Adolescents, sun protection and social marketing
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Abstract
Skin cancer is a very real and prominent health problem for Australians. For adolescents in particular, despite adequate knowledge levels, they are continuing to have negative sun safe behaviours as attitudinal and social factors overpower health promotion efforts. Through a comprehensive literature review, competitors to health promotion are addressed and the need for a more comprehensive strategy for behaviour change is outlined. Social marketing is introduced as a potential and effective strategy in behaviour change interventions. It is believed to be far more appropriate for hard to change behaviours such as adolescent sun protection, as it uses to go beyond mere education and addresses the underlying issues.

Introduction
Due to the Australian climate and lifestyle, as well as a predominantly fair skinned population, skin cancer is the most prevalent form of cancer in Australia (Australian Institute of Health and Welfare, 2000). Australia is reported to have the highest skin cancer incidence rates in the world (Arthey & Clarke, 1995) with one in every three people who spend their childhood or adolescence in Australia developing skin cancer later in life (Australian Institute of Health and Welfare, 2000).

While melanoma in childhood and adolescence is rare, it is estimated that up to two thirds of a person’s risk of melanoma is acquired in the first 15 years of their life (NSW Health Department and The Cancer Council NSW 2001). Furthermore, reducing sun exposure during childhood and adolescence, even by using sunscreen alone, could decrease an individual’s lifetime risk of developing nonmelanoma skin cancers by up to 78% (Stern, et al., 1986). This is in large part due to high levels of sun exposure during childhood and adolescence due to the greater amount of time children and adolescents spend in the sun in comparison to adults (Buller & Borland 1999) and the more sensitive skin in young children (NSW Health Department & The Cancer Council NSW 2001; World Health Organisation 2001). While both these cohorts are susceptible to the dangers of the sun, in comparison to adolescents, children’s sun protection behaviours are largely governed by their parents and they generally have tighter school regulations. In fact, research shows that despite sun protection practices among children being considered below optimal levels (Johnson, et al., 2001), they are consistently shown to be much higher than those of adolescents (Stanton, et al., 2004). Australian adolescents are reported to have an overall low adherence to sun protection guidelines (Fritschi, et al., 1992; Summerville & Watt, 2003; Dobbinson et al., 2005). Coupled with this already low adherence is a general decrease in specific practices, such as sunscreen application, which have previously been the most favoured forms of protection (Dobbinson et al., 2005). These declining positive behaviours and increasing negative behaviours have created a considerable increase in the gap between adolescent and adult sun protection behaviours (Dobbinson et al., 2005). This continuing risky behaviour is regardless of past efforts from health promotion professionals who have attempted to curb this dangerous trend. Such efforts have largely been
school based programs and mass media campaigns. Evaluations of some of the more dominant programs are:

- Kristjansson and associates (2003) evaluated a school based intervention program based on an education kit which was administered by teachers. The kit consisted of a manual for teachers, overhead transparencies, a short video and recommendations and instructions for sun protection behaviours. The intervention was administered in 184 adolescents in years 7 and 8 (aged 13-15 years). The results indicated an increase in knowledge of skin cancer risk factors, although attitudes of students relating to abstaining from sunbathing and tanning remained relatively unchanged.

- Geller and associates (2003) evaluated the Environmental Protection Agency’s SunWise school program. The program is a national environmental and health education sun safety program aimed at primary and secondary students. Results of the evaluation indicated a significant increase in knowledge, increase in intention to play in the shade and modest changes in the intentions to use sunscreen.

- Lowe and associates (1999) evaluated a school-based randomised controlled trial in Australia. Students in grades 8, 9 and 10 in the intervention group received a program that addressed issues such as the need to protect yourself from the sun, behavioural strategies, personal and social images of having a tan and changes in the school environment. The results indicated an improvement in the intervention group’s knowledge, but minimal changes in sun protection behaviour.

- In terms of the mass media campaigns Paul and associates (2003) conducted focus groups with high school students in NSW to examine teenagers’ perceptions of sun protection messages in the mass media. Majority recalled the ‘slip slop slap’ message, 11 of the 17 groups recalled the ‘Seymour the Snowman’ and half the groups (8/17) recalled the ‘Me No Fry’ campaign. Teenagers perceived the messages from these campaigns to be instructional and overly directive, and believed that such campaigns were more appropriate to pre-teens because they were simplistic, boring and lack realism. Some teenagers expressed the desire for campaigns which were fun and humorous, while others indicated that they would prefer a campaign with strong graphic images and messages similar the National Tobacco Campaign and Roads and Traffic Authority Campaigns. This study found that adolescents require sun protection messages which are specifically targeted to them or differ significantly from those aimed at children (Paul et al., 2003).

It is thus the intention of this research to understand why these behaviours are seemingly so difficult to change, and why these past attempts at increasing the positive sun protection behaviours of adolescents have failed to bring about behaviours change.

Method

A comprehensive review was conducted of literature addressing issues of adolescence, adolescence and sun protection behaviours, practices and attitudes, associated tanning, beach and outdoor cultures as well as past strategies and campaign materials. This literature was largely restricted to works from the past 10 years in order to maintain a relevance to present day adolescents and was collected through electronic databases. These databases being Emerald Full text, Science Direct, Proquest 5000, Expanded Academic Index, and Factiva.
They were searched using the key words *adolescents, young people, sun protection, tanning, protective behaviours, risky behaviours, attitudes and perceptions*. Further contributions were also provided by academics and professionals with knowledge of this area, including the NSW Cancer Council.

**Discussion**

When addressing mass media campaigns, as they have proven to be effective with younger children it is a simple solution to say that an adolescent specific campaign needs to be developed so as to recognise the differences between children and adolescents, and between adolescents and adults. However, the overall results of the intervention programs indicate that while there has been an increase in the knowledge of skin cancer risk factors, there has been only minimal changes in sun protection behaviour (Lowe et al., 1999; Geller et al., 2003; Kristjansson et al., 2003). In order to explain these results we must understand that knowledge does not necessarily lead to behaviour change. Previous interventions have been successful in generating (or perhaps building on) a solid knowledge base in regards to risks and preventative methods, however they are still yet to result in any noticeable or recordable behaviour changes. This is inevitably due to the fact that education alone is not the only key to understanding this situation. In these particular circumstances this lack of avoidance behaviour is *not* attributed solely to a lack of general skin cancer knowledge. Numerous studies have shown adolescents to have good knowledge about the general principles of sun protection and risks of exposure (Livingston et al., 2001; Lowe et al. 2000) and the Australian adolescent is even reported to have an accurate and realistic sense of their own likelihood at developing skin cancer (Lowe et al., 2000).

We must instead understand the attitudes towards sun protection that exist within adolescents. That is, their attitudes towards tanning and the use of particular sun protection products. As educated on the risks as this groups may be, suntanned skin remains highly desirable, especially for females, with 60% of adolescents stating they like to get a tan and 32% reporting actively trying to get a suntan compared to 15% of adults (Dobbinson et al., 2005). Additionally, a reported 83% of students desire at least a light suntan, with a slightly higher proportion of females (86%) exhibiting this response (Lowe et al., 2000). This desire for a tan is overriding the efforts of health professionals in their attempts to combat the risky sun protection behaviours of adolescents through intervention and education.

This overwhelming desire for a tan is on the rise and can be attributed to a number of fierce competitors for health professionals, these being; *Lifestyle;* adolescents are only selecting sun-protection behaviours that fit their lifestyles and that take minimal effort on their part. This indicates that adolescents hold a certain level of laziness, or complacency, in regard to skin protection (Mikati, 2005). *Australian Culture;* having a tan is associated with being Australian (Heartbeat, 2003) and has developed a cultural discourse where being tanned is expected. This is mainly due to the formation of images of national identity such as the iconic ‘bronzed- Aussie lifesaver’ (White, 1997) and the stereotyped tanned surfer as the beach became an integral part of Australian culture.
**Body Image/Appearance/Fashion:** As individuals reach adolescence, they begin to experience physical attraction to the opposite sex, and with this comes an increased concern about their own appearance (Shoveller et al., 2003).

**Media:** the media has the ability to create and set standards of beauty within a society (McCabe & Ricciardelli, 2003). Unfortunately in today’s society, although relatively proactive, the media is still responsible for a pro-tan message (McDermott et al., 2005). In addition, the media is constantly bombarding youth with images of celebrities with perfect tans (which are generally fake).

**Risky Behaviour:** risk taking has long been known to be associated with adolescents. Overall, adolescents as a collective group display negative risk taking behaviours in areas other than just sun protection behaviours. E.g. tobacco use, sexual activity, nutrition.

**Unrealistic Optimism:** large level of unrealistic optimism in this age cohort which causes individuals to understand the risks involved, but to in fact ignore them, or under-estimate their individual risk compared to others (Sjoberg et al., 2004).

Tanning is thus considered a risky behaviour that is extremely hard to change, especially in the adolescent age cohort (Sjoberg et al., 2004). This is mainly due to the strength of the attitudes that act as a barrier to behaviour change. To date, despite adolescents being in a high-risk group for poor sun protection behaviours, few intervention studies available in the published academic literature have focused on changing adolescent sun protection behaviours, choosing instead to focus on the superficialities of education. Furthermore, all of the aforementioned campaigns relied on the principles of health promotion to dictate their direction and unfortunately, to date have not been able to tap into the psyche of the Australian adolescent. It is the belief of this researcher that the current strategies are not equipped to deal with the complexities of hard to change behaviours such as this. The behavioural issue of adolescents and sun protection is a prime example of where mere education and exposure to promotion activities alone are not substantial enough to create a behaviour change. Instead, a more comprehensive intervention strategy needs to be applied in order to encompass a broader range of issues that are involved with both accepting and rejecting a behaviour, whether this is the augmented products that can aid the acceptance process, the perceived costs associated with the behaviour, or the type and the channels of message delivery. Thus, rather than concentrating on merely promoting good health practices by increasing knowledge levels, health professionals should take heed of social marketing, which allows the campaigns creators to take a more personalised and in-depth strategy in campaign development and implementation.

Social marketing is defined as the application of commercial marketing technologies to the analysis, planning, execution, and evaluation of programs designed to influence the voluntary behaviour of target audiences in order to improve their personal welfare and that of their society (Andreasen, 1995). The theory of social marketing also borrows tools, techniques and theory from numerous other bodies of knowledge including health and behavioural sciences, management and sociology in an attempt to encourage, promote and alter behaviours in the most effective way possible. The overall benefit of using social marketing in comparison to health promotion is that social marketing views behaviour as a product to be sold to an individual and aids in developing the best possible way to do so. It has a customer focus, whereby it addresses the needs of the individual and it relies on the concept of a voluntary and
mutually beneficial exchange, so as to make the behaviour change easier and more appealing. Social marketing interventions have worked to help change other complex behaviours in adolescents, such as the Truth campaign, which was the U.S.A’s largest national youth-focused anti-tobacco campaign to date. This campaign was designed to expose the marketing and manufacturing practices of tobacco companies to convince and empower teens to be anti-tobacco. Overall, the campaign showed good recall, was convincing to its target audience and was followed by a dramatic decline in smoking rates among 8th 10th and 12th graders for which the campaign was cited as a major contributing factor, with the rates of smoking in high school students falling by more than 1 million in two years of campaigning (http://www.protectthetruth.org/truthcampaign.htm). In addition, while aimed more so at young adults rather than specifically adolescents, the Healthy Talk campaign from Massachusetts in the United States addressed the psychological barriers to sexual health. It used social marketing to design and deliver a mass-media public health campaign to promote inter-couple communication in regards to sexual health practices, in an attempt to reduce unintended pregnancy and sexually transmitted diseases. While only pilot evaluations were conducted, it was concluded that a positive association had developed between exposure to the campaign message and perceptions, intentions and self-reported behaviours (Cho et al., 2004).

An important tool of social marketing is the use of the 4P marketing mix. The promotion, product, price and place components allow for the development of alternative strategies and to encompass a wider range of issues. Unlike the principles of health promotion, which generally only pay attention to the promotion aspect by relying on the message and creative materials, social marketing uses market research to address all four components to allow for a thorough investigation and design. The promotion component addresses the type and structure of the message and creative aspects. In this situation, if a message could be created that accurately addressed an issue(s) that caused concern for adolescents, the possibility exists to change attitudes towards tanning on an individual level. The product component refers to the core, actual and augmented product. The augmented product is the actual sun protection products themselves, such as sunscreen, hats and rash vests, and are believed to be extremely important as they allow for branding and trend setting, both of which are proven to be extremely valuable tactics with adolescents and have the potential to increase the social desirability of sun protection and its associated products. Potential strategies in this area are the re-branding of the Cancer Council for adolescents, or alignment with already well branded companies that are in the desired positioning (i.e. well known surf brands) that may want to increase their own levels of perceived social responsibility. This also includes products that can assist in harm minimisation such as fake tan products, as it may be more realistic to change attitudes towards the use of fake tans rather than attempt to change the attitude towards the behaviour of tanning in general. For price this includes both monetary and non-monetary costs. We must understand that the adolescents and sun protection is largely governed by non-monetary costs due to the social desirability of the alternate behaviour (having a tan) and the socially conspicuous nature of the augmented product’s consumption. Lastly, place is a reference to the distribution channels and how the individuals will be exposed to the message and products. It may in fact be beneficial to investigate alternative media channels that are relevant to adolescents (such as the internet and mobile phones) rather than relying on more traditional media channels.

Conclusion
The potential for the use of social marketing in adolescent sun protection has immense possibilities. The social marketing communication model allows us to address the desired behaviour intention as a product to be sold to the target market, while encompassing necessary areas such as message and promotional strategies and products development to bring about behaviour change. This strategy could be a direct intervention in an attempt to either reduce the desire for a tan, increase the social acceptability of using specific sun protection practices, or even to alter the social norm of complacency. The possibility for risk reduction strategies also exists with the use of tangible products, such as fake tan, to provide safer alternatives for hard to change behaviours.

References


