

## **Reactance and Behavioral Change: Marketing Healthy Lifestyles**

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*Public sector marketers have long utilized marketing techniques in attempts to persuade citizens to exhibit certain types of desired behaviors. Public sector marketers are now attempting to promote healthy lifestyles in response to recent studies that show that unhealthy lifestyles can significantly contribute to increased rates of disease and death. One particular problem is obesity. The number of Americans who are either dramatically overweight, or obese, is at an all time high, with 35.7% of Americans classified as obese in 2010 (Flinn, Langreth, and Cortez, 2012), prompting individuals in the medical profession to attempt to identify better ways to market healthier diets to the public (Chipello, 2005). However, consumers may view these efforts as a potential loss of freedom, resulting in reactance. Following Brehm's (1966) theory of social reactance, this paper provides guidance on how best to market a healthier lifestyle.*

### **INTRODUCTION**

The study of the use of marketing techniques in the non-profit sector “came of age” in 1969, when Kotler and Levy published an article in the *Journal of Marketing* noting the importance of proper use of marketing techniques in the non-profit sector. One particular area of concern for those in the non-profit sector recently has been the marketing of healthy lifestyle behaviors. Marketing healthy lifestyles might include such activities as encouraging consumers to refrain from smoking, drink only in moderation, exercise, wear seat belts in cars, wear bike helmets, eat a variety of nutritious foods, without consuming excessive calories, and similar activities. Research has shown that modification of lifestyles is positively related to decreased mortality rates and increased quality of life.

While a number of similarities exist in the way that marketing concepts can be applied in both public and private sector organizations, researchers have also identified important differences (e.g., Bloom & Novelli, 1981.) One of the most critical differences between for profit and public sector marketing is the impact on consumer choice sets. Traditional (for profit) businesses regularly develop and promote new products, increasing potential choice sets of consumers. In contrast, public sector marketers are frequently concerned with convincing individuals to delete items from current choice sets.

One segment of the marketplace where this dichotomy is particularly evident is that of public sector marketers promoting healthy lifestyles in terms of consumption (suggesting consumers limit or eliminate certain food choices from their diets), while food marketers continually increase the variety of food options available to consumers. Studies by the medical profession have found that the U.S. is currently in an obesity epidemic, with approximately 34 % of adults in the U.S. found to be obese in 2005-2006. (Hellmich, 2007),

and the number increasing to 35.7 % by 2010 (Flinn, Langreth, and Cortez, 2012). The pervasiveness of the problem has prompted individuals in the medical profession to attempt to identify better ways to market healthier diets to the public (Chipello, 2005).

However, those individuals and organizations marketing healthy lifestyles need to be aware of the potential adverse consequences of marketing efforts that may be viewed as "freedom reducing". Brehm (1966) proposed a theory of social reactance which addressed the issue of consumer response to reduced choice. The theory states that perceived attempts to reduce behavioral freedom of individuals may result in reactance. A person experiencing reactance would be motivated to reestablish that freedom by engaging in a behavior that they might not have otherwise engaged in, or continuing to engage in a behavior that an outside force was threatening. A certain behavior might become important for a person to exhibit simply because attempts have been made that threaten that behavioral choice (Brehm and Brehm, 1981).

Brehm's theory of reactance is of critical importance to public sector marketers seeking to promote healthy lifestyles. While public sector marketers are attempting to induce individuals to change eating patterns by reducing intake of certain types of foods, or increasing the amounts of exercise undertaken, they might be creating reactance on the part of consumers. This might result in consumers engaging in more of the behavior which marketers are attempting to reduce. Well meaning efforts to promote healthy lifestyles might create enough reactance to prove counter-productive.

This paper provides an overview of the literature examining reactance. Following this review, applications of reactance concepts are examined within the context of public-sector marketing efforts aimed at promoting healthy diets.

## REACTANCE THEORY AND IMPLICATIONS

Brehm (1966, p. 4) stated that "Given that a person has a set of free behaviors, he will experience reactance whenever any of these behaviors is eliminated or threatened with elimination." Brehm proposed that the magnitude of reactance is a function of the four factors. The first factor is the importance of the freedom threatened. Brehm noted that freedoms which were not seen as very important would not produce a large amount of reactance. If a consumer placed little value on the choice of margarine or butter, elimination of the freedom to choose butter due to its adverse health consequences would produce little reactance. However, if a consumer placed a great deal of importance on having butter on toast, elimination of the freedom to choose butter might produce a large amount of reactance. The second factor discussed by Brehm was the proportion of freedom eliminated. If consumers were required to use only margarine on toast and breads, but could use either butter or margarine on most foods, reactance would again be less. However, if consumers could not choose butter for use on any foods, reactance would be significantly higher. The third factor was the elimination of freedoms by implication. If the government banned butter from all grocery stores, consumers might feel that the government could soon ban other well liked foods. This would produce a great deal of reactance. The final factor was the magnitude of pressure to comply. If the government banned butter, and went into people's houses looking for butter, and fined people who used butter, the pressure to comply with the ban on butter would be high, and reactance would be increased.

The freedom of choice is ingrained in all Americans. Any efforts by nonprofit marketers to lessen that freedom by recommending restrictions in eating certain types of foods is therefore likely to result in reactance. Given that eating is a critical part of each individual's life, this is certainly likely to be an important freedom. Suggesting an eating plan may indicate a major elimination in this freedom to choose. In addition, consumers may think "what freedom is next?" Consumers may also feel intense pressure to comply with the tenets of a healthy lifestyle.

Reactance to a nonprofit marketer's restriction on the amount of candy bars a consumer should eat would be shown by an increase in attractiveness of the candy bars to the consumer, and a tendency to eat more candy bars, or alternatively, other "junk food." These behaviors would demonstrate that the consumer was free to behave as he or she desired, regardless of what the non-profit marketer had told him or her. In addition, reactance may be demonstrated as a tendency to encourage someone else to engage in the threatened or eliminated behavior. Therefore, the consumer may tell his or her friends to eat more candy bars.

If marketing of healthy lifestyles creates reactance, foods that are restricted may become desirable to consumers, and consumers may respond by increasing consumption of the non-recommended foods. If consumers are told not to sit at home and watch TV, but to increase their exercise time, consumers may respond to this potential threat to their behavioral freedom by not increasing their exercise time, and by encouraging others to exert their freedom by similarly eating more of those foods not recommended by health advocates, and not being forced into exercising.

These basic manifestations of reactance were seen clearly in the introduction of New Coke to the marketplace. When New Coke took the place of Coke in the marketplace, the traditional Coke suddenly became a much more desirable commodity. Consumers bought large quantities of traditional Coke, and encouraged others to not drink the New Coke. A number of groups were formed to bring back "old" Coke. In one televised example, a leader of the movement to bring back Coke was unable to differentiate between New Coke and "old" Coke. Taste tests conducted at the time by the Coca-Cola company showed that, of those with a preference, the majority preferred the taste of New Coke to "old" Coke. The uproar was caused, not by the taste of the new product, but by the threat to behavioral freedom due to elimination of a choice. Once the freedom to drink "old" Coke was threatened, it became much more desirable. Ringold (1988) showed, in an experiment, that preference ratings for "old" Coke increased after the introduction of New Coke, and the withdrawal of "old" Coke from the marketplace.

Brehm and Siseneg (1966) and Hammock and Brehm (1966) investigated the effects on the attractiveness of choice alternatives when the freedom to choose was eliminated. The experimenters either forced a choice on subjects, or eliminated a potential choice. The experimenters found that a forced choice was rated as less desirable, compared to the rating given to the same item when the subjects were free to choose any item. The experimenters also found that a choice which was eliminated became more desirable to the subjects. In one particularly relevant experiment, candy bars were used as the stimuli. Candy bars which were eliminated from the choice set were rated higher in attractiveness than prior to elimination. Candy bars which the subjects were forced to choose were subsequently rated lower in attractiveness than prior to the experimental manipulation.

Lessne and Notarantonio (1988) investigated the effects of placing limits on the number of sales items that could be purchased on attractiveness of the sales item. In accord with reactance theory, the use of limits did increase attractiveness of the item. This study illustrates again the difficulty of marketing a healthy lifestyle. In attempting to limit the consumption of certain foods, public sector marketers may, in fact, increase the attractiveness of such foods, which could result in higher levels of consumption.

These studies demonstrate the potential difficulty of marketing healthy lifestyles. Healthy lifestyles are marketed to consumers engaging in unhealthy lifestyles. Healthy lifestyles require a restriction of behavioral freedom (Miller, et al., 2007). Consumers cannot eat as much as they want of any food they desire. They must restrict the amount of numerous foods that they can consume. For example, a healthy lifestyle may restrict a consumer's total amount of saturated fat to 30% of total calories. This restriction may make foods with higher levels of saturated fats more attractive to the consumer. If consumers, in general, are more attracted to an eliminated "unhealthy" choice, and less attracted to a "forced" or recommended healthy alternative, attempting to market healthier food choices may be extremely difficult for public service marketers.

Brehm, Stires, Siseneg, and Shaban (1966), in a study using musical recordings, again found that restriction of choice increased the attractiveness of a recording. However, they also found that this reactance effect was impacted by subjects' prior freedom to choose. Subjects with no prior freedom to choose did not show this reactance effect. This finding has important implications for public sector marketing of healthy lifestyles. When consumers have no "prior freedom" to choose, reactance may be limited. However, most consumers have long had extensive freedom to choose what foods to consume, and how much of each food to consume. They have also long had freedom to determine how much (or how little) exercise to engage in. Therefore, a great deal of reactance can be expected from efforts to market healthier lifestyles. Quick and Considine found that reactance was a result of forceful methods of communication in attempting to increase fitness (2008).

Snyder and Wicklund (1976) and Worchel and Brehm (1970) examined reactance in the context of

threats to attitudinal freedom. The experimenters used subjects who either agreed, or disagreed with a position taken by a speaker. Results showed that reactance to the communicator's message occurred for the subjects who were in initial agreement with the communicator. However, there was a strong positive attitude change for subjects who initially disagreed with the communicator.

Worchel and Brehm explained that the subjects who initially disagreed with the communicator's message showed no reactance because their initial disagreement constituted an exercise of the threatened freedom. Subjects who initially agreed with the communicator had not asserted their freedom to disagree and therefore a reactance effect occurred.

Snyder and Wicklund found that when subjects who initially agreed with the communicator wrote a precommunication essay disagreeing with the communicator's position, the reactance effects (previously found by Worchel and Brehm, 1970) were blocked. Wright (1986) demonstrated the impact of how extreme the level of prior agreement to a position was on attitude change. Wright found that subjects with extreme premeasures exhibited negative attitude change, while subjects with moderate premeasures showed moderate positive attitude change, in response to a high threat message.

The results of these studies clearly indicate the importance of segmenting the market in a public sector marketing campaign. Initial attitude seems to have a great effect on whether a message is seen as "threatening" and thus, on whether the message produces reactance or attitude change. The target market for marketing healthier lifestyles should be segmented by initial attitude, with different messages sent to different segments to help insure favorable results.

Those consumers initially moderately disagreeing with the message of engaging in a healthier lifestyle could be convinced to change to a healthier lifestyle with a high threat message. Those consumers who had substantial disagreements with the idea of a healthier lifestyle should be targeted with a lower threat, more subtle message, and also given the opportunity to freely discuss the positive and negative aspects of a healthy lifestyle. This would give such consumers the opportunity to disagree with the message, and thus reduce the possibility of reactance.

Mazis (1976) used a naturally occurring intervention to investigate reactance theory. A local anti-phosphate ordinance reduced the prior freedom which people in a particular locality (Miami) had been accustomed to exercising in terms of choosing detergents. Results of attitude surveys taken after the anti-phosphate ordinance took effect supported reactance theory. Detergents containing phosphates were rated as more effective by residents of Miami than by residents of a control locality which still allowed phosphate containing detergents. Miami residents also expressed less optimism concerning the success of governmental regulation in solving water pollution problems. Thus, an ordinance aimed at "saving the environment" produced negative perceptions, and possibly counter-productive behavior, due to reactance. This situation might have been avoided by a different marketing approach that stressed the benefits of the new types of detergents, but allowed continued use of the phosphate detergents at an additional cost.

Heilman (1976) provided evidence that reactance is positively associated with the intensity of the influence attempt. High threat messages ("You must eat healthy foods") produce more reactance than low threat messages ("You should try to eat a healthy diet"). However, Heilman found that the level of reactance was affected by the perceived possibility of punishment. Reactance decreased if subjects were convinced that they were likely to be punished for disobeying a high threat message. This effect was demonstrated in the Mazis study. The reactance might be increased because the residents of Miami believed the ability of the locality to stop the usage of phosphate detergent (purchased in another locality) was low.

The Heilman study results show the importance of the concept of behavioral freedom to the degree of reactance generated. If consumers are told that they "must" wear seatbelts, and those not wearing seatbelts are ticketed and fined, the consumers may no longer feel that they have freedom to engage in an alternative behavior (not wearing seatbelts.). These results also point out the importance of the public sector not threatening punishment which it cannot carry out. A long running promotional campaign attempted to encourage consumers to wear seat belts. However, seat belt usage increased dramatically only after laws were passed requiring usage, and motorists were ticketed and stopped for not wearing seatbelts.

In terms of healthy lifestyle marketing, consumers are unlikely to feel that they will be punished (in the short term, by a non-profit marketer) for not following healthy lifestyle advice. Promotional campaigns

should therefore expect that, in most instances, reactance will result from behavioral freedom reducing messages.

Brockner and Elkind (1985) showed that level of reactance was related to self-esteem. Subjects with high and medium self esteem showed reactance effects, by showing greater resistance to a persuasive communication in a "threat" than in a "no-threat" condition. These subjects had a positive attitude change in the "no-threat" condition, and a negative attitude change in the "threat" condition. Conversely, low self esteem subjects showed greater resistance to the persuasive communication in the "no-threat" than the "threat" condition.

These results provide significant insight into message segmentation for marketers of healthy lifestyles. For subjects with high self esteem, a low threat message would tend to be more effective. For those subjects with low self esteem, a more threatening message might prove more persuasive.

Self esteem might be seen as an overall feeling of competence. Thus, it might seem logical that competence related to a specific issue might also be related to reactance. Issue specific competence was defined by Wicklund and Brehm (1968) as a person's feeling of knowledge about an issue which allowed the person to knowledgeably exercise freedom of choice. Wicklund and Brehm (1968) showed that issue specific competence was related to reactance. People with higher levels of issue specific competence showed higher levels of reactance than people with lower levels of issue specific competence.

Mann and Hill (1984) investigated reactance theory in the context of trash disposal at a shopping mall. A demand to dispose of trash was less effective in provoking compliance than a less strongly worded request, in accordance with reactance theory. Geller, Witmer, and Orebough (1976) and Reich and Robertson (1979) also found support for reactance theory in the effects of message wording on trash disposal. Again, studies support that, in cases where retaliation is unlikely, and consumers have high issue specific competence (trash disposal), a lower threat message was more effective.

Schwarz and Kumpf and Bussman (1986) found that resistance to persuasion was stronger with more explicit influence attempts, in a study involving college students' evaluations of textbooks. Again, college students, with typically high self esteem, and having issue specific competence, exhibited reactance to higher threat (hard sell) messages.

A message encouraging healthy eating and exercise should be less threatening, and more focused on information (a soft sell) for those in target segments with high issue specific competence. For those with low issue specific competence, a more threatening (hard sell) message would be appropriate.

Engs and Hanson (1989) investigated drinking patterns in college students since the passage of laws increasing the legal drinking age to 21. They found that incidents of drinking behaviors were more frequent among college students under 21 than among college students over age 21. They interpreted this finding as a reactance effect. The students felt an important freedom was being threatened. A law banning drinking is certainly a high threat message. The students would likely feel high levels of issue specific competence (as college students typically feel very competent on most issues), and student would have extremely negative attitudes toward the message. According to reactance theory, these factors would combine to produce a high level of reactance. If, in fact, reactance was at work in this instance, it suggests that some regulatory laws may be counterproductive. The people to whom the laws are targeted may break the laws simply to reassert their freedom, even if the behavior was not originally highly valued. This study again reflects the difficulty of simply regulating healthier behavior. Regulations may, in fact, encourage the forbidden behavior. This is especially true if such regulations are perceived as being difficult to enforce.

Brehm (1989) provided a general overview of possible applications of reactance theory to consumer behavior. He noted the threat to a freedom can lead to increased attractiveness of that freedom. He also noted that a threat to one freedom can be seen as an implied threat to other freedoms. For example, if the government restricts one right, other restrictions may soon follow.

He noted that consumers often value freedom of choice, even if they don't often exercise that particular choice option. Consumers might oppose the elimination of a particular product from the local supermarket "just in case" they might someday want to use that product, because such restriction might create the perception that potential freedom of choice has been restricted.

Researchers have found examples of how reactance has made marketing of healthy lifestyles difficult.

Bushman (1998) found that college students were more likely to want to taste a high fat cream cheese when it had a warning label indicating that consumption of high fat foods may increase risks of heart disease. Nestle (2002) detailed how the food industry generated substantial reactance by informing consumers of those new laws or regulations which might limit consumer's food choices. Brownell and Horgen (2004) also noted that efforts to regulate supplements were derailed after public outcry that individual rights to choose were threatened.

For profit marketers of food products market products to maximize shareholder wealth. Any efforts by public sector marketers to reduce consumers' consumption of certain foods is obviously a potential threat to profits and will be met with resistance. One form of resistance by for profit marketers is to attempt to build reactance in consumers. Cigarette manufacturers attempted to fight restrictions on smoking by starting campaigns on behalf of "smokers rights" (Brandt, 2007, p. 298). Similarly, an ad in USA TODAY on December 6, 2006, on page 3b, in response to New York city's banning of trans fats, was headlined "Hey New York: What's Next? The ad noted that "because there are healthier alternatives, it opens the door to banning so much more! Using the same logic, let's get rid of: New York Style Pizza *Seriously, do you need all that cheese?* Beef Hot Dogs *Tofu Dogs almost taste the same* Corned Beef Turkey breast is much leaner Coffee Tea is probably better for you How about a government Department of Menus?" The final line of the ad concludes "Find out more at ConsumerFreedom.com." Clearly, this is an attempt to build up reactance in consumers by relating this one action to the potential to lose future freedoms.

## SUMMARY

Public sector attempts at marketing healthy lifestyles are a very positive effort to improve consumer health and longevity. However, as noted above, reactance theory points out a number of difficulties with marketing healthy lifestyles. Any elimination or threat of elimination of freedom to choice among all food products and of a particular activity can be perceived as a threat to personal freedom, thus producing reactance. In addition, reduction in freedoms advocated by such marketing campaigns might be seen as threatening other possible behavioral freedoms in the future. Both of these conditions have also been shown to produce reactance.

In addition, if a governmental agency attempts to implement an ordinance or law which is difficult to monitor and enforce, citizens will be more likely to have reactance aroused than if citizens are certain that the law will be strictly enforced.

In the public sector, governmental entities often "suggest" a mode of behavior for the public, or "force" a choice. These studies indicate that governmental entities should exercise great care in how they attempt to influence behavior.

Sheth and Frazier (1982) proposed a model of strategy mix choices for the nonprofit sector where the choices of strategy were dependent upon the attitudes and current behaviors of various population segments. However, the reactance literature indicates the need for more precise segmentation of the target market in marketing healthy lifestyles. Along with strength and direction of initial attitude, there is also need to consider a person's prior freedom to exercise his or her choice, a person's perceived risk of retaliation if the desired behavior is not engaged in, and a person's level of self-esteem, and a person's issue specific competence. Thus, public and nonprofit sector marketers should segment the market based on those six factors. Depending on the expected level of reactance, high threat or low threat messages can be targeted specifically toward appropriate groups. High threat messages would be more appropriate and effective for groups with factors that indicated a low level of reactance to such messages, while low threat messages would be more appropriate and effective for target segments which are likely to have high levels of reactance to high threat messages.

Use of the knowledge gained from research in the area of reactance can be of great help in enabling public sector and nonprofit organizations to develop effective promotional campaigns to achieve their organizational goals. Without use of this knowledge, organizations may develop promotional campaigns that are ineffective, or in fact, counterproductive. As public sector budgets continue to shrink, efficient use of resources is more critical than ever. Public sector marketers must use all information available in order to

develop efficient, effective marketing campaigns.

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