Carrots, Sticks, and Promises: A Conceptual Framework for the Management of Public Health and Social Issue Behaviors

The author presents a framework that considers public health and social issue behaviors and is based on self-interest, exchange, competition, free choice, and externalities. Targets that are prone, resistant, or unable to respond to the manager's goal behave on the basis of their motivation, opportunity, and ability and on a manager's use of the strategies and tactics inherent in education, marketing, and law.

Two million U.S. residents die each year; it is estimated that half of these deaths are "premature" and attributable to lifestyle and environmental factors (UC Berkley Wellness Letter 1997). Advances in biomedical sciences, mass immunization, and sanitation have resulted in a decrease in the incidence of infectious diseases (Matarazzo 1984), so that the health status of the population in economically developed countries now has less to do with acute illness than with lifestyle issues such as excessive drinking, unhealthy diet, or the use of tobacco products (Walsh et al.1993). Influencing lifestyle can do more to increase the health of the population and lower the cost of health care than can treatment of illness.

In this article, a conceptual framework is proposed for the management of public health and social issue behaviors. The article relies on education, marketing, and law as its three primary classes of strategic tools. These tools will be considered with respect to specific targets and specific public health or social issues for which the targets may or may not have any motivation, opportunity, and/or ability to cooperate but that nevertheless have been selected for management (e.g. keeping preteen girls from beginning to smoke). The tools are considered with respect to targets who are prone, resistant, or unable to comply with the manager's goals. The relative appropriateness of the use of various

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combinations of education, marketing, and law will be determined by these states for the purpose of assisting managers in dealing with tremendously complex societal problems.

These issues arc of societal concern when they tie to freely chosen behaviors that result in social costs for which other members of the society must pay either directly or indirectly (externalities). This article also considers the macro policy trade-offs between the free choice rights of individuals and the rights of others not to have resulting externalities thrust on them. The selection of issues for which the use of education, marketing, and/or law are appropriate will be determined on the basis of this trade-off of conflicting rights.

Given the existence of these trade-offs, cooperation between parties may be necessary for the manager's goals to be met. As Ouchi (1980, p. 130) points out, "Cooperative action necessarily involves interdependence between individuals. This interdependence calls for a transaction or exchange in which each individual gives something of value... and receives something of value ... in return." This article considers the potential impact of transactions when cooperation may be hindered by the competing self-interested views of the target group (whose members may be comfortable with their current behaviors) and the manager (who seeks a particular behavior).

Current public health behavior management relies heavily on education and law while neglecting the underlying philosophy of marketing and exchange. A goal of this research, therefore, is to show the relevance of marketing along with education and law while recognizing that each tool set has its own strengths, weaknesses, and most appropriate application opportunities. Major tasks are to determine the circumstances in which education, marketing, and law are most appropriate, as well as to

¹ Manager used here as a generic term that includes, but is not limited to, various persons such as civil servants, nonprofit administrators, legislators, and/or private sector managers who attempt to direct the behavior of individuals for the good of society (as defined by the managers, the leaders, and/or the constituents of the society)

²There also are cases in which the individual may not be comfortable with the current behavior but is unable to make changes In these cases, the target and manager are not competing, but the manager still must choose among education, marketing,

determine the societal values as to (lie desire to impose society's interests on individuals through the several sets of available tools.

Introducing Education, Marketing, and Law

The use of the tripartite classification of education, marketing, and law is based on previous work. Lindblom (1977) frames his macro analysis of the major politicocconomic systems of the world into three classes of social control: persuasion, exchange, and authority. Smith (1996) has five classes of micro management tools, which he refers to as the 5Fs: facts (informational education), feelings (emotional education), facilitation (product, price, and place), freebies (promotions), and force (force of law). Hastings and Elliott (1993) use 3Es--education, environment, and enforcement-in their micro level framework. Before proceeding, several terms must be clarified.

Here, education refers to messages of any type that attempt to inform and/or persuade a target to behave voluntarily in a particular manner but do not provide, on their own, direct and/or immediate reward or punishment (e.g., "Quitting isn't easy-keep trying," "Just don't do it," "Eat five fruits and vegetables per day"). Education can teach and create awareness about existing benefits but cannot deliver them, even though the resultant knowledge may have value for long-run behavior, in the pursuit of benefits. Education (alone) requires the target to initiate the quest for the benefit and/or solicits voluntary compliance. Compliance may be for a previously known reward (e.g., "Stop smoking and reduce the chances of heart disease"), a reward not previously received (e.g., teens are taught that "kissing a smoker is like licking an ashtray"), or for no explicitly apparent reward (e.g., "Don't forget to vote"). Education, if alone, can suggest an exchange but cannot deliver the benefit of the exchange explicitly.

Lindblom's *persuasion* is similar and comprises several forms of social control from ideological instruction and propaganda found in totalitarian systems to the free competition of ideas found in liberal democracies. Education is also similar to what Wiener and Doescher (1991) term a *behavioral solution*, that is, a solution that asks people to make voluntary sacrifices. Finally, education is similar to what Rasmuson and colleagues (1988) define as *health communications*, that is, "the development and diffusion of messages to specific audiences in order to influence their knowledge, attitudes, and beliefs in favor of healthy behavioral choice."

Although messages often are used to inform or persuade, as an aid to the marketing of a product or service in an exchange or as an aid in the enforcement of law, these supporting tactics are not Included under the rubric of education here. Messages that support in these ways are important to the overall integrated behavior management process but are different from messages that stand in isolation. The former are included under marketing and law; the latter are considered education.

Marketing refers to attempts to manage behavior by offering reinforcing incentives and/or consequences in an environment that invites voluntary exchange. The environment is made favorable for appropriate behavior

through the development of choices with comparative advantage (products and services), favorable cost-benefit relationships (pricing), and time and place utility enhancement (channels of distribution). Positive reinforcement is provided when a transaction is completed.

Lindblom regards *exchange* as the fundamental relationship on which market systems are built; one party gives up -something to get something from another party. Kotler and Roberto (1989, p. 24) define *social marketing* as "a program planning process that promotes the voluntary behavior of target audiences by offering benefits they want, reducing barriers they are concerned about, and using persuasion to motivate their participation in program activity." Marketing offers a direct and timely exchange for a desired behavior.

Law involves the use of coercion to achieve behavior in a nonvoluntary manner (e.g., military conscription) or to threaten with punishment for noncompliance or inappropriate behavior (e.g., penalties for littering). Law also can be used to increase (by the use of price subsidies) or decrease (by the use of taxes, which effectively raise prices) the probability of transactions that might not develop as desired through free-market mechanisms; in these ways, law can be used to facilitate marketing solutions. According to Black's Law Dictionary (1990, p. 984), "law, in its generic sense, is a body of rules of action or conduct prescribed by controlling authority, and having binding legal force.... That which must be obeyed and followed by citizens subject to sanctions or legal consequences is a law."

Lindblom's authority is similar and exists when one individual or group implicitly or explicitly, freely or by force, recognizes the control of another individual or group. Authority consists of commands backed by specific penalties that threaten to disadvantage noncompliance. Law is also similar to what Wiener and Doescher (1991)'term a structural solution, that is, a political act that mandates individual behavior. For Taylor and Singleton (1993), the distinction between marketing and law could be that marketing works self-monitoring and self-sanctioning negotiating, whereas law is used as external monitoring and sanctioning when the transaction costs of marketing are too high and the community is not strong enough to reduce these costs on its own.

Although the use of law generally is thought of as coercive and punishing, the coercion also can be positive and of assistance. The use of law can force a behavior that is desirable to the target but is not viable because of pressure to conform to a different standard. In this case, the law can provide an external motivator when an internal one cannot be accepted by the target (e.g., forcing a motorcyclist to wear a motorcycle helmet by legal means can work when no individual motorcyclist would choose this option freely). Law and marketing both can offer environmental opportunities and reinforcement for behavior, but in marketing the behavior is voluntary, whereas in law. It is coerced.

In still other cases, law is used to create marketing exchanges. When the law is used to set up voluntary programs such as Head Start, such action is categorized as marketing. Law (herein) is used to manage by coercive

punishing of inappropriate behavior without choice; marketing manages by offering incentives and choice.³

Education and marketing are similar in that both propose uncoerced, free-choice behavior. In addition, marketing offers a specific timely and explicit payback, whereas education can offer only a promise of future potential payback and is unable to reinforce directly. Whereas marketing offers an explicit exchange and brings it to the target, education implies that an exchange might exist but the target must search for it. Marketing adds choices to the environment, whereas education informs and persuades within the set of choices that already exist. Law is similar to marketing in that both offer exchanges in the target's environment; marketing's offerings, though, are presented with free choice that is rewarded, whereas the force of law generally imposes sanctions for noncompliance with the proffered choice. In general, the presence of a reinforcer is incentive (marketing), whereas the withholding of a reinforcer or the onset of a punishment is coercive (backed by the force of law).

Consider the following example of how the three classes of tools might be used: A social issue with behavior management implications facing many societies involves genetic testing and the opportunity to lessen the occurrence of disabilities. If society wishes such management, while also considering the rights of its citizens, should the management be through education, marketing, or law?

- -With education, the government could inform and persuade citizens with respect to the value for the individual and the society of genetic testing and, for individuals with relevant genetic markers, could provide education on the value of voluntarily choosing not to have children. Education offers free choice to citizens and accepts the externality costs that would result from socially undesirable choices.
- -Through the use of marketing, the government could encourage voluntary genetic testing by setting up test sites in shopping malls and. in exchange, could offer counseling on the topic of family planning using the test results and other issues of concern to the family. For those with relevant genetic markers, voluntarily choosing not to have children might be compensated for with a priority status for adoption, Marketing offers free choice and attempts to minimize externalities by offering benefits in exchange for behaviors with fewer externalities.
- -Through law. the government could require genetic testing of all citizens as they approach the age of reproduction and involuntary sterilization of those who carry genes that might lead to disabilities. Failure to comply could be punished harshly. Law restricts free choice by punishing socially undesirable choices but manages behavior to minimize externality costs.

These options are presented to show the differences among, and the opportunities and limitations of, the three major classes of tools and how an evaluation of these tools is relevant to behavior management. In reality, an issue

³There are cases in which there is a thin line between marketing and law or in which the law is used to create an exchange situation. As with marketing, law can be used to create offerings, manage price, facilitate distribution, or disseminate messages. Many government programs that offer freely chosen exchanges are examples of products or services being created and marketed by the passage of laws.

as genetic testing probably would be managed through a combination of the three classes of tools both over time and across different targets, and the relative weighting of the tools would be a function of individual and societal values as well as macro public policy considerations.

Before integrating education, marketing, and law in a behavior management framework, some issues of marketing and political philosophy are considered in the following section.

Issues that Influence the Potential Value of Marketing in Public Health and Social Issue Behavior Management

Because many managers are not trained formally in marketing, they often tend to neglect key issues that are important in the use of a marketing perspective. An appreciation of the self-interest of the target, the benefits of an exchange, and the constraining nature of power and competition are needed if marketing is to be used successfully as a class of behavior-management tools. These issues are considered next in comparison with their use in commercial marketing.

Self-interest

In most situations, people act primarily out of self-interest; in commercial marketing, this self-interest clearly and consistently is acknowledged and pursued. In the commercial sector, managers appeal to consumers' self-perception of short- and long-run self-interest (e.g., "buy my brand and you will be better off," "buy my brand and you will feel better about yourself"). In public health and social issues, managers often ask members of the target market to behave in ways that appear to be the opposite of that member's perception of self-interest and are often the opposite of the current manifestation of that self-interest as observed through the member's current behavior. People choose to eat junk food, not exercise, smoke and drink to excess, or engage in unsafe sex because they have evaluated their own situation and environment and made a self-interested decision to behave as they do.

Primary and selective demand. Commercial managers generally seek changes in selective demand after the primary demand decision with respect to the product class already has been made. That is, the major self-interest decision with respect to the product class has been made, and only the minor brand choice decision remains. For social managers, the desired behavior is more likely to be a change in primary demand (e.g., start behaving in a way that is new; stop behaving in a way that has been enjoyable). This difference in emphasis on primary versus selective demand makes the social manager's task more difficult.

When making a selective demand decision, consumers' ambivalence is overcome fairly easily because the differences among choices are often minor. The primary demand decisions sought with respect to public health issues generate more powerful levels of ambivalence. Most people who smoke know they should stop; many people who drink to excess "hate themselves in the morning." Many smokers

make primary demand decisions several times each hour, they are determined to quit after each cigarette but then are determined to have just one more when their need for nicotine builds a few minutes later. This ambivalence with respect to the primary demand decision makes public health behavior management difficult and often calls for explicit reinforcement of the behavior that is sought by the manager.⁴

Although commercial and social issues differ greatly with respect to how managers accommodate self-interest, it is important to note that the targets are behaving similarly in both domains. Individuals act in their own self-interest whether they are given the opportunity to change brands or to change health-related behavior. If the individual can discern immediate self-interest in the behavior, it is more likely to occur; if there is no perceived benefit, it is less likely to occur. If the change is minor (selective demand), it is more likely to occur; if the change is major (primary demand), it is less likely to occur.

Self-interest. Mansbridge (1990) has edited a book of readings put together to show that there are determinants of behavior other than self-interest. In the introduction to Beyond Self-Interest (p. ix), though, she states that "Self-inteest explains most of human interaction in some contexts, and it explains some role in almost every context. Institutions that allow self-interest as a primary motive, like the market and majority rule, are indispensable when vast groups of people who have no other contact with one another need to coordinate their activities or make collective decisions." This article involves what happens in the vast majority of individual decisions and when self-interest may or may not be consistent with societal goals and needs,

Whereas marketing generally plays on short-run self-interest through an exchange of reinforcers, education and law play on self-interest in quite different ways. Education often recommends and encourages behaviors by promising a selfinterested future return on the behavior investment; though there is no explicit exchange, there are offers of possible returns. Some education campaigns clearly show the target why there would be self-interest in behaving appropriately (e.g., "If you use a condom, you will be less likely to contract a sexually transmitted disease"), others show a societal benefit but no direct self-interest (e.g., "If you drive more slowly, the nation will have greater fuel reserves"), and others do not show either societal or individual benefit but merely present moral platitudes (e.g., "Just say no"). Some campaigns offer immediate self-interest reinforcers (e.g., "If you immunize your baby today, it will be less susceptible to a variety of childhood diseases"), whereas others offer the possibility of future self-interested rewards (e.g., "If you drink milk today, you are less likely to contract osteoporosis when you are old"). Some of these campaigns compete directly with the behavior they are trying to change (e.g., "If you don't smoke, your mouth will taste fresher; you will be more sexually attractive and cool").

Law demands nonvoluntary behavior and offers a selfinterested return by promising not to punish those who behave correctly (e.g., "If you continue to drive without drinking, we will not take away your driver's license") or cease behaving incorrectly (e.g., "if you stop drinking and driving, we will reinstate your license"). In both education and law, the self-interest of the society and its managers is pursued, but it is not always clear to the target that its self-interest is being considered.

There are several bodies of literature that support the importance of considering self-interest. These include behaviorism (beginning with Skinner 1935); evolutionary psychology (Dawkins 1976; Wright 1994); the evolution of cultures, norms, and conventions (Coleman 1990; Young 1996); neoclassical economics (Block 1994; Hausmann and McPherson 1996); behavioral decision theory (Kahneman, Slovic, and Thersky 1982); and economic sociology (Coleman 1990). Work that does not support the importance of self-interest often does so by showing exceptions to its universality (Mansbridge 1990; Sober and Wilson 1998).

The Exchange

In addition to self-interest, the fundamental nature of the exchange must be considered. In commercial marketing, the payback in the transaction is defined by an implicit or explicit contract, and its timing occurs closely behind, or simultaneous to, the initial behavior of the target. With public health and social issues, the payback is often vague, uncertain, and in the distant future.

Exchange theory. Although the exchange and transaction are at the heart of marketing philosophy (Alderson 1957; Hunt 1976; Sheth. Gardner, and Garrett 1998), much of what has been called social marketing in the past has neglected the exchange (Andreasen 1994). The functionalist school of marketing thought (Alderson 1957; Sheth, Gardner, and Garrett 1988) presents a perspective that often is missing in public health behavior management.

Marketing occurs when there is an attempt to transfer value from one entity's assortment to another's for the purpose of enhancing the assortment of the first party (Alderson 1957). Alderson puts forth the idea that there must be a common stake in the survival of both sides; both sides must perceive the opportunity for enhancing their own value but also recognize that there is risk for each involved in the transaction. According to the functionalist school, each side must assume potential costs and risks to achieve potential added value, but society places the burden of costs and risks on the individual when it uses only education or law.

Timing and payback. Houston, Gassenheimer, and Maskulka (1992) raise two issues that tie directly to the transference of marketing to social and public health issues. In most cases of commercial marketing, (1) the timing of the two parts of any transaction are temporally close and (2) the payback is agreed upon explicitly and clearly by both sides. In many noncommercial cases, these conditions do not hold, and as a result, targets are reluctant to engage in the behavior being advocated.

Explicit and temporally close payback, the offer of an immediate positive behavioral reward, and accommodation of self-interest are some of the conditions that differentiate strong and weak exchanges and may result in immediate positive reinforcement. Education, marketing, and law all

⁴This idea was generated from the comment of an anonymous reviewer.

offer exchanges, but those in education are weak (they generally are not temporally close and do not show explicit payback), and the exchanges in law may be temporally close and explicit but generally are based on coercion and are often negative.

In many public health behavior-management cases, there is no temporally close or tangible payback in return for the behavior. For example, many individuals have made a decision, in their own perception of self-interest, to be slothful with respect to exercise and diet. The educational messages that the social manager presents ask the individual to begin to exercise and eat more vegetables while watching less television and eating fewer high-fat foods. In return, the individual is promised some vaguely lower probability of having a heart attack that may or may not occur at some undetermined time in the future. Such a message proposes an exchange that offers neither a temporally close transaction nor an explicit payback. The individual is called on to make a choice between a behavior that definitely leads to an easyto-see, certain, immediate, pleasant outcome and a very different behavior that may lead to a less certain but longer-run pleasant outcome.

Behavior with respect to public health and social issues comes about in much the same way as it does for commercial exchanges; individuals act out of self-interest, accepting "good" deals and rejecting "bad" ones. The difference is that the public health manager often asks for behavior that is not perceived by the individual to be of self-interest. Public health issues benefit society and often benefit the individual in the long run; the problem lies in showing the individual that immediate and sometimes continuous (undesirable) behavior must take place to achieve the long-run benefit. Although education can present long-run benefits, marketing exchanges may be needed to initiate behavior, or law may be needed to overcome the perception of a lack of benefit.

Power and Competition

A third set of commercial-social differences involves power in the relationship and competition in the marketplace. Because of the existence of competition in most commercial marketing situations, managers know that the target has the power to choose from any of the existing vendors. This consumer power leads to an accommodation of needs.

In addition, consumer apathy, or low involvement, puts more pressure on the manager to show an immediate benefit for the target; it is this logic, at least in part, that has led to the huge increase in consumer sales promotions that lead to immediate purchase behavior for frequently purchased convenience goods. Commercial marketers long have known that the nature and outcome of an exchange will be influenced strongly by the relative power of the parties (Gaski 1984), but social behavior managers often seem to make implicit assumptions about the extent of their own power when they represent society or an agency thereof. This assumption is manifested through the choice of education or law as the preferred tools of behavior management, as managers fail to recognize that in a free-choice society, they actually have little power.

As a group, apathetic, or low-involvement, individuals in the target population have tremendous latent power to

extract benefits from the society in return for desirable behavior and curtailment of externalities (Coleman 1990). Because the locus of actual power (the individual) is recognized by managers to be different from the locus of apparent power (government), the need for tools that work differently than those of law and education becomes more necessary. On the individual's side of the ledger, apathy is a strong source of power. The greater the value of the exchange for one side, the more power can be brought to bear by the other through its seeming apathy (Coleman 1990). Although apathetic individuals often do not realize the power they have and may be too disorganized to use it, managers must respond to this latent power if they are to achieve their goals. In this situation, an implicit form of negotiation takes place that consists of rejection of offers by the apathetic individuals until the manager creates an exchange that is worthy of attention.

Many social managers are equally presumptuous when they assume that they are operating in an environment devoid of competition; free choice, apathy, and inertia are powerful competitive forces that often are ignored. Social managers must recognize that there is always competition. For every choice there is an alternative: to be or not to be, to binge drink or drink in moderation, to exercise or remain a "couch potato." In a free-choice society, many laws are not followed if the target cannot discern the reward in doing so.

Dickson (1992) discusses the invisible hand of competition that constrains the self-interest of the firm and forces the firm to serve the interests of customers so that the value of behavior opportunities will be recognized. The result of recognition of power and competition in the marketplace leads to a greater balance between buyer and seller, which calls for mutual accommodation.

Issues of Public Policy Philosophy that Relate to Public Health and Social Issue Behavior Management

Managers also must consider the normative macro issues of political philosophy within which their micro level management is to be considered. These issues center on the rights and responsibilities of the individual and the society, when the individual lives in a free-choice society, and when the individual's actions may create externalities (costs) that affect other individuals without their explicit agreement (Buchanan 1971).

Free Choice and Externalities

A classic example of this trade-off involves the right of the state to impose helmet laws on motorcycle riders versus the right of the individual to ride without a helmet. If the society allows free choice, it must be prepared to accept the externalities that come from the increased health costs that accompany accidents when riders have not worn helmets. If the society wishes to limit externalities, it must be prepared to limit free choice as well. Should the state impose helmet sanctions through law, should it try to educate and persuade its citizens to wear helmets, or should it develop an exchange that allows citizens the opportunity to go without helmets but imposes all health care costs back on the helmetless

individual (or his or her insurance provider) through an exchange contract)

The Tragedy of the Commons

A large subset of the cases dealing with these trade-offs of free choice and externalities involves the issue of overuse of a limited resource. Freely choosing to use a limited resource can lead to externalities as the resource is exhausted. The classic example here involves a common grazing area: Each unit of the community pursues personal self-interest by adding one more head of cattle to its own herd to increase its own fortune, but when each continues to add cattle, the common area becomes overgrazed and all suffer. Although each has acted rationally and with self-interest, the collective actions are tragic for the community.

This scenario first was presented by Lloyd (1833) as a rebuttal to Adam Smith's notion of the invisible hand that promotes the public interest through increased competition and capitalism (Smith 1776). Some behaviors that are individually uninhibited but collectively costly include behaving in an unhealthy manner (e.g., smoking, drinking excessively, having a high-fat diet), having large families, polluting, and littering. When society is asked to fund the health care needs of those with unhealthy lifestyles, these behaviors yield eternality costs for other citizens and taxpayers. How does a society manage population growth, moderation in alcohol consumption, or sensibility in diet and exercise? Hardin (1968) notes that these sorts of issues cannot be controlled in the long run by appeals to conscience (education). In the short run, some members of society may restrain their use of the commons, but in the long run, they will see that others are taking advantage of their good nature. As a result, overtime more members of society will act in their own self-interests to the detriment of the greater good. To balance this, Hardin (1968) suggests that there must be costs associated with the use of the commons such that the costs will lead to proper behavior. This can be done, for example, by increasing the tax burden for families as they continue to have children or taxing alcohol usage at a level that develops funds to pay for the health care costs associated with its abuse (law). Conversely, children from small families can be offered college scholarship subsidies that are not made available to children from larger families (marketing). Hardin's initial work has led to a vast literature and many studies involving the conditions in which his model holds.

Social Dilemmas and Social Traps

Social dilemmas (Dawes 1980; Wiener and Doescher 1991) are characterized as situations in which each individual receives a higher payoff for a socially defecting choice, but all individuals are better off if all cooperate than if all defect. For example, there is a net benefit to society when all citizens recycle, even though each citizen is inconvenienced by the activity; if no one recycles, all suffer the costs of a larger waste management problem.

Social traps (Dawes 1980) occur when a behavior that results in a short-term benefit leads to a long-term cost. There are many health issues for which individuals can find short-run benefit in not behaving in a cooperative manner

(e,g., smoking, drinking, having a poor diet, not exercising), but these behaviors often lead to long-term individual costs and also impose future health care costs on the society.

In addition, individuals may perceive themselves as playing the role of the sucker when others are not behaving appropriately or when they are giving up the opportunity to be a free rider (Messick and Brewer 1983). Information asymmetry and monitoring problems often make it easy to defect and free ride. Many social issues have these characteristics; some, such as recycling, provide little direct personal benefit to the individual regardless of effort, whereas others, such as health issues, have the potential to provide personal payback over time. Society must consider these tragedies, dilemmas, and traps in the development of fair and compassionate policy, as well as of workable micro level strategies.

What Are Some of the Rights and Responsibilities of the State?

In the present context, it commonly is agreed that the (democratic) state has the right and responsibility not only to protect the rights of free choice of its citizens, but also to protect them from the externalities caused by others. The difficult judgments arise when considering the level of externalities that society should accept, the level at which it must protect others from these externalities, and the level of free choice it wishes to maintain.

What Are Some of the Rights and Responsibilities of the Individual?

The individual's rights and responsibilities (in democratic states) include the right to free choice, tempered with the responsibility to not impose externalities on others through either active creation of costs or being a free rider. In addition, individuals have the right to be free of externalities caused by others. This balance is difficult. as it is often in each individual's self-interest to allow externalities to be imposed on others, to be A free rider, and to not pay a fair share for services received. When each individual acts with self-interest (micro motivations), society overall may suffer to the point at which no individual is able to be maximally efficient (macro behaviors) (Schelling 1978).

There are many philosophies of government that consider these conflicts between the individual and the state. *Paternalism* operates from the view that the state knows what is best for the individual; it then imposes this knowledge on its constituents. Paternalism has been described as actions by society for the benefit of the individual without the consent of, or contrary to the wishes of, the individual (Brock 1983). *Libertarianism* operates from the view that the individual knows what is best and should be left alone to make choices freely. Libertarianism allows free choice and maximum liberty, but there is a resulting concern that free choice *will* lead to greater externalities as individuals make choices that impose costs on others.

The three classes of management tools map onto these philosophies as follows: Education clearly offers free choice when it is used to inform and/or persuade, but also can lead to greater externalities when citizens choose not to act as managers wish. If a libertarian were to allow any form of

governmental intervention, it would be through informative education. Education suggests society's view of the individual's self-interest to the individual. Law is clearly coercive; even if used with the best of intentions, it would be a tool of a paternalistic government and would limit free choice to control externalities. Law imposes society's view of the individual's self-interest on the individual.

What, though, is marketing? One view is that marketing offers free-choice opportunities in a competitive environment by providing incentives that can be accepted or rejected within the environment. Another view is that marketing presents a package that is so appealing as to be coercive and, therefore, reduces choice and manipulates behavior. A third view is that marketing assesses the individual's self-interest and makes behavioral opportunities available that satisfy that self-interest; in the resulting exchange, the individual gives up a behavior that leads to the externalities and receives satisfaction of self-interested needs.

What Is Marketing, and How Does It Differ from Education and Force of Law?

The previous literature and discussion lead to the following definition of marketing:

Marketing consists of voluntary exchange between two or more parties, in which each is trying to further its own perceived self-interest while recognizing the need to accommodate the perceived self-interest of the other to achieve its own ends.

This definition is based explicitly on the self-interest and behaviorist notions that emerge from several of the basic disciplines that have had a great impact on marketing. It is an extension of the marketing concept, which "holds that achieving organizational goals depends on determining the needs and wants of target markets and delivering the desired satisfactions more effectively and efficiently than competitors do" (Kotler and Armstrong 1994, p. G-6). Organizations succeed (i.e., fulfill their own self-interests) by assessing and meeting needs (i.e., accommodate the self-interest of the other). The definition of marketing presented here is consistent with Alderson's (1957) and Dickson's (1992) writings.

Marketers attempt to manage behavior by creating alternative choices in the target's environment that lead to voluntary self-interested exchange. Direct immediate positive reinforcement in the self-interest of the target is given when a transaction is completed or consumption occurs. Marketing is used in an attempt to assess and meet needs and to create a direct free-market exchange between the manager and the target with the greatest efficiency for each party. This separates marketing from education and law.

Education assesses and discusses needs but urges the targets to figure out how to meet their own needs. Education is used to assist targets by helping them realize their needs and be motivated to pursue them, but it cannot be used to satisfy needs because it offers no direct rewards.

Law operates in at least two ways: It is used (1) to assess needs and then force some endogenous subset of the environment to behave in a way that enables the target to

meet its needs and (2) to force target behavior to meet (the manager's own needs. When used in the first way, law is close to marketing in accommodating the sell'-interests of a target, though it does so at the expense of creating potential inefficiency for some other entity that is forced to behave to accommodate the manager and the target. (See, for example, the case of iodized salt discussed in P_2 in the section "A Conceptual Framework for Public Health and Social Issue Behavior Management.") The exchange in law is indirect and/or potentially inefficient, in that it forces either a third party to accommodate a need that was not pursued in tile past or tile target to behave inefficiently for the benefit of the manager.

Another way to consider differences among education, marketing, and law is in relation to the congruence of preexisting self-interests held by the target and the manager. Education will be an appropriate tool when individual selfinterest is strong and consistent with societal goals but the target merely is uninformed; in such cases, no additional reinforcement is necessary. For example, in the 1970s it was discovered that aspirin taken to relieve the symptoms of chicken pox caused Reyes' Syndrome in some children. By educating parents about this finding, the incidence of the syndrome almost was eliminated. Marketing will be appropriate when the level of self-interest is insufficiently consistent with societal goals to elicit behavior. For example, the Peruvian government wishes to control births, but merely educating the population has not been sufficient to gain the desired result, the government now has begun to offer an exchange of clothing, food, and money to women who agree to voluntary sterilization. Law will be appropriate when the preexisting self-interest of the target cannot be overcome with additional rewards through exchange, when rewarding is inconsistent with societal goals, or when the rights of the target are believed to be irrelevant. For example, California now has 90% compliance to seat belt laws, whereas the overall U.S. compliance level is 70%. Some believe this higher level is due to stricter enforcement of laws that permit spot checks of drivers.

Costs and Benefits of the Issue

Rangan, Karim, and Sandberg (1996) present a 2 x 2 matrix that considers costs versus benefits and suggests another perspective for the issues at hand. It could be inferred from the matrix that the more favorable the individual cost-benefit relationship (low cost; tangible, personal benefits), the more likely that education will be sufficient. Similarly, the less favorable the individual cost-benefit relationship (high cost; intangible, societal benefits), the more likely that law will be needed. The middle cases (mixed costs and benefits) would be most likely to use marketing solutions to improve the cost-benefit relationship.

A Conceptual Framework for Public Health and Social Issue Behavior Management

In this section, education, marketing, and the force of law are considered from a micro normative managerial application perspective within tile context of the prior macro public policy discussion. In considering any public health or social issue, a target may be prone, resistant, or unable to accommodate the manager's goals. The selection of tools to be used in the management of any target will be a function of where the target is perceived to be in this set,

MacInnis, Moorman, and Jaworski (1991) have presented a model of information processing of advertising in which motivation, opportunity, and ability (MOA) influence consumers' level of processing and shed light on the sort of tactics that might be useful in developing an advertising campaign. These components are modified here to have value for the management of public health and social issues. Tactics can be developed to match existing levels of MOA or enhance the probability of achieving future desired levels of MOA.

A target will be more prone to accept the manager's goals if it is easy for that target to discern the self-interest in changing or if it is easy for the manager to convey this point. Conversely, a target will be resistant or unable to accommodate-date the manager's goals if one or more of the set of MOA are lacking.

Figure I presents an overview of the relationship among (1) targets who are prone, resistant, or unable to date-date the manager's goals; (2) the target's MOA; and (3) the use of the tools of education, marketing, and law. Figure I shows the eight segments of any market that result from the combinations of the presence or absence of MOA and in what conditions education, marketing, or law can be superior at achieving the manager's goals of obtaining appropriate-ate behavior from a variety of targets.

The first three propositions consider MOA separately. Motivation is goal-directed arousal (MacInnis, Moorman, and Jaworski 1991; Park and Mittal 1985). Individuals are motivated to behave when they can discern that their self-interest *will* be served. As such, self-interest is a strong component of motivation. For many Issues, (here is no Inherent motivation to comply because there -is no perception of the potential accommodation of self-interest. An analogous situation in profit marketing exists when brands in a product class are perceived to be similar. Advertising may have a slight impact, but a larger impact results from sales promotions (Tellis 1988). Therefore, the following is proposed:

P_I: Motivation to act voluntarily will be increased slightly through education by discussing self-interest or increased moderately by accommodating self-interest through marketing. Law will be called on when the target cannot be motivated to act, voluntarily.

Lack of opportunity includes situations in which the individual wants to act but is unable to do so because there is no environmental mechanism at hand. For example, students who binge drink on college campuses located in small towns often complain that they do so because there just is not anything else to do on the weekend. Marketing could lead to the introduction of alternative forms of recreation to

⁵The term self-interest has been used previously in this article because it is used commonly in the literature being referenced. Motivation is the more common term of choice in the consumer behavior literature.

Figure 1

Applications of Education, Marketing, and Law

MOTIVATION yes			no	
OPPORTUNITY	yes	no	yes	no
ABILITY	1	2	3	4)
	prone to behave	unable to behave	resistant to behave	resistant to behave
yes	education	marketing	law	marketing, law
	unable to behave	(6) unable to behave	7 resistant to	8 resistant to
no	education, marketing	education, marketing	behave education, marketing, law	behave education, marketing, law

compete with binge drinking. P_2 is based, in part, on the previous discussion of exchange.

Situations in which there is lack of opportunity also can be overcome by use of law. Marks (1997) presents a case in which South Africans in rural areas and townships traditionally did not have ready access to iodized salt because it was only distributed in urban areas, where demand was higher. Free-market incentives for manufacturers to market iodized as well as regular table salt to these poor segments did not exist. Regulations to iodize all salt were passed in 1995, and though consumer motivation (nonurban residents' demand) had not been addressed by policymakers, mandating opportunity led to universal usage of the healthier alternative. It follows that

P₂. Although education will make the target aware of existing opportunities, it cannot create opportunity; opportunity can be created through marketing or indirectly through law.

Ability to act is the third element of MacInnis, Moorman, and Jaworski's (1991) model and is referred to as consumers' skills or proficiencies in interpreting brand information in an advertisement (see also Alba and Hutchinson 1987). In the present case, ability refers to individual skill or proficiency at solving problems and may include breaking a well-formed or addictive habit or countering the arguments of peers. Another relevant determinant of ability comes from Bandura's (1997) self-efficacy theory, in which those with high expectancies of personal achievement show greater abilities on a variety of tasks that relate to personal and publick health issues.

P3 is based, in part on the preceding discussion of power and competition. A dominant competitor can impede the ability of the target to behave, either directly or through the peer group. For example, teenagers in a drug-prone environment often talk about their inability to resist the pressure put on them by their friends. It is proposed, therefore, that

P3: The ability to behave can be developed through education; marketing will assist in imparting ability by reinforcing a newly developed skill. The force of law may frustrate a target who is unable to act or does not have the ability to make appropriate choices.

Returning to Figure 1, a target is totally receptive to the goals of the manager and prone to behave appropriately only when MOA are all present (cell 1). In such a case, education will be sufficient to manage behavior; the target wishes to act, knows how to act, and can find the environmental mechanisms to do so. The power of competition would be minimal with respect to this target; the target only needs to be reminded to engage in the proper manner. In cases in which opportunity is missing (cell 2), marketing may be sufficient to gain behavior by introducing a product/service into the environment that enables the target to manifest its motivation and ability. Similarly, if only ability is missing (cell 5), education and/or marketing may be sufficient to teach the target how to behave and pursue its motivation through existing opportunities. When motivation exists but cannot be executed, there should be no need for the use of law. Self-interest will drive the target to the proper behavior when the hurdles associated with lack of ability and lack of opportunity are removed.

A target is resistant to the manager's goals when motivation does not exist, regardless of existing opportunities or abilities. In the extreme case in which there is opportunity and ability but no motivation (cell 3), it may be necessary to resort to the law to manage behavior. In cases in which opportunity also is missing (cell 4), marketing should be attempted before law is used. Similarly, if ability is missing (cell 7), education and marketing may be sufficient and should be used before law. Often when opportunity and ability problems are remedied, motivation follows; in these cases, it may be proper for the manager to resist the temptation to resort quickly to the use of law.

Figure 1 can be used to segment a market. Consider, for example, binge drinking on college campuses. It has been proposed (Saur 1998) that students who become binge drinkers almost always do so shortly after arriving on campus as freshmen; as they mature, many give up their bingeing habits during their junior and senior years. The manager's goals here are to minimize the number of freshmen who begin to binge drink and to maximize the number of juniors and seniors who become more moderate and responsible drinkers. In this case, there is a self-interested need to belong, explore identity, and experiment with new-found independence. Easy access to alcohol provides strong competition, and the university has little power to control behavior easily. The benefits of binge drinking tic directly and immediately to self-interested needs, and the benefits of moderation and/or abstention often are presented as vague and distant. Binge drinking has become a serious problem because secondary effects-such as damage to property, sexual harassment, drunk driving, unprotected sex, and, occasionally, death-lead to unacceptable levels of externalities. The following example involves the onset of freshmen binge drinking.

Students in cell 1 only need to be reminded not to binge drink; they will be receptive to educational messages. Cell 2 students know they should not binge and are motivated not to do so but cannot find other recreational opportunities, therefore, they binge. Offering a midnight intramural basketball league on Friday and Saturday nights provides one example of alternative opportunity. Cell 5 students also know they should not binge, are motivated not to do so, and know that midnight basketball is available; however, they do not have the ability to tell their friends that they would rather play ball than drink. They continue to drink because they do not want to be perceived as socially deviant; they need to develop the ability to stand up to their peers. This is a task to be accomplished through education and then reinforced through the good feelings that come from, for example, playing ball. Cell 6 combines the issues of cells 2 and 5. The members of cells.2, 5, and 6 are motivated to comply with the goals of the manager but need help in doing so. Marketing and/or education can provide this help and aid in reducing externalities.

In cell 3, students are quite happy with their binge drinking behavior~ (hey see no need to change even though they are in an environment that offers choice and they have the ability to change their behavior. Marketing and education tactics may have been presented in the past, but behavior has not changed. In this case, law is necessary if it is important

to manage behavior. Cells 4, 7, and 8 correspond to cells 2, 5, and 6, respectively. Education and marketing are appropriate here and should be used before relying on the law. Cell 4 students may have no motivation to stop bingeing because there are no alternative forms of recreation available to them. Cell 7 students may have no motivation to stop because they do not have the ability to deal with the resultant social situation within their peer group. Marketing and/or education interventions indirectly may create motivation and remove the need to use law.

Public health and social issue cases such as binge drinking currently may overuse education and law. The power of education is limited because it does not offer a short-run reinforcing exchange of self-interest; though this is not an issue when the target is clearly receptive to the goals of the manager, it may be that managers are relying on education in cases in which the target is lacking in opportunity and/or ability.

Another explanation (which does not seem appropriate to binge drinking) would hold that the cells in which there is no motivation are dominated by a lack of awareness, and that by using education to raise awareness, motivation would result. Such a case would exist if education had been underused.

In other cases, managers may overrely on the force of law. Although there clearly are cases in which the only way to achieve appropriate behavior is to use the law, there are also cases in which an unnecessary overuse of the law leads to resentment. College students do not seem to be drinking less as a result of relevant laws, but they are becoming more resentful of their universities and the local police for enforcing these laws. In some recent cases, this resentment has led to rioting and property damage. Marketing provides opportunity, and with the onset of opportunity, motivation may increase.

The previous discussion presents various scenarios in which only education, marketing, or law dominates. The real world is, of course, not that simple, and as a result, the manager will need to consider the proper ordering with which to bring these tools to bear on a situation. For example, in cell 5, education and marketing will be used most often to manage students who have motivation and opportunity but no ability to reject binge drinking. There are, though, cases in which law may be appropriate if education and marketing do not work. Consider the case in which pressure is so great that students need some outside force to prohibit them from behaving, so that they do not lose face with peers. Ability to behave appropriately can be enhanced when the target is forced to do the right thing. It may be more comfortable to behave and be able to blame tile law than it is to behave and be ridiculed by peers.

Similarly, the segments in cells 4, 7, and 8 can be pursued with marketing and/or education strategies. If the resulting opportunity and ability does not raise motivation, the legal strategies used in cell 3 can be brought to bear; if motivation increases with the onset of opportunity, the education strategies of 'cell 1 can be brought to bear.

Other Variables Influencing the Selection of Education, Marketing, and Law

There are many other variables that can influence managers in their selection of education, marketing, and/or law as classes of strategic tools. The following sections suggest several of" these.

Current usage as an indicator of readiness to behave. Targets who are not yet engaging in an unwanted behavior may be more prone to exhibit the desired behavior; these targets are more likely to be found in cell 1 of Figure 1. Those currently engaged in the unwanted behavior will be more resistant to change; they will have less motivation to change and will be less able to do so, These targets are more likely to be in cells 7 and 8 but also might be in cells 3 and 4. For example, Hankin and colleagues (1993) show that warning labels on alcohol beverages decreased consumption during pregnancy for light drinkers but had no effect on women who drank more heavily at the time of conception. Therefore, the following is proposed:

P₄: 11 iose who are not engaging in a socially undesirable behavior will be more receptive to continuing the desired behavior and more responsive to education, whereas those who are behaving, realizing the benefits of the previously selected reinforcing behavior, will be more resistant and more likely to need marketing or law to effect a change.

Level of competition. The more passive the competitive choice, the more likely it is that education can be a sufficient tool for eliciting the desired behavior. For example, there are few strong arguments to be made against childhood immunizations; when parents of young children are urged to get their children immunized, most parents respond appropriately (cell 1). There are, though, some parents for whom apathy can be a competitive force that subverts action. In these cases, marketing may be more appropriate (perhaps through channels tactics that would make immunizations more easily available, or through sales promotions) (cells 2 and, perhaps, 6). In other cases, parents may oppose immunization on religious or philosophic grounds; now the competition can be regarded as severe, and force of law may be needed to achieve the desired behavior. In these cases there are: for example, laws requiring immunization before children can begin school (cells 3 and, perhaps, 7). The diffusion of innovation literature (Rogers 1962) provides strategies for cases in which competition is passive or moderate. Therefore, the following is proposed:

P₅: When competition is passive, education may be sufficient; as the competition of other behavioral options, or of apathy, intensifies, a more obvious exchange will be needed, and marketing should be called on. As the power of the altentative behavior choice intensifies even more, marketing no longer will achieve the desired result, and the force of law will become appropriate

Developing a target of critical mass. There are behaviors that can be influenced by pursuing one individual at a time (e.g., spousal abuse), whereas with other issues, behavior will not occur until all in the target agree to change at the same time. Schelling, (1978) uses the example of profess-ional hockey players who would wear helmets but cannot do so until all are forced to do so, lest their macho image be lessened. It may be more difficult to stop a single student from binge drinking and deviating from peer norms than it would be to manage the behavior of the entire group. Those who may not have the ability to resist the group's norms individually (cells 5-8), may be able to behave collectively (at least in cells 5 and 6).

A related issue deals with the free rider problem; an individual will be reluctant to behave if there is a perception that this will allow others to free ride off that behavior. Education may lead to enough people volunteering, but, marketing and law can provide an exchange so that those behaving appropriately will feel rewarded; pricing that rewards prudence and penalizes flagrancy provides a marketing solution that offsets the advantages otherwise accruing to free riders. Soda and beer bottle and can deposits at-tempt to serve this purpose. Free riders are most likely to be found in cells 3, 4, 7, and 8.

Force of law may be needed to produce a critical mass when individuals do not have the opportunity or ability to act alone. Although citizens could be told of the virtues of fluoridating their own water or given the opportunity to buy fluoride powder to sprinkle in each glass of water, a law that forces the provision of fluoridated water to all may be a more efficient way to provide opportunity. Cells 3, 4, 7, and 8 contain individuals who are resistant to being pan of the critical mass needed in these cases. Individuals in cells 1, 2, 5, and 6 are unable to effect behavior without the cooperation of those who are resistant.

Although individuals in small groups are often willing to make sacrifices to help one another, this is less likely to happen in larger, more heterogeneous communities (Schelling 1978). A consideration of social dilemmas and social traps (Dawes 1980) plays an important role here. Some efficient choices are self-sustaining through education after they are discovered, but others need the incentives of a marketing exchange or the coercion of law to be maintained.

When the target of critical mass consists of the entire community, the force of law is used to protect the majority from an aberrant minority. An extreme example occurred when Sweden changed its legal driving side from left to right. Although education could be used to manage those who would make the proper free-choice decision, the law could threaten to punish those for whom free choice was inadequate. Therefore,

P₆: When individuals can respond to the manager's goals without feeling that they are at a disadvantage relative to others in the community, marketing and education should be used. If a critical mass of support is needed, marketing or law will be required. If the entire market must behave simultaneously, law will be required.

Sharing community costs and benefits. Related to the preceding proposition is the perceived share of the community cost imposed on, and the benefit to be garnered by, the individual. The greater the perception of a payoff, the easier it will be for the individual to behave. For example, parents generally will support a bond drive to pay for a swimming pool for the local school; others in the community will support the pool if they are given an exchange that offers them the opportunity to use it outside classroom hours. Other members of the community reluctantly will pay taxes to support it when the first two groups have enough votes to force a bond issue on them. Behavior is most likely to occur when there is a payoff to the individual and those most similar to him or her (Olson 1965). Those who are most supportive of the issue are likely to be in cell 1, those most re

sistant are in cells 3, 4, 7, and 8; and members of 4, 7, and 8 may be managed by allowing them the opportunity and/or ability to share in the benefits. P7 returns to a consideration of the importance of self-interest and provides more depth to the issues of motivation and self-interest presented in P_1

P₇: When individuals perceive that they will receive a large share of the community benefit (and/or some nonsocial benefit), education will suffice to manage behavior. When individuals perceive that they will receive a share of the community benefit, marketing will be used if it can provide additional benefit. Law will be used when individuals perceive they will receive a very small or no share of the community benefit, with no opportunity to share in any future benefits.

In addition to the preceding issues, it also is necessary to consider the sequencing of the movement of a target across the cells of Figure 1. For example, as members of cell 4 are given opportunities to behave and are made aware of them, they may move to cells 3 or 1. Those in cell 1 are now prone to behave and will respond to an educational push, but those who remain unmotivated, despite now having both opportunity and ability, will move to cell 3 and should face the threat of legal intervention.

Consider that the level of smoking in the United States decreased from approximately 40% of the population to approximately 20% in the past 25 years. The reduction was mostly in response to a tremendous education effort, which did an excellent job on the members of cells 1 and 5. As managers continued in their attempts to reduce smoking levels, it was necessary to concentrate more on the other cells with stronger legal efforts, such as forbidding smoking in public buildings and commercial establishments. The future may bring other legal and marketing efforts.

How Public Policy Issues Affect the Use of the Conceptual Framework

Democratic societies have an ongoing concern with the balance of free choice and externalities. Although the philosophy of marketing can provide a compromise position between the extremes of paternalism and libertarianism, the practice of marketing often is neglected in favor of education and law when such considerations are made. Marketing can offer a middle ground by allowing exchange through management of the environment (paternalism). as well as free choice and accommodation of self-interest (libertarianism). Trade-offs between individual and societal needs and rights create behavior management difficulties. This allocation of rights is central to the functioning of any social system as the questions of who acquires what and who gives up what are considered (Coleman 1990). The following section considers several variables that might yield insight into the relationships between the philosophies and tools discussed previously and leads to several propositions.

Propositions Related to Public Policy

Predicted level of externalities. Selection of a tool of besavior management will depend on the externalities predicted to result from the behavior. For example, drug abuse may be believed to have unacceptable externalities because of the perceptions of related crime or lack of productivity in the workforce, so there are laws to manage its abuse. Alcohol abuse, in contrast, may be believed to have lower externalities, so policymakers have passed less severe laws and advocate education to inform and persuade relevant populations as to appropriate behavior. The predicted and tolerable level of externalities for tobacco use have changed dramatically in the past years, and as a result, policy with respect to managing tobacco usage behavior also has changed. The relationship of behavior management and externalities has a long history in political philosophy under the concept of "harm to others" (Feinberg 1984; Mill 1859). Therefore,

 P_8 If externalities are predicted to be low, a policy advocating education will be sufficient. Conversely, government will impose itself through the force of law when the predicted cost to society of an undesired individual behavior is high. Marketing will be used when neither extreme exists.

Whose rights dominate? In a free-choice society, individual rights dominate unless there is a compelling reason to favor the state (Feinberg 1984). For example, in many democratic countries (other than the United States), individuals are not believed to have strong rights with respect to drinking and driving; therefore, strong laws protect other motorists. In the United States, the rights of individual drinkers are of greater concern, with the result that laws are weaker and greater emphasis is placed on education. Therefore,

P9: If the issue is perceived to be one in which the rights of the greater society dominate, managers will turn to a strong legal system, but without this perception, education or marketing will be used.

Locus of power When managers perceive that they have power, they have less need to offer an exchange. It is only when they perceive a lessening of their own relative power that they would engage in a transaction that involves compromise. P_{10} is derived from the previous discussion of power:

P₁₀: If managers perceive that they have power, they *will* use either force of law or education. If power is balanced between the society and the individual, or resides with the individual, the manager will need to offer an exchange and will call on the use of marketing.

Homogeneity and behavior management. In their work on collective action problems and transaction costs, Taylor and Singleton (1993) propose that the stronger the community, the less need there is for institutions that manage behavior (and their costs) or for outside forces to enforce and coerce behavior. This model suggests that more homogeneous communities can manage with education, but as homogeneity breaks down, more formal exchange relationships are needed, and eventually laws must be enforced to solve collective problems. As communities get larger and less homogeneous, there is less reliance on education, though solutions still can be negotiated through cooperation (marketing?). As still more individuals enter the community with different

self-interests, there is ever less cooperation, and managers rely more heavily on law.

Similarly, Ouchi (1980) considers the transactions costs of clans, markets, and bureaucracies and posits that clans are efficient when goal incongruence is low and performance ambiguity is high; markets are efficient when goal incongruence is high and performance ambiguity is low. Bureaucracies are efficient when both goal incongruity and performance ambiguity are high. As Taylor and Singleton (1993) do, Ouchi concludes that members of a closely knit community are more prone to behave as per the group norms and will do so in response to education. Congruence of goals is most likely to occur when there is overlap in self-interest. Therefore,

P₁₁: The most homogeneous communities will manage behavior primarily through the use of education, moderately homogeneous communities manage with marketing, and the least homogeneous communities *will* rely on law to manage behavior.

What Does Marketing Offer Public Policy?

In an era of increasing political centrism and economic deregulation, marketing offers a philosophic and pragmatic middle ground. In an era of increasing individual self-interested demands, decreasing homogeneity, and diminished respect for government, marketing offers the philosophy of exchange. Marketing may offer a philosophic middle ground between paternalism and libertarianism on several dimensions. It offers free choice, while also offering behavior management through environmental changes.

Marketing offers a mechanism to find a cooperative balance between the rights of the individual and the rights of society. By operating through free choice, marketing protects the rights of the individual, because none is forced to accept the societal offering. Marketing assists society in achieving its rights by offering an incentive to the citizenry to behave in a societally appropriate manner. Ultimately, marketing offers free choice, consistent with the philosophies of both capitalism and democratic processes, as well as with the American mythic philosophy of rugged individualism.

Some Concluding Thoughts

This research has brought together several disparate themes with the goals of creating a conceptual framework for social marketing and of showing that social marketing is unique in relation both to commercial marketing and to education and the force of law. Within this framework, the manager can consider variables relevant to the selection of education, marketing, and law as sets of tools that can be brought to bear on the management of public health and social issue behaviors. The article continues with a consideration of the decline and reemergence of marketing philosophy in social marketing.

The Decline of Marketing Philosophy in Social Marketing ,

Social marketing emerged in the late 1960s and 1970s from the work of Bagozzi (1978), Kotler and Levy (1969), Kotler and Zaltman (1971), Rothschild (1979), and Shapiro (1973).

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among others. In this literature, tile core concept of marketing was perceived as the exchange (Bagozzi 1978; Kotler and Levy 1969) or the transaction (Kotler 1972) and was regarded as being in the self-interest of both the manager and the target (Shapiro 1973). Although this focus remains at the core of commercial marketing, many who claim to practice social marketing have drifted far afield from this philosophic base.

Many policymakers and social marketing managers now seem to regard social marketing as consisting of educational (informative and/or persuasive) messages and seem to be unaware that the core concept of marketing resides in the exchange (Andreasen 1995). It is possible that this shift in focus has occurred in large part because most social marketing managers come from a public health or mass communications background, and few have had broad training in marketing. William Smith (1993), one of the leading practitioners of social marketing, has said that "the problem with social marketing practice is clear, there is often little or no marketing."

"Social marketing" has become a generic term that encompasses education and marketing but too often has been co-opted by education. Without a clear commitment to a social marketing that is rooted in the philosophy of the exchange, the Field will remain focused on education and communications, but exchange and transactions are necessary and important in a framework of behavior management. Education should be used when no explicit exchange is possible or necessary or when the target is prone to behave appropriately without the development of an exchange; marketing should be used when the target is unlikely to behave as desired without receiving something (tangible or intangible) in return.

The Reemergence of Marketing Philosophy in Behavior Management

When used properly, education, marketing, and law can help move the target from its current state to that of the manager's goal. To do so, managers must have

⁶To support this point, a search of the PSYCLIT database 1991-1997 was conducted using "social marketing" as the key word. There were 32 articles; 6 of them used marketing in the way that this article has separated marketing from education. At the 1997 Innovations in Social Marketing Conference, 6 or 18 papers discussed marketing; in 1998, 10 of 25 did so.

REFERENCES

- Alba, Joseph W. and J. Wesley Hutchinson (1987), "Dimensions of Consumer Expertise," *Journal of Consumer Research*, 13 (March), 411-54
- Alderson, Wroe (1957), Marketing Behavior and Executive Action: A Functionalist Approach to Marketing Theory. Homewood, IL: Richard D. Irwin.

a good understanding of and accommodate the target's MOAs and the trade-off of free choice and externalities.

The potential for success of the three sets of tools is derived from the target's assessment of the "risk premium" (Ouchi 1980) associated with an action. When this is close to zero, education will be sufficient to elicit behavior when the risk premium is low to moderate, marketing-based exchanges can compensate for the cost of the risk, when it is too high, law often is needed because the manager is unable to compensate for the risk premium. The goals of the manager should be to reduce the perception of the risk premium (education), compensate for the risk premium (marketing), and force behavior so that no individual can take advantage of another's incurred risk premium (law).

As Weibe (1951) noted almost 50 years ago, it is difficult to sell brotherhood like soap. When marketers sell soap, they have a product that has certain benefits; when they advertise, they can refer buyers to these benefits Too often, managers of public health behaviors, in effect, tell the target to stop being dirty or threaten to fine those who remain dirty, rather than offering the target a brand of soap and a rationale as to why the soap's benefits and rewards are superior to remaining dirty. To sell brotherhood like soap, there must be soap; however, in too many cases there is no immediately apparent soap, and as a consequence, it is difficult to show why behavior should occur.

Developing social marketing to its next level of growth and contribution calls for a wider focus on behavior management. The current focus leads managers to biases that are based on their backgrounds and the singular choice of edu cation, marketing, or force of law as a paradigm of choice. Each paradigm has a role to play in behavior management; behavior management must be considered from the pragmatic reality created by targets and environments (What are the MOAs?), coupled with the normative perspective of policy development (How should society address a particular issue?),

In the early 1970s, it was said that the question was not whether to do social marketing but rather whether to do it well or poorly. Because all societies attempt to manage the behavior of their citizens at some level, the question now is not whether to manage public health and social issue behavior but rather how to do so appropriately.

Bagozzi, Richard P. (1978), "Marketing as Exchange: A Theory of Transactions in the Marketplace," *American Behavioral Scientist*, 21 (March/April), 535-56.

Bandura, Albert (1997), Self-Efficacy: The Exercise of Control New York: W.H. Freeman and Company.

Black's Law Dictionary (1990), 6th ed. St. Paul, MN: West Publishing

Block, Fred (1994), "The Roles of the State in the Economy," in *The Handbook* of *Economic Sociology*, Neil J. Smelser and Richard Swedberg, eds. Princeton, NJ. Princeton University Press, 691-710.

- Brock, Dan (1983), "Paternalism and Promoting the Good," in Paternalism, Rolf Sartorius ed. Minneapolis, MN: University of Minnesota Press, 237-460.
- Buchanan, J.M. (1971), *The Bases for Collective Action*. New York: General Learning Press.
- Coleman, James S. (1990), Foundations of Social Theory. Cam-bridge, MA: Harvard University Press.
- Dawes, Richard (1980), "Social Dilemmas," Annual Review of Psychology, 31, 69-93.
- Dawkins, Richard (1976), The Selfish Gene. Oxford: Oxford University Press.
- Dickson, Peter Reid (1992), "Toward a General Theory of Competitive Rationality," *Journal of Marketing*, 56 (January), 69-83.
- Feinberg, Joel (1984), *The Moral Limits of Criminal Law: Harm to Others, Vol.* 1. New York: Oxford University Press.
- Gaski, John F (1984), "The Theory of Power and Conflict in Channels of Distribution," *Journal of Marketing*, 48 (Summer), 9-29.
- Hankin, Janet R., Ira J. Firestone, James J. Sloan. Joel W. Ager, Allen C. Goodman, Robert J. Sokol, and Susan S. Martier 0 993),"The Impact of the Alcohol Warning Label on Drinking During Pregnancy," Journal of Public Policy & Marketing, 12 (1). 10-18.
- Hardin, Garrett (1968), "The Tragedy of the Commons," Science, 162,1243-48.
- Hastings, G.B. and B. Elliott (1993), "Social Marketing Practice in Traffic Safety," in *Marketing of Traffic Safety*, Chapter 3, 35-53.
- Hausman, Daniel M. and Michael S. McPherson (1996), Economic Analysis and Moral Philosophy. New York: Cambridge University Press
- Houston, Franklin S., Jule B. Gassenheimer, and James M. Maskulka (1992), Marketing Exchange Transactions and Relationships. Westport, CT. Quorum Books.
- Hunt, Shelby D. (1976), 'The Nature and Scope of Marketing," *Journal of Marketing*, 40 (July). 17-28.
- Kahneman, Daniel, Paul Slovic, and Amos Tversky (1982), Judgement Under Uncertainty Heuristics and Biases. Cambridge: Cambridge University Press.
- Kotler, Philip (1972), "A Genetic Concept of Marketing," Journal of Marketing, 36 (April), 46-54.
- and Gary Armstrong (1994). *Principles of Marketing*, 6th ed. Englewood Cliffs, NJ: Prentice Hall.
- and Sidney J. Levy (1969), "Broadening the Concept of Marketing," *Journal of Marketing*, 33 (January), 10-15.
- and Eduardo L. Roberto (1989), Social Marketing Strategies for Changing Public Behavior. New York: The Free Press.
- and Gerald Zaltman (1971), "Social Marketing: An Approach to Planned Social Change," *Journal of Marketing*, 35 (July), 3-12.
- Lindblom, Charles E. (1977), Politics and Markets. New York: Basic Books. Inc.
- Lloyd, W.F. (1833), Two Lectures on the Checks to Population. Oxford.
- MacInnis, Deborah J_ Christine Moorman, and Bernard J. Jaworski (1991), "Enhancing and Measuring Consumers' Motivation, Opportunity, and Ability to Process Brand Information From Ads," *Journal of Marketing*, 55 (October), 32-53.
- Mansbridge, Jane J. (1990), Beyond Self Interest. Chicago: The University of Chicago Press.
- Marks, Amy Seidel (1997),"Private Sector Collaboration in Social Marketing Health Research: Examples from South Africa," presented at Innovations in Social Marketing, (May), Boston.
- Matarazzo, J.D. (1984), "Behavioral Health: A 1990 Challenge for the Health Sciences Professions," in *Behavioral Health: A Handbook of Health Enhancement and Disease Prevention*, J.D. Matarazzo, S.M. Weiss, J.A. Hord, and N.E. Miller, eds. New York: John Wiley & Sons, 3-40.
 - Messick, M. and K. Brewer (1983), -Solving Social Dilemmas: A Review," in *Review of Personality and Social Psychology*. L. Wheeler and P. Shaver, eds. Beverly Hills, CA: Sage Publications.

- Mill, John Stuart (1859), *On Liberty and Other Essays*, reprinted 1991. Oxford: Oxford University Press.
- Olson, M. (1965). *The Logic of Collective Action*. Cambridge, MA: Harvard University Press.
- Ouchi, William G. (1980), "Markets, Bureaucracies, and Clans," Administrative Science Quarterly, 25 (March), 129-41.
- Park, C. Whan and Banwari Mittal (1985), "A Theory of Involvement in Consumer Behavior: Problems and Issues," in *Research in Consumer Behavior*, Vol. 1, Jagdish N. Sheth, ed. Greenwich, CT: JAI Press, 201-31
- Rangan, V. Kasturi, Sohel Karim, and Sheryl K. Sandberg (1996), "Do Better at Doing Good," *Harvard Business Review*, 74 (May/June), 42-54.
- Rasmuson, M., R. Seidel, W.A. Smith, and E. M. Booth (1988), Communication for Child Survival, 7.
- Rogers, E.M. (1962), Diffusion of Innovations. New York: The Free Press. Rothschild, Michael L. (1979), "Marketing Education in Nonbusiness Situations or Why It's So Hard to Sell Brotherhood Like Soap," Journal of Marketing, 43 (Spring), 11-20.
- Saur, Meghan (1998), "A Marketing View of Binge Drinking on College Campuses," senior honors thesis, University of Wisconsin.
- Schelling, Thomas C. (1978), Micromotives and Macrobehavior. New York: W.W. Norton & Company.
- Shapiro, Benson P. (1973), "Marketing for Nonprofit Organizations," Harvard Business Review, 51 (September/October). 123-32.
- Sheth, Jagdish N., David M. Gardner, and Dennis E. Garrett (1988), Marketing Theory: Evolution and Evaluation. New York: John Wiley & Sons.
- Skinner, B.F. (1935), "The Generic Nature of the Concepts of Stimulus and Response," *Journal of General Psychology*, 12, 40-65.
- Smith, Adam (1776), An Inquiry Into The Nature and Causes of the Wealth of Nations, reprinted 1937. New York: Random House.
- Smith, William (1993), "The Future of Social Marketing," presentation to the Marketing Conference on Creating Successful Partnerships, Carleton University, Ottawa, Canada.
- Techniques to Promote Public Health Activities," paper presented to Promoting Public Health Activities, paper presented to Promoting Public Health in an Era of Change; Agency for Health Care Policy and Research; User Liaison Program, Towson, MD.
- Sober, Elliot, and David Sloan Wilson (1998), Unto Others: The Evolution and Psychology of Unselfish Behavior Cambridge, MA: Harvard University Press.
- Taylor, Michael and Sara Singleton (1993), 'The Communal Resource: Transaction Costs and the Solution of Collective Action Problems," Politics & Society, 21 (June), 195-214.
- Tellis, Gerard J. (1988), 'The Price Elasticity of Selective Demand: A Meta-Analysis of Econometric Models of Sales," *Journal of Marketing Research*, 25 (November), 331-41.
- UC Berkeley Wellness Letter (1997). "What's Really Killing Us," (August), 7.
- Walsh, Diana Chapman, Rima E. Rudd, Barbara A. Moeykens, and Thomas W. Moloney (1993). "Social Marketing for Public Health," *Health Affairs*, (Summer), 104-19.
- Weibe, G.D. (195 1), -Merchandising Commodities and Citizenship on Television," Public *Opinion Quarterly*, 15 (Winter), 679-91.
- Wiener, Joshua Lyle and Tabitha A. Doescher (1991), "A Framework for Promotion of Cooperation," *Journal of Marketing*. 55 (April), 38-47.
- Wright, Robert (1994). The Moral Animal, New York: Pantheon, Books.
- Young, H. Peyton (1996). "The Economics of Convention," Journal of Economic Perspectives. 10 (Spring), 105-22.