
Simultaneous media usage: A critical consumer orientation to media planning

Received in revised form.

Joseph J. Pilotta

is Vice President of Research at BIGresearch and has written 10 books. His most recent papers (co-authored with Gary Drenik and Philip Rist) have been accepted by the *Journal of Advertising Research* and the *International Journal of Public Opinion Research*.

Don E. Schultz

is presently Professor (Emeritus) of Integrated Marketing Communications at the Medill School of Journalism, Northwestern University. Following a successful career in advertising, he obtained a Master's degree in advertising and a PhD in mass media from Michigan State University while also teaching in the MSU Department of Advertising. He has consulted, lectured, held seminars and written extensively on integrated marketing communication, marketing, branding, advertising, sales promotion and communication management worldwide.

Gary Drenik

is President and CEO of BIGresearch and has developed successful products for media and retail clients for more than a decade. Together with Prosper Business Development Corporation co-founder Philip Rist, he generated more than \$100 million in revenue for clients with the Total Target Campaign™, an integrated marketing service for local media companies.

Philip Rist

is Vice President of Strategic Initiatives at BIGresearch, and a founding member and Managing Director of Prosper Business Development Corporation. He secured such clients as Gannett, Bell Atlantic, Crains Communications, Cox Communications, Sprint and Arbitron and established BIGresearch as the exclusive provider of consumer data to the National Retail Federation.

Keywords:

Simultaneous,
media, planning

Joseph J. Pilotta,
Ohio State University,
BIGresearch,
3131 Derby Hall,
Columbus,
Ohio 43210,
USA
Tel: +1 614 846 0146
Fax: +1 614 846 0156
e-mail:
joe@goproper.com

Abstract

This research study is the third in a series of surveys exploring the incidence of simultaneous media usage among a national sample of US consumers. The research is based on 12,322 respondents who were sampled via an online network. The findings show that simultaneous media usage, ie multiple exposures to various media forms at a single point in time for the same media consumer, occurs in and among a substantial portion of the US media population. The existence of simultaneous media exposures, created by multi-tasking consumers, is a fact in today's media marketplace. The existence of simultaneous media exposures undermines most current media measurement systems as they are defined as isolated environments. Thus, the challenge of this paper is for media management to rethink how media evaluations should be rethought for the 21st century.

INTRODUCTION

In this paper, the findings of initial research into the development and occurrence of simultaneous media exposure are described and detailed. The authors define simultaneous media exposure as individual consumers being exposed to more than one media system or approach at a single point in time. In short, it describes the increasingly prevalent consumer activity of multi-tasking, eg being online and watching television at the same time, reading the newspaper while listening to the radio, or reading the mail while talking on the telephone.

This paper describes a research survey conducted in March 2003. This was the third in a series of studies that have been conducted over the past two years. It is based on an initial BIGresearch online pilot study of 1,883 participants conducted during May 2002. That was followed by a fully executed investigation into simultaneous media usage and its effects on 7,800 respondents conducted in August 2002. Thus, this paper provides a summary of what has been learned in the three studies about this increasingly important media phenomenon.

RATIONALE

Today's fragmented media environment is characterised by an exploding number of media alternatives vying for people's time. Unfortunately, people still have only 24 hours in a day. This has forced them to multi-task or simultaneously use various media forms at the same point in time, simply to keep pace with events around them.

Everyone knows that people often talk on the telephone or face to face while listening to the radio or viewing television, so simultaneous media usage is not new to the consumer and, indeed, has been commented on by researchers in the past. As Robinson and Godbey (1997) noted, radio listening used to be an absorbing experience, which people

would often engage in to the exclusion of other activities, whereas 'today, radio is almost exclusively a secondary activity, something we listen to while doing something else. Television is beginning to go the same route . . .'. But media researchers and planners are still a long way from coming to terms with this phenomenon.

The growth of simultaneous media usage should have a direct impact on the allocation of advertiser media money. This should occur since every current media measurement or estimation methodology assumes that each media exposure occurs in isolation. That is, one medium does not compete with another for consumer attention at a single point in time. Thus, each media exposure, even if it occurs at the same time as some other media exposure, is counted as a single event. Obviously, this type of simultaneous media exposure has or should have a major impact on how media advertising campaigns are planned and executed in the future.

Simultaneous media usage also suggests that some major rethinking of how media is used in communicating with consumers is necessary. For example, under situations of simultaneous media exposure, it is likely that either one message becomes background or both messages pass through one another. Both options create a different metric of receptivity to programming and advertising, requiring media research and allocation to be reconsidered in light of some of the following issues:

- Which media have the most power in simultaneous use?
- Which areas of interest command the most attention during simultaneous usage?
- Are there social/cultural differences in receptivity to simultaneous media use?
- What type of messages and length are most viable during

- simultaneous media use?
- Which media/messages are more powerful with simultaneous usage?

Unfortunately, neither media planners, media buyers, media research organisations nor the media themselves have answers to these questions even though they challenge the present foundations of commercial media systems. The purpose of this paper is thus to raise the issues brought about by simultaneous media usage and to challenge the community to begin seeking solutions.

THE STUDY: OVERVIEW

The simultaneous media usage study (SIMM study) was conducted online in March 2003, with 12,320 respondents participating. The study employed BIGresearch’s proprietary technology that balances the survey results to the Census 2000 population. The sampling is a random sample of the US population, who are online, in this case meaning the populace which has access to e-mail, a free product for US participants from home, work, libraries, community centres and the like. People in the survey who have access to e-mail reflect the US Census at every age, sex and income level. The online population today is a ‘mass’ media (see Figure 1).

The study demonstrates BIGresearch’s sampling technique with its precision accuracy through computer intensive statistics achieving validity at the 0.01 level of variance. The online population matches the media usage reports of other authoritative sources without significant differences, eg Harris, (worldwide market research and consulting firm), www.harrisinteractive.com; NPD (the NPD Group provides sales and marketing information), www.npd.com and Nielsen (Nielsen Media Services, Chicago), www.acnielsen.com. It should be noted that the proprietary technology used is able to weight and balance samples against the Census 2000 population and the technology dynamically weights and balances, in a self-learning environment, across each of the 14 age and sex cells. All cross-tabs are automatically weighted and balanced across cells. Thus, this study compares favourably with other, more traditional media studies using traditional research techniques.

OBJECT OF THE ANALYSIS

The analysis of this study will demonstrate simultaneous usage as a significant determinant in creating behavioural indicators for new media consumption models.

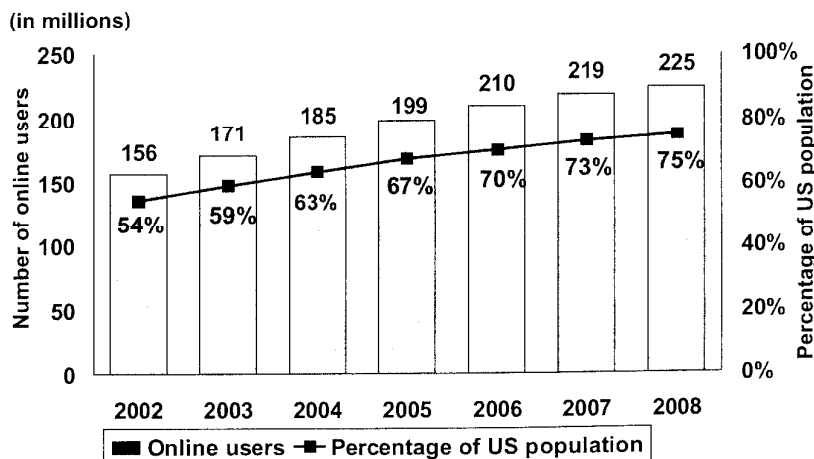


Figure 1: Online population 2000–08. Source Jupiter Internet Population Model, 7/02 (US only)

Furthermore, it will provide data and direction for new methods and studies on how media usage should and will impact future media planning by revising media planning to fit the new media landscape.

While media technology and delivery capability have changed substantially, the methodologies used in media planning, that is, the process of aligning the goals of the marketing organisation with the available media systems and alternatives, have not. When media planning was first developed, the media landscape was very different to the one found today. To understand these changes, a historical review of the development of media planning provides a useful background.

In the beginning

Originally, media planning was quite simple. A limited number of media vehicles were available to the agency or the marketing organisation. Generally they consisted of print (ie newspaper and magazines), with radio added in the 1930s. These media forms were commonly limited to local and national markets. Thus, identifying which media vehicles to use, their price and the scheduling details was a relatively simple task. Because there was limited knowledge about the audiences for the various media forms, the focus of media planning developed initially on the efficient purchase of media by the agency or marketing organisation. That is, the more messages the better and the lower the cost per message delivered became the primary evaluation criteria — a 'media tonnage' model.

As media began to proliferate following World War II and television usage began to expand, the selection of media and the structure of media planning became more complex. The focus moved from media weight to media allocation. With that change came the development and use of statistical analysis to help identify audiences, their value and how media

might be used in various combinations. The media planning and buying focus continued to be on efficiency as most marketers assumed a mass-consuming marketplace.

Three major factors greatly influenced media planning in its early stages. First, the borrowing of mass communication theory to provide a basis for understanding message diffusion and distribution. The common model was one developed by Schramm and Roberts (1971) that used the sender after—media—receiver approach. Secondly, the acceptance of the 'hierarchy of effects' models after Lavidge and Steiner (1961) and Colley (1961) that hypothesised a series of steps that consumers went through on the way to making a purchase decision, ie awareness, knowledge, preference, conviction and purchase. Thirdly, the development of statistically small samples that were then projected to the whole to speculate on audience size, make-up and value.

As a result of these assumptions, media planning has been greatly influenced by the following work. Metheringham (1964) and Broadbent (1965) built models of audience duplication, all of which assumed separate and discrete media exposures that occurred over time. Keller (1966) and others studied audience accumulation which assumed the audience for a particular medium accumulated over a period of time, not instantly. Agostini (1961) looked at audience reach which was defined as separate individuals who received unique media exposures. Smith (1885) quoted by Krugman (1962) hypothesised that a certain number of message exposures were required for consumers to process the media information. Kaatz (1975) and others presented opportunities to see, that is, there is no evidence that consumers actually were exposed to the media messages, only that they had an opportunity to be influenced.

One central assumption

Interestingly, each of these media planning pioneers was focused on the same goals, ie how to reach the most attractive audience at the most reasonable cost. But, all media experts made one basic assumption in their planning models and discussions — *that each media form should be identified, planned and measured in isolation*. In other words, the assumption was that the audience member, who was exposed to an advertising media vehicle, was in isolation from other media at the time of exposure. Thus, frequency research assumed discrete viewing, reading or listening. Duplication research assumed there were multi-media exposures but always at a different time. Message exposures or opportunities-to-see-measured media vehicles were based on households, not individuals. Reach measures were designed to identify unduplicated audiences. Media forms developed from an accumulation of audiences, not by using multi-media systems. In short, media planning assumed that exposures to advertising messages through various media forms were unique experiences for the audience members with nothing else competing for that attention.

These crude forms of media analysis were right for the times. When the major decision for an advertiser was whether to purchase space in *Life*, *Look*, *Saturday Evening Post* or maybe *Liberty*, the only real question was how many people were exposed to the message in each vehicle, how much advertising those same people received, and whether or not there was audience duplication at some point in time. Today's problem is that, while the media planning tools have stayed the same, the media forms, the consumer's use of media, the sheer abundance of media alternatives and formats and the rise of new electronic forms of interactive media have radically changed the way media is used and consumed by audiences.

Simultaneous, not individual exposures

Today, there is a media landscape that abounds in media forms with radically different customers and consumers who use media in totally different ways than media planning approaches assume. Most importantly, all these changes are continuous and evolving, so while media planning systems are static, the media themselves and the all-important consumers who use those media are dynamic and ever-evolving. There is no question that today's consumers live in a networked, interactive, multi-media environment that is unlike any that has ever been seen before. One need only observe a teenager with text messaging capability on a cellular telephone to see how radically the world has changed. Yet, media planning systems remain relatively unchanged, although more sophisticated analytics have been added, essentially the idea of individual exposure to advertising messages remains at the heart of the media planning system.

There has been speculation regarding a need for change in how media is planned and delivered. This is one of the first papers to openly challenge the basic assumptions that underlie most media planning models, that is, single-point-in-time media exposures, with little or no interference from competing forms of media to discrete viewers, listeners or readers. The fact is, single-point-in-time media exposures are no longer the case, as this study points out and more importantly, this has been the situation for some time.

SIGNIFICANT FINDINGS

Some of the findings from this 2003 study are shown in Table 1, analysed by sex, it was shown that:

- 32.7 per cent of males and 36.4 per cent of females *regularly* watch television when they go online
- 23.8 per cent of males and 29.1 per cent of females *regularly* go on

Table 1 Significant findings from the SIMM, March 2003

All Consumers	
Respondents selected: 12,320	
When you go online, do you simultaneously ...	
regularly	
Listen to the radio?	18.3%
Watch TV?	34.6
Read magazines?	3.7
Read the newspaper?	6.0
Read the mail?	13.4
When you read the newspaper, do you	
simultaneously ... regularly	
Listen to the radio?	13.6%
Watch TV?	23.8
Go online?	7.1
When you read magazines, do you	
simultaneously ... regularly	
Listen to the radio?	11.4%
Watch TV?	16.2
Go online?	5.2
When you listen to the radio, do you	
simultaneously ... regularly	
Read the newspaper?	10.2%
Watch TV?	7.3
Go online?	16.8
Read magazines?	6.3
Read the mail?	8.9
When you watch TV, do you simultaneously ...	
regularly	
Listen to the radio?	3.0%
Go online?	26.5
Read magazines?	6.4
Read the newspaper?	9.2
Read the mail?	11.2
When you read the mail, do you	
simultaneously ... regularly	
Listen to the radio?	11.7%
Watch TV?	19.6
Go online?	9.0

- online when they are watching television
- 16.8 per cent of males and 22.2 per cent of females *regularly* watch television when they read their mail.

This study shows that if 'occasional' simultaneous usage is included, in excess of 50 per cent of respondents were engaged in simultaneous media usage at any given time. Also, when asked about simultaneous media usage and 'how one pays attention', only 15.9 per cent of people surveyed said they do not engage in simultaneous media usage (15.7 per cent males, 16.2 per cent females).

While engaged in simultaneous media usage, 51.1 per cent of

respondents indicated they *pay attention* to one medium more than other(s) and 32.9 per cent said they attend to each media equally at the same time. Clearly, this indicates a vastly different group of consumers, some of whom are able to multi-task and multi-process information and material. Yet, media models cannot or do not accommodate this dramatic change.

Time spent on television/cable, radio, internet, newspaper, magazines and direct mail usage was over 10 hours per day in this sample audience. In order to engage media purely on an individual basis, between school, shopping, homework, sleeping and things that take one outside the scope of attending to media, there would not be enough hours in a day to accomplish everything.

Simultaneous usage is a fact from the experiential viewpoint of the consumer. Furthermore, it is actually confirmed by the silo measures of Arbitron, Nielsen and Interactive Media when matched with this study's findings. Insofar as one totals usage of Arbitron's (International Media and Marketing Research Firm, www.arbitron.com) radio, Nielsen's (www.acnielsen.com) television and interactive media's online with the time spent individually and in total as noted in this study there is little difference. When one adds them together, over 10 hours per day are spent on media, which is in line with the current study. This means simultaneous media is in play but was only indirectly measured by the above vested-interest companies.

Additional insights from this study that should influence media measurement and planning are detailed below. When asked: 'When you watch TV and a commercial comes on, what do you do?':

- 15.3 per cent of the respondents regularly leave the room
- 30.2 per cent of respondents

- regularly mentally tune out
- 30.1 per cent of respondents regularly watch, but not with their full attention
- 30.8 per cent of respondents regularly channel surf
- 32.4 per cent of respondents regularly talk with others in the room or on the telephone

The above findings clearly add another dimension to simultaneous media usage in which non-media activities are engaged in concurrently with the media exposure itself.

In media planning and measurement, it is equally important to note that media usage is changing dramatically in addition to how the media is processed. For example, the importance of 'who says' versus 'what is said' is totally ignored in most media planning methodologies. Word of mouth is becoming a critically important result of media exposure. Some examples from the study reveal:

- When asked 'When you read, see, or hear an ad, which influences your purchasing decision?' the concept of *ad relevance* seems to be thematic, as 56.2 per cent of respondents indicated 'the ad made me think about how the product would be useful to me.'
- When asked 'How important are the following media in influencing your purchase decisions?' word of mouth was first with 36.5 per cent of the responses, coupons were second with 23.1 per cent, third was in-store promotion with 15.1 per cent, and television/cable was fourth with 14.3 per cent.

In this study, 14.1 per cent of respondents regularly seek advice on the purchase of goods and services and 23.0 per cent regularly give advice to others on the purchase of goods and services. The fact remains that word of mouth is not created *ex nihilo*, but has a context out of which it is born.

Therefore, any correlation between preference for giving or seeking advice and media consumption habits would or should have important marketing implications. Some implications of the study for media planning are as follows:

- Media allocation needs to allow for simultaneous media day/part usage, as well as the impact of the foreground/background combination on the message effect.
- Allocation must follow simultaneous media usage to be able to understand the social/cultural differences in how media is used and consumed; this has major implications for media allocation.
- Simultaneous duplication is occurring in ever increasing amounts.
- Cumulative audiences occur immediately, not over time — does this change the definitions of reach and frequency?

DISCUSSION

These findings have established that simultaneous media usage is a fact. The research has come from the experiences of the individual, in their everyday behavioural activities. In excess of 50 per cent of all individuals engage in various combinations of media through the day, whether it is being online and watching television, listening to the radio and being online, reading a magazine and watching television, reading the newspaper and watching television, or reading a magazine and being online, etc.

It has also been determined that not all media are equally weighted as two simultaneous media become foreground and background for each other. Interestingly, these findings suggest that the prime time for simultaneously watching television and going online, and its converse, occurs between 7–11pm. This is generally considered to be the prime time for television exposure, yet it is clear that even if television

exposure is greatest during this time period, it is commonly in combination with some other media form.

The authors believe that better media allocation requires better tools to address the inter-coupling of various media as intermittent users engage in their use. Clearly, these data show that simultaneous media usage is a fact and is significant in the daily lives of a substantial number of consumers. There are multiple applications for this in the world of retailing and the authors are working with clients on the following applications to achieve a higher return on their investment in advertising.

- Determine the media habits of consumers of simultaneous media usage by retail channel and day/part, and then compare the usage to competitors
- Determine the best type of message in light simultaneous media usage by retail channel
- Determine the foreground and background of simultaneous media usage to find the point of distraction
- Determine the simultaneous media usage of consumers who prefer word-of-mouth advertising by retail channel
- Determine the simultaneous media usage advice givers and seekers by retail/channel.

The above applications will enhance

communication effectiveness while reducing costs. Further research will enable the creation of a model for advertising return on investment, not only for traditional but also for new media technologies.

REFERENCES

- Agostini, J. (1961) 'How to estimate unduplicated audiences', *Journal of Advertising Research*, 1(1), 11–14.
- Broadbent, S. (1965) 'Media planning and the computer by 1970', in *The Thompson Medals and Awards for Advertising Research 1965 Report*, The Thompson Organization Ltd, London, UK, 68.
- Colley, R. H. (1961) *Defining Advertising Goals for Measured Advertising Results*, The Association of National Advertisers, Inc, New York, NY.
- Kaatz, R. B. (1975) 'Doctor (un)Strangeperson, or, how I learned to stop worrying (about some numbers) and love my magazine plans', paper presented to the AAA Convention, Knoxville, TN, April.
- Keller, P. (1966) 'Patterns of media audience accumulation', *Journal of Marketing*, January, 30(2), 32–37.
- Lavidge, R. J. and Steiner, G. A. (1961) 'A model of predictive measurements of advertising effectiveness', *Journal of Marketing*, October, 25, 59–62.
- Metheringham, R. (1964) 'Measuring the net cumulative coverage of a print campaign', *Journal of Advertising Research*, December, 4, 23–28.
- Robinson, J. and Godbey, G. (1997) *Time for Life*, Penn State Press, University Park, PA.
- Schramm, W. and Roberts, D. F. (1971) *The Process and Effects of Mass Communication*, The University of Illinois Press, Urbana, IL.
- Smith, T. (1885) 'Hints to intending advertisers', quoted in Krugman, H. E. (1962) 'An application of learning theory to TV copy testing', *Public Opinion Quarterly*, 26, 626–634.