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Pharmaceutical Drug Marketing Strategies and Tactics

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Pharmaceutical Drug Marketing Strategies and Tactics: A Comparative Analysis of Attitudes Held by Pharmaceutical Representatives and Physicians

R. Stephen Parker, DBA
Charles E. Pettijohn, DBA

ABSTRACT. A variety of promotional strategies have been used to stimulate sales of pharmaceutical drugs. Traditionally, push techniques have been the predominant means used to encourage physicians to prescribe drugs and thus increase sales. Recently, the traditional push strategy has been supplemented by a pull strategy. Direct-to-consumer advertising is increasingly used to encourage consumers to request advertised drugs from their physicians. This research compares the attitudes of two of the most affected participants in the prescriptive sales processes; physicians and pharmaceutical sales representatives. The findings indicate differences between physicians and pharmaceutical sales representatives regarding the efficacy and ethical considerations of various promotional strategies. *[Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <http://www.HaworthPress.com> © 2005 by The Haworth Press, Inc. All rights reserved.]*

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The pharmaceutical industry is a prime example of an industry that combines both "push" and "pull" strategies in their promotional efforts. The "push" strategy, which relies primarily on personal selling and sales promotion as a means to "push" a product through the marketing channel, is exemplified by the $13.2 billion dollars invested in the efforts of salespeople who market drugs directly to physicians (Benitez, 2003). A considerable portion of this money is spent on promotional items such as pens, pencils, mugs, and calendars, all including the company name or logo (Nucifora, 1998). Nucifora (1998) found that promotional products could be divided into categories in which business gifts represented 20% of promotional products followed by employee relations and events (12.2%), trade shows (8.7%), and public relations (8.5%). Investments in these "specialty items" are so significant that the Promotional Products Association International ranks the pharmaceutical and chemical manufacturers industry seventeenth in terms of using promotional products (Promotional Products Association International, 2003).

Pull strategies, which rely on advertising and sales promotion to the end user to "pull" the product through the marketing channels, are illustrated by the annual use of approximately 34,000 advertisements (Adams, 2002) that promote both over the counter drugs as well as prescription medications. Brass (2001) reported that in 2000 over the counter drug sales reached $19.1 billion in revenues. Shapiro and Schultz (2001) indicate that prescription medications reached $120 billion in sales in 2001, with a projected doubling of sales by 2004. In an attempt to make sure these projections are realized, the pharmaceutical industry is expected to spend between $2 billion (McLean, 2001) and $2.6 billion (Handlin et al., 2003) on direct-to-consumer advertising. This growth rate is not expected to decline; Lipman (2000) projects approximately $7.5 billion being spent on direct-to-consumer advertising by 2005. Lipman further indicates that these huge amounts of advertising dollars will have the effect of sending consumers to their physicians asking for information about a particular brand of a product or directly asking the physician that the product be prescribed to them.

It seems clear that the combination of these push and pull strategies are aimed at increasing the awareness of various types of products by both the consumer (patient) and the physician, and ultimately increasing the sale of those products. These tactics raise a variety of issues, such as: (1) do pharmaceutical representatives efforts unduly influence a physi-

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cian to prescribe a brand of medication that could be prescribed in a generic form; (2) does direct-to-consumer advertising cause a demand for a particular brand or category of product that is not needed by the consumer; and (3) are the methods used by the pharmaceutical companies ethical business practices? This study adds to the existing literature by examining, and comparing, the responses of physicians and pharmaceutical representatives with regard to questions relating to the influence of these various promotional strategies.

LITERATURE

Promotional push strategies have traditionally been used to encourage middlemen to sell a product to the next level of the channel. In the pharmaceutical industry, the push strategy is employed to gain cooperation from the physician in prescribing a particular drug to a patient or end user. The physician has been the key channel member in the health care industry, as they control approximately 80% of all health care expenditures through their recommendations to patients who rely on their physicians for advice (Weeks, Wallace, and Kimberly, 2001). The pharmaceutical industry has attempted to implement this push strategy by using pharmaceutical representatives who call on physicians, as well as giving promotional items of various types to the physician in an attempt to influence their prescribing behaviors. This type of promotional gift giving appears to be effective, as a variety of studies report that promotional gifts can create positive perceptions, reinforce buying decisions, and can enhance the image of a company (Daly, 1993; Gibb, 1994). This type of push strategy is particularly attractive due to its ability to retain established customers, as it is estimated to cost five to ten times as much to gain a new customer as to keep an existing one (Rudick, 1995).

It should be noted that significant amounts of money are spent on these types of promotional items. For example, Strout (2001) reported that the Pfizer company spent approximately $86 million on items such as pens, mugs, and umbrellas, and that amount is in addition to the approximately $7 billion spent on giving free drug samples for physicians to provide to their patients. While $7 billion seems to be a staggering amount of money, it may be very well spent, as Shapiro and Schultz (2001) report that physicians who have frequent contact with a drug company representative were 13 times more likely to ask that a particular drug be added to an insurance plan's list of approved drugs. Further, Waud (1992) and Sibblad (2001) suggest that by providing physicians

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with free samples of their products, physicians were more likely to prescribe those products than they were the generic version of a drug.

While promotional gift giving seems to be effective in terms of increasing prescriptions, and therefore sales, there are potential ethical problems connected to the use of a push strategy using pharmaceutical representatives and gift giving. The most obvious is whether or not it is in the consumers' best interests to have pharmaceutical representatives influencing the type of drugs that patients are prescribed. Yoon (2004) suggests that when one accepts an unsolicited gift without reciprocating in some fashion that a form of social discomfort will arise. Therefore, he argues that it is likely that when pharmaceutical representatives provide physicians with even small gifts such as coffee mugs, pens, or stationary it is likely that the physician will respond by prescribing the representatives' products.

While potential conflicts of interest seems obvious, Jung (2002) found that only 46% of medical students surveyed reported believing it was unethical to take gifts from pharmaceutical representatives. In a recent effort to reduce the chances of unethical behaviors, the Pharmaceutical Research and Manufacturers of America (PhRMA) have issued new guidelines, which limit or restrict the type and dollar amounts of gifts that representatives are allowed to provide to physicians. These new guidelines place a limit of $100 on the gifts that can be given to physicians and also requires that those gifts be limited to gifts that could be used in the physician's practice (Benitez, 2003). Crader-Thompson (2003) indicates that gifts which comply with these guidelines might include "reminder" items such as pens and notepads as well as gifts that ultimately benefit patients which could include such items as anatomical models, stethoscopes, textbooks, and samples.

Given the PhRMA codes of conduct are voluntary, individual state legislators have also begun to question the ethical issues involved in gift giving and, as in the state of Vermont, laws have been passed requiring any gift of over $25 to be reported and registered with the state and available for public inspections (Agovinao, 2002). While ethical guidelines and laws may be in place, it appears that it is still common practice for representatives to provide the physician and his/her staff lunch as the "price of admission" to get time with the physician (Tosh, 2004, p. 8).

The literature reveals that while the pharmaceutical industry is using a push strategy, they have also modified that strategy and are placing more emphasis on the use of a pull strategy (Pinto, Pinto, and Barber, 1998). This type of strategy is implemented by the use of direct-to-consumer advertising campaigns where the consumer/patient is being asked to visit

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his/her physician and ask about specific products that can be used to treat illnesses or symptoms which they may be exhibiting.

This shift in strategy has been noticeable in several ways. First, the amount of money spent on direct-to-consumer advertising has increased dramatically. In 1989 the pharmaceutical industry spent approximately $40 million on direct-to-consumer advertising. However, that number rose to $160 million in 1994 and $350 million by 1995 (Pinto, 2000). These increases in expenditures were followed by even more impressive expenditures. By 1996 approximately $700 million was spent on direct-to-consumer advertising (Borzo, 1997), followed by an enormous rise to $2.3 billion in 2000 (McLean, 2001) with estimates of upwards of $7 billion by 2005 (Romano, 2002). This strategy has also affected the amount of money invested by pharmaceutical firms on advertising in medical journals. This amount has declined so significantly that many of these journals have been forced to recover revenues through an increase in classified advertising (Weeks, Wallace, and Kimberly, 2001).

The results of the change in strategy from push to pull have been phenomenal. Approximately 10 million consumers are thought to have requested an advertised drug, after seeing an advertisement for the product (Handlin et al., 2003). Numerous studies confirm the effectiveness of direct-to-consumer advertising. Huang (2000) reported that nearly 33% of respondents who had seen an advertisement for a specific pharmaceutical product ask their physician for that product. Approximately 75% of those who asked for a specific product were prescribed the drug requested. McLean (2001) conducted a similar study, which tended to confirm Huang's findings. McLean found that approximately 25% of the respondents who had seen an advertisement for a pharmaceutical product asked for the product and 84% of those who requested the product were ultimately prescribed that product. Findlay (2002) reports that a specific result of this increase in advertising is that prescriptions for the 50 most heavily advertised drugs were up 24.6%, as compared to a 4.3% increase in all other pharmaceutical products.

While the combination of push and pull strategies seems to be an effective combination for increasing the sales of pharmaceutical products, there is debate regarding whether this strategy is in the consumer's best interest. One argument is that while pull strategies have succeeded in having patients ask their physicians about specific diseases or for specific pharmaceutical products, the push strategies may have succeeded in convincing physicians to prescribe products which pharmaceutical representatives are selling. These products are often more expensive than existing generic products that would be as effective in treating pa-

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tients. Silversides (2001) suggests that this combination of strategies may place the physician in the position of having to explain to a patient, who is asking for a specific brand of drug, why that product is not in his/her best interest. Lipsky and Taylor (1997) argue that approximately 80% of physicians believe that direct-to-consumer advertising causes an increase in product cost and can be misleading to the consumer. A study conducted by Paul, Handlin, and Stanton (2002) found that 62% of responding physicians either agreed or strongly agreed that DTC advertising was not a good idea. They further report that 92% of the respondents thought that patients do not understand the risks associated with particular drugs and that advertising often overstates the efficacy of advertised drugs. A particularly interesting finding of this study was that 63% of responding physicians felt pressured to prescribe drugs that patients had seen advertised.

A more positive perspective regarding the combination of push and pull strategies is that by having more informed consumers/patients, at least in the long run, overall health care is improved and total costs reduced (Mossinghoff, 1992). Dukes et al. (2001) argues that more informed consumers lead to those consumers seeking information about symptoms or conditions that may have otherwise gone undiagnosed and untreated, thereby creating a healthier population. This study adds to the existing literature by examining and comparing the responses of physicians and pharmaceutical representatives with regard to questions relating to the influence of these various push and pull promotional strategies.

METHODOLOGY

Accomplishment of the research purposes required the development of a data collection instrument and the specification of the relevant sample. With regard to the sample, it was determined that to compare the attitudes of physicians with those of pharmaceutical representatives would require the use of two samples. The first sample was a group of physicians and this sample was drawn from a regional health care facility located in the mid-west. The physicians included in the sample were engaged in the practice of medicine and each member of the sample had interacted with a variety of pharmaceutical sales representatives. This sample seemed relevant because they were taken from a variety of specialties and because they had each been exposed to a variety of pharmaceutical representatives and the various marketing strategies used by pharmaceutical manufacturers. The second sample used in this study

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consisted of 250 pharmaceutical representatives who were currently employed by a well known national pharmaceutical company. While this division of the company's sales force was based in the mid-western portion of the United States, they received the same sales training as did those representatives working in different sections of the United States. These two groups were chosen because they allowed responses from physicians practicing in the mid-west to be compared with those obtained from pharmaceutical representatives who also worked in the mid-west thereby reducing problems that might arise from comparing respondents from different geographic areas, cultures, and differences in marketing strategies.

A self-response questionnaire was developed for the physician sample based on consultations with the facility's management team. A pre-test was conducted with 35 physicians; the questionnaire was then revised and distributed to 363 staff physicians. A second self-response questionnaire for the pharmaceutical representative sample was developed in consultation with pharmaceutical representatives. After the instrument was pre-tested with 29 pharmaceutical representatives, a revised questionnaire was developed and distributed to the representatives attending a regional sales meeting.

As mentioned previously, the surveys were designed with the consultation of both physicians and pharmaceutical representatives. Their input resulted in the development of twenty three parallel questions that were asked of both the physicians and the pharmaceutical representatives. Responses were recorded through the use of a Likert type scale with a response of 1 indicating that the respondent strongly disagreed to a response of 5 indicating the respondent strongly agreed with the question. Of these questions, seven questions focused on the use of the traditional push marketing strategies, which involved the effectiveness of the pharmaceutical representatives. The second group of six questions evaluated the effectiveness of the relatively new use of pull marketing strategies and these included an assessment of aspects of direct-to-consumer advertising. The final section consisted of ten questions designed to assess the perceptions of the participants regarding the degree to which aspects of pharmaceutical sales promotion activities are ethical. An additional section pertaining to the demographic characteristics of both groups was also included in the survey instrument.

The survey was then administered to the participants using the drop off technique of administration. Completed questionnaires were returned to the researchers using postage paid envelopes to the university to assure the respondents' anonymity. A total of 77 usable questionnaires were re-

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turned by the physician sample resulting in an overall return rate of 21.2%. A total of 90 usable questionnaires were returned from the pharmaceutical sample, resulting in an overall return rate of 36%.

RESULTS

A series of t-tests were conducted to determine whether significant statistical differences existed between physicians and pharmaceutical representatives in terms of their responses to questions concerning direct-to-consumer advertising and gift giving strategies. The results of these tests are shown in Table 1, which examines perceptions of push marketing strategies; Table 2, which examines perceptions of pull marketing strategies; and Table 3, which examines perceptions of ethical considerations. There were fourteen questions where physicians' and representatives' perceptions were found to be significantly different at the .05 level.

Perceptual Differences in Push Strategies

An examination of Table 1 reveals four areas where the perceptions of physicians and representatives were found to be significantly different. Pharmaceutical representatives were significantly more likely to perceive that they influenced the prescription of drug categories than were physicians (3.8 reps vs. 3.5 physicians). Pharmaceutical representatives were also significantly more likely to believe that they provide enough information for a physician to prescribe a drug than were physicians (3.7 reps vs. 2.6 physicians). Moreover, the physician's responses of 2.6 would lead one to believe that they do not feel that they have received adequate information from the representative to be comfortable in prescribing specific pharmaceutical products.

Significant differences were also found in the perceptions of whether information received from written sources supplied by the pharmaceutical representatives was adequate to aid physicians in their prescription-related activities. Again, pharmaceutical representatives were significantly more likely to believe that the information they supplied was adequate to assist the physicians (3.7 reps vs. 3.4 physicians). However, physicians were significantly more likely to report that they believe that too much money is being spent on the promotion of pharmaceutical products through the present representative networks (2.9 reps vs. 3.6 physicians).

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TABLE 1. A Comparison of Physician and Pharmaceutical Representatives' Beliefs Concerning Push Strategies

	Physicians Mean (sd)	Reps Mean (sd)	t-value (p)
Drug **categories** promoted through reps are more likely to be prescribed	3.5 (.84)	3.8 (.96)	2.4 (.02)
Drug **brands** promoted through reps are more likely to be prescribed	3.7 (.82)	3.8 (.96)	1.0 (.33)
Samples provided by reps do not influence physicians prescription decisions	3.2 (1.2)	3.2 (1.1)	.6 (.54)
Reps provide enough information to prescribe a drug	2.6 (.96)	3.7 (.91)	7.6 (.00)
Physicians get drug information from written sources that reps leave	3.4 (1.0)	3.7 (.89)	2.0 (.04)
Pharmaceutical reps provide little benefit to physicians in the determination of the proper drug to prescribe	2.8 (1.2)	2.9 (1.2)	.6 (.53)
Too much money is spent on promoting pharmaceutical products through the current representative networks	3.6 (1.1)	2.9 (1.1)	4.0 (.00)

* Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly Agree = 5

The information in Table 1 indicates agreement between pharmaceutical sales representatives and physicians regarding three aspects of a push marketing strategy. First, no differences exist in terms of the perceptions of the impact representatives have on the likelihood a specific brand of drug will be prescribed. Second, both pharmaceutical representatives and physicians seem to agree that samples have minimal impact on the physician's prescribing decisions. Finally, both physicians and representatives tend to disagree equally with the statement that representatives provide little benefit in the determination of the proper drug to prescribe.

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TABLE 2. A Comparison of Physician and Pharmaceutical Representatives' Beliefs Concerning Pull Strategies

	Physicians Mean (sd)	Reps Mean (sd)	t-value (p)
Drug ads improve the patients' awareness of side effects and precautions	2.8 (1.1)	3.4 (1.2)	3.5 (.00)
Drug ads increase the patients' awareness of diseases or conditions	3.3 (1.0)	3.7 (1.0)	2.6 (.01)
Hypochondria cases have increased in the last two years	3.1 (.83)	3.5 (.88)	2.9 (.00)
If patients request a specific **type** of drug, physicians tend to prescribe it	3.1 (.80)	3.8 (.91)	4.4 (.00)
If patients request a specific **brand** of drug, physicians tend to prescribe it	3.0 (.74)	3.8 (.93)	5.6 (.00)
Too much money is spent on promoting pharmaceutical products through DTC advertising	4.4 (.81)	3.2 (1.1)	8.0 (.00)

* Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly Agree = 5

Perceptual Differences in Pull Strategies

Significant differences were found in all six of the areas examined in Table 2, which compares perceptions of the various pull strategies that are presently being used by the pharmaceutical companies. As shown in Table 2, the findings indicate that physicians were ambivalent regarding the impact of direct-to-consumer advertising, with scores of approximately 3.0 (5 point scale) on these dimensions. However, pharmaceutical representatives were significantly more positive. In each of the first two areas, pharmaceutical representatives were found to more strongly believe that direct-to-consumer advertising has been effective in increasing patients' awareness of side effects (3.4 reps vs. 2.8 physicians), and diseases or conditions (3.7 reps vs. 3.3 physicians). Pharmaceutical representatives also were significantly more likely to feel that direct-to-consumer advertising had increased the likelihood that physicians

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TABLE 3. A Comparison of Physician and Pharmaceutical Representatives' Beliefs Concerning Ethical Considerations

	Physicians Mean (sd)	Reps Mean(sd)	t-value (p)
It is ethical for physicians to take promotional items from pharmaceutical reps	3.4 (.94)	3.8 (1.1)	2.4 (.02)
It is ethical for physicians to take **some** promotional items from pharmaceutical reps	3.2 (1.1)	3.5 (1.1)	1.5 (.14)
It is ethical to accept promotional items such as			
Free Samples	4.7 (.47)	4.4 (.84)	2.5 (.01)
Trips to Seminars	3.1 (1.2)	3.6 (1.2)	2.6 (.01)
Pens/Note Pads/Specialties	4.0 (.81)	4.2 (.96)	1.5 (.14)
Lunch for Physician and Staff	4.0 (.82)	4.0 (1.1)	.1 (.96)
Tickets to Entertainment Events	2.8 (1.2)	2.7 (1.2)	.6 (.54)
Dinner for the Physician and Family	2.6 (1.2)	2.8 (1.3)	.8 (.42)
My employer discourages giving physicians extravagant gifts	3.1 (1.0)	3.9 (1.2)	4.6 (.00)
Physicians tend to prescribe generic drugs when they are as effective as brand name drugs	4.6 (.71)	3.8 (.99)	5.6 (.00)

* Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, Strongly Agree = 5

would prescribe both the type drug (3.8 reps vs. 3.1 physicians) and brand of a product (3.8 reps vs. 3.0 physicians). Interestingly, representatives also believe that the cases of hypochondria have increased in the last two years (3.5 reps vs. 3.1 physicians). The only area where the physician was found to score higher was in the perception that too much money is being spent on direct-to-consumer advertising (3.2 reps vs. 4.4 physicians).

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Perceptual Differences in Ethical Considerations

Five of the ten dimensions that assessed ethical considerations were rated significantly different by the two groups of respondents. Sales representatives felt that it was more ethical for physicians to accept promotional items than did the physicians themselves (3.9 representatives vs. 3.4 physicians). With regard to the ethics of accepting specific promotional items, only two significant differences were found. Physicians felt it was significantly more ethical to accept samples than did the representatives (4.4 representatives vs. 4.7 physicians). Conversely, representatives felt it was significantly more ethical for physicians to accept trips to seminars than did the physicians themselves (3.6 representatives vs. 3.1 physicians). The findings also indicate significant differences on the issue of giving/accepting extravagant gifts, as the pharmaceutical representatives were significantly more likely to agree with the statement that their employer discourages giving/accepting extravagant gifts (3.9 representatives vs. 3.1 physicians). The issue of prescribing generic drugs also resulted in significant differences, with physicians significantly more likely to agree with the statement that physicians will prescribe generic drugs when they are as effective as brand name drugs (3.8 representatives vs. 4.6 physicians).

LIMITATIONS AND CONCLUSIONS

This study conducted a comparative analysis of the perceptions of two critical components of the pharmaceutical supply chain, physicians and pharmaceutical representatives. Specifically, the research examined the opinions of both the representatives and the physicians as they relate to the effectiveness and the efficiency of traditional push marketing strategies and the more recent application of pull marketing strategies in the pharmaceutical industry. Additionally, the study compares the ethical perceptions of the two groups, as they relate to various sales promotional techniques that have been used in the pharmaceutical industry.

Prior to discussing conclusions, limitations should be considered. Limitations present in this research are largely the result of shortcomings inherent in survey research. First, the samples used in this study provide a limitation. The samples must be considered convenience samples and therefore it would not be wise to generalize beyond the sampling frame to the general population of physicians or pharmaceutical

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representatives in the United States. Many research studies of this type use one firm as the sampling base. This sampling strategy minimizes potential issues of bias associated with using disparate firms in the sampling frame. However, it should be noted that the findings here, as in many studies, apply only to the particular firm's sales force that participated in the research. In addition, different geographic areas or corporate cultures could change the results of a follow up study. Second, the survey instrument may provide a limitation. While it was pretested, the instrument may not provide either total clarity or completeness for evaluating the relationships discussed.

However, regardless of the limitations, the results indicate that representatives believe they are a valuable part of the promotional strategy for the pharmaceutical industry. Thus, the representatives believe that the traditional "push" strategy is an effective one. On four of the questions relevant to the representative's role in the effective marketing of pharmaceuticals, the representatives rated their inputs very positively (a minimum of a 3.7 rating on a 5 point scale). On those questions in which disagreement reflected a positive attitude, the representatives rated those questions at or near the scales' midpoint (3.0). This finding, pertaining to the representative's self-ratings of their performance could be anticipated.

The fact that the physicians in the sample did not hold the representatives with the same positive regard raises issues. Three separate findings may provide questions that require evaluation. The first finding is the physicians' failure to agree with statements pertaining to the concept that the information provided by representatives is adequate for physicians to prescribe drugs. Not only is the physician rating low (2.6 with a 3.0 midpoint), it suggests that physicians are gaining information from sources other than pharmaceutical representatives. Thus, the informational role that the representative should be fulfilling may not be performed adequately. This implies that pharmaceutical firms might either find alternative means of informing physicians or that the representative's skills in performing this function should be enhanced.

A second finding has similar implications. This finding indicates that both physicians and pharmaceutical representatives agree that the representatives have minimal impact on physicians in their determination of the proper drugs to prescribe their patients. This finding suggests that the influence of representatives may be minimal in the determination of drugs that should be prescribed. This finding also suggests that the influence of pharmaceutical representatives may be negligible in the "pushing" of pharmaceutical products. While these two issues are nega-

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tive, the third issue may be the most telling. Physicians tended to believe that "too much money is spent promoting pharmaceutical products through the current representative networks." This finding, when combined with the other two, may lead one to the conclusion that changes in traditional distribution networks may be necessary. In fact, this conclusion may have served as the impetus for the shift to direct-to-consumer advertising and a pull marketing strategy.

Before one judges the effectiveness of pharmaceutical representatives and their "push" strategies too harshly, it should be recognized that that physicians also question the efficacy of direct-to-consumer advertising. While one could reasonably anticipate that pharmaceutical representatives might perceive direct-to-consumer advertising and a pull marketing strategy as a threat to their future viability, and thus have negative attitudes toward this strategy. The results show that this expectation was not met, as pharmaceutical representatives generally held significantly more positive attitudes toward aspects of direct-to-consumer advertising than did physicians. For example, physicians did not believe that patients' requests affected their prescriptive practices.

Correspondingly, it seems that physicians only marginally agree that direct-to-consumer advertising influences patients' awareness of diseases or conditions and precautions or side effects. Finally, physicians strongly agreed (4.4 on a 5.0 scale) with the statement that "too much money is being spent on promoting pharmaceutical products through direct-to-consumer advertising." Thus, this implies that physicians may not be pleased with the use of pull strategies by pharmaceutical firms and may discount the influence that this advertising has had on pharmaceutical sales. Based on these factors, one might conclude that physicians feel that promotional methods are generally not effective in stimulating demand and/or knowledge for pharmaceutical firms. However, this conclusion should be viewed with some skepticism, as physicians may be hesitant to attribute either their knowledge or their prescriptive decisions and behaviors to the promotional activities of a pharmaceutical firm.

While differences with regard to some ethical issues did exist, opinions did not seem as pronounced. It seems that both pharmaceutical representatives and physicians agree with the ethical considerations underlying the acceptance of specific promotional items. Moreover, the findings show that self-regulation in the pharmaceutical industry is influencing representatives' behaviors in giving extravagant gifts. But, the fact that disagreement exists between the representatives and the physicians regarding the influence their employer might have over the

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accepting/giving of extravagant gifts might imply that pharmaceutical firms need to provide more education pertaining to their self-regulatory actions to physicians. Without this information, physicians might perceive that their pharmaceutical representative is withholding "perks" that the physician is accustomed to receiving. Finally, physicians argue that they are more likely to prescribe generic drugs than representatives may believe they are. Thus, it seems that attitudes regarding ethical issues are relatively clear, and significant differences may generally be only in the degree to which representatives and physicians agree.

In conclusion, the data reported in this study has serious implications for the pharmaceutical industry in that neither the push nor pull strategies presented to physicians are being greeted with a great deal of enthusiasm. In fact, in both cases, physicians indicate that they believe too much money is being spent on the representative network and on the amount of money being spent on direct-to-consumer advertising. This should lead the pharmaceutical industry to reexamine their strategies and perhaps consider a more finely tuned system, which gives the physician the quantity and quality of information that is needed to make a decision on a new product. On the other hand, the pharmaceutical firms may consider that physicians might be under-emphasizing the degree to which their behavior is influenced by both push and pull strategies and over-emphasizing their self-reliance. Nevertheless, the results do indicate that further evaluation may be necessary.

The data also points to differences in the perceptions of gift giving and taking. Steps should be taken by both the physician's employer and the representative's employer to reduce even the appearance of impropriety. Without such steps, both physicians and the public may perceive that pharmaceutical firms are not providing them with the benefits that they anticipate.

REFERENCES

Adams, Chris (2002). "FDA Inundated Trying To Assess Drug Ad Pitches" *Wall Street Journal* (Eastern Edition), March 14, B1.

Agovinao, Theresa (2002). "Drug Companies Overstep Boundaries," *Marketing News*, 36 (17), 17.

Benitez, Tina (2003). A Primary Concern, *Incentive*, 177 (2), 18-21.

Brass, Eric P. (2001), "Changing the Status of Drugs From Prescription to Over-The-Counter Availability," *New England Journal of Medicine*, 345 (11), 810-816.

Borzo, G. (1997). "Consumer Drug Ads Booming" FDA Reviews Restrictions," *American Medical News*, 40 (6), 28, 37.

Downloaded by [The University of Edinburgh] at 03:27 30 January 2015

Crader-Thompson, Elizabeth (2003). "New Guidance Offers Advice on Industry Interactions with Health Care Professions," *Journal of Health Care Compliance*, 5 (5), 5-9.

Daly, Ellen (1993). "Advertising Impact: Using the Power of Promotional Gifts," *American Salesman*, 38 (10), 16-21.

Dukes, David E., James F. Rogers and Eric A. Paine (2001). "What You Should Know About Direct-to-Consumer Advertising of Prescription Drugs," *Defense Counsel Journal*, 68 (1), 36-49.

Findlay, Steven (2002). "Do Ads Really Drive Pharmaceutical Sales?" *Marketing Health Services*, 22 (1), 20-25.

Gibb, Fiona (1994). "To Give or Not To Give?" *Sales & Marketing Management*, 146 (9), 136-139.

Handlin, Amy, Joseph B. Mosca, Dana A. Forgione and Dennis Pitta (2003). "DTC Pharmaceutical Advertising: The Debate's Not Over," *Journal of Consumer Marketing*, 20 (2 & 3), 227-237.

Huang, Alison J. (2000). "The Rise of Direct-To-Consumer Advertising of Prescription Drugs in the United States," *Journal of the American Medical Association*, 284 (17), 2240.

Jung, Paul (2002). "No Free Lunch: A Young Doctor's Take on Why Residents' Souls Should Matter More than Their Stomachs," *Health Affairs*, 21 (2), 226-231.

Lipman, Marvin M. (2000). "Should You Take Health Advice from Drug Ads?" *Consumer Reports on Health*, 12 (10z), 11.

Lipsky, Martin S. and Christine A. Taylor (1997). "The Opinions and Experiences of Family Physicians Regarding Direct-To-Consumer Advertising," *Journal of Family Practice*, 45 (6), 495-499.

McLean, Candis (2001). "The Real Drug Pushers," *Newmagazine (Alberta Edition)*, 28 (6), 38-42.

Mossinghoff, Gerald J. (1992). "Pharmaceutical Manufacturers and Self-Regulation of Drug Advertising and Promotion," *Journal of Drug Issues*, 22 (2), 235-244.

Nucifora, Alf (1998). "Promotional Products Are More Than Just Party Favors," *Long Island Business News*, 45 (52), 4c.

Paul, David P., Amy Handlin, and Angela D'Auria Stanton (2002). "Primary Care Physicians' Attitudes toward Direct-To-Consumer Advertising of Prescription Drugs: Still Crazy After All These Years," *Journal of Consumer Marketing*, 19 (7), 564-574.

Pinto, Mary Beth (2000). "On the Nature and Properties of Appeals Used In Direct-To-Consumer Advertising of Prescription Drugs," *Psychological Reports*, 86, 597-607.

Pinto, Mary Beth, Jeffery K. Pinto and Joseph C. Barber (1998). "The Impact of Pharmaceutical Direct Advertising: Opportunities and Obstructions," *Health Marketing Quarterly*, 15 (4), 89-101.

Promotional Products Association International (2003). "The 2002 Estimate of Promotional Products: Distributor Sales," http://ppai.org/MediaInformation/IndustryStatistics/SalesVolumeEstimates

Romano, Michael (2002). "Ethical Quandary," *Modern Healthcare*, 31 (14), 4-6.

Rudick, Judy (1995). "Are You Treating Your Customers Like a One-night Stand?" *American Salesman*, February, Vol. 40, Issue 2, pp. 23-27.

Shapiro, Joseph P. and Stacey Schultz (2001). "Prescriptions: How Your Doctor Makes the Choice," *U.S. News & World Report*, 130 (7), 58-61.

Sibbald, Barbara (2001). "Doctors Asked to Take Pledge to Shun Drug Company Freebies," *Canadian Medical Association Journal*, 164 (4), 531.

Silversides, Ann (2001). "Direct-To-Consumer Prescription Drug Ads Getting Bolder," *Canadian Medical Association Journal*, 165 (4), 462.

Strout, Erin (2001). "Doctoring Sales," *Sales & Marketing Management*, 153 (5), 53-60.

Tosh, Mark (2004). "Time to End the Free Lunches," *Medical Marketing & Media*, 39 (8), 8.

Waud, Douglas R. (1992). "Pharmaceutical Promotions–A Free Lunch?" *New England Journal of Medicine*, 327 (5), 351-353.

Weeks, William B., Amy E. Wallace and B.C. Surrott Kimberly (2001). "The Changing Face of Pharmaceutical Advertising," *Marketing Health Services*, 21 (3), 27-30.

Yoon, Philip W. (2004). "An Agency Theory Perspective on Physician Interactions with the Pharmaceutical Industry," *Academy of Management Proceedings*, D1-D6.

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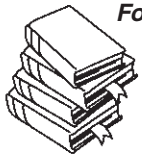

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