132, 37.2%). The second most frequent media frame was ‘Customers should be careful about DTC ads’ (n = 84, 23.7%). The next frequent media frame was ‘The issue of DTC ads is under regulatory investigation’ (n = 68, 19.2%). Media frame of ‘DTC ads aim to educate consumers’ appeared least (n = 43, 12.1%).

Among issue frames in news releases, the issue frame of ‘Pharmaceutical companies self-regulate DTC ads’ was most frequent (n = 23, 42.6%). The next frequent issue frame was ‘DTC ads are marketing’ (n = 20, 37%). The issue frame of ‘DTC ads aim to educate consumers’ was next frequent (n = 10, 18.5). The frames of ‘The issue of DTC ads is under investigation’ and ‘Customers should be careful about DTC ads’ did not appear. Table 3 shows the frequency of media frames and issues frames across the newspapers and industrial news sources.

Violation Interpretation and the Macro-level Legitimacy Gap

To answer the third research question, means of headline valence, story valence, and overall valence for both news coverage and news release were calculated (see Table 4.). The good-of-fitness t-tests were conducted to examine the mean differences among the three. The results showed that there were significant differences on news headline valence ($t = 40.696, p < .001$), story valence ($t = 229.888, p < .001$), and overall valence ($t = 228.349, p < .001$) between news coverage and news releases. Table 4 shows the valences of headline, story, and overall news stories and Table 5 shows the valences of three across the four newspapers. Table 3 shows the valences of each frame for both news contents and news framing. Valences of news stories were all negative and valences of news releases were all positive. In other words, there were gaps on valences between news contents and news releases.

To answer the fourth research question, the valence of news contents and that of news releases were summed up. The maximum difference is 2 and the minimum is 0. The frame of ‘The issue of DTC ads is under regulatory investigation’ had .90 degree of gap. The frame of ‘DTC ads aim to educate consumers’ had .65. The frame of ‘DTC ads are marketing’ had 1.19, and the frame of ‘Pharmaceutical companies self-regulate DTC ads’ had 1.43. The largest gap was the sub-frame of ‘DTC ads increase profits’ that had 1.27, and the lease was the sub-frame of ‘DTC ads are beneficial to the elders for their health’ that had 0, in turns, there was no gap between news coverage and news releases. The overall gap was 1.44. Each gap was listed on Table 3.

Table 3. List of Media frames

Framing	Description	NYT	W P	WS J	US A	N of stories	Overall valence	PR	BIZ	N of stories	Overall valence	Gap
Frame 1.	The issue of DTC ads is under investigation.	19	8	29	11	68	-90	0	0	0	0	.90
Sub-frame 1-1.	Congress investigates the issue of DTC ads.	6	1	2	2	11	-.91	0	0	0	0	.91
Sub-frame 1-2.	FDA warns/regulates the issue of	13	7	23	9	52	-.90	0	0	0	0	.90

	DTC ads.													
Sub-frame 1-3.	Advocacy groups appeal the danger of the issue of DTC ads.	0	0	4	0	4	-1.00	0	0	0	0	0	1	
Frame 2.	DTC ads aim to educate consumers.	12	3	14	14	43	.35	7	3	10	1.00	.56		
Sub-frame 2-1.	DTC ads are helpful to educate consumers to diagnose symptoms.	4	3	6	9	22	.73	5	2	7	1.00	.27		
Sub-frame 2-2.	DTC ads help initiating doctor-patient relationship.	2	0	0	1	3	.67	2	0	2	1.00	.33		
Sub-frame 2-3.	DTC ads are beneficial to the elders for their health.	1	0	1	0	2	1.00	0	1	1	1.00	0		
Sub-frame 2-4.	A company lunches new DTC ads aiming education for consumers.	0	0	7	0	7	1.00	0	0	0	0	1		
Sub-frame 2-5.	DTC ads hurt doctor-patient relationship.	5	0	0	4	9	-1.00	0	0	0	0	1		
Frame 3.	DTC ads are marketing.	48	15	44	25	132	-.59	12	8	20	.60	1.19		
Sub-frame 3-1.	DTC ads are another marketing tool.	22	4	24	10	60	-.50	5	3	8	.62	1.12		
Sub-frame 3-2.	DTC ads increase profits.	5	1	3	2	11	-.27	0	2	2	1.00	1.27		
Sub-frame 3-3.	Pharmaceutical industry spends too much money on DTC ads.	12	10	13	10	45	-.87	0	0	0	0	.87		
Sub-frame 3-4.	A company launches new DTC ads spending much money	8	0	2	2	12	-.17	3	1	4	.50	.67		
Frame 4.	Customers should be careful about DTC ads.	29	25	19	11	84	-.95	0	0	0	0	.95		
Sub-frame 4-1.	DTC ads do not give information about risks or side-effects.	9	6	11	2	28	-.96	0	0	0	0	.96		
Sub-frame 4-2.	The industry's argument of educating consumers is questionable.	6	7	1	3	17	-.94	0	0	0	0	.94		
Sub-frame 4-3.	DTC ads lead consumers to overuse drugs.	4	6	2	2	14	-.93	0	0	0	0	.93		
Sub-frame 4-4.	DTC ads are deceptive and misleading.	8	5	5	4	22	-1.00	0	0	0	0	1		
Frame 5.	Pharmaceutical companies self-regulate DTC ads.	8	3	7	3	21	-.43	13	10	23	1.00	1.43		
Sub-frame 5-1.	Pharmaceutical companies regulate DTC ads voluntarily.	5	2	1	1	9	-.22	0	1	1	1.00	1.22		
Sub-frame 5-2.	Pharmaceutical companies comply to DTC ads guideline of PhRMA.	0	0	1	1	2	.00	12	9	21	1.00	1		
Sub-frame 5-3.	Pharmaceutical companies regulate DTC ads forced by FDA.	3	1	5	1	10	-.70	0	0	0	1.00	1.70		
	Total	117	55	117	66	355	-.59	32	21	53	.85	1.44		

Table 4. Means of headline/story valence

	Valence (M)	
	News coverage	News release
Headline	-0.45 (SD = 0.899)	0.35 (SD = 0.520)
Story	-0.58 (SD = 0.677)	0.85 (SD = 0.408)
Overall	-0.59 (SD = 0.681)	0.85 (SD = 0.408)

Table 5. Means of headline/story valence

	Valence (M)			
	NYT	WP	WSJ	USA
Headline	-0.50 (SD = 0.551)	-0.38 (SD = 0.652)	-0.45 (SD = 1.171)	-0.41 (SD = 1.022)
Story	-0.63 (SD = 0.638)	-0.73 (SD = 0.525)	-0.50 (SD = 0.765)	-0.55 (SD = 0.683)
Overall	-0.64 (SD = 0.636)	-0.73 (SD = 0.525)	-0.50 (SD = 0.773)	-0.55 (SD = 0.683)

No significant differences

DTC ads News Coverage, News Releases and Regulatory Enforcement

To test the hypothesis, the frequency of news coverage, news releases, and regulatory enforcement were analyzed. Table 6 shows the trend of valence of news coverage and news releases, gaps between the two, and the number of FDA regulatory enforcement actions. The gap and FDA actions are correlated to one another ($r = 0.535$, $p = 0.037$). Also, valence of news releases are highly correlated to FDA actions ($r = 0.701$, $p = 0.006$). Therefore, the hypothesis

was supported. Figure 3. shows a graphical trend of media frames and FDA regulation across the study period. Figure 4. shows a graphical trend of legitimacy gaps and FDA regulation across the study period.

Table 6. The trend of news coverage/news releases valence and FDA regulation actions

	Overall Valence of News Coverage	Overall Valence of News Releases	Gap	FDA
1997	-0.52 (SD = 0.602)	0.80 (SD = 0.447)	1.32	13
1998	-0.33 (SD = 0.761)	1.00	1.33	18
1999	-0.36 (SD = 0.638)	0.75 (SD = 0.500)	1.11	6
2000	-0.48 (SD = 0.770)	1.00	1.48	17
2001	-0.66 (SD = 0.721)	0.83 (SD = 0.408)	1.49	10
2002	-0.57 (SD = 0.739)	1.00	1.57	8
2003	-0.57 (SD = 0.698)	0.50 (SD = 0.707)	1.07	9
2004	-0.78 (SD = 0.513)	1.00	1.78	8
2005	-0.70 (SD = 0.603)	0.96 (SD = 0.204)	1.66	9
2006	-0.14 (SD = 0.864)	0	0.14	0
2007	-0.74 (SD = 0.653)	0.67 (SD = 0.577)	1.41	2
2008	-0.70 (SD = 0.669)	0.00 (SD = 1.414)	0.7	3

Figure 3. Trend of media frames and FDA regulation actions

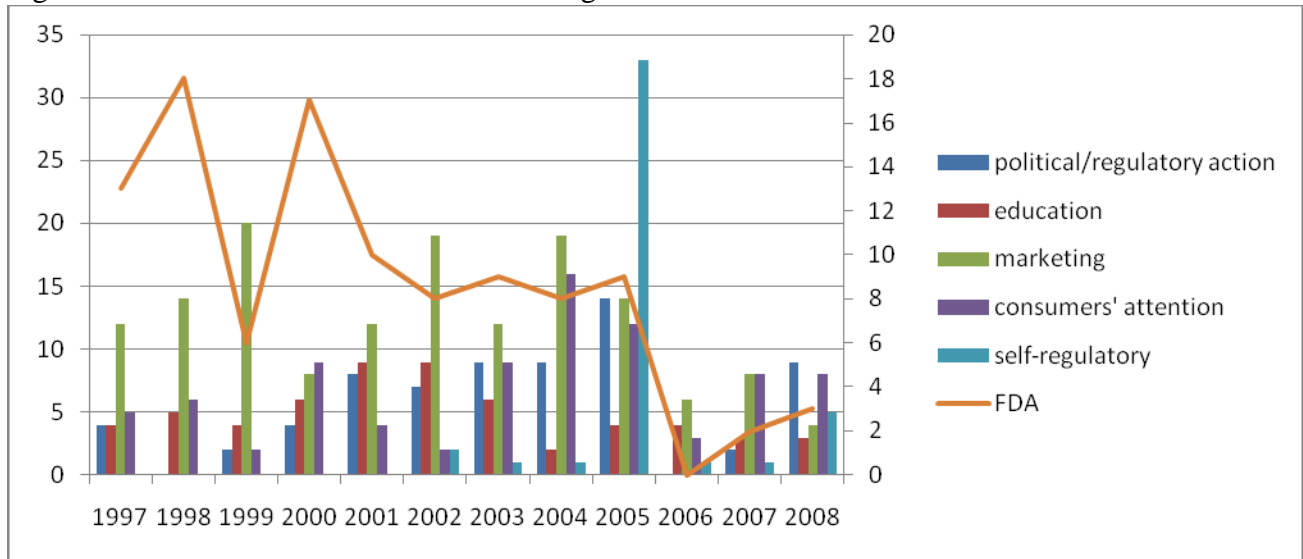
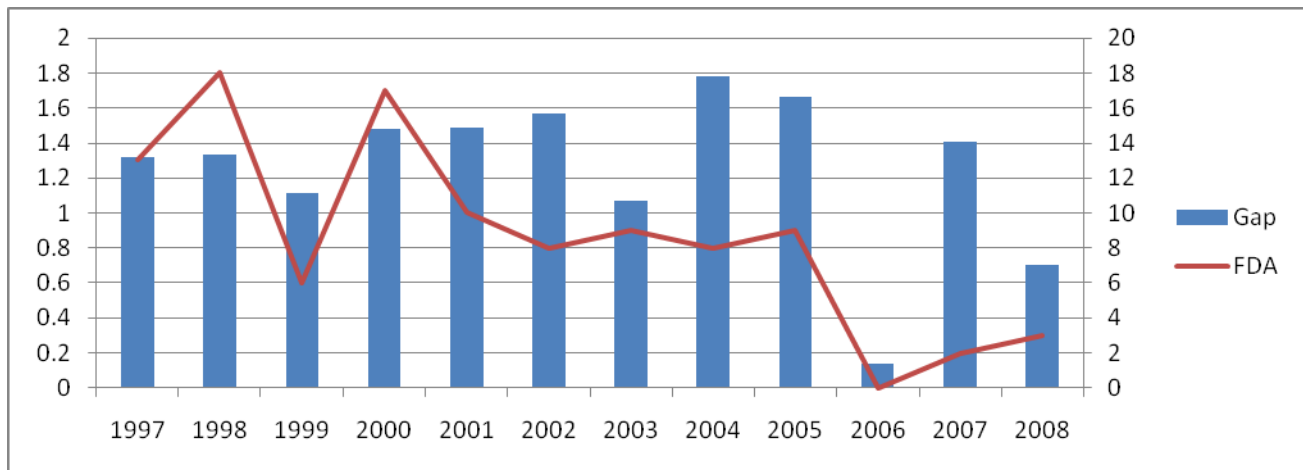


Figure 4. Trend of legitimacy gaps and FDA regulation actions



Discussion

The legitimacy gap has gained attention from scholars in both management and public relations. While management literature has argued the importance of communication in managing the gap, the concept of legitimacy gap has been largely neglected in public relations. From the issue management perspective, the legitimacy gap should be managed strategically for issues that are perceived as problematic in society.

Although the pharmaceutical industry contributes greatly to a society by improving public health, the public distrusts the industry. This notion can be understood from the concept of legitimacy gap which acknowledges the discrepancy between societal expectation and business performance (Sethi, 1977). The industry has been faced with a variety of issues, and issues management should deal with those issues and the legitimacy gaps resulting from controversial

issues. Recently, the issue of DTC ads has emerged as the most controversial during the past decade (Donohue, Cevalco, & Rosenthal, 2008). However, the focus of controversy has not been discovered. The present study examined the legitimacy gap between societal expectation interpreted by the media and the industry's self-presentation applying Expectancy Violation Theory and framing theory.

As the FDA loosened the regulations on DTC ads after 1997, DTC ads have been controversial. The issue has received large amounts of news coverage exhibiting various viewpoints. These viewpoints have been represented as frames. While the media (printed media in the present study) has paid great attention to the issue, it seemed that the pharmaceutical industry did not respond properly in terms of the amount of news stories and news releases. During the 10-year period, the finding shows that relatively little amount of news releases was presented compared to news stories. However, the trend of the numbers of stories for both sides seems similar to one another (see Figure 2). In other words, as the number of news stories was increasing between 2001 to 2005, the number of news releases was also increasing. It seems that the industry knew the trend of news coverage and acted properly.

However, when it comes to consider the media frames and issue frames, it does not seem that the pharmaceutical industry used appropriate issues frames. While much media attention had paid to the frame of 'marketing' with negative valence and 'education' with positive valence, the frame of 'education' was used least. More importantly, the Pharma, which represent the pharmaceutical industry, has focused on the 'education' frame, but pharmaceutical companies have not shown enough support in terms of news release. Also, the frame of 'customers should be careful' in the media, there had not been appropriate responsive issues frames toward it.

By applying EVT, the present study examined violations of interpretation of the issue. The media's violation interpretation was negative, resulting in the gap between the media coverage and industrial position. In other words, it caused a macro-level legitimacy gap. Obviously, the existence of gaps is confirmed in the present study. The present study also showed that the relationship between the number of regulatory enforcement and the legitimacy gap between the media and the industry. This finding suggests that the industry should pay attention to the media and the authority concurrently. The result of negative violation is anticipated unfavorable business climate, the present study confirmed the need for strategic issues management. With regard to regulatory investigation, the number of news releases was greater. However, from the issues management perspective, the industry should have paid attention before the FDA actions.

In addition, understanding the tendency of negative violation across the newspapers and the tendency of media frames used in the newspapers is also important. Among four newspapers, although the number of stories of *The Washington Post* is small, it has a large amount of word counts on average and the most negative valence.

Practical Implication

The results showed that both the media and the industry have competing points of view; therefore, the industry did not respond to the media's main argument. Issues communication efforts should involve two-way communication (Heath, 1997). Therefore, the industry needs to respond to the media's accusations. Therefore, as the results showed that the violation interpretation on the issue of DTC ads in the media was mostly negative, it resulted in the negative legitimacy gap. Public relations practitioners should understand the gap, and try to loosen the gap such as responding in an appropriate way, suggesting reasonable frames, or using

consistent frames. Also, DTC ads campaigns aim to educate publics using large amounts of money. However, education should not occur only through advertising but also in the form of public relations activities. While DTC ads have appeared in television or magazines, the finding shows that media relations efforts have not appeared in elite newspapers and even in industrial news sources. At the same time, from the relationship management perspective, the openness or trust did not appear in the campaign as the media frames of DTC ads often imply deceptive or misleading information.

Theoretical Implication

Applying EVT, the prevalent hostile news coverage was probed and the controversies on the issue were discovered using framing theory. Also, although much research has emphasized the importance of issue framing in issues management, the present study showed narrow scope of issues framing limited to 'education' and a small amount of news releases from the industry. Public relations practitioners should pay attention to the creation of favorable issue frames and communicate effectively with those issue frames. To do that, research needs to support the way to form issues framings.

Further study

The present study showed the negative violation in the mass media (especially in elite printed newspapers). This negative interpretation affects publics' perception. The individual level of negative violation needs to be examined as the individual-level of legitimacy. When they are examined together, the issue and the legitimacy gap would be better understood and managed strategically. Also, when the individual-level of legitimacy is examined, the concept of communicator rewardingness should be taken into close consideration as a significant mediator.

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