

## A CORRESPONDENCE ANALYSIS OF SOURCES OF INFORMATION USED BY FESTIVAL VISITORS

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Information sources used by festival visitors need to be examined due to the increasing competition within the events sector as a result of growth in the number and size of events being staged. The article provides an analysis of a visitor profile of a major wine festival staged in the Swan Valley wine region of Western Australia (WA). A survey was conducted over the five weekends of the staging of the 2002 festival. Data were analyzed using correspondence analysis techniques to underpin the underlying dimensionalities of the sources of information based on age groups, group composition, and usual place of residence of intrastate, interstate, and international visitors. Results indicate that the most common source of festival information was personal through word-of-mouth across all visitor groups. Other sources of information that also had some significance include newspapers and radio. The results provide information for developing a theoretical framework for events information search behavior, and managerial implications for festival organizers are presented.

Key words: Festivals; Events; Information sources; Correspondence analysis

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Festivals have a rich history in both the ancient and modern worlds. Due to the changing nature and scope of festivals, the area of increasing importance for festivals organizers is the identification of the most effective mode of information dissemination. Whilst various studies have been undertaken in tourism information search behaviors (Chen, 2000; Fodness & Murray, 1999; Kotler, Bowen, & Makens, 2003; Morrison, 2002; Snepenger & Snepenger, 1993; Vogt & Fesenmaier, 1998), there appears to be a lack of research in information search behaviors within the context of

events and festival management. Information sources have a dual role in that they are used by festival visitors to plan their visits, and they are used by festival organizers to formulate strategic and operational plans for the festival (Jafari, 2000). Therefore, the identification of visitor profiles, with the associated sources of awareness and information, requires research within the festival sector to help festival managers “effectively deliver the needed message to the appropriate information sources for attracting their target audiences” (Chen, 2000, p. 240).

When looking at the events sector, it can be seen that the use of the term festival is applied to a range of events. The Policy Studies Institute (1992, p. 1, cited in Bowdin, McDonnell, Allen, & O'Toole, 2001) states:

A festival was traditionally a time of celebration, relaxation and recuperation which often followed a period of hard physical labor, sowing or harvesting of crops, for example. The essential feature of these festivals was the celebration or reaffirmation of community or culture. The artistic content of such events was variable and many had a religious or ritualistic aspect, but music, dance and drama were important features of the celebration.

Thus, traditionally, many festivals have been staged primarily for the local visitor market. However, local governments, residents, and festival organizers are viewing festivals as booms to local economies, and thus are seeking to maximize economic impacts by attracting as many visitors as possible (Delamere, 2001). This is noticeable in the increasing number and frequency of festivals being staged, and by the nature and scope of these festivals. Resulting from this is an increase in competition for attracting local festival visitors, while increasing the market audience to intrastate, interstate, and international visitor markets. Thus, while the local domestic market may still be the underpinning of many festivals' visitor cohorts, regional and international visitors are increasingly attending a range of festivals. Van Gessel (2000, p. 114) has stipulated a number of criteria for events to be internationally attractive, one of which is for the event to be able to attract attention both on a national and an international level. Thus, it is of significance to investigate festival attendees' information search patterns based on a range of factors including age, place of residence, and visitor group composition. This information is required to provide relevant information for event strategic planning and management (Getz, 1997; Hall & Macionis, 1998; Nicholson & Pearce, 2000).

To investigate the sources of information of festival attendees, the research project investigated a major wine festival staged in a regional wine area, situated in the urban peripheral region of the capital city of Perth, Western Australia. The combination of wine, food, and place provides potential for festival development in the combining of tourism devel-

opment and wine production, two of Australia's fastest growing industries (Foo, 1999; Wine Industry Association of Western Australia [WIAWA], 1997). Wine-producing regions not only provide the spatial context for the development of wine tourism, the inclusion of a temporal element, but can also provide the context for the staging of wine-related events such as wine and food festivals (Carlsen, 1999; Getz, 2000; O'Toole, 2001).

### Background

The "Taste of the Valley" (TOTV) festival is staged in the urban-rural peripheral region of Western Australia's oldest and most awarded wine-growing region, the Swan Valley, approximately 40 minutes from the City of Perth (Swan Valley Tourism Council, 1999). This festival has been staged for 3 years and was originally designed by the regional tourism council to be staged in the quieter autumn period following the busy harvest season, the intention being that it maximized undercapacity within a low business period. The "Spring in the Valley" festival, held 6 months earlier in the spring season, is the premier wine festival for the region, having been successfully staged for 13 years and considered to be the major wine festival in Australia.

The TOTV festival involved the local tourism member organizations coordinating a program of wine and food tasting, food, wine, and art trails, and unique "GourmArt dinners." The diverse range of businesses involved in the festival included wineries, arts and craft galleries, food and beverage outlets, boutique breweries, a cheese factory, and a chocolate factory. While recognizing the growing number of wine tourism regions and the increasing number of wine and food festivals being held throughout Australia, the aim of the festival was to target the serious food and wine visitor market with a unique, quality festival. The focus of this study was to identify the sources of information visitors used to learn about the festival and to identify the TOTV attributes that visitors consider important for the festival's success.

### Study Methods

A survey of visitors to the festival was conducted during the staging of the 2002 "Taste of the Valley Festival," using a four-page questionnaire. The ques-

tionnaire contained 18 structured and open-ended questions seeking information on a range of issues relating to visitors attendance at the festival. A key objective of the questionnaire was to elicit information concerning the sources of information visitors used to find out about the festival. Demographic, expenditure, travel, and length of visitation information of the festival attendees was also sought. The focus of this article is matching the information source with age, place of residence, and visitor group composition.

Throughout the duration of the 5-week festival, a group of research assistants located around the tourism loop in the Swan Valley administered the survey to festival visitors using random intercept method. To gain a wide coverage of responses from visitors attending the festival at different times of the day, and on different days, survey administrators were scheduled to collect data over the range of times and days during the staging of the festival. A total of 700 visitors participated in the survey over the 5-week period of the festival. The collected data were analyzed with descriptive statistics to investigate the demographic profile of respondents, and further analysis using correspondence analysis was undertaken to match the sources of information against levels of demographic characteristics using version 11.0 of the SPSS (statistical package for social sciences) package.

### Results and Discussions

Profiles of the respondents who volunteered to participate in the survey at the festival sites indicate that the majority (59%) were females, 25–34 years of age (27%), repeat visitors to the TOTV (73%), and came from the metropolitan area (north of the river) of Western Australia (53%); 59% of respondents attended the festival with family or friends, and a third (33%) of the respondents learned about the festival through word-of-mouth communication. The latter characteristic is congruent with that fact that customers place more weight on social sources of information when they buy services; in particular, the hospitality and travel industry is most dependent on word-of-mouth information (Morrison, 2002). Food and wine was the main attraction for the majority of respondents (52%) who attended the festival to come to the Swan Valley (Table 1).

### Correspondence Analysis

The information sources used by respondents were analyzed for age group, usual place of residence, and group composition, using correspondence analysis. Correspondence analysis was chosen for this study because it transforms a table of numerical information (categorical data) into a graphical display, facilitating the interpretation of this information. The most important function of correspondence analysis is its multivariate nature that enables simultaneous treatment of multiple categorical data showing relationships that would not be detected in a series of pair-wise comparisons of variables (Chen, 2000; Chen & Gursoy, 2000). This technique portrays sets of data points in a joint space by

Table 1  
Festival Respondents Profiles

Characteristics/Categories	Count	Valid %
<b>Gender (N = 665)</b>		
Female	392	58.9
Male	273	41.1
<b>Age group (N = 683)</b>		
18–24 years	145	21.2
25–34 years	182	26.6
35–44 years	170	24.9
45–54 years	108	15.8
55+ years	78	11.4
<b>Usual residence (N = 665)</b>		
Perth metro-NOR <sup>a</sup>	350	52.6
Perth metro-SOR <sup>a</sup>	160	24.1
WA region	29	4.4
Interstate	43	6.5
Overseas	83	12.5
<b>Group composition (N = 687)</b>		
Alone or with partner	220	32.0
With family/friends	404	58.8
With others	63	9.2
<b>Information sources (N = 537)</b>		
Word-of-mouth	177	33.0
Radio	64	11.9
Television	36	6.7
Newspaper	82	15.3
Road signage	39	7.3
Web site/Internet	19	3.5
Other sources	120	22.3
<b>Main attraction to Swan Valley (N = 665)</b>		
TOTV 2002 festival	201	30.2
Food and wine	346	52.0
Art and entertainment	42	6.3
Other	76	11.4

<sup>a</sup>NOR = north of the river and SOR = south of the river to indicate which part of the metropolitan area one lives (the Swan River divides Perth into two geographic sections, north and south).

Table 2  
Information Sources by Age Group ( $N = 522$ )

	Age Group					Total
	18–24	25–34	35–44	45–54	55+	
WOM	11.3%	8.2%	6.7%	4.6%	2.5%	33.3%
RAD	3.3%	2.9%	3.4%	1.3%	1.0%	11.9%
TEL	1.5%	1.0%	2.1%	1.5%	0.8%	6.9%
NEW	1.7%	3.3%	4.0%	3.6%	2.5%	15.1%
RDS	1.9%	1.9%	1.3%	0.4%	1.7%	7.3%
WIN	0.6%	2.1%	0.8%	0.2%		3.6%
OTH	3.8%	6.1%	5.6%	3.3%	3.1%	21.8%
Total	24.1%	25.5%	23.9%	14.9%	11.5%	100.0%

Note: WOM, word-of-mouth; RAD, radio; TEL, television; NEW, newspaper; RDS, road signage; WIN, Web site/Internet; OTH, other.

analyzing the relations between the categories of two discrete variables by transforming the matrix into a two-way table (Clausen, 1998; Greenacre & Blasius, 1994; Hoffman & Franke, 1986). This technique: a) produces a visual representation of the relationships between the row categories and the column categories in the same space; b) is versatile; c) can handle data which are already in percentage form; and d) the graphical output is rich in information (Greenacre & Blasius, 1994; Kara, Kaynak, & Kucukemiroglu, 1996; Phillips, 1995).

### Age Group

Table 2 shows the profile of each level of information sources for the corresponding levels of age group. A significant chi-square value was reported for the age-information relationship. The reported value for Table 2 was  $\chi^2(24) = 51.558$   $p = 0.001$ .

The first correspondence analysis examined the use of various information sources by various age groups. Four dimensions were extracted (Table 3), showing a one-dimensional solution containing 50% of explained variance with a singular value of 0.222. Hair, Anderson, Tatham, and Black (1998) recommend selection of the number of dimensions based on the overall level of explained variance desired and a rule of thumb is that dimensions with eigenvalues greater than 0.2 should be included in the analysis (Table 3).

The joint plot in Figure 1 shows the relationships between the row (information sources) and column (age group) based on the proximities of the row and

column points. The joint plot indicates that the youngest age group (18–24) was more likely to depend on word-of-mouth information, while the older age groups were more likely relying on television or newspapers. The 45–54 age group was more likely to utilize information gleaned through the television and the 55+ age group would have relied on newspapers. In terms of information source utilization, the 25–34 age group was separated from other age groups, and Website/Internet, road signage, and other means of information sources were separated from word-of-mouth, radio, television, and newspaper, and hence were not distinguishable among the various age groups. The results suggest that marketers of the festival need to adopt different promotional tools to different age groups. For example, television advertising would be effective to get the attention of 45–54 age groups, newspapers would be an effective medium for 55+ ages, and the younger group would be attracted to the festival through the word-of-mouth communication. Due to the fact that

Table 3  
Correspondence Analysis on Information Sources Between Age Groups

Dimension	Singular Value	Inertia	Proportion Explained	Cumulative Proportion
1	0.222	0.049	0.499	0.499
2	0.164	0.027	0.273	0.772
3	0.136	0.018	0.187	0.958
4	0.064	0.004	0.042	1.000
Total		0.099	1.000	1.000

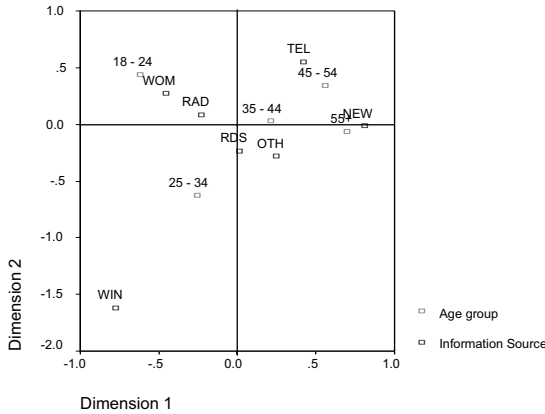


Figure 1. Joint plot of information sources and age group. WOM, word-of-mouth; RAD, radio; TEL, television; NEW, newspaper; RDS, road signage; WIN, Web site/Internet; OTH, Other.

Website/Internet was separated from any of the age groups, utilizing this mode would be counter-productive.

*Usual Place of Residence*

Table 4 shows the profile of each level of information sources for the corresponding levels of usual residence. A significant chi-square value was reported for the residence-information relationship. The reported value for Table 4 was  $\chi^2(24) = 51.953$ ,  $p = 0.001$ .

The second correspondence analysis examined the use of various information sources by place of resi-

Table 5

Correspondence Analysis on Information Sources Between Residences

Dimension	Singular Value	Inertia	Proportion Explained	Cumulative Proportion
1	0.240	0.058	0.569	0.569
2	0.167	0.028	0.274	0.843
3	0.108	0.012	0.115	0.958
4	0.065	0.004	0.042	1.000
Total		0.101	1.000	1.000

dence. Four dimensions were extracted (Table 5). It shows a one-dimensional solution containing 57% of explained variance with a singular value of 0.240.

The joint plot in Figure 2 shows the relationships between the row (information sources) and column (usual residence). The joint plot indicates that visitors from Perth-SOR and interstate were more likely to depend on word-of-mouth information, while the visitors from Perth-NOR were more likely utilize newspapers and road signage as main information sources. Website/Internet, radio, and television were separated from word-of-mouth, road signage, newspaper, and other information sources and hence were not distinguishable among the various residence groups. To publicize the festival to people from different residential addresses requires a different promotional mix. Road signage would be appropriate for potential visitors from the Perth metropolitan region north of the river, while word-of-mouth communication would be more appropriate for potential visitors from the Perth metropolitan area south of

Table 4

Information Sources by Usual Residence (N = 513)

	Residence					Total
	Perth-NOR	Perth-SOR	WA Region	Interstate	Overseas	
WOM	15.8%	8.8%	1.8%	2.3%	4.1%	32.7%
RAD	7.2%	3.5%	0.4%	0.2%	0.2%	11.5%
TEL	5.1%	0.8%	0.2%		0.6%	6.6%
NEW	10.1%	3.7%	0.2%	0.6%	1.0%	15.6%
RDS	4.7%	1.4%			1.2%	7.2%
WIN	1.0%	1.8%	0.2%		0.6%	3.5%
OTH	10.7%	4.3%	1.9%	1.4%	4.5%	22.8%
Total	54.6%	24.2%	4.7%	4.5%	12.1%	100.0%

Abbreviations same as Table 2.

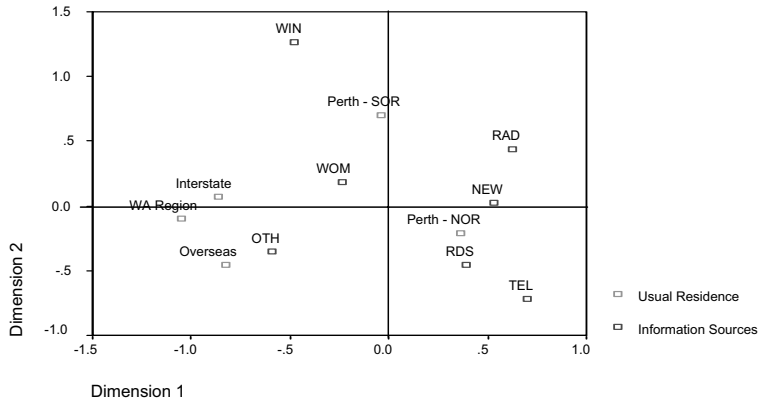


Figure 2. Joint plot of information sources and usual residence.

the river. Overseas visitors might be interested to attend the festival based on other types of information. Once again, promoting the festival on the Web site/Internet may not be an appropriate strategy for any of the visitor types.

#### Implications and Conclusion

A correspondence analysis was undertaken to investigate the underlying dimensionalities of the sources of information used by festival visitors based on age groups and usual place of residence of intrastate, interstate, and international visitors. This article has shown the existence of significant differences in the utilization of information sources between residential locations and between age groups. For example, visitors from Perth (NOR) would more likely use road signs and papers to find out about the festival, while those in the Perth (SOR) would more likely rely on word-of-mouth. In other words, the two groups use distinctly different sources, the former relying on print media while the latter relying on personal information. Overseas and WA regional visitors would more likely use other information sources. Those visitors in the 18–24 age bracket would more likely use word-of-mouth (personal) communication compared with the over 55 age group, who would more likely rely on print media. Those in the age bracket between 25 and 34 may have used the Website/Internet for information gathering about the festival. Interstate visitors, on the other hand, may have relied on word-of-mouth

information about the festival.

The foregoing results and discussions provide valuable information that supports the need for festival visitor information search behavior understandings, which are necessary for festival managers when undertaking both strategic and operational planning. The use of this information by festival organizers can be helpful in programming, marketing, and festival product development. Strategic decisions involving the distribution sources for festival information should be seriously considered when looking at sources used in previous years, while implementation at the operational level needs to be the most effective mode available for the targeted festival market audience. In order to enhance future festival successes, astute festival organizers would take note of the significance of source of information utilized by visitors to the festival.

When considering information distribution, the development of a records system for repeat visitation would seem an appropriate strategy to implement. This could be done in the form of a “A Taste in the Valley” visitors database for local visitor target audiences, with perhaps the wine industry using this database as a means for information updates and mailing purposes throughout the year. However, for the international visitor markets that appear to use other sources of information, links from the festival website through to regional and state level tourism websites would be beneficial for the dissemination of appropriate information. This would certainly sustain the visitor awareness of the Swan Valley, and

its wines and produce availability if undertaken on a seasonal basis. This is important when considering the perceived target market of festival visitors from the tourism perspective, and therefore further psychographics research could be undertaken to investigate various segments within the visitor group.

Food and wine festivals are showing significant popularity in urban settings, and when staged in the context of the urban-rural periphery in winery regions, there are opportunities to develop unique images and awareness of these tourism and wine zones. Event organizers should market the opportunity to attend the events and to experience the excitement of other secondary activities that may be integrated into the overall regional tourism plan (Neirotti, Bosetti, & Teed, 2001; Telfer, 2000).

A festival, when staged in a unique context, in an authentic location, with the provision of facilities identified as being of significance by the visitor market, and using research as a primary input into the event planning process should ultimately result in the staging of a successful event for all stakeholders—in particular, the visitor stakeholder. Of significance for this study is the fact that visitors must be able to find out about the festival, which means the festival organizers should endeavor to investigate and use the best information modes for attracting their proposed festival audience. As Prentice and Andersen (2003) reiterate, the festival is a composite experiential product that can be considered as a destination with great practical application in defining the unique selling points of particular festivals. Therefore, efficient information sources are of significant value to the success of the festival. In conclusion, as the study was focused on limited aspects of the festival, further research incorporating wider issues important to the urban-rural peripheral event planners would be the logical extension of this research.

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