

# Why do some yellow page advertisements capture attention better than others?

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Tuominen R. Why do some yellow page advertisements capture attention better than others? *Acta Odontol Scand* 2001;59:79–82. Oslo. ISSN 0001-6357.

One thousand Finnish people aged 20 years and more were interviewed to investigate how people perceive dentists' yellow page advertisements and which attributes they find attractive. Each subject was asked to identify the advertisement that captured his/her attention the most and which one least from a double-page spread of dentists' yellow page ads. The subjects were then asked to give the reason for the decisions, which was duly recorded. Various characteristics of the ads were recorded. In the analyses the five most commonly attractive and the five most commonly unattractive ads were compared with all the others shown to the subjects. The five most commonly chosen attractive advertisements were larger and had less text density than the others ( $P < 0.001$ ). In contrast, use of frames decreased by fourfold the probability of being chosen. The subjects most often reported use of pictures or photograph, clarity of the ad, and large size as the reasons for choosing their favorite ad. Commonly expressed reasons for disliking an ad were small print, being boring or uninformative, and an unclear or muddled look. All three ads designed by advertising professionals were among the five most commonly attractive, whereas all five most commonly unattractive ads were planned by dentists themselves. Dentists plan their yellow page advertisements alone much too often. This results in ads that consumers do not necessarily distinguish from the mass of others. Consumers appreciated use of a picture or photograph and a clear message in large ads. Common criticisms were small print and a boring, uninformative, or unclear appearance. □ *Advertising; consumers' perceptions; dentists; economics; dental*

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Although goods and services, particularly health care services, are very different things, consumers seek similar information in both. For example, information relating to cost and benefits, availability, and personnel qualifications is expected in advertisements for both goods and services (1).

Consumers accept that health care professionals advertise and expect to find useful information in their ads (2). Although consumers tend to have a favorable attitude toward dental advertising, dentists themselves are more critical (3). Butler & Abernethy (4) compared the information provided by physicians in their yellow page advertisements with what consumers expected to get from them. Physicians were generally found to offer the expected information.

Cobb-Walgren & Dabholkar (5) found that consumers want items like business name, logo, phone number, address, and specific services in physicians' ads. Those with abundant information were deemed influential and effective, resulting in the most receptive feeling from consumers using the yellow pages to select a physician.

However, opposition to increased yellow page advertising by physicians has been raised by the profession itself (6, 7), and some studies have shown that much of the information in such ads is misleading (8).

Yellow page ads by dentists may be an effective method of attracting new customers, particularly in more competitive situations (9, 10). Dentists have been shown to overestimate practice attributes, such as location, while

underestimating others, like ease of making appointments, which consumers appreciate (11). In another study practice location was of great importance when choosing a dentist (12).

Yellow page advertisements are typically planned for consumers needing to make an initial contact. Consumers use only a few sources of information for selecting a dental service provider, the yellow pages being the second most popular source, after friends and relatives (13). Together with the content, it is important for the ad to be attractive enough to be noticed among the mass of other ads on the pages. However, using only listing has been much more common than using display ads, even when advertising dentistry has not been restricted (14).

The aim of this study was to investigate how lay people perceive dentists' yellow page advertisements and which attributes they find attractive.

## Materials and methods

One thousand Finnish people aged 20 years and more were interviewed. For each of the five cities included in the study, a fixed quota of 20 men and 20 women was determined for each of five age categories: 20–29 years, 30–39 years, 40–49 years, 50–59 years, and 60 years and older. The interviews were carried out randomly on the street and in market places in the city centers, until each

Table 1. Studied advertisement characteristics and their effect on the probability of being chosen as one of the five most attractive or unattractive ads

Characteristic	Five most attractive		Five least attractive	
	OR	95% CI	OR	95% CI
Frames	0.25	0.17, 0.36	2.24	1.12, 4.48
Picture/photograph	1.34	0.88, 2.04	0.34	0.11, 1.06
Logo	1.69	1.22, 2.34	1.80	0.81, 4.03
Heading	56.51	28.46, 112.20	0.13	0.05, 0.35
Additional color	0.75	0.52, 1.09	NA	NA
Names listed	NA	NA	NA	NA
Services listed	2.92	2.14, 3.98	2.11	0.95, 4.69
More than one language	1.00	0.99, 1.01	59.42	32.20, 109.65

OR = odds ratio; 95% CI = 95% confidence interval; NA = not applicable, no cases in one of the 2 × 2 table cells.

age and sex quota was completed. The final sample size in each city was therefore 200 subjects.

The yellow pages were chosen from the Helsinki metropolitan area directory. The double-page spread of dental advertisements included 17 display ads and 24 listings. The 17 display ads covered approximately 90% of the double page. The smallest display ads were 18 cm<sup>2</sup> and the largest 120 cm<sup>2</sup> in size. The cities included in the survey were among the largest in Finland, located around the country 170–640 km from the capital.

Research assistants specially trained for this survey worked as interviewers. They showed a double-page spread of yellow page ads to the interviewed subject and asked him/her which one of the ads most captured his/her attention and which one least. The interviewers questioned every subject, using identical phrasing and in the same manner. The time taken to decide was not limited in any way.

After the subject had chosen the most attractive and unattractive advertisements, he/she was asked to give the reasons for the decisions, which were duly recorded. All reasons were subsequently coded and grouped into categories with similar meanings.

The characteristics of the double-page of ads shown to the subjects were as follows: presence of frames around the ad; presence of a drawn picture or photograph; presence of a logo; presence of a heading other than just the name of the clinic; use of additional color (red); listing of dentists' names; listing of services or specialties; use of other languages than Finnish; price of the ad, as obtained from the publisher of the directory; and density of the ad, determined by dividing the number of letters and numbers in the ad by its size.

In addition, each advertiser was contacted and asked whether the ad was planned by advertising professionals or by dental professionals.

The size and price of the ad and the number of letters and numbers in it were all significantly correlated. Density was not significantly correlated with these, however, and thus size and density were both included in the final analysis.

The five advertisements selected as most attractive and most unattractive were compared with all the remaining

ones displayed to the subjects and examined in relation to the above characteristics.

For the statistical evaluation of the data the chi-square test was used for differences in proportions and Student's *t* test in means. Odds ratios (OR) were calculated for all proportional comparisons and their 95% confidence intervals (95% CI) as: 95% CI = OR<sup>1±1.96/x</sup>, where x is the square root of the test statistic obtained by using the chi-square test.

## Results

The five advertisements most commonly chosen as attractive were significantly larger and had less text density than the others ( $P < 0.001$ ). Use of a heading, listing of services or specialties offered, and a logo in the ad were significantly associated with the probability of being among the five most attractive ads (Table 1).

In contrast, use of frames decreased by fourfold the probability of being chosen. A picture or photograph, additional color, or names of practicing dentists did not significantly increase the odds of being chosen. Nor did the use of languages other than Finnish, usually Swedish, improve the overall attractiveness of the ad (Table 1).

Table 2. Proportions of reported reasons for choosing particular yellow page advertisements as one of the five most or least attractive, by 1000 adult subjects

Characteristic	Five most attractive	Five least attractive
Could not give a reason	0.0	1.3
Picture or photograph	29.2	6.9
Clarity	31.5	0.0
Unclear, muddled	0.0	14.0
Large size	5.1	0.0
Small size, small print	0.0	27.7
Additional color	16.0	7.5
Logo	2.2	0.8
Interesting, different, artistic	3.8	0.0
Boring, uninformative	0.0	29.2
Message	12.2	8.7
More than one language	0.0	3.9

The OR for listing names of practicing dentists could not be calculated, as all ads without the name(s) of practicing dentist(s) were confined to the five most attractive ones.

The subjects most often reported use of pictures or photographs, clarity of the ad, and large size as the reasons for choosing their favorite ad (Table 2). The reasons were similar across the age groups, but women mentioned a picture or photograph (33.8%) significantly (OR, 1.60; 95% CI, 1.22, 2.09) more often than men (24.2%). On the other hand, men mentioned clarity (34.2% versus 29.0%) slightly (OR, 1.27; 95% CI, 0.98, 1.65) more often and additional color (18.4% versus 13.7%) more often (OR, 1.42; 95% CI, 1.02, 1.98).

The five ads most often chosen as unattractive were significantly smaller and had higher letter and number density ( $P < 0.001$ ) than the others. They also significantly more often had frames, no heading, and languages other than Finnish (Table 1).

Commonly expressed reasons for disliking an ad were small print, being boring or uninformative, and an unclear or muddled look (Table 2). Women and men were very similar in this respect. However, the youngest subjects (20–29 years) mentioned the boringness of ads (40.6%) significantly more often (OR, 2.56; 95% CI, 1.66, 3.95) than those aged 60 and more (21.1%). Use of additional color disturbed subjects in the oldest age bracket (11.1%) more often (OR, 2.78; 95% CI, 1.30, 5.88) than the youngest ones (4.2%).

All three ads designed by advertising professionals were among the five most attractive, whereas all the five least attractive ones were planned by the dentists themselves.

## Discussion

As the sample for this study came from five cities with populations ranging between 77,000 and 190,000, it is safe to generalize these findings to city dwellers only. Because the communities for carrying out the interviews were selected, use of census-based sampling frames would not have produced any higher generalizability, and thus fixed quota samples were determined.

The respondents' data were collected from cities other than the capital Helsinki, where the directory of the yellow pages was from. This was to ensure that the interviewed subjects had no prior knowledge of the ads or clinics. If local directories had been used, subjects might have seen the ad of their own service provider or otherwise known some of them. This could have caused bias.

These findings show how the respondents perceived ads but not how they behaved. Because these people did not make any actual purchase decisions, the results only suggest what type of ad attracts customers to dental clinics or have the opposite effect.

The single most commonly chosen ad was not analyzed separately because the number of characteristics in it would have been too limited. Choosing the five most

favored ads increased the numbers of characteristics and made statistical analysis possible. Even then multivariate analysis with several independent variables was not possible, and the analyses were limited to one characteristic at a time.

The well-known fact that larger ads have higher readership than smaller ones was confirmed in this study. The size of an ad was a more important factor in this respect than any other characteristic studied here. In the reported reasons for choices, small ads were found to irritate subjects even more than large ones were found attractive. Although larger ads are more expensive, they would seem to be more cost-effective. Small ads can be hard to discern among the mass of advertisements in the yellow pages. Ads should include the information that will distinguish one provider from another (15). If a clinic decides to invest in this form of marketing, it must be ready to budget more than the bare minimum.

The suggestion from previous research that health care professionals should include a large number of items in their ads (4, 5) was not corroborated in this study. Packing in many items makes the ad dense, which did not attract the interviewed subjects. It has been suggested that consumers tend to utilize four to seven information cues when making purchase decisions (1). On the other hand, Freiden & Goldsmith showed that most people used only one information source when selecting a dental service provider (13).

Listing of practitioner names may not be informative to customers. People searching the yellow pages obviously do not have a certain clinician in mind, and the name only identifies his or her gender. However, those looking for a service provider are likely to be interested in the variety of dental specialties available. The fact that listing services had a significant beneficial effect, in contrast to listing names, supports this notion.

Headings had a strong impact on potential clients; they highly significantly increased the odds of ads being considered most attractive. Furthermore, ads with a heading had significantly decreased odds of being considered unattractive. Use of larger ads enables headings to be placed without crowding of the text.

Frames around the ad did not have the anticipated effect. Whereas people may notice these ads more easily, frames seemed to create a harmful rather than a beneficial impression. Frames take space from the message and may increase the text density, which was shown to disturb consumers.

The use of a logo can be beneficial but does not guarantee a positive reaction. Logo planning is demanding and requires professional input to ensure the appropriate and anticipated signal to the audience. This was supported by the finding that all the ads developed by professionals were among those most positively perceived.

Whereas everyone appreciates the need to receive, for example, root canal therapy from a trained dentist rather than an unqualified person, most dentists seem to think that they are adequately skilled in the work of advertising

professionals. This produces poor advertisements and a waste of marketing resources. Dentists who acknowledge the expertise of advertising specialists are likely to do better than those trying to manage by themselves. Previous research by McAlexander et al. (10) showed that dentists using display ads had a higher level of income and patient turnover than those using only a listing.

Although a significant number of subjects did not appreciate other languages in the ads, their use may signify a special intent. Their primary target population may be the minority speaking that language rather than the majority.

The reported reasons for choosing the most and least favored ads included approximately 100 different phrasings. However, the categories presented in Table 2 were easy to form; a continuum from clear to unclear or muddled seemed to distinguish the best and the least liked.

The use of a picture or photograph was mentioned clearly more often than expected. The finding that almost a third of the subjects were attracted by a picture or photograph contradicts Butler & Abernethy's (4) finding that less than 1% of consumers desired a photograph in physicians' yellow page advertisements. However, the importance of listing services corroborated their comparable finding (4).

On the basis of these study findings, an attractive yellow page advertisement for a dental clinic should be planned by an advertising professional, be relatively large and clearly designed, and include a heading and list of services but not so much information that the ad becomes dense. The ad should have a carefully planned logo and possibly a picture or photograph to improve attractiveness and lessen the possibility of a boring look. For this purpose an additional color should be used cautiously. The ad should not have frames or list practicing dentists' names and should definitely not use small print.

The present data come from Finland, and we do not know how well they can be generalized to other market situations. Finnish dentists have used yellow page advertising increasingly from the early 1980s, which approximates the situation in many European countries. Future research is needed to ascertain whether similar advertisement

characteristics have equal importance to people in different health care markets. An interesting question to be studied in this context is the role of cost sharing by third-party involvement in people's perceptions.

*Acknowledgements.*—This study was supported by the Finnish Cultural Foundation and the Yrjö Jahnsson Foundation.

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