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This paper describes the initial steps in target market segmentation and evaluation as part of an industry-linked research project to develop a social marketing program for sun protection. The Project Reference Group developed a set of segmentation evaluation criteria based on recommendations from marketing and health promotion literature, as well as adding criteria specifically relevant to the industry partner. The process enabled an informed, representative and defensible selection of a primary target market as an initial starting point for further target market research and segmentation. It also demonstrated that bridging terminology from the fields of marketing and health promotion as well as including context-specific evaluation criteria can enhance target market segmentation in social marketing.

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Using Market Segmentation Theory To Select Target Markets For Sun Protection Campaigns

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Abstract

This paper describes the initial steps in target market segmentation and evaluation as part of an industry-linked research project to develop a social marketing program for sun protection. The Project Reference Group developed a set of segmentation evaluation criteria based on recommendations from marketing and health promotion literature, as well as adding criteria specifically relevant to the industry partner. The process enabled an informed, representative and defensible selection of a primary target market as an initial starting point for further target market research and segmentation. It also demonstrated that bridging terminology from the fields of marketing and health promotion as well as including context-specific evaluation criteria can enhance target market segmentation in social marketing.

Introduction

This project, funded by an ARC Linkage Grant, provides the opportunity to synthesise and apply best evidence from research in marketing, mass media communication, and health behaviour change real-life campaigns for a leading industry partner, The Cancer Council NSW (TCCN). This paper reports on phase one of the development of the research plan for this project – the selection of the target audience.

Social marketing has successfully borrowed many concepts and techniques from the commercial world. While there are some important caveats on the application of marketing knowledge to social marketing, a thorough understanding of the theory and practice of social marketing is an essential foundation for the development of communication campaigns aimed at changing the community's health-related behaviour. However, many organisations conducting health behaviour campaigns in Australia, and elsewhere in the world, do not adequately consider these factors in the development of their campaigns – thus the tendency for the campaigns to underperform.

Skin cancer in Australia

Australia has the highest incidence of skin cancer in the world. Skin cancer is the most common form of cancer in Australia, with incidence rates outnumbering all other forms of cancer by more than 3 to 1. Each year around 380,000 people are diagnosed with skin cancer and around 1300 people die from it. Skin cancer is one of the most costly cancer burdens to the health system, with an estimated \$420 million each year spent on diagnosis and treatment (Australian Institute of Health and Welfare and Australasian Associations of Cancer Registries, 2003). Skin cancer is one of the most preventable of cancers, with protection from exposure to UVR as the primary means of prevention. Sun protection campaigns and programs run over the past twenty years are beginning to impact on incidence and mortality rates, however, a recent survey found that there is still a tendency to view suntans as healthy or desirable and there is still room for improvement in sun protective behaviours (Centre for Behavioural Research in Cancer, The Cancer Council of Victoria, 2005). Changing the attitude, knowledge and behaviour of people about sun exposure and tanning is key to reducing the incidence of skin cancer in Australia.

Market segmentation

Social marketing offers a consumer centred approach and demands a thorough, well-researched understanding of the target market, specifically their knowledge, attitudes and behaviours relevant to the behaviour change at hand (Maibach, Rothschild & Novelli 2002). Key to this research is techniques for segmenting and evaluating target markets.

Market segmentation is the process of dividing the target market into groups to better understand their current behaviours, evaluating each segment and selecting target segment(s) and then developing an appropriate marketing mix for those segments which includes developing messages and tailoring programs to meet their specific needs. Segmenting target markets helps us to group those with commonalities as well as gain a better understanding their specific wants, needs, barriers and behaviours (Kotler, Roberto & Lee 2002).

Segmentation criteria

There are many variables by which target markets can be segmented; and these are fairly consistently described in basic marketing texts, although the number of categories varies as they are either expanded or collapsed by different authors. The majority of these however fit within the four basic categories of variables: geographic, demographic, psychographic, and behavioural (e.g., Kotler, Adam, Brown and Armstrong, 2003).

It is also important to consider segmentation criteria that are not considered in commercial marketing texts, particularly those that relate to social marketing in health. Some social marketing textbooks have suggested additional segmentation criteria, based on work from the field of health behaviour change (e.g., Kotler, Roberto and Lee, 2002). The most common of these is the Stages of Change, or Transtheoretical Model (Prochaska, DiClemente et al. 1992) which sets out five stages of change that people go through – not necessarily linearly – in changing a health-related behaviour. An additional potential segmentation category for health-related social marketing programs is physical/medical variables.

The key to deciding which segmentation strategy (or strategies) to utilise is to identify which best guide the specifics of the product requirements (Dibb, Simkin, Pride and Ferrell, 2001). For example, it would not be useful to segment the market by marital status if we have no reason to believe that the optimal marketing mix for single people (i.e., the product features, price, distribution channels, and promotion) would differ from that for married people.

Evaluating the segments

Once the target markets have been segmented, they can be evaluated according to criteria which have emerged from work in both (social) marketing and health promotion/health education. While there is some variation between marketing texts, the four requirements most commonly accepted as necessary for effective segmentation (e.g., Kotler, Adam, Brown and Armstrong, 2003) are:

- **Measurability:** Can we determine the size of the segments from available data?
- **Accessibility (or reachability):** Can we access and provide products/services this group?
- **Substantiality (or segment size):** Is this segment large enough to be “profitable” – how many people, what percentage of population?
- **Actionability (including organisational capabilities):** Can programs be designed to attract and service this segment? Can we, given our current staff and services, develop and implement activities for this market?

The evaluation criteria set out in health promotion textbooks is in fact similar criteria but with different labels. The four criteria most commonly reviewed in health promotion texts (e.g., Hawe, Degeling and Hall, 1998) are:

- **Problem incidence/prevalence:** How many people in this segment experience this problem/are not engaged in the desired behaviour?
- **Problem severity:** What are the consequences that could occur for this group if the problem is not addressed/they do not adopt the desired behaviour?
- **Selectivity:** Does the problem impact this group in a specific way; how easily can we define or select out this group?

Note that the first two (problem incidence and problem severity) are fundamentally a subset of measurability; and the third clearly overlaps with accessibility.

Method

During the initial establishment of the project a participative management group or Project reference Group (PRG) was established to bring together key individuals to ensure expert consultation and input was gained at key decision points identified by the routine project management group as recommended by Hanna and Wilson (1998, p 334). The PRG consisted of The Cancer Council NSW (TCCN) Chief Executive Officer (CEO) and relevant TCCN experts in the areas of retail, marketing and communications, health strategy and campaigns, media and skin cancer prevention. The PRG also included experts from an Australian university in marketing, social marketing and health behaviour, as well as the project manager and PhD students.

A planning day with the PRG provided a starting point for the beginning the segmentation process. The format for the meeting was designed to promote participative management decision-making (Hanna and Wilson 1998) and utilised a clear goal oriented agenda and an evidenced-based platform on which to base the discussion. A summary of the current literature was presented detailing which segments were at risk of developing skin cancer and which segments had modified their behaviour and adopted positive sun protection practices. The CEO of TCCN then provided a historical review of their *sun protection* programs to reflect on which segments had previously been targeted. He also reported on other TCCN priorities that should inform the decision. After reflecting on these presentations the PRG participated in a facilitated discussion in order to make a decision regarding the primary segmentation of the target market. Various established techniques were utilised to facilitate the discussion such as brainstorming to generate all relevant variables and concept mapping to draw out a consensus regarding the variables discussed (Antil, Desrochers, Joubert and Bouchard, 2003).

Results

Kotler, Lee & Roberto (2002) describe that in social marketing target audience segmentation “one base is often used as a primary way to group a market...then, each segment is further profiled and perhaps narrowed, by using additional important and relevant variables that predict response to strategies,” (p.124). It was agreed that age was the primary basis for segmentation because the risk factors and behaviours in skin cancer prevention vary predominantly by age, (Buller and Borland 1999). This would also simplify other marketing considerations such as developing appropriate communication materials and selecting suitable channels. Additional demographic variables (such as gender, occupation, education) and, to a lesser extent, geographic variables (such as urban versus rural), as well as behavioural variables (current sun protection

behaviours) would be considered as secondary segmentation variables for later components of the program (e.g., the development of specific messages) and would be further explored as part of formative research with the target market.

The first issue that arose in developing segment evaluation criteria was the use of discipline-specific language. Representatives from the marketing division were comfortable with marketing terminology (e.g., substantiality or profitability), while those from the health policy division preferred health promotion terminology (e.g., problem incidence or severity). For this reason, the names of evaluation criteria were modified to reflect the differing understandings and perspectives of the multidisciplinary team.

A second key issue was the identification of additional evaluation criteria that were important to TCCN representatives and organisational considerations:

- Stakeholder acceptability: are their groups in the community who have an interest in seeing this segment targeted by a skin cancer prevention program
- General responsiveness: How likely is this group to be responsive to social marketing activities?

A final criterion was added for the purpose of the research project:

- Research integrity: Can we objectively measure the effect of the program on the target audience (i.e., has this group been heavily targeted by past or current programs in sun protection)

Potential target groups (segmented by age) were children, adolescents, young adults, adults and older adults. The PRG then decided on the following evaluation criteria to rate these potential markets. The final criteria which differ slightly in terminology from the segmentation literature, whilst retaining the rationale, were:

- Health impact: What would be the quantifiable health impacts if this group is targeted by a prevention program (a construct combining the criteria of *measurability* and *substantiality* from marketing and the subsets of *problem prevalence* and *problem severity* from health promotion)
- Amenability to change: What does the literature say and how will this group respond to a prevention program (a hybrid of *actionability* from marketing and *general responsiveness* from the TCCN criteria)
- Research integrity: (as above)
- Stakeholder acceptability: (as above)
- Current behaviour: Has this group adopted positive sun protection behaviours (consulting the literature reviewed for the project - in actuality, a subset of *health impact*)
- Accessibility: Can this group be easily targeted by a prevention program (e.g., are they high consumers of media or are they accessible with a settings based approach)

Table 1: Rating of Various Target Groups (segmented by age)

	Health impact	Amenability change	Research integrity	Stakeholders	Current behaviour	Accessibility
Children	✓✓	✓✓	✗	✓✓	✗	✓✓
Adolescents (14-18 years)	✓	?	✓	✓✓	✓	✓✓
Young adults (18-24 years)	✓	?	✓	✓	✓	✓✓
Adults	?	✓	✓	?	✗	✗
Older adults	?	✓	✓	?	?	✗

Children: The PRG considered children to be a segment that would greatly benefit from a prevention strategy (as the evidence shows the vast majority of damage occurs in the early years); children are amenable to positive health behaviour change and stakeholders are interested in seeing their sun protection behaviours improved (or maintained). They were also an accessible market via settings based programs in schools. However children have generally adopted positive sun protection behaviours and had been extensively targeted by previous and current programs.

Adolescents: Like young adults, the PRG felt their amenability to health behaviour change was questionable. However, their high rates of sunburn and sun exposure meant that adolescents could potentially benefit significantly from the right prevention strategy. Adolescents were considered accessible as high consumers of media and via settings based interventions in high-schools and/or TAFE colleges. The targeting of adolescents has strong stakeholder support, especially parents of adolescents. Targeting adolescents would also have research integrity (as there had been few large scale campaigns targeting this group) and therefore the impact of any new programs could be assessed.

Young adults: The PRG felt that young adults would demonstrate quantifiable health benefits from a prevention program (though not as significantly as children); had stakeholder support; and were accessible as high consumers of media and via settings based interventions in TAFE colleges and universities. They were less amenable than children to health behaviour change and were inconsistent in their adoption of recommended sun protection behaviours. Targeting young adults would have research integrity (as few large scale campaigns have targeted this group).

Adults and older adults: These groups were considered more suitable for an early detection message than a prevention program. The PRG felt there would be less stakeholder support and research indicated they had generally adopted sun protective behaviours. Adults were also considered a less accessible market in terms of settings-based interventions and targeted media.

On the basis of the criteria considered, two market segments (adolescents and young adults) were seen to be the most favourable targets for a new program. A decision was made by the PRG to target the youth market, which was defined as age 14 to 20 years, with further research necessary to further refine or segment this market.

Discussion

We found that, while most of the standard segment evaluation criteria were applicable, or could be adapted, to the selection of a target market for a sun protection social marketing program, there was a need to add a number of organisation-specific, and to some extent, issue-specific criteria in order to fully evaluate the potential target groups and determine which was the most appropriate.

The intensive market segmentation and evaluation approach taken for this project was in part achievable due to the financial and academic resources available. Typically, social marketing initiatives developed and conducted by NGOs, local government, and other such organisations would not have these resources and this raises the question of how such a process might work in an everyday context. There is a need for the development and dissemination of simple frameworks for key components of social marketing, such as market segmentation, that build on the very basic (and commercially focused) guidance provided by marketing textbooks. Such frameworks should: provide a basis for the 'translation' of information across disciplines to ensure that the variables are meaningful; include suggestions on how relevant research and practice can enhance decision making; encourage social marketers to consider a range of other context specific variables or criteria to ensure optimal decision making.

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