

EVALUATING THE EFFECTIVENESS OF HEALTH SPONSORSHIP OF SPORT, ARTS AND RACING

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SUMMARY

The Western Australian Health Promotion Foundation (Healthway) provides sponsorship support to sports, arts and racing (SAR) organisations to promote health within their activities, and has a unique sponsorship system whereby sponsored organisations are matched with a health agency support sponsor. The health agency receives a sponsorship budget from Healthway to develop the health promotion strategy at the organisation's events.

Healthway's evaluation system, known as Graduated Project Evaluation (GPE), was developed by the Health Promotion Development and Evaluation Program (now the Health Promotion Evaluation Unit or HPEU) at The University of Western Australia. The system consists of four levels of evaluation linked to the dollar value of the project. Sponsored SAR organisations receiving \$25,000 or more are assigned to GPE level 3, which involves audience surveys undertaken by HPEU to measure the impact of health messages including cognitive, attitudinal and behavioural effects.

A series of audience surveys at Healthway-sponsored events were undertaken in 1992-3 and 1996-7. The results show that across a range of health messages and target groups, message awareness among audiences increased over this period. Comprehension and acceptance of health messages were high in both survey periods but intention to act on the message and behaviour relative to the message increased in the later surveys.

The results demonstrate the effectiveness of sponsorship as a health promotion strategy and suggest that greater impact can be achieved by increasing the exposure of audiences to health messages over time.

INTRODUCTION

The Western Australian Health Promotion Foundation (Healthway) was established in 1991 through tobacco control legislation that banned tobacco sponsorship of sport, arts and racing. Healthway provides sponsorship support to sports, arts and racing (SAR) organisations to promote health within their activities, and has a unique sponsorship system in that organisations receiving \$5,000 or more are matched with a health agency support sponsor. The health agency receives a sponsorship budget from Healthway to develop the health promotion strategy at the organisation's events.

In 1992, the Health Promotion Development and Evaluation Program (*now known as the Health Promotion Evaluation Unit (HPEU)*) designed a system for the evaluation of health promotion and sponsorship projects sponsored by Healthway. The system, known as Graduated Project Evaluation (GPE) is the first major published system that attempts to systematically evaluate an organisation's sponsorship program. GPE aims to match an appropriate level of evaluation to each sponsorship project. The GPE structure consists of four evaluation levels and the main criterion for assignment of GPE levels is the dollar

amount of sponsorship as follows: GPE level 1 for ≤\$10,000; level 2 for \$10,001-25,000; level 3 for \$25,001-100,000; and level 4 for \$100,00+, (Holman, Donovan and Corti, 1993).

Projects within GPE level 3 and above are required to undertake impact evaluation. GPE level 3 projects are valued at more than \$25,000 to the sponsored sport arts or racing organisation and the support sponsor receives \$7,000 or more to promote a health message. The evaluation required for projects at this GPE level includes assessing the sponsored health message in terms of impact measures: health message awareness, comprehension, acceptance, intention and action. These measures represent a hierarchy of cognitive/attitudinal effects (Donovan and Robinson, 1992).

An earlier study examined all sponsorship projects funded by Healthway at the GPE level 3 from July 1992 to July 1993 (Holman, Donovan and Corti, 1994). The study was repeated in 1996/97 and this paper compares the 1996/97 sponsorship monitor results with those collected in 1992/93 in terms of cognitive impact achieved by sponsored health messages at sport, arts and racing events.

METHOD

The survey instrument differed according to the way the survey was administered (i.e., self-administered or interviewer-administered) and the life-stage of the respondents (i.e., adult, teenager or child). Children aged 10 years or above were eligible to participate in the surveys. In 1996/97, 64.5% of completed questionnaires were interviewer-administered, compared with 27.5% in 1992/93.

The survey instrument administered to children measured only health message awareness and comprehension, and gathered demographic data. The other versions of the survey instruments gathered data on impact measures, demographics, and five health behaviours (smoking, alcohol intake, fruit and vegetables consumption, exercise and sunlight exposure). The interviewer-administered questionnaire included items on prompted recognition and these were not included in the self-administered questionnaires. Interviews were conducted at the sponsored venues either during an interval or post event. There were 33 projects included in the 1996/97 sample and 55 in the 1992/93 sample.

Cognitive Impact Measures

All respondents were first asked whether they could recall seeing or hearing any health messages at the event. Interviewer-administered questionnaires then measured prompted awareness by presenting respondents with a list of messages and asking which they recalled seeing or hearing at the event. Respondents recalling the message (self-administered), or either recalling or recognising the message (interviewer-administered) were designated aware of the message. This is reported as 'total awareness' in the tables. Respondents' recall of the message was further categorised as exactly correct (all words recalled), partially correct (most words recalled), related correct (words recalled relate to the topic area, but not specifically and only to the message at the event), or incorrect. All three correct categories were combined for the total awareness measure.

Respondents who were aware of the message at the event were then asked what they understood the message to mean (comprehension), and, if correct, were asked their attitude toward the message (acceptance).

All respondents accepting the message (other than the child self-administered questionnaire respondents) were asked what thoughts, if any, they had about the message. Further, if they had seen the message at a previous event, they were asked

whether or not they had taken any action as a result. Respondents' stated thoughts were analysed and those who expressed an intention to take action as a result of exposure to the message were identified. Action (and intention) includes any actions (or intentions) related to the message, not just adoption and continuation of the recommended behaviour. It also includes not only personal actions, but those related to encouraging others to adopt or continue a recommended behaviour.

Messages

There were 16 different messages - across seven health areas - allocated to sponsorships in 1996/97 and 21 (9 areas) in 1992/93. In general, the distribution of message topics was similar for the most frequently allocated messages. The most frequent areas in both periods were smoking, followed by nutrition, physical activity and sun protection.

Respondents

The sex and age distributions of respondents are summarised in Table 1. Respondents in the 1996/97 sample were more evenly spread across all age groups compared with the 1992/93 sample which contained a larger percentage of respondents in the 10-14 age group relative to other age groups. Hence, as all 10-14 year olds are students, the 1992/93 sample comprised significantly more respondents in the 'retired, student, housewife' category than in the 1996/97 sample (59.7% vs 34.0%). No attempt was made to attain similar sample demographics as the samples reflect the populations attending these Healthway sponsored events. Hence the data are presented unweighted.

Table 1: Sample Demographics

Characteristics	1992/93 (N=5,710) %	1996/97 (N=2,579) %
<u>Sex</u>		
Males	48.4	46.8
Females	49.9	52.2
No response	1.7	1.0
<u>Age group</u>		
10-14 years	38.8	18.2
15-19 years	10.7	18.5
20-29 years	16.0	17.3
30-39 years	14.6	15.5
40-49 years	11.5	14.9
50+ years	7.2	14.5
No response	1.3	1.0

RESULTS

Cognitive Impact Measures

The results for the hierarchy of cognitive responses for both 1996/97 and 1992/93 are shown in Figure 1 as a proportion of the total sample. That is, of all persons attending Healthway sponsored events, 75.8% were aware of a Healthway sponsored message at the event; 68.2% correctly understood the message; 60.2% accepted or agreed with the message; 7.3% formed some

intention to act on the message; and 1.7% claimed to have taken some action as a result of prior exposure. Table 2 shows the cognitive impact measures as a proportion of each preceding level in the hierarchy.

Figure 1: Results of the Cognitive Impact Measures as a Proportion of the Total Sample

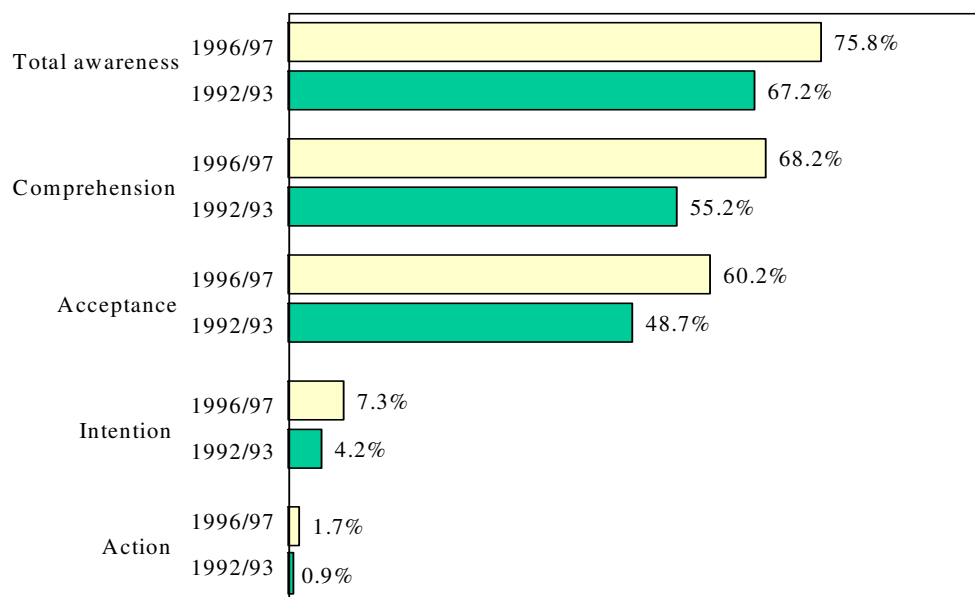


Table 2: Cognitive Impact Measures as a Proportion of Each Preceding Level

Measure	1992/93 (N=5,684)	1996/97 (N=2,579)
	Total Sample %	Total Sample %
Total awareness	67.2	75.8
Comprehension	82.2	90.0
Acceptance	88.2	88.2
Intention	8.6	12.2
Action	20.9	22.8

Total awareness of the sponsored health messages at events increased significantly from 67.2% in 1992/93 to 75.8% in 1996/97 ($p < 0.05$). Total awareness at the event is a measure of unprompted recall and prompted recognition. Respondents who were aware of the sponsored message were asked ‘what they thought the message meant’. Message comprehension increased slightly in 1996/7 from an already high level: 90.0% (82.2%) of these respondents correctly understood the message (Table 2). Respondents who were aware of the message were asked whether they ‘agreed, disagreed or had no feelings either way about the health message’. Acceptance of the message remained high in 1996/7: of those who were aware of and correctly understood the message, 88.2% (88.2%) agreed with the message (Table 2).

Respondents who were aware of the sponsored message, were asked ‘what they thought about, if anything, when they saw or heard the health message’. Intention to act on the message increased, but not significantly: of these respondents, 12.2% (8.6%) mentioned that they would or wanted to do the recommended behaviour. Respondents who were aware of the sponsored

message at a previous event, were asked what they did, if anything, as a result of being aware of the health message. In both 1992/93 and 1996/97, approximately 1 in 5 of these respondents took some relevant action (20.9% and 22.8%, respectively).

Multiplying the preceding proportions down the hierarchy of measures provides an estimate of the percentage of the total sample who were sufficiently stimulated to take some relevant action as a result of exposure to a health message. For the total sample this was 1.7% (0.9%) (i.e., $75.8\% \times 68.2\% \times 60.2\% \times 12.2\% \times 22.8\% = 1.7\%$). This hierarchical multiplicative exercise shows the importance of achieving high levels of effects early in the hierarchy. Thus, the higher the level of awareness that can be achieved, the greater the likelihood of achieving behaviour change in the target group. These data show a substantial increase in action over previous years, and probably reflect the cumulative effect of many of these or related messages now being seen for a number of years at the same types of events.

Gender

In both survey periods, higher percentages of females were aware of the health messages at sponsored events compared with males : 77.7% vs 73.7% in 1996/7; $p < 0.05$. Of those who understood the message, females more likely to accept the message (90.6% vs 85.2% in 1996/7; $p < 0.05$). There was little difference between males and females in terms of intention and action.

Effects of Age Group

In 1992/93, the level of awareness appeared generally unrelated to age, although the youngest and oldest age groups differed significantly: 70.7% vs 62.5%, respectively. The 1996/97 results showed a more negative linear relationship of decreasing awareness with age. Nevertheless, total awareness in all age groups increased substantially compared with 1992/93.

Intention to take relevant action - and hence total action - was highest in the 10-14 age in 1992/93, but not substantially so: 14% vs approximately 8% for all other ages combined. However, in 1996/97, the difference was far greater: 37% vs approximately 10% for all other age groups combined. Similarly, action was substantially higher. This may reflect the fact that children at this age are far more influenced by health messages than are older children and adults. It may also reflect the nature of the sponsored behaviours: sun protection and sports injury prevention behaviours which are actually implemented during the sponsored projects for children, such as sports clinics.

Cognitive Impact Measures by Health Behaviour Status

With the exception of children, respondents were asked a series of questions to assess their health behaviours: smoking, alcohol intake, fruit and vegetables consumption, exercise and sunlight exposure. The criteria were taken from the recommendations of the Health Department of Western Australia, and directly from the National Health and Medical Research Council (1992) guidelines for responsible drinking. Only results for smoking messages and sun protection messages are reported here.

Smoking Status

Awareness of smoking messages among both smokers and non-smokers was higher in 1996/97 compared with 1992/93 (Table 3). Smokers showed greater total awareness of smoking messages than non-smokers, and equal understanding but less acceptance, in both the 1996/97 and 1992/93 surveys. However, acceptance among smokers in 1996/97 was lower than in 1992/93 (64.7% vs 74.5%), which may reflect the greater restrictions on smoking in Healthway-sponsored venues since the earlier surveys. Intention was far higher among smokers compared with non-smokers in 1992/93. However, intention among

smokers was 50% lower in 1996/97 and was slightly less in smokers compared with non-smokers (intention and action in non-smokers includes encouraging others to quit). Action in smokers was also lower in 1996/97 compared with 1992/93.

Table 3: Cognitive Impact by Smoking Status Only for Projects Featuring an Anti-smoking Message

Measure	Smoking Status							
	1992/93				1996/97			
	Smoker		Non-smoker		Smoker		Non-smoker	
	n	%	n	%	n	%	n	%
Total awareness	552	71.2	1841	66.3	232	81.5	565	77.9
Comprehension [#]	353	91.5	1087	87.2	161	93.2	373	93.3
Acceptance [#]	321	74.5	790	89.1	150	64.7	347	90.2
Intention [#]	237	13.1	695	5.3	96	6.3	311	8.0
Total action ⁺		1.3		0.4		0.3		0.6

Percentages refer to percentages of each preceding level.

+ Percent is of those who were aware of the sponsored message at a previous event

Sun Protection Status

Awareness was high in all projects with sun protection messages, and these messages produced far higher awareness and action than other messages (Table 4). Unsafe sun protection respondents are those who reported that they had been sunburnt at any time in the previous year. In 1996/97, unsafe sun protection respondents showed greater total awareness of sun protection messages than sun safe respondents, and slightly greater understanding and acceptance, but less action. There were insufficient numbers of projects with sun protection messages in 1992/93, hence no comparison data are shown.

Table 4: Cognitive Impact by Sun Protection Status Only for Projects Featuring a Sun Protection Message

Measure	Sun Protection Status			
	1996/97			
	Unsafe		Safe	
	n	%	n	%
Total awareness	212	91.5	97	85.6
Comprehension [#]	184	98.4	70	94.3
Acceptance [#]	181	90.1	64	93.8
Intention [#]	162	17.9	60	20.0
Total action ⁺		8.0		14.0

Percentages refer to percentages of each preceding level.

+ Percent is of those who were aware of the sponsored message at a previous event.

DISCUSSION

Overall, 76% of people attending Healthway sponsored events were aware of the health message. The results indicate that there was a significant increase in message awareness in 1996/97 (76%) relative to 1992/93 (67%). This may reflect a combination of increased exposure to the health messages over time and the improved and innovative strategies used by health agency support sponsors to promote the health messages.

Message comprehension increased slightly from an already high level: 90.0% of respondents aware of the message correctly understood the message, compared with 82.2% in 1992/93. Acceptance of the message also remained high: of those who were aware of and correctly understood the message, 88.2% agreed with the message in both survey periods. Intention to act on the message increased substantially (but not significantly): of those respondents who accepted and understood the message, 12.2% mentioned that they would or wanted to do the recommended behaviour, compared with 8.6% in 1992/93. In both the 1992/93 and 1996/97 surveys, intention to behave in accordance with the health message was low. This was because our measure is a conservative estimate of 'intention' as respondents are not asked directly whether or not they had formed such an intention, but rather 'what thoughts they had, if any, when they saw or heard the message'. A more direct and appropriate measurement of intention has been implemented for recent surveys, which is: "When you saw or heard the health message at today's event, did you decide to try and do something related to the message? If yes: What did you decide to try and do?"

In 1996/97, 1.7% of the total sample - versus 0.9% in 1992/93, were sufficiently stimulated to take some relevant action as a result of exposure to a health message. These data show a substantial increase in action over previous years, but was focussed primarily in two areas (sun protection and sport safe behaviours) rather than across all health messages.

Intention to take relevant action - and hence total action - was highest in the 10-14 age group in 1992/93, but not substantially so: 14% vs approximately 8% for all other ages combined. However, in 1996/97, the difference was far greater: 37% vs approximately 10% for all other age groups combined. Although sub-cell numbers were small, it may well be that children at this age are far more influenced by health messages than are older children and adults. This is consistent with findings from our previous studies (e.g., Corti, Donovan, Holman et al, 1997). In both survey periods, females at sponsored events showed greater awareness and understanding of the health messages than males.

In 1996/97, awareness of smoking messages in both smokers and non-smokers was substantially higher than in 1992/93. However, of those who were aware of the message, acceptance, intention and action were lower amongst smokers in 1996/97 than in 1992/93. In 1996/97, the sun protection messages resulted in high total awareness, and far higher awareness and action than all other messages.

Overall, these two studies provide evidence of effectiveness of sponsorship as a strategy to achieve high prompted awareness, comprehension and acceptance of a health message at sport, arts and racing events. Marked increases have been achieved for all stages in the hierarchy of cognitive effects, and it is likely that the results are related to increased exposure of audiences to health messages over time combined with more effective sponsorship strategies.

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