

## ***NEWSPAPER READERSHIP: Further Investigation on Questionnaire Wording Related to Internet-published Newspapers and its Impact on Newspaper Audience Estimates***

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### **Background**

Traditional newspaper audience measurement (in the United States) asks respondents to report whether they “read or looked into” a specific list of printed newspapers. The emergence and popularity of newspaper websites holds the potential to cloud the answer to this question for some respondents. When reporting their newspaper reading habits, some respondents might not be sure whether to include their on-line reading of the newspaper website, as well as their reading of the printed version of the paper. The issue of respondent confusion over printed (hard-copy) and Internet versions of newspapers is a complex one that concerns the media research industry.

The genesis of this line of research was based on concerns about respondent confusion of Internet and printed newspapers that were expressed by newspaper industry leaders, and further discussed by the technical committee of the ABC Readership Profile service. The ABC Readership Profile service, begun in 2002, publishes a set of research guidelines for newspaper audience measurement. To help answer the questions raised about respondent confusion between print and online newspapers, and its potential impact on audience measurement, Scarborough Research volunteered to conduct experimental design based research.

Scarborough Research is the leading supplier of audience estimates for newspaper readership in 75+ markets across the United States. Scarborough’s measurement of printed newspaper audiences is based on a series of questions asked during the telephone interview phase of our syndicated survey. The questions follow the ARF published guidelines for newspaper audience data collection. Respondents are asked on an aided basis about past 7-day reading of daily local and national newspapers, followed by a “when last read” question for each paper they report reading. Respondents who report reading a specific paper “yesterday” are counted in that paper’s daily average-issue newspaper audience. Similarly, for Sunday newspapers, respondents are asked about past month reading using an aided list of national and local papers. Those that report “last Sunday” reading of a specific Sunday newspaper are counted in the paper’s average-issue audience. Scarborough’s newspaper audience data from the 75 local market studies are accredited by the Media Rating Council. Scarborough newspaper clients can choose to participate in the ABC Readership Profile audit process.

Scarborough has an interactive system in place to address issues of respondent confusion during the interview. Throughout the Scarborough interview process, interviewers have access to an electronic database of prompts, called “Cue-Tips” that help them clarify respondent questions about the survey and overcome any respondent objections. These Cue-Tips are available to the interviewers at the touch of a button and can be called up in context of the specific section that the respondent is being asked. For example, during the newspaper section, if the respondent spontaneously volunteers that they are not sure whether to report their Internet newspaper reading, the interviewer can pull up and read a prompt clarifying that their printed newspaper readership is what we are specifically asking about. The Cue-Tip database is proprietary to Scarborough and has been developed over many years of interviewing. There are over 90 different Cue-Tips covering seven major categories of respondent concerns. Even with this detailed system in place, the potential for respondent confusion during the interview still exists, and so further investigation of the topic of confusion over printed versus Internet newspapers was determined to be worthwhile.

In a paper presented at the 2003 Symposium, Scarborough Research reported on an investigation of the impact of changes to question wording during the readership interview on reported audience estimates<sup>1</sup>. These changes involved adding a sentence to the interview instructing respondents to exclude any Internet newspaper reading from their reported print newspaper reading.

In the previous research reported in the 2003 paper, the additional instruction was found to increase reported readership for Sunday newspapers, a counterintuitive finding. One would expect that telling respondents to not include their Internet reading would decrease the total reported readership rather than increase it. This 2003 study used a design where three variations of the instruction (an extra sentence added to the interview about exclusion of Internet newspaper reading) were applied to telephone survey respondents. These respondents were pulled from nine different local markets, creating three “virtual markets” (cells) by rotation of the different language versions in the interview.

In the 2004 research, the additional language referencing the exclusion of Internet readership from reported print readership was limited to one single version. Three local markets were selected and 500 respondent interviews were completed in each market. The findings of the study were that this new wording had no statistically significant impact on respondents’ reported print readership, for either Daily or Sunday audience. This work represents a continuing effort by Scarborough to understand and report on the issue of respondent confusion between traditional print and Internet-published newspaper versions.

### 2004 Study Methodology

The methodology used in the 2004 research study of Internet and print newspaper readership was an experimental design, where the test interviews and control interviews were conducted in the same manner, with the only difference being the addition of a single line to the test interview that told respondents not to include their online newspaper reading in their reported newspaper readership. The same set of interviewers was used for both the test cell and control cell fieldwork in each set of market cells. The same calling centers managed the fieldwork for the test and control cell interviews. Sample management procedures, respondent contact protocols, and data processing procedures were addressed similarly for each cell.

Three geographically diverse markets were selected which each had the characteristics of being higher than average in concentration of both Internet usage and printed newspaper readership. An Eastern, Midwestern and, Western market were included. Respondents participated in a telephone interview of approximately 16 minutes in length. Approximately 500 test interviews were completed in each local market. The only difference in the test versus control interview was the addition of a single line instruction in the text of the test interview as follows:

*“Here, we are asking about reading the printed newspaper, not the Internet or online version”.*

This line followed the introduction to the newspaper readership section of the interview. To put the extra wording in context, the full question asked is:

*“Next, I’m going to read a list of newspapers to you from your general area. Please answer yes or no for each paper.”*<extra text here in test version>

*“First, I’d like to ask you about weekday newspapers published every day Monday through Friday. During the past 7 days, which of the following weekday newspapers have you read or looked into, either at home or away from home?”*<Interviewer reads list of local specific papers – The Daily Gazette, The Daily Times-Republic, etc.>

The instruction was inserted as indicated above in the test questionnaire script, following the first line of the introduction, after the sentence “Please answer yes or no for each paper”. The control version was the standard syndicated interview from these local markets, without this additional text.

All interviews were conducted in English. Interviews averaged 16 minutes in length and asked about radio listening, daily and Sunday newspaper reading, television usage, Internet usage and selected sites visited, and demographics. Response rates for the surveys averaged 46.9% and ranged between 41.9 and 50.7%. The test fieldwork ran from 9/21/04 to 10/2/04. A total of 1,517 test interviews were completed. The control fieldwork was pulled from syndicated production interviewing, using the smallest comparable fieldwork dates that would pull an equivalent amount of in-tab sample. 1,513 local market syndicated interviews were pulled from production sample for the control cell. These interviews took place between 8/31/04 and 10/20/04. The control market interviews had a somewhat longer total field period due to the fixed schedule of interviewing for the syndicated study.

### Study Results

The results of the research found that the addition of the extra line in the interview, telling respondents to only report print newspaper reading, had no statistically significant impact on the newspaper audience numbers (95% confidence level used). This data is shown below in Chart 1 for respondents who read Any Daily and Any Sunday newspaper, expressed as percent reach of Adults aged 18+ (% coverage) in the Metropolitan Statistical Area for each market:

**Chart 1**

MSA Newspaper Audience % Reach, Adults 18+	Test Interview	Control Interview	Difference	Sig.@95%
Total, Three Markets	(n=1,517)	(n=1,513)		
-Read Any Daily Paper,	61.6	58.6	+3.0	No
-Read Any Sunday Paper	64.7	66.8	-2.1	No
Midwestern Market	(n=510)	(n=306)		
-Read Any Daily Paper	56.3	56.8	-0.5	No
-Read Any Sunday Paper	66.2	68.8	-2.6	No
Western Market	(n=502)	(n=349)		
-Read Any Daily Paper	54.2	55.2	-1.0	No
-Read Any Sunday Paper	60.6	63.0.	-2.4	No
Eastern Market	(n=505)	(n=858)		
-Read Any Daily Paper	65.9	60.4	+5.5	No
-Read Any Sunday Paper	66.5	68.3	-1.8	No

*Individual markets and newspapers were masked for client confidentiality*

When looking at individual newspapers in each market, no statistically significant differences were observed in the reported readership for any of the newspapers, when the sentence about excluding Internet newspaper reading was added to the interview (95% confidence level used). This data is shown for several leading newspapers in Chart 2 below. Across all individual newspapers, no significant differences were found.

**Chart 2**

MSA Newspaper Audience % Reach, Adults 18+	Test Interview	Control Interview	Difference	Sig.@95%
Midwest Market	(n=510)	(n=306)		
-Daily Paper A	52.4	52.5	-0.1	No
-Sunday Paper A	66.0	68.5	-2.5	No
Western Market	(n=502)	(n=349)		
-Daily Paper B	43.4	39.4	+4.0	No
-Sunday Paper B	48.9	49.7	-0.8	No
-Daily Paper C	7.9	7.0	+0.9	No
-Sunday Paper C	9.4	8.8	+0.6	No
Eastern Market	(n=505)	(n=858)		
-Daily Paper D	50.5	47.4	+3.1	No
-Sunday Paper D	60.4	61.9	-1.5	No
-Daily Paper E	6.8	6.1	+0.7	No
-Sunday Paper E	2.9	4.2	-1.3	No
<i>Individual markets and newspapers were masked for client confidentiality.</i>				

The demographic samples of each market's test and control cells were compared on both a weighted and unweighted basis and were found to be similar in composition. This consistency suggests the lack of a significant difference in the readership numbers across the two cells is not due to any significant skew in the demographic make up of the test and control respondents.

## Discussion

The result of no significant difference in the audience numbers for newspapers when the additional instruction is added to the interview (to report reading the printed paper, not Internet/online) is a somewhat reassuring finding. It suggests that the level of respondent confusion between newspaper website media consumption and print paper reading is perhaps not as great as one might expect in today's fragmented media world. If respondents were routinely reporting their Internet newspaper usage along with their traditional printed paper reading, we would expect adding the instruction would exclude internet-only readers from the total, thus decreasing the total readership. The same can be said for the total market net audience numbers (any daily and any Sunday paper). However, we do not observe a significant difference in newspaper audience between the two groups, where one interview included this instruction and one did not, all else being held constant.

This result differs from our previous work in this area, which did find a significant increase in Sunday readership when a sentence was added telling respondents not to include Internet newspaper reading in their reported newspaper reading. This current 2004 study used a different study design than the previous 2002 research that was presented at the 2003 symposium.

The most notable difference between the two research studies is that in the current 2004 study, we used a single consistent sentence to ask respondents to exclude their Internet newspaper reading across all of the test interviews in all of the three local markets where the test was conducted. (Again, the wording was: "*Here, we are asking about reading the printed newspaper, not the Internet or online version*".) In the 2002 study, three different versions of the sentence were employed. These three versions are shown below:

2002 study wording used – 3 versions:

- 1) "*I'm not talking about copies of the newspaper which can be received via computer using the Internet. I'll ask about possible Internet usage later in the interview*"
- 2) "*Please do not include use of any newspapers on the Internet or online. I am only interested in the print version of newspapers at this time.*"
- 3) "*As I read the list, please include only reading of the printed paper; do not include reading the paper on the internet or online.*"

The phrase “Internet or online” was used in the three versions based on qualitative research that explored what language respondents used to describe online newspapers. The reason that three versions of this sentence were used in the 2003 study was mainly due to the participation of many different parties in the design of the research. Since everyone could not agree on a single wording of the sentence, all three versions were used and randomly rotated throughout the interviews. The other notable difference between the two studies was the use of three selected local markets in the 2004 study, compared to a selected sample of interviews spread out across nine local markets in the 2002 study. The 2002 study created three “virtual markets” from the interviews pulled out of the nine different markets, where the interviews from each of the three “virtual markets” had one of the three versions of the extra sentence in common. (For example, virtual market number one included ten interviews from market A using version one, twelve from market B using version one, eight interviews from market C using version one, and so on).

When examining the 2002 data by individual version of the sentence about excluding Internet reading, we found a statistically significant increase in reported Sunday readership for only the first version (# 1 in the list of three shown above) and not the other two versions. With this in mind, the 2004 study employed a sentence that we determined was the simplest possible language with the fewest words, more in spirit with versions #2 and #3 rather than the first version.

The 2004 study used a somewhat more straightforward design, in that a simple, single version of the extra sentence about excluding Internet newspaper readership was employed, and three individual local markets were utilized. When reviewing the results of the findings with the ABC reader profile technical committee, their recommendation was to make optional the use of an explicit instruction to exclude Internet newspaper reading from newspaper audience research that conforms to the ABC Reader Profile standards. On this basis we have determined to not add any extra wording about excluding Internet newspaper reading to our syndicated interview at this time. Being mindful of respondent burden, our rationale is that the fewest words are preferable when measuring newspaper audience, unless they add needed clarity. That additional clarity does not seem to be evident based on the findings of the research.

### **Comparison to Other Research**

Cable, Nunziato and Appel (2003)<sup>ii</sup> found that instructions to respondents to exclude online reading suppressed the total reported incidence of reading for selected newspapers and magazines. This study design utilized a self-administered mailed paper questionnaire, and was fielded among subscribers of a single publication (*The Wall St. Journal*). The use of three questionnaire versions allowed comparison of a control version, where Internet reading was not mentioned, and two test versions where Internet reading was either asked to be included or asked to be excluded.

The version that asked respondents to exclude Internet reading showed statistically significant decreases in the reported incidence of readership for several publications. The version that instructed respondents to include all reading, online as well as print, showed some publications gaining and some losing audience. The authors report that no significance test is appropriate for this questionnaire version, given the circumstances that a one tailed test was used and the direction of the change (a decrease) was in the opposite direction of that predicted. That being said, the changes in audience numbers did not consistently point in one direction, suggesting a finding similar to that observed in our 2002 paper.

The methodology of this study is not strictly applicable to the total population, as noted by the authors. The main factor is that the study consisted of subscribers to a single publication – *The Wall St. Journal*. The profile of readers of this newspaper shows they are considerably more educated than the average American. They are nearly four times more likely to have a Post-Graduate degree (PhD, MA, MS, JD, etc.). Wall St. Journal subscribers are 40% more likely to have used the Internet in the past 30 days. This profile skew may have impacted their interpretation of the instruction regarding reporting Internet readership of various publications. A population that is very educated and familiar with online media might react differently to instructions about reporting of print versus online media consumption than one which was less educated and less familiar with online media.

A profile of their reader in comparison to the general population is shown below in Chart 3. While this profile is based on total readers, one would assume that the subset of WSJ subscribers would have an even more educated and Internet-savvy profile than total readers.

**Chart 3**

Demographic:	Adult 18+ US Population	Wall St. Journal Readers	Index Vs. US Population
Gender:	(n=206,610)	(n=5,786)	
Male	48.4	67.1	139
Female	51.6	32.9	64
Age 18-34	30.7	23.7	77
Age 35-54	39.0	42.2	108
Age 55+	30.3	34.1	113
Education:			
Grade school (8 <sup>th</sup> grade or less)	4.4	0.9	21
Some high school	7.3	1.6	22
HS Graduate	36.0	11.1	31
Some College/University	28.4	24.3	86
College/University Graduate	13.2	26.1	198
Some Post Grad Study	2.5	6.7	265
Post Grad Degree	8.2	29.2	358
Occupation:			
Blue Collar Occupation	25.2	9.3	37
White Collar Occupation	40.5	67.1	166
Used Internet/Past 30 days	59.9	84.0	140
Source: Scarborough USA+ database, Release 2, 2004			

Another interesting feature of the Wall St. Journal is that the online version of this newspaper is available only by fee-paid subscription access. This contrasts with most newspaper websites where access is free simply by going directly to the site, or after filling in a registration form. One would expect that the readers of the online version would be perhaps even more sophisticated Internet users since they were willing to pay for online content.

The differences in methodologies between the two studies also make comparisons challenging. The self-administered method used in one and the interviewer administered method in the other also might impose a differential impact on respondent instructions. The lack of a purely experimental design also makes conclusive statements about the findings difficult, as the authors note.

One conclusion that could be reached when comparing these two studies might be that the impact of instructions regarding reporting Internet reading is not always what one might assume it would be. There is no consistent finding that telling average readers not to include online reading results in lower reported audiences, or that telling them to include it raises print audiences. As described earlier in this paper, we have found evidence in our 2002 study that among a general population, the specific wording used for respondent instructions regarding reporting of Internet reading can impact the result on reported audience. Our most current research, using a controlled experiment, showed no significant impact from adding a simpler version of this respondent instruction to the readership interview. It would seem that continuing research is needed to assess the impact of respondent instructions during measurement of print media audiences and their corresponding online versions. Scarborough plans to be on the forefront of these investigations.

### **Profile of Internet vs. Printed Newspaper Readers**

To better understand the current picture of who is reading newspapers online and how they compare to printed newspaper readers, we ran an analysis of current Scarborough data to examine the profile of these audiences. The data show that there is currently a fairly small percentage (about 3%) of total adults who read newspapers online exclusively, that is, using the Internet to read newspapers but not reading a daily or Sunday printed paper. Most of those reading any online newspaper are also

readers of either a daily or Sunday printed newspapers. Part of the reason for this is that Internet usage and Newspaper Readership both skew upscale; higher education and higher income respondents with “white-collar” occupations. However, some interesting differences are noted when examining the relative age skews of those who *exclusively* read online newspapers to those who *exclusively* read printed papers. The online-exclusive newspaper reader is much younger, and more highly educated, than the print-exclusive newspaper reader. These comparisons are shown below in Chart 4:

**Chart 4**

Demographic	Read online paper, not print (% composition) (n = 5,526)	Index vs. Total Adults	Read print paper, not online (% composition) (n= 131,437)	Index vs. Total Adults
<b>Age of Respondent</b>				
Age 18-34	49.1	160	24.7	80
Age 35-44	24.2	120	19.1	95
Age 45-54	15.9	84	19.9	105
Age 55+	10.8	36	36.3	120
<b>Education</b>				
HS grad or less	34.3	72	45.3	95
Some College (Some University)	32.6	115	29.7	105
College Graduate (University degree)	18.0	136	13.7	104
Some Post Grad. Study	3.9	154	2.6	102
Post Grad Degree	11.1	136	8.7	107
Source: Scarborough USA+ R2, 2004				
*Source question: Ways use Internet: Read a Newspaper				
# Source questions : Read any Daily or any Sunday paper and do NOT use Internet to read a newspaper				

These highly educated younger readers of the exclusive Internet editions of newspapers represent the new generation of media consumers. While still a small percentage of total readers, they are likely an influential one, based on their demographic characteristics. As a leading provider of audience information for newspapers, Scarborough will continue monitoring their incidence and behavior in the future, to help publishers better understand the changes happening in printed newspaper media vehicles and their online counterparts.

A new development in measurement of these media is additional data that has been added to the syndicated Scarborough survey to help track online newspaper readers for individual publications. Yesterday and Past-7-day readers of specific online newspapers are being captured effectively with the Release 1, 2005 study, allowing publishers to profile the integrated audience of both print and online readers.<sup>1</sup> This change will help newspaper media report the full spectrum of their individual media-brand’s audience, both in print and on the Internet.

<sup>1</sup> The full database (12-months data) will be available with R2, 2005 Scarborough, along with the capacity to run reach and frequency analyses of the mutual and exclusive audiences of the print and online newspapers that are measured in each local market

<sup>i</sup> Lindner, Gregg and Jane Traub, "How Question Wording Impacts Newspaper Estimates: Traditional Vs. Online, Worldwide Readership Research Symposium 2003, Cambridge, MA. Published Session Papers, P. 413-416

<sup>ii</sup> Cable, Virginia and Gennaro Nunziato and Valentine Appell, "The Impact of Online Reading on Traditional Print Media Estimates", Worldwide Readership Research Symposium 2003, Cambridge, MA. Published Session Papers, P. 417-421