

Examining Information Contents and Ad Appeals in Japanese Over-the-Counter Drug Advertising

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Abstract

A quantitative content analysis of Japanese OTC drug TV commercials broadcasted during prime time was conducted to provide an overview of pharmaceutical advertising in Japan. In the sample of 204 ads, nutritional supplement drinks were the most frequently advertised drug category. Ad appeals including effective, safe, and quick-acting were popular. Additionally, these ads predominantly used a product merit approach, and celebrity endorsers, particularly actors/actresses and "talents" (such as TV personnel and comedians), were frequently featured.

Key Words: OTC Drug Advertising, Content Analysis, Japanese Advertising

Introduction

The recent lift on the ban of selling over-the-counter (OTC) drugs online in Japan has created a significant change in the field. With this new law in effect, all OTC drugs can be made available to purchase online. Options for shopping outlets have now widened for the general public, and consumers will rely on information from media and pharmaceutical companies to make purchase decisions.

This trend suggests that the role of OTC drug advertising will be increasingly important. In Japan, the Ministry of Internal Affairs and Communications (2012) states that TV is still the most frequently produced and consumed medium despite the rapid growth of Internet media use. Thus, television commercials are one of the prime information sources of OTC drugs for most Japanese consumers, and research on OTC TV commercials is called for to accommodate the anticipated increase in the sales for the product category.

Meanwhile, research on OTC drug advertising/marketing has been scarce, particularly in the Japanese context. Studies of Japanese advertising exist but mainly in the form of content analysis (e.g. Madden, Caballero, & Matsukubo, 1986; Mueller, 1992; Johansson, 1994). Past research on Japanese advertising has primarily focused on unique advertising appeals (in relation to the debate between standardization vs. localization), not delving into drug advertising and how ad appeals may differ based on product categories. Thus, it is essential to closely examine the contents of OTC drug ads to provide an overview of Japanese OTC advertising for more

advanced studies of pharmaceutical promotions in Japan.

In addition, this line of research is extremely important because OTC drugs are considered to be effective for use in self-medication (Ministry of Health, Labour and Welfare, 2015). Self-medication in Japan is advocated by the government as well as the medical field, including health-care providers, as self-medication can initiate spontaneous preventative health care by individuals and help reduce health insurance costs (Nagao, 2014). To maximize the effectiveness of self-medication using OTC drugs, more information on the drugs is required. Advertising can serve as the first information platform by which consumers acquire drug-related information. Thus, more information on the content of OTC drug advertising is crucial in developing promotional materials that can satisfy the informational demands of consumers.

The objective of this study is to explore portrayals of OTC drug advertising in Japan by focusing on endorsers, advertising appeals, and medical conditions featured in TV commercials. The market environment for OTC drugs is expected to be more competitive due to the trends toward deregulation and globalization in the medical field. These trends will lower the entry barriers that had existed in the Japanese pharmaceutical market for foreign pharmaceutical companies. In fact, large European pharmaceutical companies like Novartis and Bayer have been actively seeking to expand their operations into foreign markets since the 1990s and have achieved significant increases in profits. This practice, in turn, has funded research and development and resulted in further profit expansions

and a positive growth spiral (Mizuho Bank, 2015). As this example indicates, the phenomenon of globalization in the market environment will call for pharmaceutical companies operating in the Japanese market to revise promotional strategies. Thus, it is necessary to understand the current snapshot of promotions, and in this regard, the current study serves as a starting point to provide essential information for pharmaceutical companies.

Literature Review

OTC Drugs in Japan

OTC drugs in Japan are classified into three categories. Type 1 OTC drugs are manufactured with ingredients requiring special precautions, including ingredients not widely used in the other OTC drug classifications (Ishikawa, 2014). Type 2 OTC drugs contain ingredients that in rare cases cause health problems; this type includes cold medicine and pain/fever reducers (Ishikawa, 2014). Vitamin supplements, indigestion medication, and similar remedies are classified into Type 3 OTC drugs; they include ingredients that may cause minor discomfort or mild symptoms (Ishikawa, 2014). All OTC drugs can be sold online with different degrees of restrictions. Additionally, the category of quasi-drug is generally regarded as a part of OTC drugs in Japan. They are grouped in between drugs and cosmetics, and their effects on the human body are milder than drugs (Yabe, 2009).

OTC Drug Advertising Regulations

OTC drug advertising regulations stem from the Pharmaceutical Affairs Law. Generally, this act prohibits the following promotional activities (to general public): 1) advertising of pre-approved drugs; 2) deceptive and/or extravagant advertising; 3) testimonials/endorsement by medical professionals; and 4) advertising of scheduled drugs (Yabe, 2009). The law also sets the standards for proper advertising practices to prevent misuse of these drug products by general consumers. For instance, marketers are advised to avoid using exaggerations when referring to safety and effectiveness of drugs and cosmetics (Yabe, 2009). Moreover, pharmaceutical companies must not use comparative advertising with intention to attack competitors' products (Yabe, 2009). The Japanese Pharmaceutical Act is strict on endorsement by medical professionals even if ads are targeted toward medical professionals. Thus, while using endorsers in advertising is a popular tactic for Japanese advertising, this type of expert endorsement is not expected to be seen in OTC drug advertising.

Content Analysis of Drug Advertising

To this day, the majority of studies concerning drug advertising were conducted on direct-to-consumer (DTC) prescription drugs in the U.S. context. Although DTC advertising of prescription drugs is not approved in Japan, this review will focus on previous research using the method of quantitative content analysis to build the framework for the current study.

Generally in the U.S., the Food and Drug Administration (FDA) states that in DTC drug advertising, detailed side effects, contraindications, and effectiveness must be fully disclosed (so-called "Fair Balance provision") for consumers to assess risks and benefits of drugs (Sheehan, 2007). In Japan, the Pharmaceutical Affairs Law advises that the disclosure of safety information on drugs should be done within the context of effectiveness and results and should avoid exaggerated expressions (Koga, Egawa, Ohshima & Mohri, 1992). Hence, the Japanese approach to advertising expressions tends to be less specific compared to US counterparts.

Informational Contents in DTC Advertising and Information-Persuasion Trade-Off Model

A firm's decision on the optimal amount of information, as well as the types of information, to be included in ads can be influenced by many factors such as consumers' motivations and ability to process information (Cacioppo & Petty, 1985), the product category (Vaughn, 1986), and the brand type and size (Anderson, Ciliberto, & Liaukonyte, 2013). According to the Information-Persuasion Trade-Off model (Anderson et al., 2013), ads have both informative and persuasive components; the persuasive components consist of non-objective and subjective information that tends to be more cognitive, emotional and contextual. On the other hand, the informational components can be defined as appeals based on factual data presented in a logical manner (Puto & Wells, 1984; Ju & Park, 2015). The model suggests that the amount of information in an ad is proportional to the number of informational cues presented in the ad (Anderson et al., 2013). Drugs are considered to be a "thinking" product category, and consumers tend to use informational cues in ads to guide their purchase decision making (Vaughn, 1986). Thus, informational components can be assumed to be prominent in drug advertising in general.

Previous studies on DTC advertising content analysis have approached to this topic from two perspectives: informational contents and advertising appeals. They mainly stressed the types of informational contents in their findings. Informational contents, also referred as "factual claims," (Frosch, Kruger, Honik, Cronbolm, & Barg, 2007, p. 7) include cues like brand

names, manufacturers (Frosch et al., 2007), drug types based on the diseases it will treat (Roth, 1996), medical conditions / symptoms, effectiveness / performance (Macias & Lewis, 2004; Bell, Kravitz, & Wilkes, 2000), and safety/risks (Sheehan, 2007; Koga et al., 1992). Among these, some emerge as key informational factors that are essential for drug advertising.

Medical Conditions: Medical conditions that the drug will treat is crucial in drug advertising since previous research on health beliefs models indicates that individuals tend to be engaged in preventive health behaviors if they perceive themselves to be susceptible to a medical condition (Roth, 1996; Rosenstock, 1974). Consumers will first pay attention to this type of information in drug advertising to either ease symptoms or be prepared for the symptoms.

Scholars have used different labels to content-analyze this information category. For example, Roth (1996) labeled it as “types of drugs” and found that in DTC drug print ads, anti-histamine for decongestion was most often followed by ads for antihypertensive, menopause side effect reducing drugs, and smoking cessation drugs. Similar results were found by Bell et al. (2000); allergies are the most frequently addressed medical condition. The difference from Roth’s study (1996) was that other popular medical conditions stated were cardiovascular, dermatologic, and HIV/AIDS related conditions. Studying prescription drug web sites, Macias and Lewis (2004) reported that psychiatric and neurological disorders were the most frequently addressed medical conditions followed by OB/GYN conditions. Similarly, Sheehan (2007) found the three most addressed medical conditions on prescription drug websites were psychiatric and neurological disorders, dermatological conditions, and OB/GYN conditions. It is interesting to note that depending on the ad medium, the most often addressed condition may differ. Web sites offer almost unlimited spaces for information and can deliver information about drugs for complex symptoms. Meanwhile, other traditional media are limited in space. They tend to deliver information for drugs treating relatively common uncomplicated symptoms. As the current study will be examining television commercials, there is a disadvantage due to a limit on the information delivery capability coupled with the nature of OTC drugs targeting the general public. Hence, there may be a tendency for drugs for most common symptoms and medical conditions to appear on television more often than ads of drugs for complex symptoms.

RQ 1: *What types of medical conditions are addressed in OTC drug television ads in Japan?*

Performance and Effectiveness: Bell et al. (2000) listed expressions such as effectiveness, cure, dependable, innovative, powerful, prevention and symptom control (p. 331) and found that “effectiveness,” “symptom control,” and “innovative” were the top three expressions used to refer to drug effectiveness. Macias and Lewis’ study (2004) also reported that “effective” was the most common expression used followed by “convenient.” As this type of information can be considered material ---a claim that can directly affect the likelihood of purchase (Fueroghne, 2007) --- direct positive expressions may have appeared prominent enough to mention after medical conditions were observed in previous research.

Safety and Risk Information Including Side Effects: The majority of research on DTC drug advertising was conducted in the U.S., where pharmaceutical advertisers are required to disclose both benefit and risk information (Sheehan, 2007). However, a study on Japanese drug advertising targeted towards medical professionals revealed that information on safety and risk were less frequently featured compared to American drug ads (Koga et al., 1992).

Past research has approached this information category from different angles. For example, in their study on print drug ads, Bell et al. (2000) reported that “non-medicated,” “safe,” “neutral,” and “non-addictive” were the common terms used in safety-related claims. However, for claims of side-effect risks, Roth (1996) argued that drugs with higher prevalence for secondary effects were less likely to be advertised directly to consumers, and therefore, expressions such as “severe” and “prevalent” were not commonly seen in DTC drug ads. On the other hand, in the context of web sites with more information capacities, Macias and Lewis (2004) reported that 94 percent of DTC drug web sites addressed issues regarding side effects. However, according to Sheehan (2007), risk presentations tended to be inconsistent on DTC drug web sites. Categories including psychiatric/neurological drugs reported more on benefits than risks, while cancer and gastrointestinal drug web sites consistently presented risk information (Sheehan, 2007). These phenomena (i.e. inconsistent risk information presentations despite the Fair Balance guideline from the FDA) suggest that we may see an imbalance between benefit and risk information in the case of Japanese OTC drug advertising since there is not an equivalent guideline for the Fair Balance.

Advertising Appeals: Ad appeals are to persuade and influence consumers to take an action (e.g. purchase) and range from rational (comparative advertising etc.) to emotional appeals (warmth, humor, fear etc.) on a continuum (Macias & Lewis, 2004). The Information-Persuasion Trade-Off Model (Anderson et

al., 2013) indicates a firm's decision to make persuasive ads rather than informative ads depends on the nature of differentiation of the market; when there is vertical differentiation in a market with objective qualities, firms tend to create more informative ads based on the characteristic advantages of their products. In addition, Anderson et al. (2013) suggest that larger brands tend to include less information in ads. In the context of OTC drugs in Japan, drugs used to treat the same medical conditions tend to contain similar active ingredients, and therefore the market can be characterized as less vertical in terms of differentiation. Moreover, in the Japanese pharmaceutical market, larger companies dominate advertising in terms of their spending. According to Nikkei Advertising Research Institute (2015), three pharmaceutical companies ranked in the Top 50 advertisers in Japan; companies such as Takeda and Kobayashi are major pharmaceutical companies known for offering a wide range of OTC drugs. Thus, we can expect to see persuasive cues in OTC drug ads, although informational content is still generally regarded as prominent in drug ads.

Empirical findings also show that in DTC prescription drug ads, the use of emotional appeals is also common. For instance, Frosch et al. (2007) found that while rational appeals were widely used, emotional appeals (particularly positive ones) were used universally in TV commercials of prescription drugs. However, in DTC drug websites, Macias and Lewis (2004) stated that appeals that pharmaceutical companies had used tended to emphasize rationale and benefits over emotional appeals. This may be due to the larger information capacity of the web. The scarcity of information on the use of message appeals in Japanese drug advertising prompts the current study to address the following:

RQ2: *What kinds of ad and message appeals are commonly used in Japanese OTC drug TV commercials in relation to medical conditions?*

Cultural Characteristics of Japanese Advertising

Soft-Sell, Hard-Sell, and Product Merit Approaches in Advertising

When examining ads from different cultures, it is essential to pay attention to their unique influence. One of the popular topics is soft-sell. Mueller (1992) defines soft-sell appeals as ones that create an emotional atmosphere. Soft-sell appeals tend to be image-oriented and sentimental (Okazaki, Mueller, & Taylor, 2010). Hong, Muderrisoglu, and Zinkhan (1987) argue that this approach is common in Japanese

advertising because the mode of living is represented by adaptation to external environments, and consumers search for happiness in the natural conditions.

On the other hand, hard-sell appeals emphasize sales orientation with an attempt to distinguish the product from the competition (Okazaki et al., 2010). In Japanese advertising, implicit comparisons using phrases such as "number one" and "leader" may be used (Mueller, 1992) but this type is less likely to be seen due to preferences for harmony and bans on direct comparative advertising. Mueller (1992) proposed another common appeal called product merit. The focus is on presenting product facts as the center of the ad's content. In DTC drug advertising, emphasizing product merits is likely to influence consumers' perceptions toward the drugs; thus, we may see this type of appeal used more in Japanese drug advertising.

The Use of Celebrity Endorsers

Celebrity endorsers are very popular in Japan. The majority of Japanese commercials (approximately 70 percent) feature celebrity endorsers, and consumers find these ads likable (Money, Shimp, & Sakano, 2006). Lin (1993) indicated that in Japanese TV ads, more celebrity endorsers were featured than American ads. Mueller (1992) also found that celebrities were frequently used in Japanese print ads. It is an effective tactic to enhance positive responses to ads, and this assisted through the projection of likability of featured endorsers onto the advertised product. Thus, the following research questions are proposed:

RQ3: *In Japanese OTC drug ads, how are the portrayals of cultural ad appeals distributed according to medical conditions?*

RQ4: *How are these endorsers featured in Japanese OTC drug ads based on cultural advertising appeals?*

Method

OTC drug television advertising is defined as follows: TV ads designed to persuade consumers to seek information about an OTC drug or to select a particular OTC brand (Kaphingst, Dejong, Rudd, & Daltroy, 2004). The definition includes Type 1-3 OTC drugs and quasi-drugs.

Sample Selection

A quantitative content analysis of Japanese OTC drug TV commercials between 2014 and 2015 was conducted. Data collection was administrated from one week randomly selected from the third and fourth quarters in 2014 and the first quarter in 2015. TV commercials broadcasted during the prime time ("Golden Hours" --- 7-10 PM) in the five major TV

networks in Tokyo metropolitan area (TV Asahi, Nihon TV, Fuji TV, TBS, and TV Tokyo) were recorded. On each day, two networks were randomly selected for recording.

The unit of analysis was an OTC drug TV commercial with at least one endorser (or actor). Following the method used by Frith, Cheng, and Shaw (2004), this study examined the largest or the most dominant model in a TV commercial if more than two endorsers were featured. One undergraduate and one

graduate student attending a major private university were hired to code the ads. Both are native speakers of English with strong Japanese language skills and are familiar with Japanese culture. A two-hour segment from the recordings of the five major networks was randomly selected for the pilot study (n=28). Krippendorff's Alpha for the key variables were all above .90, an acceptable rate for the intercoder reliability (Table 1).

Table 1 Krippendorff's Alpha for Key Variables

Variables	Krippendorff's Alpha
Drug Categories	.98
Medical Conditions	.97
Advertising Appeals	
Drug Effectiveness	.93
Safety	.90
Advertising Appeals	.97
Cultural Advertising Appeals (Product Merit, Soft-Sell & Hard Sell)	.98
Endorser Types	.98

The coding schemes used are: 1) drug categories (Peterson et al., 1976); 2) medical conditions (Wallace, Rogers, Turner, Keenum, & Weiss, 2006); 3) drug effectiveness (Macias & Lewis, 2004; Bell et al. 2000); 4) safety (Macias & Lewis, 2004); 5) advertising appeals (Frosch et al., 2007); 6) cultural advertising appeals (Mueller, 1992); 7) endorser type (modified from Kaphingst et al. 2004); and 8) company type.

A total of 4,733 TV ads were recorded, and 205 OTC drug TV ads were in the sample. Ads from the same brands with different versions were included in the analysis. Since one ad only featured products, this case was discarded from the analysis (n=204).

Results

Sample Characteristics

There were 31 pharmaceutical companies, and 78 brands were advertised. The five largest advertisers were Takeda (19.5 %), Taisho (13.7 %), Kobayashi

(11.7 %), Lion (4.9 %), and Daiichi Sankyo Healthcare (3.9 %). Among the 204 ads, 199 ads were for domestic and 5 were for foreign companies (including joint ventures). The five most frequently advertised brands included: 1) *Arinamin* (nutritional supplement drink from Takeda, 6.3 %); 2) *Benza Block* (cold medicine, Takeda, 5.4 %); 3) *Biofermin* (antidiarrheal, Taisho, 4.9 %); 4) *Colac* (Laxatives, Taisho, 3.4 %); and 5) *Lipovitan* (nutritional supplement drink, Taisho, 3.4 %).

Data Analysis

RQ1 asks about the medical conditions addressed in OTC drug TV commercials (Table 1). The data indicate that nutritional supplements (to enhance one's endurance) are the most frequently addressed medical condition (23.5 %), followed by common cold (14.2 %) and heartburn/acid indigestion (9.8 %).

Table 2 Medical Conditions Featured in TV Commercials

Conditions	Frequency (%)	Conditions	Frequency (%)
Nutritional Supplements	48 (23.5)	Diarrhea	8 (3.9)
Common Cold	29 (14.2)	Itch/Irritation	8 (3.9)
Heartburn/Acid Indigestion	20 (9.8)	Eye Irritation	7 (3.4)
Pain Reliever	15 (7.4)	Hair Loss Prevention	5 (2.5)
Sinus Infection	14 (6.9)	Allergies	3 (1.5)
Minor Muscle Pain	14 (6.9)	Others	22 (10.8)
Constipation	11 (5.4)		
Total			204 (100)

RQ2 examines portrayals of ad appeals in OTC drug TV commercials based on medical conditions. Three sets of cross-tabulation with chi-square analysis were conducted. For the *drug effectiveness* category, *effectiveness/powerful* was the most frequently used (71 percent), followed by symptom control (16.2 %),

dependable (8.3 %) and prevention (4.4 %) (Table 3). Interestingly, *symptom control* was most frequently addressed in OTC drugs for common cold symptoms (41.4 %) and sinus infection (18.2%). Thus, effectiveness/powerful appeal was the most popular drug effectiveness appeal ($\chi^2=112.58$, $df=36$, $p<.01$).

Table 3 Cross-Tabulation of Drug Effectiveness Appeals and Medical Conditions

	Effective/Powerful (% within Appeals)	Symptom Control	Prevention	Dependable
Nutritional Supplement	46 (31.7%)	0	0	2 (11.8%)
Common Cold	14 (9.7%)	12 (36.4%)	3 (33.3%)	0
Heartburn/Acid Indigestion	12 (8.3%)	2 (6.1%)	1 (11.1%)	5(29.4%)
Pain Reliever	9 (6.2%)	4 (12.1%)	0	2 (11.8%)
Sinus Infection	8 (5.5%)	6 (18.2%)	0	0
Minor Muscle Pain	11 (7.6%)	3 (9.1%)	0	0
Constipation	7 (4.8%)	1 (3.0%)	0	3 (17.6%)
Diarrhea	7 (4.8%)	1 (1%)	0	0
Itch/Irritation	6 (4.1%)	0	1 (11.1%)	1
Eye Irritation	7 (4.8%)	0	0	0
Hair Loss Prevention	1 (0.7%)	0	0	4 (23.5%)
Allergies	3 (2.1%)	0	0	0
Others	14 (9.7%)	4 (12.1%)	4 (44.4%)	0
Total (% of Total)	145 (71.1%)	33 (16.2%)	9 (4.4%)	17 (8.3%)

$\chi^2=112.58$, $df=36$, $p<.01$

For the *safety* category, *safe* was the most mentioned appeal (64.7 %), followed by *natural*; however, 19.8 percent of the sample did not refer to any safety-related appeals in their ads ($\chi^2=89.86$, $df=24$, $p<.01$) (Table 4). *Safe* appeals were often featured in TV commercials for nutritional supplement drinks (26.5 %)

and OTC drugs for common cold (22 %). Additionally, OTC drugs for heartburn/acid indigestion treatment (21.9 %), pain reducer (18.8 %) and sinus infection (18.8 %) tended to feature the *natural* appeal.

Table 4 Cross-Tabulation of Safety Appeals and Medical Conditions

	Safe/Non-Addictive (% within Appeals)	Natural	N/A
Nutritional Supplement	35 (26.5%)	8 (25.0%)	5 (12.5%)
Common Cold	29 (22.0%)	0	0
Heartburn/Acid Indigestion	11 (8.3%)	7 (21.9%)	2 (5.0%)
Pain Reliever	9 (6.8%)	6 (18.8%)	4 (10.0%)
Sinus Infection	8 (6.1%)	6 (18.8%)	0
Minor Muscle Pain	9 (6.8%)	0	5 (12.5%)
Constipation	5 (3.8%)	0	6 (15.0%)
Diarrhea	3 (2.3%)	5 (15.6%)	0
Itch/Irritation	6 (4.5%)	0	2 (5.0%)
Eye Irritation	3 (2.3%)	1 (3.1%)	3 (7.5%)
Hair Loss Prevention	4 (3.0%)	1 (3.1%)	0
Allergies	3 (2.3%)	0	0
Others	7 (5.3%)	2 (6.3%)	13 (32.5%)
Total (% of Total)	132 (64.7%)	32 (15.7%)	40 (19.6%)

$\chi^2=89.86$, $df=24$, $p<.01$

As for the *ease of use* appeals, *quick-acting* was most often used (46.6 %), although a quarter of the sample did not address any appeals related to the drugs' ease-of-usefulness ($\chi^2=188.05$, $df=48$, $p<.01$; Table 5). *Quickness* was stressed in drugs for common colds (27.4%), nutritional supplement (18.8 %), and muscle

pain (10.5 %), while convenience was featured more in drug ads for heartburn/acid indigestion and sinus infection (11.8 %). Also, *ease-on-system* appeals were featured in drug ads for constipation (laxatives, 55.6 %).

Table 5 Cross-Tabulation of Ease-of-Use Appeals and Medical Conditions

	Convenience (% within Appeals)	Quick Acting	Easy on System	Other	N/A
Nutritional Supplement	6 (17.6%)	18 (18.9%)	0	23 (47.9%)	1 (5.6%)
Common Cold	3 (8.8%)	26 (27.4%)	0	0	0
Heartburn/Acid Indigestion	4 (11.8%)	7 (7.4 %)	0	7 (14.6%)	2 (11.1%)
Pain Reliever	0	14 (14.7%)	0	0	1 (5.6%)
Sinus Infection	4 (11.8%)	8 (8.4%)	2 (22.2%)	0	0
Minor Muscle Pain	0	10 (10.5%)	0	4 (8.3%)	0
Constipation	0	0	5 (55.6%)	2 (4.2%)	4 (22.2%)
Diarrhea	3 (8.8%)	3 (3.2%)	0	1 (2.1%)	1 (5.6%)
Itch/Irritation	4 (11.8%)	3 (3.2%)	0	1 (2.1 %)	0
Eye Irritation	2 (5.9%)	2 (2.1%)	0	0	3 (16.7%)
Hair Loss Prevention	1 (2.9%)	0	0	4 (8.3%)	0
Allergies	0	3 (3.2%)	0	0	0
Others	7 (20.6%)	1 (1.1%)	2 (22.2%)	6 (12.5%)	6 (33.3%)
Total (% of Total)	34 (16.7%)	95 (46.6%)	9 (4.4%)	48 (23.5%)	18 (8.8%)

$\chi^2=188.05$, $df=48$, $p<.01$

To answer **RQ3** which examines the relationship between cultural ad appeals, a cross tabulation between these variables was conducted. 96.2 percent used the *product merit* appeal, 7.4 percent used a soft-sell approach, and none within the sample used a hard-sell approach. The results showed that across all

conditions, the product merit approach was used; however, only a selected number of medical conditions used a soft sell approach in these ads, such as heartburn, nutrition, and irritation ($\chi^2=21.26$, $df=12$, $p<.05$; Table 6).

Table 6 Cross-Tabulation of Cultural Ad Appeals and Medical Conditions

	Product Merit (% within Appeals)	Soft Sell
Nutritional Supplement	40 (21.2%)	8 (16.7%)
Common Cold	29 (15.3%)	0
Heartburn/Acid Indigestion	17 (9.0%)	3 (15.0%)
Pain Reliever	15 (7.9%)	0
Sinus Infection	13 (6.9%)	1 (6.7%)
Minor Muscle Pain	14 (7.4%)	0
Constipation	11 (5.8%)	0
Diarrhea	8 (4.2%)	0
Itch/Irritation	7 (3.7%)	1 (6.7%)
Eye Irritation	5 (2.6%)	2 (13.3%)
Hair Loss Prevention	5 (2.6%)	0
Allergies	3 (1.6%)	0
Others	22 (11.6%)	0
Total (% of Total)	189 (92.6%)	15 (7.4%)

$\chi^2=21.26$, $df=12$, $p<.05$

RQ4 addresses the use of endorsers in Japanese OTC drug ads. Table 7 illustrates the breakdown of endorser types by gender ($\chi^2=32.02$, $df=6$, $p<.01$). Overall, females are featured more than males in OTC drug TV commercials (55.4 %). Among all of the

endorser types, the largest category is “actor playing a role (37.3 %)” followed by the actor/actress category (34.8 %) and the talent category including comedians and TV personalities (12.3 %).

Table 7 Endorser Featured in OTC Drug TV Commercials by Gender

Endorser Type	Male (% within gender)	Female
Actor/Actress	23 (25.3 %)	48 (42.5 %)
Musician	0	4 (3.5%)
Athlete	11 (12.1%)	0
Other “Talent” (e.g. comedians, TV personalities etc.)	18 (19.8%)	7 (6.2 %)
Actor Playing a Role	35 (38.5 %)	41 (36.3%)
Character	3 (3.3%)	11 (9.7 %)
Other	1 (1.1%)	2 (1.8%)
Total (% of Total)	91 (44.6%)	113 (55.4 %)

$\chi^2=32.02$, $df=6$, $p<.01$

Table 8 Endorser Types and Cultural Advertising Appeals

Endorser Type	Product Merit (% within Cultural Appeals)	Soft Sell
Actor/Actress	66 (24.9 %)	5 (33.3 %)
Musician	1 (0.5%)	3 (20.0%)
Athlete	11 (5.8%)	0
Other “Talent” (e.g. comedians, TV personalities etc.)	20 (10.6%)	5 (33.3 %)
Actor Playing a Role	75 (39.7%)	1 (6.7%)
Character	14 (7.4%)	0
Other	2 (1.0%)	1 (6.7%)
Total (% of Total)	189 (92.6%)	15 (7.4 %)

$\chi^2=32.02$, $df=6$, $p<.01$

The relationship between endorser types and cultural ad appeals was further examined with a cross-tabulation through a Chi-square test (Table 8). Overall for the product merit appeal, actors playing a role ranked the highest in appearance (39.7%), followed by actor/actress (24.9 %) and other talents (10.6 %). Soft-sell appeals were used with ads featuring actors/actresses (33.3 %), talents (33.3 %), and musicians (20 %). Athletes and characters were not associated with soft-sell approaches ($\chi^2=41.77$, $df=6$, $p<.01$).

Discussion

The current study attempted to illustrate an overview of Japanese OTC drug advertising and executions in a TV context. The findings reflected unique characteristics associated with Japanese environment along with pharmaceutical products.

The Prominence of Nutritional Supplements in Drug Advertising

The most notable phenomenon in this study is the frequent appearance of nutritional supplements (mostly in a form of drink) in Japanese OTC drug TV ads. Categorized as a quasi-drug, these nutritional drinks are regarded as different from regular energy drinks due to ingredients. They are allowed to advertise their main effective ingredients unlike energy drinks as they also include food additives. Although the market for this type of product has been experiencing a plateau in the recent years, the demand from females has increased significantly, and product lines are stretching to appeal this new customer segment (Ryutsu Journal, 2014). Moreover, according to the statistics on labor hours for Japanese workers, Japanese people often work long hours, and their commute is long. On average, Japanese people spend 1.18 hours for commute, which is 13 minutes longer than the world average (Yamada, 2014). The average weekly working hours is 40.5 hours/week, longer than other developed nations such as the U.S.

(33.6 hours) (WebR25, 2014). As these facts suggest, many Japanese workers often encounter exhaustion, and this might make nutritional drinks a popular choice. To support new product introductions, marketers may have placed more emphasis on promoting these drinks and used TV ads to appeal to larger customer segments.

Advertising Appeals and Medical Conditions

Straightforward appeals such as “effectiveness,” “safe,” and “quick-acting” are frequently featured across all of the medical conditions. This may be because the purchase of OTC drugs is usually for practical reasons, such as easing symptoms. Consumers purchase drugs rather than seeing doctors due to time constraints and/or minor symptoms, so they may prefer to ease their symptoms as quickly as possible. Use of unambiguous appeals highlighting time sensitiveness (quick-acting) can be effective to enhance feeling of urgency.

As for cultural ad appeals, we see product-merit appeals as the most frequently used appeal; this is contrary to Japanese advertising's tendency to display a soft-sell approach. This is not too surprising as people purchase OTC drugs to solve a particular problem (i.e. ease symptoms), and featuring product merit appeals in ads can effectively communicate the benefits of the advertised products. At the same time, soft-sell appeals are used in drugs for heartburn and irritations but not for pain problems. This may be because irritation and heartburn is regarded as less acute than other conditions like pain and fever. Thus, using the soft-sell approach to appeal to consumers' emotions can be still effective.

The Popularity of Actors and “Talents” in OTC Drug Advertising

The results show that actors playing a role in TV commercial are the largest group of humans portrayed in OTC drug TV ads. Unlike in the U.S. where we do not often see many celebrity endorsers in TV ads, the use of celebrities is common in Japan. In this regard, the current study confirmed the previous findings of Mueller (1992) and Lin (1993).

Notably, actors/actresses are often seen in TV commercials in Japan. In fact, you may see western actors/actresses who rarely make appearances in TV commercials in their home countries (e.g. Tommy Lee Jones for Suntory BOSS Coffee commercials). Also, “talents,” such as TV personnel and comedians, are quite popular and often endorse products/brands. These tactics can be related to mere exposure effect (Zajonc, 1968) –people prefer familiar objects/issues/items. Consumers are likely to be exposed to images of celebrities repeatedly, thus developing preferences for

them. Combined with the tendency for uncertainty avoidance (Hofstede, Hofstede, & Minkov, 2010), Japanese consumers may show stronger preferences for familiar entertainers. In order to facilitate and improve likability of ads and brands, pharmaceutical marketers in Japan may rely on the use of celebrities in promotional campaigns just like marketers in other fields.

Limitations of the Study and Suggestions for Future Research

This study is not free from flaws that should be tackled in future research. First, the method of quantitative content analysis is descriptive by nature. This study aims to provide a snapshot of the practice of Japanese OTC drug advertising within a TV context, and ads carried in other media are not included in the analysis. Therefore, the external validity of the results is limited. The data from this study imply neither causality nor generalizability. To further enhance the value of this line of research, a variety of media, including Internet and social media, should be included in content analysis to provide more information on cross-media promotion.

There is also an issue of empty cells in cross-tabulations. It is usually advised that each cell contains a minimum of five cases for analysis. However, to take this line of research one step further (to examine human behavior and psychology), it is necessary to understand the status quo in the executions in the industry. Due to this reason, the details of data distribution are kept as presented in this paper. Future content analysis studies should carefully reexamine the categories used in this study, particularly effectiveness, safety, and ease-of-use appeals, to accurately present the status quo of message appeals used in OTC drug advertising.

This paper is a smaller segment of a larger study that will employ an experiment to study consumers' responses to different ad appeals and endorsers in OTC drug advertising. It is hoped that future research will utilize the findings from this study to develop more comprehensive studies with actual responses from consumers to add more knowledge to the body of literature on pharmaceutical advertising.

Implications and Conclusion

From a practical viewpoint, this study provides a reference point for international pharmaceutical companies that are considering an entry or expansion to the Japanese market to develop effective advertising campaigns. Particularly, the information can be used to determine the degree of standardization in promotional campaigns for international marketers. For academics, this research sheds light on the area of OTC drug advertising that is to be cultivated further in the future, and it serves as the first step for exploring the area of

endorsers' influence on consumer responses in drug advertising. With a great possibility of implementation of Trans-Pacific Partnership, a regional trade agreement involving Japan and the U.S., deregulation of the pharmaceutical industry in Japan is likely to take place in the near future. This will offer tremendous opportunities

for pharmaceutical companies across the world, and therefore Japanese companies also must be prepared for more fierce competition. In this sense, the value of this line of research is never to be underestimated, and more research will be necessary that highlights the need for understanding these cross-cultural influences.

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