

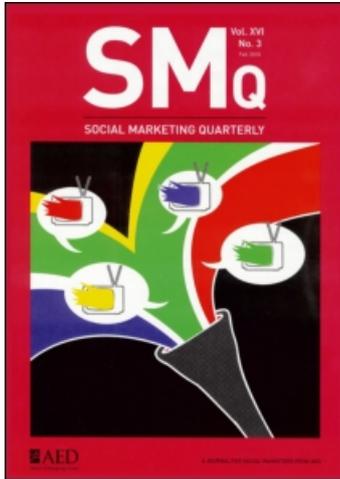
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Strategies for the Social Marketing Mix: A Systematic Review

BY NADINA RALUCA LUCA AND L. SUZANNE SUGGS

ABSTRACT

The marketing mix is a key component of social marketing providing one of the differential points in bringing about behavior and social change. There is a dearth of information regarding the strategies used for the mix in social marketing interventions. This systematic review identifies the strategies used in the social marketing mix, product, price, place, promotion, policy, and partnerships, and their associated outcomes, in health behavior change interventions. A systematic literature search was conducted for peer-reviewed articles published in English from 1990 to 2009 that reported social marketing interventions addressing disease prevention, cancer, heart disease, diabetes, HIV, STDs, reproductive health, physical activity, nutrition, and tobacco. Articles must have identified at least 3 of the Ps of the marketing mix, reported the evaluation, and met the 6 social marketing benchmarks criteria. Twenty-four studies describing 17 interventions met the inclusion criteria. The complete marketing mix was identifiable in 5 interventions. Strategies such as removing perceived barriers, using the Internet for placement, applying innovative promotion, involving communities, and supporting policies were identified as current practices. The results identified a number of strategies that showed potential for the marketing mix with important implications for practice.

Introduction

Since its introduction in 1971, social marketing has gained popularity as an innovative and effective consumer-oriented approach to promote behavior change and improved quality of life for individuals, groups, and society (Kotler

& Lee, 2008; Kotler & Zaltman, 1971). A key component of social marketing, providing one of its differential points, is the marketing mix. Previous systematic reviews and meta-analyses offer valuable information and evidence about the social marketing approach in nutrition, physical activity, substance misuse, tobacco, branding, and mass media interventions. Yet, there remains a dearth of information regarding the strategies used and the evaluation of the marketing mix (Evans, Blitstein, Hersey, Renaud, & Yaroch, 2008; Grilli, Ramsay & Minozzi, 2002; Snyder et al., 2004; Stead, Gordon, Angus, & McDermott, 2007).

The purpose of this systematic review is to examine strategies used in the social marketing mix and to report outcome trends. The focus is on interventions that aim to change behaviors related to nutrition, physical activity, diabetes, smoking, sexually transmitted infections (STDs), HIV, heart disease, and cancer. The diversity of marketing mix strategies is presented, highlighting current trends in strategies and outcomes. Finally, suggestions for future research and practice are presented.

Methods

Data sources and search strategy

A systematic literature search was conducted from March 1 to April 30, 2009, retrieving peer-reviewed articles published from 1990 to 2009. Bibliographic databases included the Cochrane Library, Wiley Interscience, Science Direct, PsycINFO, PubMed, Psychology and Behavioral Sciences Collection, Communication & Mass Media Complete, Library, Information Science & Technology Abstracts Publications, Communication Studies, Social Services Abstracts, Sociological Abstracts, ABI/Inform, Emerald Management Xtra, and JSTOR. Search terms included disease prevention, cancer, heart disease, diabetes, HIV, STD, reproductive health, physical activity, nutrition, tobacco, social marketing, health communication, health intervention, and health promotion. To identify additional literature, reference lists of retrieved articles were hand searched.

Selection criteria

Included papers must have been peer-reviewed, written in English, described social marketing health interventions published between 1990–2009, addressed one of the previously listed health topics, and met the six social marketing benchmarks (Table 1; Andreasen, 2002). They must have had identified at least three of the six Ps (product, price, promotion, place, policy, partnerships) and reported the

TABLE 1

Six Social Marketing Benchmarks^a

1. Behavior change	Clear focus on behavior, based on a strong behavioral analysis, specific behavior goals
2. Consumer research	Based on formative research to understand the consumer experiences, values, and needs. Intervention elements are pretested with the target group
3. Segmentation and targeting	Segmentation variables to select the target group; tailoring for the selected segments
4. Exchange	Incorporates an "exchange" analysis; understanding what the person has to give to get the benefits proposed; considers incentives, rewards, disincentives
5. Competition	Both internal (psychological factors, pleasure, desire, risk taking, addiction, etc.) and external (other influencers) competing forces to the behavior change are analyzed; strategies to remove or minimize the competition
6. Marketing mix	Complete marketing mix (product, place, price, promotion) and when required, adds partnerships and policy

^aAndreasen, 2002.

evaluation. Coding was performed by N. R. Luca and independently verified by L. S. Suggs. Cases of disagreement were resolved through discussion until consensus was reached.

Outcome measures

The intervention, target audience, marketing mix strategies, and outcomes were coded. Intervention effectiveness was evaluated in accordance with the Social Marketing Effectiveness Framework: awareness, engagement, behavior, social norm, and well-being (Varcoe, 2004; Table 2).

Findings

A total of 271 articles were retrieved, and 24 papers describing 17 interventions satisfied the inclusion criteria (Table 3). As several papers were published describing one intervention (i.e., six papers about the VERB campaign), these papers were grouped together and findings discussed according to interventions.

TABLE 2

Social Marketing Effectiveness Framework^a

LEVELS OF EFFECTIVENESS	CHANGES	RESULT	METHOD OF MEASUREMENT
Awareness	Increase in awareness of issue	Individual changes in awareness	Audience surveys
Engagement	Change of attitude, contemplation of behavior change	Behavior responses to the intervention, individual changes	Audience surveys, behavioral data
Behavior	Individual behavior change	Individual changes in behavior	Audience surveys, behavioral data
Social norm	Diffusion of the desired behavior change, sustainability, political environment (legislation)	Normative changes in attitude and behavior	Media, political tracking, observation
Well-being	Improvement in quality of life for both individuals and society	Change in social and environmental outcomes	Social report, environmental and epidemiological data

^aAdapted from Varcoe, 2004.

Social marketing mix strategies

The complete marketing mix (six Ps) was identifiable in four interventions (1, 2, 5, 9). The majority of interventions provided evidence for product, place, promotion, and partnerships.

Product

All interventions identified their product platform. Strategies included innovative positioning: fruit intake as energy booster (1), low fat foods as “cool” alternatives (3), diabetes control as a hopeful, positive product (7, 9), and changing the typical product (instead of “use a condom” to “rethink risks”) (15). Other strategies identified were overcoming competition (5, 6, 17), social norms (5, 6, 12, 17), use of theory to get people to stop smoking (16), and branding (5, 10, 12, 13, 16) (Table 4). Positioning the product as cool and appealing was a common strategy in nutrition and physical activity interventions that reported positive behavior change outcomes. Positioning, challenging people’s perceptions about the product, was also used in diabetes (7, 8) and HIV (15) interventions. Interventions that developed a complete brand reported that the high campaign (5, 10, 13) and

TABLE 3

Sample Characteristics: Interventions

ID	INTERVENTION	HEALTH TOPIC	PAPER
1	Energize Your Life!	Nutrition	Shive & Neyman Morris, 2006
2	LEAN	Nutrition	McDermott et al., 2005
3	Low-fat milk selection in schools	Nutrition	Wechsler, Basch, Zyber, & Shea, 1998
4	Food Friends	Nutrition	Young, Anderson, Bechstrom, Bellows, & Johnson, 2004; Johnson, Bellows Bechstrom, & Anderson, 2007
5	VERB	Physical activity	Wong et al., 2004; Berkowitz et al., 2008; Berkowitz, Huhman & Nolin, 2008; Huhman et al., 2007; Price, Huhman, & Potter, 2008; Heitzler et al., 2008
6	Get Up and Do Something	Physical activity	Peterson, Abraham, Waterfield, 2005
7	Control Your Diabetes. ForDiabetes Life		Gallivan, Lising, Ammary, & Greenberg, 2007
8	Thunder and Lightning and Rain	Diabetes	Almendarez, Boysun, & Clark, 2004
9	Move More Diabetes	Diabetes	Richert, Webb, Morse, O'Toole, & Brownson, 2007
10	Heart Truth	Heart disease	Long et al., 2008
11	Style: Doing the right thing	STDs	Wackett, 1998
12	The Healthy Talk	STDs & family planning	Cho, Oehlkers, Mandelbaum, Edlund, & Zurek, 2004
13	The Healthy Penis	STDs	Montoya et al., 2005; Ahrens et al., 2006

(Continued)

TABLE 3

Continued

ID	INTERVENTION	HEALTH TOPIC	PAPER
14	HIV. Live with it. Get Tested!	HIV	Futterman et al., 2001
15	Think Again	HIV	Lombardo & Léger, 2007
16	Listening to reason	Smoking cessation	De Gruchy & Coppel, 2008
17	I am the owner of me	Smoking prevention	Schmidt, Kiss, & Lokanc-Diluzio, 2009

issue (10) awareness (81%, 61%, 85%, and 57%) was also influenced by the branding mechanism.

Price

The price mix component was reported in 13 interventions (Table 5). Price strategies in nutrition interventions included lowering the price (1, 4) and providing data on the cost benefits of healthy eating (1, 2). Lowering the price was a common price strategy also in STDs (12, 13) and HIV interventions (14) that provided free testing and alternative testing sites (14) together with minimizing barriers: reducing the inconvenience of testing and providing confidentiality (13, 14) and social support (12). Diabetes interventions also aimed to provide social support to reduce the social costs of behavior change (a peer group, involving families) (7, 9) and financial help to increase access to tests and medical assistance (7). Emphasizing the benefits of the exchange and social norms was a common strategy for physical activity (5, 6) and smoking cessation/prevention interventions (16, 17).

Place

All interventions reported their place mix. The most common strategies were using locations frequented by the audience (schools, malls, bars, transit locations, worksites) and existing distribution channels (religious, community centers, health agencies) to increase access (1–6, 7, 9, 12–14, 16) and make locations more appealing (5, 9, 14). The Internet was used in five interventions; as a location for trainings, workshops, lectures, and conferences (increase access) (2), as worksite

TABLE 4

Product

INTERVENTION	PRODUCT STRATEGY
1	Positioning: fruit = energy booster; help with weight-loss efforts
2	Positioning: linking nutrition with academic achievement, improved attendance
3	Positioning: low-fat milk = good tasting, "cool" alternative
4	Positioning: new foods = fun and tasty
5	Branding: VERB; consider competition; social norms
6	Consider competition: sedentary activities; social norms
7	Positioning: diabetes control = hopeful, positive product
8	Positioning: diabetes control = positive product
9	Consider competition: peer support network
10	Branding: the Red Dress = women's heart disease brand
11	Theory: Information Motivation Behavioural Skills Theory = informative, easy
12	Branding: the Healthy Talk = brand identity for family planning; social norms
13	Branding: the Healthy Penis for syphilis control
14	Positioning: HIV testing is safe, friendly, free
15	Positioning: rethink risks
16	Branding: NHS (National Health Service) brand for stop-smoking service; consider competition: internal and external
17	Social norms: denormalize tobacco

program (7), as an alternative site for testing (overcome psychological barriers) (13), and to engage the audience with the program (5, 9) (Table 6). One HIV intervention used special events to place the product and make it available to the audience (14). A similar place strategy, used in a physical activity intervention (5), brought the product closer to the audience by using any location where physical activity could take place (Wong et al., 2004).

TABLE 5

Price

INTERVENTION	PRICE STRATEGY
1	Lower the costs; exchange of benefits: providing data on the cost-benefits of healthy eating
2	Exchange of benefits: emphasis on the right price, providing data on the cost-benefits of healthy eating
4	Lower the costs: free program; exchange of benefits: new foods are fun, enjoyable
5	Exchange of benefits: benefits outweigh costs; minimize barriers: providing the "active zone," physical activity = fun, time with friends, peers approve
6	Exchange of benefits: emphasis on physical activity = looking good, having fun
7	Financial support: partnership with Medicare; social support: tips for family and friends
9	Social support: nondirective peer support
12	Minimize barriers: addressing the psychosocial barriers to sexual health, not sexual behavior per se; social support
13	Minimize barriers; lower the costs; financial support: free testing, new gay men health clinic; social support: alternative testing sites (online)
14	Lower the price: youth-friendly HIV testing; financial support: free testing; minimize barriers: less threatening testing technologies (saliva and urine antibody testing); Social support: confidentiality
15	Exchange of benefits: emphasize the link between unprotected sex and HIV transmission
16	Exchange of benefits: losing weight, financial savings, being fitter, more free time
17	Exchange of benefits: social norms

Promotion

Promotion was the mix component most thoroughly described in interventions. Strategies were categorized according to message, creative strategy, messengers, other strategies, and communication channels (Table 7). For message strategies

TABLE 6

Place

INTERVENTION	PLACE STRATEGY
1	Setting based: campus
2	Setting based: schools; frequented locations: home; internet: e-mail, online conference
3	Setting based: school
4	Setting based: schools; frequented locations: home
5	Frequented locations: parks, schools, community fairs; existing distribution channels: public/private sports, youth, church organizations; Internet: VERB coolness sheet
6	Frequented locations: transit locations; media channels
7	Frequented locations: workplace; existing distribution channels: national and local partners; Internet: diabetes at work web resource
8	Frequented locations: restaurants, bakeries, laundries; existing distribution channels: public health clinics
9	Frequented locations: work sites; existing distribution channels: health agencies, faith and community settings; Internet: e-mail service
10	Frequented locations: recreational sites, workplace; existing distribution channels: health agencies, faith organizations
11	Frequented locations: restaurants, retailers, community settings; existing distribution channels: clinics
12	Transit locations; existing distribution channels: family planning centers
13	Frequented locations: bars, sex venues; existing distribution channels: clinics; internet: websites for meeting partners
14	Frequented locations: schools, recreation sites; existing distribution channels: community-based, youth and health agencies
15	Frequented locations: clubs, bathrooms, condom package

(Continued)

TABLE 6

Continued

INTERVENTION	PLACE STRATEGY
16	Frequented locations: transit locations, bars; existing distribution channels: quitting service
17	Frequented locations: schools, recreational sites, community settings; existing distribution channels: school programs

(content, message type, and pretesting) positive, one-sided messages that focused on benefits of the behavior were predominant. Pretesting was also common for 13 interventions (1, 2, 4–7, 11–17). Targeted communication was used in eight interventions aiming to reach groups through culturally and linguistically sensitive messages (2, 4, 5, 10, 11, 14–16). Tailored communication was mentioned as creating messages for ethnic groups (5, 10), electronic mail messages (2), and culturally tailored messages and materials (7). Creative strategy reported on message appeals focused on empowering the audience (7, 9, 10, 17), providing a call to action (8, 10), presenting appealing images (6), and using a motivational tone (10, 16). Narrative messages were used in four interventions (8, 10–12). Humor was used to target children (3) and gay and bisexual individuals (13).

Messenger strategy examples were provided by eight interventions. Six had audience members serve as messengers (2, 4, 7, 9, 14, 17). Using messengers was an effective strategy in generating a high degree of community mobilization with effects on message dissemination in one HIV intervention targeting youth (13) but also in other interventions. A heart disease prevention program targeting women (10) and a physical activity campaign targeting tweens (5) used spokespersons and celebrities to endorse the brand. Also, the use of messengers created supplementary brand equity and increased the awareness of the brand and of the campaign itself (5, 10). Messengers were effectively used in diabetes interventions (7, 9), not only as message disseminators, but also as a social support network.

Other strategies included experiential marketing, countermarketing, and branding elements. Countermarketing was used by a smoking prevention program that targeted youth (17). Experiential marketing strategies were used in nutrition and physical activity interventions targeting children (3, 4, 5) and students (1), including events where the audience sampled the “product” (new foods, low-fat milk, fruit smoothies) (1, 3, 4) and by using existing community-based events and “street teams” to promote physical activity (5).

TABLE 7

Promotion

INTERVENTION	PROMOTION			
	MESSAGE	CREATIVE STRATEGY	MESSENGEES	OTHER
1	One sided, Pretesting	Positive appeals	Experiential marketing	Mass media: print; Interpersonal: direct mail, personal selling
2	One sided, Tailoring, Targeting, Pretesting	Positive appeals: intellectual, call to action	Spokespersons, health expert, school food service staff, parents	Mass media: print, social media (website, listservs); Interpersonal: personal selling
3	One sided	Positive appeals: humorous, teasing	Experiential marketing; slogan	Mass media: print; Interpersonal: special events (interactive games), personal selling
4	One sided, Targeting, Pretesting	Positive appeals: fun	Parents; teachers	Mass media: print, popular media (song, characters); Interpersonal: personal selling
5	One sided, Pretesting	Positive appeals: motivating, cool, fun, appealing visuals	Parents, teachers, spokespersons	Mass media: print, paid media advertising (TV), radio, Internet, social media (SMS, website), popular media (songs); Interpersonal: special events, personal selling

6	One sided, Tailoring, Targeting, Pretesting	Positive appeals: fun	Logo; slogan	Mass media: cable network, outdoor advertising (bus wrap, billboards)
7	One and two sided, Tailoring, Pretesting	Positive appeals	Partners Logo	Mass media: print; Internet, national, state, local channels; Interpersonal: personal selling, special events
8	One sided	Positive appeals: narrative	Slogan: from a national campaign	Mass media: print; radio, live interviews, call-in shows; Interpersonal: personal selling (toll-free line)
9	One sided	Positive appeals	Lay Health Educators, health care providers	Mass media: print; website, e-mail Interpersonal: personal selling, word of mouth
10	One sided, Tailoring, Targeting	Negative appeals: call to action, strong emotional tone	Spokespersons and ambassadors (public figures) Branding	Mass media: print, PSAs, popular media (video), social media (You Tube, Flickr) Interpersonal: special events
11	One and two sided, Pretesting	Positive appeals: informative, narrative		Mass media: print, radio, outdoor advertising
12	Two sided, Tailoring, Targeting, Pretesting	Positive appeals: narrative	Branding; logo	Mass media: print, radio, outdoor advertising, transit cards
<i>(Continued)</i>				

TABLE 7

Continued

INTERVENTION	PROMOTION			
	MESSAGE	CREATIVE STRATEGY	MESSENGERS	OTHER
13	One sided, Pretesting	Positive appeals; informative, humorous		Branding
				Mass media: print, outdoor advertising, popular media (cartoon strips); Interpersonal: special events
14	One sided, Targeting, Pretesting	Positive appeals: informative, easy language, appealing to youth	Youth, adult influencers	
				Mass media: print, radio, paid advertising (transit, outdoor, MTV), websites [Interpersonal: personal selling, special events]
15	One sided, Targeting, Pretesting	Sexual appeals: appealing graphics, explicit phrases, dramatic, erotic tone		Logo
				Mass media: print, outdoor adds, national website
16	One sided, Targeting, Pretesting	Positive appeals: supportive tone		Brand association
				Mass media: print, outdoor advertising, website
17	One sided, Pretesting	Positive appeals: empowering tone	Youth	Counter-marketing
				Mass media: print, PSAs, radio, website

Branding efforts included developing a logo and slogan (4, 7, 12) or a brand through a wide range of communication channels (5, 10, 13). Branding guided promotion of a STD focused intervention (targeting men who have sex with men) resulting in 85% brand awareness for Healthy Penis (13) two and a half years after the campaign (Montoya et al., 2005). Another STDs intervention (targeting youth) used branding elements such as logo and theme but reported unsatisfactory results of the Healthy Talk brand (12). The heart disease brand, “The Heart Truth” (10), was marketed through various channels, increasing campaign awareness and reinforcing the message (Long, Taubenheim, Wayman, Temple, & Ruoff, 2008).

All interventions reported the communication channels used for promotion. Print was used in all interventions, radio in seven (5, 7, 8, 11, 12, 14, 17), outdoor and/or out of home advertising in seven (6, 11–16), personal selling in nine (1–5, 7–9, 14), social media in three (2, 5, 10), websites in 10 (2, 5, 7, 9, 10, 13–17), popular media, such as cartoon characters (3, 4, 13), songs (5), video (10), and word of mouth (9) in six. Strategies such as popular media and social media were used for various target audiences in different settings. For example, popular media (character developing, songs, games) was employed in a nutrition intervention targeting children (3) and in a STD intervention addressed to men who have sex with men (13), both studies suggesting a positive reaction to this communication channel. Social media was a useful communication channel for a nutrition intervention (2) in reaching school board members and tweens in a physical activity intervention (5). Combining social media, special events, and paid media advertising were associated with a high level of awareness of the campaign (5) (Wong et al., 2004).

Policy

The policy mix component was reported in four interventions (1, 2, 5, 9) (Table 8). One setting-based nutrition intervention reported changing the policy of the food service department on a college campus, which introduced fruit in vending machines and fruit cups as a substitute for french fries (1). Another nutrition intervention made policy change its primary goal, resulting in healthier nutrition policies in 10% of California’s school districts (2). Physical activity (5) and diabetes (9) intervention policy strategies included working upstream with communities and involving partners to generate and maintain structural change. The diabetes intervention aimed to “normalize” the disease and emphasized a support network resulting in a sustainable lay health educators (LHE) network (9).

TABLE 8

Policy

INTERVENTION	POLICY
1	School level: policy regarding fruit availability on campus
2	School level: nutrition policy change campaign; School district level: soda ban bill in public schools, nutrition policies on the public agenda
5	Community level: working upstream with communities and youth organizations
9	Community level: working with the community

Partnerships

The majority of interventions reported using partnerships that served a wide range of purposes. These included: ensure campaign support (setting-based interventions) (1, 2, 4), disseminate the message and help promotion (regional and national campaigns) (5, 7, 14, 15), attract supplementary funds (10, 15), develop networks to help implement the campaign and provide human and knowledge resources (7, 14), and gain insight and support from the community with the aim of generating sustainable behavior change (5, 9, 12–14). The most frequent type of partnership, identified in nine interventions (1, 2, 5, 7–10, 13, 14), was with community-based organizations. Other strategies included partnering with schools (1–5, 11), health services through health providers and health educators (7, 9, 12, 14), media (5, 10, 14), and industry representatives (1, 5, 10) (Table 9).

Evaluation

Nine interventions used a post-test design: three randomized surveys (8, 9, 12), two intercept surveys (13, 15), two nationally representative surveys (7, 10), one cluster and convenient sample (6), and one convenient sample (16). Eight interventions used pre-/post-test designs (1–5, 11, 14, 17) including one that used a web survey (17), one cohort design longitudinal survey with representative samples (5), three quasi-experimental studies, including one cross-sectional (1), one that used single groups (11), one control and experimental groups (4), and one cross-sectional street survey (14). Evaluation was designed and/or carried out by an independent agency in three interventions (2, 5, 10). Most articles reported outcomes listed in the Social Marketing Effectiveness Framework described in Table 3 (Table 10).

TABLE 9

Partnerships

INTERVENTION	PARTNERSHIP STRATEGIES
1	Schools: campus administration; community; industry
2	Public agencies: regional, other nutrition programs, funders; community-based organizations; industry
3	Schools
4	Public agencies; Nonprofit health agencies; schools; Industry
5	Public agencies; media; community; schools; industry: sports league
7	Public agencies; community-based organizations; industry (200 organizations in total)
8	Public agencies: National Diabetes Education Program coalitions; community; health services: clinics
9	Community: coalitions; health services: health care providers; nonprofit: volunteers, social support networks
10	Media; community; nonprofit; industry: fashion, food; (Partnership-based campaign [>100])
11	Schools
12	Health services: family planning providers, health educators – advisory group; health agencies
13	Community: advisory board
14	Health services; community: coalitions of public and private community-based agencies; industry: LIFEBeat, the Music Industry Fights AIDS; Media
15	Public agencies: regional, Health Canada, additional agencies
16	Public agencies; industry; nonprofit agencies
17	Media; health agencies

Awareness and engagement

The interventions reflected a high degree of campaign awareness with some exceptions, such as the smoking cessation program (23.2%) (16) and a diabetes program (11%) (9). Two STD interventions showed increased knowledge about the issue (11, 13). Five studies reported attitude and intention changes with a positive association between campaign awareness and audience perceptions and intentions; STD (12, 13), HIV (15), physical activity (5), and heart disease (10).

TABLE 10

Mix Strategy and Evaluation

ID	MARKETING MIX STRATEGY							EVALUATION				LINKING MIX STRATEGIES & OUTCOMES ^a
	PRODUCT	PRICE	PLACE	PROMOTION	POLICY	PARTNERSHIPS	METHODS	AWARENESS KNOWLEDGE	ENGAGEMENT (ATTITUDE & BEHAVIOR CHANGE)	BEHAVIOR CHANGE	SOCIAL NORM	
Nutrition												
1	Positioning: Lower the price; exchange of benefits	Setting-based	One-sided message; pretesting; positive appeals; experimental marketing; mass media; interpersonal	School level	Schools; community; industry	Pre/post-test; Cross-sectional; quasi-experimental	72.30%	Unchanged	Significant increase in fruit intake, -0.1 (Post 1 d) vs 0.4 (Post C 1) ($p < .05$, $p < .01$)	Campus cafeteria policy change	N/A	Partnerships: important role in policy adoption
2	Positioning: Exchange of benefits	Setting based; frequented locations; Internet	One-sided message; targeting; pretesting; positive, appeals; messengers; mass media; interpersonal	School level; school district level	Public agencies; community; Industry	Pre/post-test; Independent external evaluator	High media coverage	N/A	Statistically significant ($p \leq .05$) board support improve up to 12%, 14.2%, 14.7%, 11.8% ($p \leq .05$)	Healthier nutrition policies (10% of California's unified school districts)	N/A	Augmented product: important resources for the audience; Internet (place) associated with successful dissemination of information; messengers: became valuable partners; partnerships: important role in policy adoption

3	Positioning	N/A	Setting-based	One-sided message; positive appeals; experiential marketing; slogan; mass media; Interpersonal	N/A	Schools	Pre/post-tests	N/A	N/A	25% to 57% in intervention schools; 3 months later: decrease from 57% to 49% (F = 183.80, df = 1, p = .047)	N/A	N/A	Positioning: possible factor for positive outcomes; experiential marketing; potentially positive impact
4	Positioning	Lower costs; exchange of benefits	Setting based; frequented locations	One-sided message; targeting; pretesting; positive appeals; messengers; experiential marketing; branding; mass media; interpersonal	N/A	Public agencies; nonprofit health agencies; schools; industry	Pre/post design; quasi-experimental design; monitoring	N/A	N/A	Experimental group vs control group: $p < .08$ (liked foods) vs $p < .10$ (disliked foods)	N/A	N/A	Positioning: possible factor for positive outcomes; pretesting; emphasized importance; experiential marketing; a key aspect
Physical activity													
5	Branding: consider competition social norms	Exchange of benefits; minimize barriers	Frequented locations; existing distribution channels; Internet	One sided message; pretesting; positive appeals; messengers; branding; experiential marketing; mass media; interpersonal	Community level	Public agencies; media; community; schools; Industry	Longitudinal study (after the first 2 years); cohort design; nationally representative samples; independent evaluator	Children: 81% parents; significant differences (2002-2005) $p < .01$	Parents: improved attitudes, beliefs, and support for tweens' physical activity	Statistically significant ($p < .05$) dose-response effect of exposure to VERB	Positive psychosocial effects	N/A	Messengers: increased exposure; branding: increased awareness; experiential marketing: positive reaction
6	Consider competition; social norms	Exchange of benefits	Frequented locations; media channels	One-sided message; targeting; pretesting; positive appeals; slogan; logo; mass media	N/A	N/A	Post-test; cluster and convenient sampling	62.5% ($\pm 5\%$)	27.7% intended to be more active	N/A	N/A	N/A	Positive appeals: suggested to have an important role

(Continued)

TABLE 10

Continued

ID	MARKETING MIX STRATEGY				EVALUATION				LINKING MIX STRATEGIES & OUTCOMES ^a				
	PRODUCT	PRICE	PLACE	PROMOTION	POLICY	PARTNERSHIPS	METHODS	AWARENESS KNOWLEDGE		ENGAGEMENT (ATTITUDE & BEHAVIOR CHANGE)	SOCIAL NORM	WELL-BEING	
7	Positioning	Financial and social support	Frequented locations; existing distribution channels; Internet	One-and-two sided message; tailoring; pretesting; positive appeals; messengers; logo; mass media; interpersonal	N/A	Public agencies; community; Industry	Post-test; national surveys with diabetic people; consumer panel study	58% (people with diabetes); 30% (general public)	N/A	Daily blood glucose testing increased; 39% (1997) to 55% (2002); A1C test increased	Positive trends in glucose testing	N/A	Existing distribution channels; associated with higher campaign exposure messengers; higher exposure Pretesting; reported as potential factors for success; partnerships; expanded the reach and exposure of the campaign
8	Positioning	N/A	Frequented locations; existing distribution channels	One-sided message; positive appeals; slogan; mass media; interpersonal	N/A	Public agencies; community; health agencies	Post-test; telephone survey 2 weeks post-campaign; random sample	32.7%; 75% of those with diabetes	111 (out of 750 targeted) calls made to the toll-free line	27% reported they took action	N/A	N/A	Slogan from a national campaign; increased awareness partnerships; higher dissemination
9	Consider competition	Social support	Frequented locations; existing distribution channels; Internet	One-sided message; positive appeals; messengers; mass media; interpersonal	Community level	Community coalitions; health services; non-profit	Post-test; randomized telephone survey 2 years post-campaign; monitoring changes of health behavior [Behavioral Risk Factor Surveillance System]	11%	N/A	2000-2005: increased physical activity	Sustainable volunteer Health Educators network	N/A	Social support; important factor

Heart disease													
10	Branding	N/A	Frequented locations; existing distribution channels	One-sided message; tailoring; targeting; negative appeals; messengers; branding; mass media; interpersonal	N/A	Media; community; industry; nonprofit	Post-test: nationally representative sample	34% in 2000; 45% would talk to their doctor and/or get a check-up (brand)	57% in 2006 (message); 25% in 2000; 61% in 2006 (brand)	Increased action to lower personal or family risk (lifestyle, visits to the doctor)	N/A	Decline of heart disease deaths among women	Branding: increased awareness; partnerships: extended reach
STDs													
11	Theory	N/A	Frequented locations; existing distribution channels	One-and-two sided message; pretesting; positive appeals; mass media	N/A	Schools	Pre-/post-test	53%	29.9% to 49.5%; $p < .0001$	Increased number of screening tests by 15% from previous year; no change regarding safer sex practices	N/A	N/A	Partnerships: increased exposure to the message
12	Branding	Minimize barriers; social support	Frequented locations; Existing distribution channels	Two-sided message; tailoring; targeting; pretesting; positive appeals; branding; logo; mass media	N/A	Health agencies; health services	Post-test; No control group; pilot evaluation	N/A	Positive association between exposure to messages and target audience's attitude and intention regarding the importance of talking with their partner about sex	Positive association between exposure to messages and target audience's self-reported behavior (talk about sex with their partner)	Social norm not created	N/A	Partnerships: linked with positive outcomes

(Continued)

TABLE 10

Continued

ID	MARKETING MIX STRATEGY						EVALUATION				LINKING MIX STRATEGIES & OUTCOMES ^a		
	PRODUCT	PRICE	PLACE	PROMOTION	POLICY	PARTNERSHIPS	METHODS	AWARENESS KNOWLEDGE	ENGAGEMENT (ATTITUDE & BEHAVIOR CHANGE)	SOCIAL NORM		WELL-BEING	
13	Branding	Financial & social support; minimize barriers; lowering the costs	Frequented locations; existing distribution channels; Internet	One-sided message; pretesting; positive appeals; branding; mass media; interpersonal	N/A	Community	Post-test design: 80% intercept survey of a convenience sample	6 months post-campaign and 85% 2.5 years post-campaign start	Knowledge increased; $p < .05$	6 months post-campaign: 42% of those aware of the campaign had a syphilis test in the last 6 months; 2.5 years later: 49%; $p = .009$	N/A	It might have contributed to lower syphilis incidence	Branding: increased exposure
HIV prevention													
14	Positioning	Lower the price; financial support; minimize barriers; social support	Frequented locations; existing distribution channels	One-sided message; targeting; pretesting; positive appeals; messengers; mass media; interpersonal	N/A	Health services; non-profit; community; industry; media	Pre/post-test: cross-sectional street surveys in New York City (during 6 months)	Message: from 68% to 90% after Get Tested Week	N/A	2774 phone calls; HIV tests: 462 during Get Tested Week, from the baseline average of 86; 3737 tests	N/A	N/A	Messengers: engaged the audience; partnerships: it acknowledged the importance of involving communities
15	Positioning	Exchange of benefits	Frequented locations	One-sided message; targeting; pretesting; sexual appeals; mass media	N/A	Public agencies; health agencies	Post-test: random intercept surveys of 417 men from "gay spaces"	79%	76% to rethink the sex they had	48% changed something about their sex practices (2,5039, 95% CI: 1,3012-4,8184, $P = .005$) ^b	N/A	N/A	Importance of product platform; positioning: more likely to attract the audience; pretesting: emphasized importance

Smoking cessation													
16	Branding; consider competition	Exchange of benefits	Frequented locations; existing distribution channels	One-sided message; targeting; pretesting; positive appeals; brand association; mass media	N/A	Public agencies; industry; nonprofit	Post-test; sample: the stop smoking service clients	23.2%	N/A	Modest impact on behavior (12 out of 116 clients would try quitting)	N/A	N/A	Pretesting; not prioritized enough
Smoking prevention													
17	Social norms	Exchange of benefits	Frequented locations; existing distribution channels	One-sided message; pretesting; positive appeals; messengers; counter-marketing; mass media	NA	Media; health agencies	Pre-/post-campaign web surveys (149 students)	60%	Little change in attitudes; experimenting respondents more likely to counsel others not to smoke	Absence of significant behavior change ($p < .05$)	N/A	N/A	Messengers; engaged the audience
<p>N/A = data not available. ^aMix element and outcome association stated in study. ^bTrussler & Marchand, 2005.</p>													

Behavior change

Short-term behavior change outcomes were reported in all nutrition interventions (1–4). STDs and HIV interventions showed an increase of number of screening tests by 15% (11), 462 HIV tests from baseline of 86 (14), and 49% of those aware of the campaign had a syphilis test two and a half years after the campaign launch (13). Medium and long-term behavior change outcomes were reported in diabetes prevention and control programs showing an increase of blood glucose tests from 39% to 55% in five years (7) and increased physical activity and participation rates in diabetes self-management programs (9). Smoking cessation and prevention interventions had no significant behavior change (16, 17). One physical activity intervention (5) showed a statistically significant effect on physical activity ($p < .05$) two years after the campaign launch. In “The Heart Truth” campaign, awareness of heart disease was associated with behavior change consisting of increased action to lower personal or family risk, lifestyle changes, and physician visits (10).

Social norm

Six interventions reported social norm outcomes, defined as “normative changes in attitude and behavior” (Varcoe, 2004, p. 5). One STDs and family planning intervention reported that the desired social norm had not been created (12). A physical activity intervention indicated possible psychosocial effects as social influences and self-efficacy (5). One diabetes program created a sustainable volunteer (LHE) network (9) and another reported positive behavioral trends (7). Two nutrition interventions (1, 2) created and implemented policies to support behavior change.

Well-being

Well-being level, measured by “the change in social and environmental outcomes” assessed with both environmental and epidemiological data, is more likely to be achieved by more mature campaigns (Varcoe, 2004, p. 5). Only two of the 17 interventions reported use of epidemiological data. The heart disease intervention (10) suggested that it may have contributed to the decline of heart disease related deaths among women and a STD intervention (13) may have contributed to a lower incidence of syphilis cases. Although other interventions could have contributed to well-being, lack of data does not allow for clear classification of this outcome.

Implications for Social Marketing

This systematic review reports strategies for developing a social marketing mix that can contribute to an intervention’s positive outcomes. The limitations of

the evaluations and the lack of specific indications about the marketing mix made it difficult to quantifiably link mix strategies with intervention outcomes. However, several study authors suggested relationships between certain mix strategies and outcomes (3–7, 9, 10, 12, 13, 15).

Practices in product strategies identified as likely to receive a positive response included using a complete product platform (actual, core and augmented products) (2, 15) and strong positioning (2, 3, 5, 10, 13, 15) that considered competition (5, 6, 10, 15) and branding (5, 10, 13). Price strategies that focused on lowering the price (1, 4, 7, 9, 13, 14), removing or minimizing the inconvenience of adopting the desired behavior (12, 13, 14), and providing support (social and financial) (1, 4, 7, 9, 13, 14) for the target audience to remove barriers might have contributed to intervention outcomes. However, there is no specific information reported in these studies regarding the impact of a certain price strategy on intervention outcomes. Increasing access to the product through special, community-based events and existing distribution channels, as well as using the Internet, show promise as place strategies in physical activity (5), diabetes (7, 9), and HIV-prevention (14) interventions.

Strategies such as branding and experiential marketing can reach people in the promotion efforts. Branding aims to build an identity for the intervention and reinforce its messages. This can lead to increased campaign awareness and normalizing healthy alternatives, which may have an impact on behavior (5, 10, 13). Experiential marketing creates the opportunity for the individual to try and experience the actual product, giving the impression of tangibility and removing other barriers. This strategy was tested in physical activity and nutrition interventions that targeted youth and children (1, 4, 5), aimed to reach smaller audiences but with higher personal involvement by the target audience (Heitzler, Asbury, & Kusner, 2008).

Certain communication channels were indicated as successful in reaching different publics and settings, providing promotional alternatives for future interventions. Examples included popular media for children (4, 5) and men who have sex with men (13), and also social media (5, 10), Internet (2, 5, 7, 10, 13), paid media advertising (5, 14), special events (3, 5, 10, 13, 14), and personal selling (2, 3) for various audiences. The findings also suggest that the use of messengers (public figures, individuals from the target audience) may increase campaign exposure (5, 10, 14) and engage the audience in the implementation of the campaign (14).

The data reveal that the majority of campaigns used one-sided, positive-themed messages and received favorable responses from their audience (2–5, 10, 13–15). However, there was some evidence that fear appeals might be

appropriate for tobacco or heart disease (17, 10). Most authors called for the need to tailor communication to groups (2, 7, 10, 12). However, existing evidence suggests that individually tailored communication is more effective (Krebs, Prochaska, & Rossi, 2010; Noar, Benac, & Harris, 2007), which would be important to test in future research. Additionally, pretesting messages clearly provides valuable information on the public reaction to messages before the campaign is launched (4, 7, 15, 16).

Limited data on policy development and its implications make it difficult to assess the effectiveness of policy strategies. However, some trends emerged. Some interventions successfully included policies or policy support to work with communities and institutions to support behavior change (1, 2, 5, 9). Social marketers might consider the integration of policy component in interventions to facilitate and sustain behavior change and then report their findings. Certainly, more research in the policy mix platform is warranted.

A promising trend in partnerships showed that upstream efforts could be sustained (1, 2, 5, 7, 9, 10, 14). Those interventions reporting upstream efforts at partnership building resulted in having positive outcomes, acknowledging their important role during the process (1, 2, 7, 9–12, 14). Engaging community-based organizations in the implementation and design of the campaign (1, 2, 5, 7, 9, 10, 14), partnering with industry (1, 2, 5, 7, 10) and schools (1–5, 11), and creating networks of non-profit and public agencies (2, 7, 10, 14, 15) can provide valuable resources for reaching larger audiences and creating necessary infrastructures. Yet, better reporting on partnership development is needed to best understand how partnerships work and their associated outcomes.

The findings of this systematic review emphasize the need for more rigorous evaluation designs that test the impact of strategies on outcomes. Moreover, behavioral outcomes need to be measured and reported. Conducting more rigorous studies could extend the evidence base for future interventions, resulting in the development and implementation of more effective interventions.

Research limitations

Only English-language papers were included, which consequentially had an impact on the geographical map of the data. The mix strategies were not always clearly labeled in papers, increasing the risk of miscoding them. Methodological limitations of evaluation designs in some studies made it difficult to associate outcomes with campaign effects. Finally, this review included a specific set of health topics, neglecting many other papers that could provide meaningful insight.

Conclusion

The results of this systematic review indicate a variety of strategies used to develop the marketing mix with certain trends. Strategies such as positioning, and competition for product, lowering the costs and removing perceived barriers for price, using frequented locations and existing distribution channels for placement, innovative promotion, involving communities, and supporting policies were trends in current practices. However, in some cases, the data on mix development were scarce. There is a need for authors to more fully describe how each component of the mix was developed. Despite this, the results reveal resourceful trends in strategies used successfully for developing each component of the marketing mix. Future research should further investigate the application of these strategies in different settings.

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