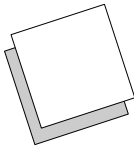


An executive summary for managers and executive readers can be found at the end of this article



The impact and effectiveness of advertisements in a sports arena

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Abstract *Explores the effects of advertising in a sports arena on message recall, purchase intentions, and actual purchase behavior. The findings from this study suggest that consumers can recall at least some of the ads they are exposed to in these captive situations but most do not produce any lasting memory trace. The data also indicate that several independent variables, most notably frequency of exposure to the advertising message, are positively associated with recall, purchase intentions and actual purchasing behavior. The findings from this study indicate that advertisements in this setting can have an impact on the behavior of consumers. However, more research is needed in this setting to identify specific execution variables which differentiate between ads which create an impact, and those that do not.*

Introduction

Over the last several decades, advertisers have been facing a fragmenting mass media which has forced them, at times, to consider alternative methods for communicating with consumers. Marketers have noted that in some situations consumers spend extended time, almost as captives, in a particular setting and have been using these extended situations as a means for exposing these consumers to advertising messages. In this context, a captive service setting is characterized by an extended stay in a service facility or place where consumers cannot normally leave before the service has been performed, or they are reluctant to do so. In addition, when a person enters this setting they are often involuntarily exposed to advertising messages. In a rare study of captive audiences, Brand and Greenburg (1994) studied the effects of commercial messages aimed at middle- and high-school students in the classroom. Other examples of captive settings include airport terminals, bus and subway stations, and sports arenas.

Like most other marketing facilities these environments can be cognitively complex. Most of the atmospheric or environmental research in marketing has occurred in more traditional retail stores, and an extensive review of this literature has shown that consumers react to, and are influenced by, the atmosphere they are in (Turley and Milliman, forthcoming). In these captive settings the ads must compete for attention with the other aspects of the atmosphere which is created by the facility, and the other people who are in it. However, since consumers often spend extended time, up to several hours, these ads can receive prolonged or repeated exposure even though they are often in the background. From a marketing perspective, the ultimate questions are how much processing of these ads is occurring by people in these types of environments, and what effects, if any, do these ads have on attitudes and consumer behavior?

Fragmented mass media

Captive settings

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Emotionally charged environment

The captive setting which is used in this study is a basketball sports arena. Sports facilities are an interesting application of this type of advertising since respondents are usually inside them for two hours or longer, and many fans go to multiple games over a season which means there is a possibility of high number of exposures to individual ads. This is somewhat similar to frequent flyers who tend to see the same ads in an airport on a number of different days. Advertising messages in sports arenas are somewhat unique, however, in that they appear in what can often be an emotionally charged environment. One of the rationales for placing ads in sports arenas is that advertisers hope that some of the excitement and affiliation that fans associate with the home team will transfer to the product or organization (Schlossberg, 1991). However, whether this excitement inhibits or encourages the processing of the information in the advertisement is not well understood at this point.

In particular this research focuses on three advertising issues. First, to what extent can consumers recall the ads they see in this type of setting? Second, do these ads influence purchasing intentions? Finally, do they have any effect on the actual purchasing behavior of consumers?

Atmospherics studies

Literature review

At present, there is very little evidence which indicates how people process advertisements in a sports facility. Other related research streams, particularly atmospherics, may reveal some insight into this situation. Several atmospherics studies have explored the influence of in-store signs on the purchasing behavior of retail shoppers. Woodside and Waddle (1975), McKinnon *et al.* (1981), and Patton (1981) found that these in-store signs influenced items sales, while Curhan (1974) reported that in-store signing had a significant impact on sales for two supermarket products but did not affect sales of two others. However, in these situations the signs were exposed to consumers at the point-of-sale so that the information in the signs did not have to be processed and stored in long-term memory for a future decision, a situation which is not always true for products advertised in captive service settings.

High number of stimuli

As noted previously, in a sports arena there are often a relatively high number of stimuli competing for a person's attention at any one point in time. Cheerleaders, dance teams, mascots, other fans at the game, vendors, the public address announcers, referees, coaches and the game itself are just some of the elements associated with this very complex environment. Wakefield and his colleagues have studied this environment and noted that the environment can influence a number of behaviors and attitudes including satisfaction (Wakefield and Blodgett, 1994), repurchase intentions (Wakefield and Blodgett, 1994; Wakefield and Sloan, 1995; Wakefield *et al.*, 1996), desire to stay in a facility (Wakefield and Sloan, 1995; Wakefield *et al.*, 1996), pleasure (Wakefield *et al.*, 1996), and perceived value (Wakefield and Barnes, 1966).

However, there is some real doubt in the advertising and marketing community about the effectiveness of in-stadium advertising. In a recent article, Crimmins and Horn (1996) wondered if sports fans notice a logo or a brand name in the background of an athletic contest. They cite Pokrywczynski's (1994) argument that ads appearing inside an arena need 8-20 times more exposure than a television commercial does to achieve the same result. However, they may have failed to recognize that this captive audience is in a facility for a very long period of time and is likely to notice and process information in the ads a number of times over the course of a

Impact on sports fans

single game. The number of times an ad may be processed over the course of a season by a fan that attends a number of games can be very high.

The articles which have explicitly explored the effects of in-arena advertising tend to indicate that these ads are having at least some impact on sports fans. For example, a study by Stotlar and Johnson (1989) on advertisements in college basketball arenas and football stadiums found that 72.6 percent of their respondents indicated that they noticed in-arena advertising and just under 70 percent could correctly identify at least one of the advertisements. In an interesting finding, the authors reported that basketball fans had higher levels of advertising recognition than football fans, but that more people noted advertising at football games.

Cunneen and Hannan (1993) studied a different kind of sports facility, an LPGA golf course, and found that although 91 percent of their sample did not look for ads, 98 percent of the respondents noticed the ads placed along the course and grounds of the golf course. Recognition levels for particular ads ranged from 80 percent to less than 1 percent. They noted that the location of the signs had some impact on recognition. They also tracked usage patterns and reported that small numbers indicated that they would buy products in the future as a result of seeing the ads placed along the course.

Shilbury and Berriman (1996) extended this research stream into another culture by studying the effects of ads inside an Australian football stadium. They tracked awareness over the course of a season and found that recognition of a particular advertiser could exceed 80 percent of their sample, although most other products were significantly lower.

Products sold inside arena

One finding that is similar in all three studies is that products sold inside the arena seem to benefit most from the advertising that is placed there. Ads for products sold inside the sports facility were in all three studies more frequently recognized than ads for products that were not sold within the facility.

A final study which explicitly examined the effects of advertising in a sports facility approached the issue differently and used a “controlled event”, slides of a volleyball game, and tested different types of promotional activities which advertisers often use (McCarville *et al.*, 1998). The promotional options in this study included a nondirected message (a logo), a directed or detailed message, a directed message plus a coupon and a directed message and a sample. Their findings indicated that the respondents that received a trial sample reported higher product quality and increased intentions to purchase.

Advertising recall

Advertising recall is one of the oldest literature streams in marketing. Strong's 1912 study is often recognized as the earliest study of advertising recall, but this topic has continued to interest researchers in psychology, advertising and marketing since his initial article.

Recognition and recall

Advertising recall and recognition are used both to measure the effectiveness of an ad and as a test of whether the information from the ad has been processed into long-term memory. While debate concerning the relative merits of recognition and recall continues, the most influential findings have developed as a result of the Advertising Research Foundation's (ARF) 1956 study of Printed Advertising Rating Methods (PARM) (Bagozzi and Silk, 1983). After studying the data from the 1956 article, Lucas (1960) concluded that recall could be considered a measure of memory, but recognition should

not. Wells (1964) carried out additional analyses of the data from the PARM study and concluded that “recall scores are more objective and therefore more trustworthy than recognition scores.” More recent research indicates that memory traces for ads can last for 11 years or longer (Bozinoff and Dacin, 1985).

Aided or unaided recall

Recall can be measured using two approaches, aided or unaided recall (Bovee *et al.*, 1995). Aided recall is where subjects are provided with the name of the company or product and then asked about the ad. Unaided recall, on the other hand, is where subjects are supplied only with a category and they must identify which ads they remember in that category. Unaided recall is the more stringent measure and often results in lower scores than aided recall (Berkman and Gilson, 1987).

Prior research has investigated the recall of ads has in a number of different contexts including print advertisements (cf. Bagozzi and Silk, 1983), television commercials (Schlinger *et al.*, 1983; du Plessis, 1994), outdoor ads (Donthu *et al.*, 1993) and radio commercials (Anderson, 1985). However, the recall associated with in-arena advertising is presently a gap in the literature. Prior studies that explored the effectiveness of in arena advertising have used recognition as a measure (Stotlar and Johnson, 1989; Cuneen and Hannan, 1993; Shilbury and Berriman, 1996).

Effects of in-arena ads

Field study

A field study was conducted to shed additional light on the effects that in-arena ads have on the people that attend sporting events. The authors were interested in noting the effects of in-arena ads on one cognitive variable, recall, and two behavioral variables, purchase intentions and actual purchasing behavior. A field study, using sports fans attending actual games was used in order to maximize the external validity of these findings.

Although field studies suffer from a number of problems, including an inability to tightly control the situation, as is possible in a laboratory setting, it is the situation advertisers must deal with when they place ads. Surveying fans at games and events are often called audience audits and are the most common type of methodology for gathering primary research in sports marketing (Mullin *et al.*, 1993).

Data were gathered at the last four home games of the regular season of an NCAA mid-major university located in the Midwestern area of the USA. These four games occurred during a ten day period immediately prior to conference tournaments. At this institution the men’s and women’s teams use the same facility and the same ads are seen by fans of both teams. Both teams enjoyed successful seasons which resulted in both being selected for their respective NCAA tournament. This on-court success resulted in relatively high attendance statistics for both clubs.

Data from game spectators

Interviewers gathered data from game spectators in the arena lobbies which are out of sight of the playing area and all advertising messages. A team of interviewers approached members of the crowd at the entrances and exits of the arena and asked them to complete a short sports marketing survey. Since the questionnaire was administered on four different game days, the interviewers were instructed to make sure that respondents had not previously completed a survey associated with this study.

Information was gathered prior to the actual game for two of these data gathering points (one men’s and one women’s), and after games had been played for the other two. This was done so that the differences between the

Questions about ads

number of ads which were recalled from long-term memory, those which respondents could recall before the game and therefore remembered from previous games, and short-term memory, those gathered from respondents immediately following the game and exposure to the ads could be compared.

Respondents were asked a series of questions about ads that appeared inside this particular arena. Initial questions explored the frequency of attendance and the degree to which respondents considered themselves to be sports fans in general, and their degree of loyalty to the athletic teams of the particular university which was used in this study. The questionnaire then asked respondents to think about any advertising signs, electronic messages, and p.a. announcements they had either seen or heard during the basketball season. Respondents were then asked to identify any of the product/company messages they could recall from memory. After completing the recall task, survey respondents were asked if they would buy a product because it was advertised at the basketball games of this institution, and if they ever had patronized a product or business because of its advertising link with this school's basketball program. Finally, they were asked to provide information on some commonly gathered demographic variables including marital status, family size, occupation, education, age, home ownership and income.

Demographic statistics

Study results

A total of 348 usable questionnaires were completed using this method. The demographic statistics for this sample revealed that 60.9 percent were married and most earned over \$35,000 in income per year. Nearly 90 percent (89.7 percent) live in households of four or fewer people, with almost half (46.5 percent) in households of either one or two people. Most (66.7 percent) owned their own home and 79.5 percent had at least attended college. The two most common occupation categories were professional and technical occupations (20.7 percent) and student (17.2 percent).

The data were analyzed using a variety of procedures including simple frequency analysis, chi-square and analysis of variance. The following sections discuss first the cognitive variable, recall, and then the two behavioral variables, purchase intentions and actual purchasing behavior.

Variations in recall

Advertising recall

The 348 respondents recalled a total of 976 advertising messages, of which 934 (95.7 percent) were classified as being correct, that is they were ads for companies or products which actually appeared inside the arena.

Interestingly, 85.9 percent of the study sample could correctly identify at least one of the ads which they had been exposed to inside the facility. The average number of correctly recalled ads for this sample was 2.68 per respondent. However as Table I indicates there was a high degree of variation in the number of ads which individuals could recall. Correct recall ranged from not being able to recall any ads at all, which occurred for 49 respondents (14 percent), to a high of nine ads for two of the members of the sample (0.005 percent). The majority of the sample (62.1 percent) could recall between two and five advertising messages, and 30.7 percent correctly recalled four or more ads.

As Table II indicates, the 53 advertisers that placed ads in this particular arena had varying degrees of success when measured by unaided recall. One of the advertisers enjoyed a recall rate of 27.3 percent while others in the sample produced no recall at all (0 percent) from this sample. Five different companies had recall rates over 20 percent but a surprising number, 25

Correct recalls	Number of respondents	Percent	Cumulative percent
0	49	14.1	14.1
1	53	15.2	29.3
2	84	23.3	52.6
3	58	16.7	69.3
4	43	12.4	81.6
5	34	9.8	91.4
6	17	4.9	96.3
7	5	1.4	97.7
8	6	1.7	99.4
9	2	0.6	100.0
Total	348	100.0	

Table I. Recall rates by respondent

% of respondents recalling ad	Number of products/companies
20% or above	5
15-19	0
10-14	3
5-9	7
1-4	13
less than 1	25
Total Arena ads	53

Table II. Recall rates by advertisers

advertisers, were identified by less than 1 percent of the sample. The array shown in Table II is, in itself, somewhat interesting in that there were not any advertisers in the 15-19 percent level of recall. Also, only 15 ads could be named by more than 5 percent of the sample. The complete lack of recall for some ads, and the extremely low rates for others, is a surprising finding for this study. There were a number of cases where very similar ads, placed either next to each other or in the same general area of the arena, generated very different levels of recall from respondents. Future studies should focus on identifying specific advertising features, often called advertising execution variables (Stewart and Furse, 1985), which influence recall of ads in sports facilities.

The type of business that is advertised may influence the level of recall that an ad achieves. Seven of the ten most frequently recalled sponsors were food-oriented businesses (see Table III). Five of these were fast-food or carry-out oriented firms, one was a sit-down restaurant, while the other was a

Influence of type of business

Rank	Sponsor	Type of activity	No. of recalls	% of sample
1	Rafferty's	Restaurant	95	27.3
2	Domino's Pizza	Pizza Chain	86	24.7
3	Paul Mitchell	Hair Care products	85	24.4
4	Wendy's	Fast Food	75	21.6
5	Houchen's	Supermarket Chain	74	21.3
6	Rally's	Fast Food	47	13.5
7	O'Deli's	Fast Food	41	11.8
8	Fruit of the Loom	Clothing products	40	11.5
9	National City Bank	Bank	29	8.3
10	Papa Johns	Pizza Chain	26	7.5

Table III. Sponsors most frequently recalled

regional grocery store chain. Because of the growing patronage of fast-food and carry-out restaurants, particularly in a university community, these types of businesses may have had increased relevance. The three nonfood businesses are an interesting mix. One is an international consumer products firm that is headquartered in this community, a second is a local bank, and the third is an international manufacturer of upscale women's health and beauty products. All three of these nonfood advertisers have been long-term advertisers in this arena which may account for some of their relatively high level of recall.

Factors associated with correct recall

The authors also used analysis of variance to explore the effects of a variety of variables on recall levels of survey respondents. Table IV shows the effects of type of game, frequency of attendance, the degree of general sport interest, the degree of loyalty to the specific university, and demographic variables on recall rates. The data reveal that frequency of attendance, the degree of loyalty to the university's program, and the type of game (men's versus women's) were all significantly related to being able to correctly identify advertisers in the arena. The data indicate that the more frequently a person comes to games, and stronger loyalty to the university were associated with being able to correctly recall advertisements. The third significant variable suggests that fans attending men's games are more likely to be able to correctly identify advertisements than are those that attend women's games.

As shown in Table IV, the timing of the data collection did not influence recall levels in this sample. Data were collected before games twice and after games twice but the length of time since exposure to the ads did not significantly influence recall rates in this sample of respondents.

Influence on purchase intentions

Purchase intentions and purchase behavior

As Table IV indicates, the behavioral variables were analyzed using analysis of variance. Kinnear and Taylor (1991) suggest that a significance level of $p < 0.10$ is sufficient for studies with managerial relevance where an error in choosing a less effective alternative could be expensive in terms of opportunity costs, therefore this threshold level was used in this section of the study. In Table IV, one-way ANOVAS are reported and there were not any significant interactions between variables. A number of the variables used in this study are significantly associated with the advertising in a sports venue influencing a consumer's purchase intentions. The data indicate that fans that attend a men's game are more likely to have ads influence their intended purchases, as are nonstudents and respondents that report that they are big supporters of this particular university's sports program. Also, those who attend games more frequently are likely to report that the ads will change their purchases of products and services. Finally, those who were questioned immediately after a game were also more likely to report that their purchase intentions were influenced by the in-arena advertising.

Actual purchasing

Fewer variables are associated with actual purchasing of a product due to advertising in a sports facility. Actual purchase/patronage behavior was influenced by the type of game. Those attending a men's game were more likely to have actually patronized a company/product because it was advertised at a basketball game. Similarly, men were more likely to have made a purchase because of the ads, and those who frequent games more regularly were also more likely to have done this.

Low level of processing

Discussion

One of the most important findings associated with this study is that although people in a captive service setting notice the ads in a facility, they obviously do not process very many of them. As mentioned previously, the average respondent in our sample could recall 2.68 ads, which indicates that they are not processing very many of the ads in the environment since on an average game day at this arena fans are exposed to about 45 advertising messages. This estimate, which was provided by the athletic office, includes about 35 signs and 10 p.a. announcements per game. This level of recall compares favorably with Zhao's (1997) study of advertising recall in televised sports programs. He examined the effects of advertisements run during the Superbowls from 1992-1994 and found that the average viewer could recall 2.92 ads from that highly watched sports event. Although the number of ads varied slightly from year to year the number of ads that viewers were exposed to in this situation was in the 55-59 range.

Strong memory trace

The nonsignificant difference in recall rates between those interviewed before games and after games is an intriguing finding. The expectation was that those respondents surveyed directly after a game, when the ads were still in short term memory, would have higher recall rates than those interviewed before a game. Pregame respondents had to recall ads from prior games which would be stored in long term memory which requires some degree of active processing by the consumer for this to occur. This finding may indicate that when consumers process ads they do so in such a way that facilitates the creation of a strong memory trace. This tends to suggest that rehearsal, defined as the silent mental repetition of information (Schiffman and Kanuk, 1997), of a few of the ads in this environment is occurring during the game.

Another interesting finding of our study is that, perhaps because of the high level of clutter in this type of environment, it is difficult for an ad to stand out and be remembered by those consumers in a captive service setting. As Table II shows, only five ads generated recall rates over 20 percent and only 15 could be recalled by more than 5 percent of the sample. Most interestingly, 25 of the ads, 47 percent of the total ads in this arena on a typical game, generated less than 1 percent recall from our sample. This study did not examine advertising effectiveness issues or characteristics of ads which increase their level of recall, but the findings from this study makes this an important issue for researchers interested in these kinds of settings to explore in future research.

Effects of repeated exposure

Table IV also suggests that the number of times a person enters the captive service setting has a particularly strong influence on both recall and the behavior of consumers. This is the only variable which is significant on all three dependent measures. The effects of repetition of exposure to ads has been a topic which has been hotly debated in the advertising medium for years and continues to generate a high level of interest in researchers (cf. Longman, 1997; Kirmani, 1997). Tellis (1997) notes that two schools of thought have emerged on this point; minimalists believe that a single exposure is enough while repetitionists contend that repeated advertising is necessary for an ad to produce results. While this study did not explicitly control for this issue, the data do suggest that frequent and repeated exposures are more likely to cause sports fans to recall ads and to affect their purchase intentions and actual purchasing behavior.

These results also suggest that advertisers that buy space at single games, rather than season-long packages, are less likely to have these ads produce

Independent variable	Dependent variable	Purchase intention		Purchase behavior		Correct sponsors IDS	
		F-value	Significance	F-value	Significance	F-value	Significance
"menwom"	Men's or women's game	7.263	0.007***	9.260	0.003***	0.150	0.698
"prepost"	Pre-game or post-game survey	3.166	0.076*	2.714	0.101	1.379	0.241
"v1"	Attend mostly men's or women's games	1.390	0.237	1.752	0.139	2.661	0.033**
"gender"		2.537	0.112	4.133	0.043**	0.333	0.564
"marital"	Marital status	1.094	0.352	1.380	0.249	1.099	0.350
"famsize"	Number of members in household	0.820	0.536	0.508	0.770	0.703	0.621
"job"	Student of non-student	5.473	0.020**	2.529	0.113	0.153	0.696
"educate"	Education level	0.251	0.939	0.643	0.667	1.745	0.124
"age"		1.325	0.246	1.392	0.218	0.856	0.528
"ownhome"	Own or rent residence	0.183	0.669	0.882	0.348	0.585	0.445
"v2"	Number of games attended	5.183	0.024**	3.192	0.075*	35.364	0.000***
"v3"	Big sports fan	0.805	0.567	0.328	0.922	1.44	0.197
"v4"	Big WKU sports fan	2.318	0.034**	1.146	0.336	2.624	0.017**

Notes: * = significance < 0.10; ** = significance < 0.05; *** = significance < 0.01

Table IV. Summary of one way ANOVA results

Disparity between men's and women's games

some positive effects. All of the most recalled ads were from firms that used season-long strategies and all five of the ads which had recall levels over 20 percent had advertised in this facility for a number of years.

It also appears that people attending men's games were more influenced by the ads than those that attended women's games. Fans attending men's games reported that they were more likely to purchase products in the future because of the relationship between the advertiser and this university's sports programs and that they had actually done so. Since this is an unexpected finding, the authors did not gather the information necessary to explain the disparity between men's and women's games. Future research should explore this issue.

A final issue associated with the effects of advertisements in a captive setting on people in the facility is that other than frequency of exposure to the ads which had a significant association with all three dependent variables, there were different patterns in the significant relationships between independent and dependent variables. Some independent variables influenced one dependent variable but were not associated with the other two. Also, several independent variables seemed to have no association with the dependent variables. Marital status, household size, education level, age, home ownership, and degree to which they considered themselves to be a big sports fan were not significantly related with any dependent variable.

Advertising execution variables

Conclusion

The data from this study suggest that people in a sports arena notice at least some of the advertisements they are exposed to. However, they also appear to screen out large numbers of them. Future research should explore the effects that advertising execution variables (i.e. message complexity, type of information and message presentation) have on recall and purchase oriented variables. Also, other intermediate variables such as attitudes toward the ad and the advertiser and recognition rather than recall of the ad should be explored by those who study advertising in these types of situations.

It also appears that there may be some variables which mediate the effects that these ads have on the people who frequent sports arenas and stadiums. Our data suggest that frequency of exposure to the ad is the independent variable which has the largest impact on recall. This finding suggests that advertisers should consider long term commitments, possibly lasting over several seasons, for these ads to achieve maximum levels of recall and effectiveness. It also appears that single game purchasing is not effective in this context.

Advertisers need to be able to evaluate the effectiveness of these ads better than what has taken place to date in the published literature. Due to the level of advertising in most sports arenas, many advertisers evidently feel as though these ads are having some effect on the people in these facilities. However, whether these ads are better investments than other, more traditional media, is not clear at this time. More research is definitely needed on this topic.


Changing technology of advertising

Finally, it is important to note that this is an area that is likely to go through some profound changes over the next few years. At the time this is written there is still considerable debate about a settlement with the tobacco industry over the extent of their product liability for past practices which may include restrictions on their future marketing strategies. The tobacco deal is important in this context since sports sponsorships and in-arena promotion

has been a loophole which tobacco marketers have used to advertise their products (Cornwell, 1997). The technology to advertise inside sports arenas is also changing. Through the use of rotating signs and teletext, facility managers have been able to increase the number of messages consumers are exposed to without increasing the space allocated to advertising. What effect these partial game exposures will have on the recall of advertising themes is not presently known.

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This summary has been provided to allow managers and executives a rapid appreciation of the content of this article. Those with a particular interest in the topic covered may then read the article in toto to take advantage of the more comprehensive description of the research undertaken and its results to get the full benefit of the material present

Executive summary and implications for managers and executives

Spectators notice ads in sports arenas

Turley and Shannon examine the effectiveness on spectators of advertisements inside the basketball arena of an NCAA mid-major university in the American Midwest. Information was gathered by questionnaire outside the arena at the last four home games of the league season. Details were collected before two of the games (one men's and one women's) and after the other two, but the length of time since exposure to the advertisements did not significantly affect recall rates.

A total of 348 usable questionnaires was completed. The 348 respondents recalled a total of 976 advertising messages, of which more than 95 percent were for companies or products that were, in fact, advertised inside the arena. Almost 86 percent of people could correctly identify at least one of the advertisements they had been exposed to inside the arena.

Fans fail to process many of the messages

These figures indicate that people in the captive setting of a sports arena actually notice the ads. However, the spectators did not process many of them. Fans were exposed to around 45 advertising messages on an average match day (35 signs and 10 public-address announcements), but the average number of correctly recalled advertisements was 2.68 per respondent. Some 14 percent of people could not recall any ads, while two respondents could recall nine. Most people could recall between two and five advertising messages.

Fifty-three advertisers had placed ads in the arena. One of the advertisers enjoyed a recall rate of 27.3 percent, while others produced no recall at all. Five companies had recall rates over 20 percent, but 25 of the 53 advertisers were identified by less than 1 percent of the sample. Only 15 ads could be named by more than 5 percent of the sample.

Similar ads placed in the same general area of the arena gave rise to very different levels of recall. Seven of the 10 most frequently recalled sponsors were food-oriented businesses. The other three had all advertised in the arena for a long period of time.

The effects on intention to purchase

People who attend games at the arena most frequently, and spectators with the strongest loyalty to the university, were best able to recall the advertisements. Moreover, fans attending men's games were more likely to be able to identify advertisements correctly, and more likely to have ads influence their intended purchases, than spectators who attended women's matches. Non-students, respondents who reported that they are big supporters of the university's sports programme and people who attend games most frequently were most likely to report that the ads would change their purchases of products and services. People questioned immediately after a game were also more likely to report that their purchase intentions were influenced by the advertisements they had been exposed to inside the arena.

The effects on purchases made

Those attending a men's game were more likely to have actually patronized a company or product because it was advertised at a basketball game. Similarly, men were more likely than women to have made a purchase

because of the ads, and those who attended games most regularly were also more likely to have done this. The research therefore suggests that advertisers who buy space at single games, rather than in season-long packages, are less likely to benefit.

Significant changes are currently affecting advertising in sports arenas. In particular, the use of rotating signs and teletext gives arena managers the ability to increase the number of messages consumers are exposed to without increasing the space allocated to advertising. These developments are likely to have some effect in a setting which is already cluttered with advertising messages.

(A précis of the article “The impact and effectiveness of advertisements in a sports arena”. Supplied by Marketing Consultants for MCB University Press.)