

5 A Day Social Marketing Project

A Review of the Literature

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Introduction

The National 5 a Day for Better Health program, initiated in 1991, began as a public/private partnership between government and industry. Initially begun as a state effort in California in 1986, the program went national soon after. The goal of the program was two-fold: to increase average personal consumption of fruits and vegetables to five or more a day, and to reduce the incidence of cancer and other chronic disease conditions affected by dietary intake (Heimendinger, Stables and Foerster, n.d.).

The 5 A Day model and subsequent messages were chosen based on studies demonstrating reduced risk of cancer in individuals consuming at least five servings of fruits and vegetables a day (Heimendinger, Stables and Foerster, n.d.). Further research indicated five to nine servings was optimal for health, and further reinforced USDA dietary guidelines.

Current Dietary Practices

Both historical and current studies examining dietary trends support the need for an aggressive educational program.

Consumption data from 1976 to 1991 showed varying average fruit and vegetable daily consumption looking at five different methods of culling data, but

no study has demonstrated that consumer intake is reaching the recommended number of servings on a daily basis (Heimendinger, Stables and Foerster, n.d.).

Data from the Produce for Better Health Foundation in 2002 indicates that only approximately 38% of the population is consuming the recommended servings of vegetables daily, and only approximately 23% of the population is consuming the recommended servings of fruit daily. Another study identified average daily consumption of fruits and vegetables at 3.1 to 3.8 servings, with only 13-23% of individuals reporting consumption of five or more servings per day (Heimendinger, Vanduy 1995).

Consumption data for children and adolescents also indicates suboptimal intake. The National Cancer Institute estimates 6.8 to 27.7 percent of children are consuming the recommended number of servings per day. Further, high school students are consuming an average of only 2.6 servings per day, just over half of the current recommendations (Reynolds, Barnowski, Bishop, Gregson and Nicklas, n.d.)

Awareness of the appropriate number of servings has also been directly correlated with daily intake. Baseline survey data collected at the beginning of the 5 a Day Program in 1991 showed only eight percent of the population was even aware that eating five or more servings per day was recommended (Heimendinger,

Stables and Foerster, n.d.). Differences in intake and willingness to change intake amounts are also evident by socioeconomic status. Campbell et al's 1999 study demonstrated that females and college educated participants were more likely to be in a stage of change associated with readiness to adopt increased produce consumption habits. The study further observed that younger and Hispanic audiences were more likely to be in a contemplative or preparation state, indicating these audiences may be more likely to benefit from interventions specific to their demographic characteristics.

Barriers to Consumption

A food choice framework created by Pollard, Kirk & Cade (2002) listed sensory appeal, familiarity, social interactions, personal ideology, media and advertising and health as intrinsic factors affecting food choices. Sensory appeal of a product influences consumer choice considerably (Pollard, Kirk & Cade, 2002). Foods that are not palatable or attractive tend to be less likely to be consumed, as are new foods that are unfamiliar, particularly to children.

Food is also viewed as an integral component of social interactions, particularly in the United States. Differences in consumption, specifically in fruits and vegetables, have been noted relative to differences in the social atmosphere surrounding the consumption (Pollard, Kirk and Cade, 2002).

Personal ideology, often more prevalent in higher income brackets also influences consumption. Personal beliefs about the

production and packaging mechanisms for food (such as organic production or type of packaging) can influence food decisions, as well as availability of the preferred food types (Pollard, Kirk and Cade, 2002).

Media and advertising influence food consumption in both overt and covert ways. Conflicting information in lay media may confuse consumers, while advertising efforts may further perpetuate the contradictory messages received by consumers (Pollard, Kirk and Cade, 2002).

A consumer's personal health may also drive the purchases made, particularly of fruits and vegetables. One study determined that consumers who believed fruits and vegetables were beneficial to health increased their consumption of these foods (Dittus et al, 1995). Moreover, consumers with strong health beliefs were more likely to meet daily recommendations for produce consumption as well (Dittus et al, 1995).

Pollard, Kirk and Cade's (2002) food choice framework also identified availability and monetary cost, as well as time constraints as extrinsic factors affecting food choices. In urban settings, lack of availability of quality produce is a clear factor in consumption (CDC, 2005). Particularly in neighborhoods considered "food deserts," procurement of quality fruits and vegetables at reasonable prices may be difficult, if not impossible. Rural residents may also face transportation barriers, with limited access to fresh fruits and vegetables, particularly outside of the typical growing season. A lack of local grocery stores, coupled with large geographical areas may force residents to shop monthly for food items and groceries. Compounding

the geographic effect, the cost of fresh produce is also often prohibitive. While frozen or canned may be available, a lack of available variety feeds back into intrinsic factors of palatability. Research has also demonstrated that women often serve as the “gatekeepers” to consumption, as they make the majority of food purchases in households (Campbell, Honess-Morreale, Farrell, Carbone & Brasure, 1999). Further, purchases are often limited to foods that women feel household members will actually consume.

Previous studies have also indicated a positive relationship between household spending on fruits and vegetables and the variety of produce purchased (Stewart & Harris, 2004). Data indicates that increased purchase amounts typically are more varied in the types of purchases of fruits and vegetables (Stewart & Harris, 2004). Households with children tend to show decreased variances in produce purchases compared with households without children. Employment status of the female head of household also affects variety in purchases, with full-time employed females purchasing less variety than those with part-time or no employment (Stewart & Harris, 2004). This further supports reported barriers of the perception of what family members would eat in terms of vegetables and fruit.

Age of the consumer affects variety, as younger consumers tend to buy less produce, and their purchases lack variety as well. Older consumers not only spend more on total purchases, the variety of produce chosen is greater when compared with younger counterparts (Stewart & Harris, 2004). Ethnic background also affects purchases, with

Asian and Hispanic households purchasing a greater variety compared to other households, regardless of total purchase amount (Stewart & Harris, 2004).

Social marketing also encounters extrinsic barriers. These barriers are external to the consumer, and include issues such as difficulty in modifying public health products, addressing economic barriers in adopting new health behaviors, and creating accessibility to increase the ease of adopting the specific behaviors (Grier & Bryant, 2005).

Theories behind Social Marketing of 5 a Day

Social marketing, or using commercial marketing techniques to “design and implement programs to promote socially beneficial behavior change” has increased within the public health sector in recent years (Grier & Bryant, 2005, p. 319). Social marketing is a continuous process consisting of planning, formative research, development of strategies, development of the program, pre-testing of the materials or products intended to be used, implementation and evaluation (Grier & Bryant, 2005).

While similar to education in that it provides information to consumers, social marketing functions as an outlet of choice. Social marketing intends to influence the choices of consumers relative to behavior change. Social marketing is intended to facilitate the process among consumers of accepting and adopting or rejecting and abandoning specific behaviors (Grier and Bryant, 2005).

Primary theories behind social marketing include the health belief model, stages of change theory and social learning theory (Heimdinger and VanDuyn, 1995). The Health Belief Model attempts to explain, but also predict health behaviors by examining current attitudes and behaviors held by individuals. Further, it maintains that individuals will engage in specific health behaviors if in fact they feel that it will avoid a negative consequence, can identify a positive outcome associated with adopting the health behavior, and believe that they can actually adopt the behavior (Glanz, Rimer & Lewis, 2002).

Stages of Change Theory, also known as the Transtheoretical Model places individuals in a continuum of stages of readiness related to change (Prochaska, DiClemente & Norcross, 1992). Stages range from pre-contemplation to maintenance, with the ability to vacillate between stages as well. External variables, as well as internal variables can also affect the individuals' stage of readiness.

Exchange Theory (Social Learning theory) provides additional theoretical background related to the motivation for change. Exchange Theory maintains that participants act out of self-interest and must give up something (a particular behavior) in exchange for something else (the new behavior) (Grier & Bryant, 2005).

Successful social marketing programs have utilized these theories in combination with social marketing techniques to elicit long term health behavior changes. Examples include campaigns to reduce smoking rates, increase work place safety, increase physical activity among adolescents,

increase incidence of early detection of breast cancer through increased mammograms and others (Grier & Bryant, 2005).

Implications for Practice

Audience segmentation reinforces the concept that social marketing cannot be everything to everyone. Target audiences are imperative in documenting effective programming (Grier & Bryant, 2005). Consumer research functions as one of the most important aspects of social marketing, with an emphasis on understanding the needs of the target audience to maximize effectiveness of the program. Also considered are the perceptions of the product, benefits, costs and other factors that may serve as barriers to adopting the behaviors (Grier & Bryant, 2005).

Social marketing consists of the “four P’s”: product, place, promotion and price. In terms of health behavior changes, the product is the new behavior that health professionals would like consumers to adopt. In traditional or commercial marketing, the alternative to the product would be analyzed. In the case of social marketing, the competition is the behavior that is being exchanged for the new behavior. In social marketing, the product refers to the “set of benefits associated with the desired behavior or service usage” (Grier & Bryant, 2005, p. 323).

In commercial marketing, place refers to the location of goods or services that are purchased. In social marketing, place is in fact “where and when the target market will perform the desired behavior, acquire tangible objects or receive associated services” (Grier & Bryant, p.

323). This includes the actual physical location of the outlets for services, but also the hours the outlet is in operation, the attractiveness of the facility, and accessibility to the services. Organizations and people that may provide the services identified may also be included in consideration of place (Grier & Bryant, 2005).

Price refers to the “cost or sacrifice exchanged for the promised benefits” (Grier & Bryant, 2005, p. 323). The aspect of price couples with Social Learning Theory in that a consumer must give up a particular behavior in exchange for a new one. The price involved may refer to the financial cost of the behavior change, but also the social or emotional price, physical cost or other perceived sacrifice in exchange for benefits from adopting the new behavior.

Promotion consists of the communication mechanisms used to share the benefits of the product (intended behavior), as well as any associated goods and services associated with the product (Grier & Bryant, 2005).

Reasons for Inclusion in FSNE Work

The National 5 a Day Program has accomplished several key goals since its inception. Awareness of the 5 a Day message has increased from baseline survey data from 8% to 19% in a six year period (Heimendinger, Stables, Foerster and Pivonka, n.d.). Increases in skill development have influenced consumption increases reported by the program as well. In 1991, consumers

reported 3.75 servings per day, compared with 3.95 servings per day in 1997 (Heimendinger, Stables, Foerster and Pivonka, n.d.).

The USDA’s Food and Nutrition Service (FNS) that administers Food Stamp Nutrition Education (FSNE) programs indicates a commitment to “improving the nutrition and health of low-income Americans and to assisting in meeting the Healthy People 2010 nutrition and related objectives for the nation” (USDA, 2005, pg. 8). With the primary goal of the program to “improve the likelihood that persons eligible for the Food Stamp Program (FSP) will make healthy food choices within a limited budget and choose active lifestyles,” four core elements form a basic range of educational categories in FSNE (USDA, 2005, p. 8). Dietary Quality, Shopping Behavior/Food Resource Management, Food Security and Food Safety make up the four elements, as supported by educational efforts within each state.

Further, activities focused on health promotion and primary prevention of disease are maintained as a focus in FSNE programming (USDA, 2005, p. 13). This includes social marketing campaigns that are behaviorally focused, with science-based nutrition education interventions toward food stamp eligible. Given the history of effectiveness of social marketing programs in improving health behaviors, previous programs provide a framework for successful changes in behavior among various target populations, including limited income populations served by food stamps.

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