Abstract

This report describes spectator recall of SunSmart skin cancer prevention advertising displayed on the Brisbane Cricket Ground scoreboard at intermittent periods throughout the 1999/2000 cricket season and the sun-protective behaviors of these spectators. Two hundred and thirty-one spectators were asked a series of five questions about their recall of SunSmart advertising and their present sunscreen usage. Respondents’ sun-protective behavior observed at the time of questioning was also recorded. The SunSmart advertising was seen by 15.6% of respondents. Recall of the SunSmart advertising was higher amongst spectators observed to have high levels of sun protection than amongst spectators with low levels of sun protection. Females were more likely than males to recall the SunSmart advertising. The efficacy of health-promoting advertising in the sports setting has yet to be established and therefore results cannot be compared against accepted benchmarks. This study contributes baseline data that will enable such comparisons to be made. The increase in recent years of health-promoting advertising at sports events, often as part of a comprehensive sponsorship program, necessitates the need for further research in this area.

Introduction

Background

Health sponsorship of sports events in Australia, enabled largely by health promotion foundations established to expedite the banning of tobacco industry sponsorship and advertising in sport, has seen an increase in health-promoting advertising in the sports setting (Donovan et al., 1993; Holman et al., 1993; Corti et al., 1995, 1997; Giles-Corti et al., 2001). On-ground signage, scoreboard advertising and health-promotion program logo placement on athletes’ uniforms and merchandise such as hats, shirts and event programs have become additional strategies implemented to encourage adoption of healthy lifestyles and behaviors (Holman et al., 1993, 1996, 1997a; Corti et al., 1997).

Sports events have been identified as ideal settings for health promotion activities as they draw large numbers of people, and those who attend sports events are more likely to engage in negative health behaviors such as cigarette smoking, poor sun-protection practices and unsafe levels of alcohol consumption (Holman et al., 1997b; Dunn and Lynch, 2001; Giles-Corti et al., 2001). With regard to sun-protective practices in particular, research has shown that most weekend sunburn is acquired whilst engaged in passive recreational activities, such as watching sports events (Hill et al., 1992; McGee et al., 1995). Extensive media coverage given to large sporting events also provides the opportunity for health promotion campaign logos and messages to be seen and heard by the wider community (Madden and...
The level to which health-promoting advertising in the sports setting is recalled by the intended target audience is scarcely documented in the literature. Results from evaluation of Western Australian Health Promotion Foundation sports sponsorship programs have been widely reported (Corti et al., 1995, 1997; Holman et al., 1996, 1997a; Giles-Corti et al., 2001); however, spectator recall of the advertising components of the sponsorship programs has not commonly been described. An exception is a study by Corti et al. (Corti et al., 1997) in which 27% of children who had attended a 3-day football clinic recalled seeing an anti-smoking message on signs at the oval where the clinic took place.

There are few other data available for comparison. Jolly et al. (Jolly et al., 1996) assessed advertising mediums used to promote the use of mouthguards by football players to see which were most likely to be recalled. The messages on ground signs and electronic scoreboards were the most frequently recalled by spectators, with 44.9% of people who recalled the mouthguard message identifying these mediums. The study did not reveal how many sports spectators actually recalled seeing the health-promoting advertising.

The scoreboard advertising campaign
The Queensland Cancer Fund conducted a SunSmart skin cancer prevention advertising campaign using the scoreboard at the Brisbane Cricket Ground (BCG) over the 1998/1999 and 1999/2000 cricket seasons. Throughout each season the SunSmart message—'Slip! on a shirt, Slop! on the sunscreen, Slap! on a broad brim hat'—appeared on the scoreboard for a period of 5–10 s at scheduled breaks in play (drinks, lunch, tea), and before and after the match. The advert was shown on the scoreboard an average of seven times per day.

The Queensland Cancer Fund’s SunSmart scoreboard advertising was designed to support existing, sustainable SunSmart program activities. The BCG has taken steps toward becoming a supportive environment for sun-protection practices—sunscreen, hats and sun-protective clothing items are available for sale, and SunSmart posters are situated around the ground. Also, the Queensland cricket team has a SunSmart policy that ensures that players act as positive role models for spectators by wearing broad-brimmed hats and sunglasses whenever practical.

Cricket spectators were considered an ideal target audience for the SunSmart scoreboard advertising for a number of reasons. Firstly, cricket is a popular summer pastime for many Australians. Attendance at the BCG exceeded 110 000 people each year during the seasons when the scoreboard advertising was conducted. This provided the opportunity to reach large numbers of people with the SunSmart message. Secondly, cricket is a sport that is played over many hours, often through the middle hours of the day. A number of areas of spectator seating at the BCG are not shaded, exposing spectators to the full extent of the sun’s ultraviolet radiation. In addition, cricket is a sport popular with young men, a group consistently associated with high levels of sun exposure (Hill and Boulter, 1996).

Queensland Cancer Fund staff and trained volunteers surveyed spectators at the BCG to determine recall of the SunSmart scoreboard advertising amongst cricket spectators. The sun-protective behaviors of spectators were also recorded. The purpose of the study was to gauge the efficacy of the medium, which would help to direct future involvement in projects of this nature.

Methods
A cross-sectional survey was conducted at the BCG over 5 days of play between November 1999 and January 2000. Spectators closest to the end of each row in uncovered seating areas were approached and asked if they would participate in a short survey. Two hundred and thirty-eight spectators were asked to participate and 231 agreed, giving a participation rate of 97%.
Spectators agreeing to participate were asked five questions relating to recall of scoreboard advertising and present sunscreen usage. Surveyors also observed and recorded the sex of participants and their sun-protective behavior at the time of questioning. Participants were not surveyed when the SunSmart advertising was being displayed on the scoreboard.

This study does not account for the influence of participants’ past exposure to the SunSmart message. Another limitation is the specific nature and narrow focus of the research.

Table I. Responses to the question: ‘Have you noticed any advertising about sun safety at the cricket today?’ and CIOP

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
<th>CIOP (SD)</th>
<th>95% Confidence interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>231</td>
<td>100</td>
<td>4.21 (2.04)</td>
<td>(3.81, 4.61)</td>
</tr>
<tr>
<td>yes</td>
<td>36</td>
<td>15.6</td>
<td>5.22 (1.99)</td>
<td>(4.57, 5.87)</td>
</tr>
<tr>
<td>no</td>
<td>195</td>
<td>84.4</td>
<td>4.03 (2.00)</td>
<td>(3.75, 4.31)</td>
</tr>
<tr>
<td>Men</td>
<td>168</td>
<td>100</td>
<td>4.17 (1.99)</td>
<td>(3.87, 4.47)</td>
</tr>
<tr>
<td>yes</td>
<td>19</td>
<td>11.3</td>
<td>5.31 (1.92)</td>
<td>(4.45, 6.17)</td>
</tr>
<tr>
<td>no</td>
<td>149</td>
<td>88.7</td>
<td>4.02 (1.95)</td>
<td>(3.71, 4.33)</td>
</tr>
<tr>
<td>Women</td>
<td>63</td>
<td>100</td>
<td>4.33 (2.19)</td>
<td>(4.05, 4.61)</td>
</tr>
<tr>
<td>yes</td>
<td>17</td>
<td>27</td>
<td>5.12 (2.12)</td>
<td>(4.11, 6.13)</td>
</tr>
<tr>
<td>no</td>
<td>46</td>
<td>73</td>
<td>4.04 (2.17)</td>
<td>(3.72, 4.36)</td>
</tr>
</tbody>
</table>

B. M. Lynch and J. Dunn (Borland and Theobald, 1990) was calculated for each participant, based on their observed sun-protective behavior and reported sunscreen application at the time of questioning. CIOP was calculated by using the following equation: head cover (broad-brimmed or legionnaire hat or umbrella = 2.0; cap or visor = 1.0; no cover = 0) + eye protection (wrap around or side paneled sun glasses = 2.0; other sun glasses = 1.0; no sun glasses = 0) + body cover (shirt with high neck/collar and elbow length/long sleeves = 2.0; T-shirt = 1.0; singlet or no shirt = 0) + sunscreen (SPF 30/15+ = 2.0; SPF <15 = 1.0; no sunscreen = 0).

Survey participants who noticed the SunSmart advertising had a significantly higher CIOP than those who did not (5.22 versus 4.03, P < 0.002). This difference was also apparent for males and females separately (Table I).

Discussion

The primary objective of this study was to investigate the efficacy of scoreboard advertising as a medium to promote SunSmart behavior to cricket spectators. The level of recall of the SunSmart advertising by spectators was recorded, and the sun-protective behavior of spectators who did and did not recall the advertising was quantified.

Although reported recall of the SunSmart advertising might appear quite low (15.6%), exposure to advertising can effect an individual’s preferences and judgments even if the advertisement is not recalled (Janiszewski, 1988; Shapiro et al., 1997). For example, Janiszewski (Janiszewski, 1988) has shown that incidental exposure to newspaper advertisements increases individuals’ liking for the advertised brands, even though they do not recall having seen the advertisements. With this in mind and with little evaluation of health-promoting advertising having been conducted previously, it is difficult to place the results obtained in this study in a context that allows meaningful comparisons to be made.
The evaluation of anti-smoking sponsorship of a 3-day football clinic allows some comparison: researchers found that 27.2% of respondents recalled seeing signs with the slogan ‘Smoking? No Way!’ (Corti et al., 1997). This level of recall is higher than that recorded by the evaluation of the SunSmart scoreboard advertising. However, the levels of exposure to the health-promoting advertising were different in each study: the anti-smoking signage was static and the football clinic participants were exposed to this advertising across 3 days, whereas spectators at the BCG were only exposed to the SunSmart message approximately six times (at breaks in play) in 1 day.

Spectators who recalled the SunSmart advertising in this study were engaged in significantly higher levels of sun-protective behavior than those who did not recall the advertising. From this result one could infer that the SunSmart message may not have reached those who needed its prompt the most. However, the possibility exists that those who did notice the advertising responded to the behavioral prompt and increased their level of personal sun protection or moved to a shaded seating area. It is also possible that past exposure to the SunSmart message may have influenced sun-protective behaviors practiced by survey participants. The association between the recall of SunSmart advertising and sun-protective behavior should be explored in any future evaluations.

In terms of gender, women represented 27% of the current sample, yet accounted for 47% of those who recalled the SunSmart advertising. Women also scored a marginally higher CIOP rating (4.33) than men (4.17). These results imply a gender differential in terms of recall of this advertising and attendant personal sun protection, and suggest that targeting advertising to men may be one way of improving impact for this audience.

The outcomes of this study provide important baseline data to aid future evaluation of health-promoting advertising in the sports setting. The increase in recent years of health-promoting advertising at sports events, often as part of a comprehensive sponsorship program, warrants further investigation into the efficacy of this medium. Future evaluation of health promoting advertising in the sports setting should assess the varying impact of messages differing in style and content, period of exposure, and the relative impact of these variables by gender.

Acknowledgements

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References

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