DAZED AND CONFUSED: THE CHARACTERISTICS AND BEHAVIOR OF TITLE CONFUSED READERS

Martin Frankel, Risa Becker, Julian Baim, Michal Galin, Scott McDonald

INTRODUCTION

One of the most often discussed issues in the methodology of print audience research is that of title confusion. The potential threat of title confusion has continued to concern both research producers and research users because the results of print research are often used in a marketplace where potentially confused titles are often direct competitors. Many times these direct competitors feel that they are in worse than a zero-sum competition. Confused readers actually have the potential for producing a "double negative impact" since these readers act to decrease the audience of one publication and increase, by the same amount, the audience of a competitor.

It is interesting to note that in Michael Brown's landmark work *Effective Print Media Measurement*, [Brown, 1999] which summarizes much of the relevant wisdom to emerge from the first nine Worldwide Readership Symposia, the term "title confusion" requires three lines in the index for page references while terms like "response rate" and "source of copy" only require two.

Much of our inspiration for the present study has roots in Don McGlathery's 1993 paper "Does Title Confusion Affect Magazine Audience Levels?" [McGlathery, 1993] Specifically we wanted to create a large scale empirical data set that would allow us to examine many of Don's hypotheses and conjectures.

In 2005 Mediamark Research Inc. (MRI) undertook a large scale study designed to explore some of the methodological issues associated with potential title confusion. The research made use of an internet-based panel and a web-based questionnaire. While the sample size is quite large (46,798 respondents), readers should note that there are substantial differences in both data collection mode and sampling process compared to the current MRI audience study, which is based on a national probability area sample and an in-person interview. Thus while we view the results of our reported research as informative, the substantial differences in both mode and sample must temper their generalizability.

STUDY DESCRIPTION

A full description of the study is contained in the companion paper "Title Confusion: The Impact of Response Error on Competitive Pairs." However, in order to provide context for the current analysis, the research design is briefly summarized.

Readership behavior for forty-eight (48) large US magazines was collected from an internet-based sample of 46,798 US adults (18 years and older). Twenty-four (24) of the forty-eight studied magazines consisted of twelve (12) pairs of potentially confused titles. The remaining twenty-four (24) titles were used to act as "fillers" for one of the

experimental treatments studied.

There were two basic experimental treatments. One of the treatments varied the mode of magazine IDENTIFICATION. For this treatment, magazines were either identified to respondents using black and white LOGO images or using four recent COVERS **and** the logo. The second treatment varied the PLACEMENT of the potentially confused titles. There were three placement variations for this treatment: potentially confused pairs always on the SAME SCREENING PAGE (Window), potentially confused pairs always on DIFFERENT SCREENING PAGES, and potentially confused pairs RANDOMLY DISTRIBUTED among all screening pages.

These treatments were combined in a full factorial design. That is, respondents were studied in each of the 2 by 3 = 6 possible combinations of the two different treatments. The sample was distributed evenly among the 6 possible treatment combinations, approximately 7,500 respondents each.

For the screen-in process the twenty-four potentially confused titles were distributed evenly among eight (8) different screening pages (windows). Thus, each screening page contained six (6) different magazine titles (logos or covers and logos). The screening pages (windows) were designed so that respondents would see all six magazine titles on the screen at one time. The same screen space was allocated to either the black and white logo or the four miniaturized covers and logos. The particular placement treatment condition: either potentially confused pairs on same page, potentially confused pairs on different pages and full randomization, was applied to all magazines consistently within a single respondent. Thus, some respondents were always exposed to potentially confused pairs on the same page, while others were always exposed to potentially confused pairs on different pages and others were exposed to a full randomization of titles across pages. This uniformity within respondent was also applied to the mode of identification. A respondent saw either logos or covers and logos consistently across all magazines.

Confused Reader: Operational Definition

In this paper, as well as in our companion study, we have operationally defined a confused reader as an individual who first, "screened-in" for a particular title[1], second, indicated readership within the most recent publication period, and third, "screened-out" for the same publication in subsequent questioning. Our definition is in some respects "too tight" and in the other respects "too loose." We feel that it represents a workable compromise between theory and practice.[2]

Confused Reading Claims and Readers

In most of this paper the basic unit of analysis is the claimed read, rather than the claimed reader. We have adopted this analytic strategy because, a person may claim readership of magazines A, B and C and subsequently be classified as a "confused" reader for magazine B, but not for A or C. Thus, a person (reader) may be classified as a non-confused reader for some magazines and a confused reader for others. This perspective is, in fact, more germane to various questions that arise about the impact of confused readers on audience size and composition. To indicate this perspective, we use the use the term "reads" rather than "reader" in Tables 2 through 6. For completeness however, we do report the results of some analyses that were undertaken at the person level (Tables 7 and 8).

Research Questions

The primary focus of our companion paper is the "impact" of potential title confusion on the relative audience levels for potentially confused pairs of magazines. This paper generally finds that title confusion exists but, the competitive

[1] A 6-month screen was used.

[2] We do not ask persons who re-confirm the screen to re-confirm the read. At the same time, we do not present persons who screened out of both titles in a pair with the opportunity to re-screen in. Further, we do not attempt to separate confusion and question reliability or reproducibility.

impact of this confusion is quite minimal. The focus of the present paper is examination of the characteristics of the confused readers or more correctly, the confused claimed reads. Our analyses were guided by the following questions about confused reads and readers.

1. What are the demographic characteristics of the individuals who produce confused reads? Are these confused reading claims associated with individuals who are older or younger? Are they more or less well educated? Do they skew by gender, race/ethnicity, income, marital or work status?

2. What are the readership quality characteristics of the confused reads? Are these incorrectly claimed reads coupled with claims of high or low frequency? Where were the confused read copies obtained? Where did the reading occur? How long did respondents claim to spend with these confused reads?

3. To what degree does the method of questioning impact the chance of producing a confused read?

4. Is the probability of producing a confused read related to the number of magazines read by an individual?

THE DATA

The Extent of Confused Reads

Table 1 shows the number of projected readers as well as the number and percent of confused readers found in the sample of 46,798 respondents. These projections are based on sample post-stratification weighting[3] to the same demographic parameters used in the MRI national audience study. The Fall 2004 MRI audience estimates are shown in the last column. Pairs of potentially confused titles are shown in successive rows. We note that all of the audience estimates are substantially higher than those in MRI's national audience study. These differences are, no doubt, related to both the mode of data collection and the non-probability nature of the sample. Both the magnitude and composition of these differences serves as an additional reminder that the present results of our analyses should be interpreted as results obtained in a large scale laboratory design rather than a fully projectable survey.

As this table shows, approximately 9% of the claimed reads for the potentially confused titles are classified as "confused" readers.[4] The remaining analyses in this paper will focus on these confused reads and readers.

Table 1: Total Readers and Confused Readers for 24 Potentially Confused Magazines

Magazine Name	Total Readers (000)	Confused Readers (000)	% Confused Readers	MRI National Study Fall 2004
Baby Talk	11300	1009	8.93%	5197
American Baby	13800	1370	9.93%	6534
Soap Opera Weekly	8342	820	9.83%	4220
Soap Opera Digest	11033	997	9.03%	5246
PC Magazine	17709	1736	9.80%	5145
PC World	23474	3418	14.56%	4740

[3] Post-Stratification was based on the same multivariate raking algorithm used in the MRI national readership study.
[4] As indicated elsewhere, a confusion rate of 9% is, most likely, an overstated estimate because of both mode and sample effects.

Parents	19923	2979	14.95%	14726
Parenting	16911	2099	12.41%	10118
Newsweek	28621	1497	5.23%	19526
Time	32183	1161	3.61%	21132
Men's Fitness	13400	1553	11.59%	5600
Men's Health	18760	1471	7.84%	8480
Better Homes and Gardens	52055	3318	6.37%	38192
House & Garden	24565	4313	17.56%	13887
Golf Magazine	9496	1062	11.18%	5646
Golf Digest	9346	1101	11.78%	5584
Fortune	8522	596	6.99%	3782
Forbes	9818	635	6.47%	4591
Family Circle	40479	1950	4.82%	21441
Woman's Day	41321	1788	4.33%	20504
Country Living	22486	3175	14.12%	11387
Country Home	19570	3683	18.82%	8088
Travel & Leisure	13428	967	7.20%	4690
Conde Nast Traveler	9523	1402	14.72%	3440
TOTAL	**476062**	**44097**	**9.26%**	**251896**

Demographic Characteristics of Confused Reads

We first examine the demographic characteristics of confused readers or, more correctly, confused reads.

Table 2: Demographic Characteristics of Confused Reads

	Reads (000)	**Confused Reads (000)**	% **Confused Reads**	**Index**
Sex				
Men	194314	19812	10.20%	110
Women	281748	24285	8.62%	93
Household Income				
Less than $25,000	94180	10995	11.67%	126
$25,000 to $49,999	116696	11158	9.56%	103
$50,000 to $74,999	100736	8970	8.90%	96
$75,000 or more	164450	12975	7.89%	85
Age				
18 to 24	44985	5180	11.51%	124

25 to 34	95783	9755	10.18%	110
35 to 44	107879	9896	9.17%	99
45 to 54	96127	8071	8.40%	91
55 to 64	60748	4984	8.20%	89
65 and over	70540	6211	8.81%	95
Respondent Education				
Less than High School	19177	2210	11.52%	124
High School	186270	18706	10.04%	108
Some college	137549	12617	9.17%	99
Graduated 4-yr college	66068	5416	8.20%	89
Post-College Grad+	67000	5150	7.69%	83
Employment Status				
Employed	311495	29096	9.34%	101
Not Employed	164567	15002	9.12%	98
Marital Status				
Married	292644	24728	8.45%	91
Divorced/ Separated/ Widowed	90886	9755	10.73%	116
Single, Never Married	92532	9615	10.39%	112
Race/Hispanic Origin				
White/Caucasian	347996	30162	8.67%	93
Black/African American	64635	7265	11.24%	120
Other	63432	6671	10.52%	114
Spanish, Hispanic, or Latino	70510	8497	12.05%	130
TOTAL	**476062**	**44097**	**9.26%**	**100**

Table 2 shows the demographic profile of all reads and confused reads across the 24 potentially confused titles. Indices provide a measure of the degree to which confused reads differ from all reads. For example, in Table 2, the index 110 associated with males indicates that males were approximately 10% more likely to have more confused reading evemts relative to males and females combined. The value 110 is derived as follows. First from Tables 1 and 2, we find that among all magazines studied there are a total of 476,062,000 reads with 44,097,000 of these classified as "confused" reads. Thus the percent of all reads that are confused reads is 44,097,000/ 476,062,000 = 0.092629 = 9.263%. From Table 2 we find that for males, the total reads across the 24 titles is 194,314,000 and the number of males who are classified as confused readers is 19,812,000. This gives a male percentage confused as 19,812,000/194,314,000 = 0.101958 = 10.196%. The ratio of the male percentage of confused readers to the total percentage of confused readers is 10.196/9.263 = 110% rounded.

Examination of Table 2 shows that confusion rates are higher among males, persons with lower incomes, and younger persons 18-24 and 25-34. People with less education (less than High School) are more likely to produce

confused reads, and persons with more education (college degree or more) are less likely to produce confused reads. Married persons tend to produce somewhat fewer confused reads than persons who are Never Married or Widowed, Divorced and Separated. Rates of confusion do not seem to vary by employment status. Confusion rates are higher for racial minorities as well as Hispanics.

The profile of reads, and thus readers, tending to have higher rates of confusion suggest there may be a certain grouping of demographic characteristics associated with the phenomenon. For example, higher rates of confusion are associated with both younger persons and lower income. We know that these two characteristics are correlated with one another.

In order to better understand the separate impact of each of the demographic classifications, an analysis was undertaken using logistic regression. Logistic regression is often appropriate when the dependent or left side variable takes only two possible values. For this analysis, a "confused" read was assigned the value 1 while a read defined as "not-confused" was assigned the value of 0. We note that the number of data observations for these analyses was equal to the total number of reads. For computation of standard errors, confidence limits and significance tests, the observations associated with an individual were treated as clustered, weighted observations.

The results of a logistic regression are typically expressed in terms of odds-ratios. Odds-ratios are similar to indices but differ with respect to the comparison group. For example, if we apply logistic regression to predict confusion based on gender alone, we find that the odds-ratio[5] for males versus females is 1.204. This means that males are about 20% more likely to be confused readers than females. This is often called the unadjusted odds-ratio. When we add age as a predictor in the logistic regression, the odds-ratio for males versus females is 1.189. This indicates that taking the marginal impact of age into account (or controlling for age) only slightly reduces the odds of males being confused. Specifically, males are about 19% more likely to be confused readers than females, if we control for age. This type of modified odds-ratio is often described as the "adjusted-for age" odds-ratio.

Either the change or lack of change in an "adjusted" odds-ratio is informative. For example, the lack of large change in the adjusted odds-ratio for males versus females based on age means that we cannot attribute the differences in rates of confusion among males and females to differences in age among confused and non-confused readers.

In Table 3 we show the confused reads unadjusted and adjusted odds-ratios for the same demographics and categories shown in Table 2. When the predictor, or left-side, variable is categorical and contains more than two categories the odds-ratio comparisons are typically expressed by comparing odds-ratios with a single (but arbitrary) base category. In our example odds-ratios for age are based on a comparison with the oldest group 65 years and older. Associated with each odds-ratio is an upper and lower confidence limit. When the lower and upper limits are either both above 1.0 or both below 1.0, the odds-ratios are significant at the 5% level.[6]

Table 3: Unadjusted and Adjusted Confusion Odds-Ratio for Demographic Characteristics

	Unadjusted			Adjusted		
	Odds-Ratio	**Lower 95% limit**	**Upper 95% limit**	**Odds-Ratio**	**Lower 95% limit**	**Upper 95% limit**

[5] The odds-ratio is the exponentiation of the logistic regression coefficient, in this case the coefficient associated with male. In the simple case of a single variable the odds-ratio is the ratio of the odds of a male being confused to the odds of a female being confused. In the former case there are a total of 19,812,000 confused male reads and, by subtraction from the total, 174,502,000 non-confused male reads. This gives a confusion odds for males of 19,812,000/174,502,000 = .113534515. For females there are a total of 24,285,000 confused reads and 257,463,000 non-confused reads. Thus, the odds of confusion are 24,285,000/257,463,000 = 0.094324232. The ratio of these two odds (male divided by female) is 0.113534515/0.094324232 = 1.203662225 = 1.204. An odds-ratio is similar to an "index" often used in media research, but differs because there is a direct comparison between two groups. The index shows this comparison relative to the total group.

[6] These confidence limits are computed using the Complex Sample Logistic Regression in SPSS 13.0. Both the weight and the clustering of reads within individuals is taken into account for these confidence limits.

Sex						
Male vs. Female	1.204*	1.066	1.359	1.242*	1.090	1.416
Household Income						
Less than $25,000 vs. $75,000 or more	1.543*	1.296	1.837	1.287*	1.069	1.549
$25,000-$49,999 vs. $75,000 or more	1.234*	1.069	1.424	1.073	.921	1.248
$50,000- $74,999 vs. $75,000 or more	1.141	.973	1.339	1.046	.890	1.231
Age						
18 to 24 vs. 65 and over	1.348*	1.092	1.664	1.167	.913	1.493
25 to 34 vs. 65 and over	1.174	.961	1.435	1.098	.807	1.360
35 to 44 vs. 65 and over	1.046	.876	1.249	.980	.815	1.179
45 to 54 vs. 65 and over	.949	.749	1.204	.893	.718	1.111
55 to 64 vs. 65 and over	.926	.774	1.108	.906	.753	1.090
Respondent Education						
Less than High School vs. Post-College Grad+	1.564*	1.142	2.142	1.346	.988	1.833
High School vs. Post-College Grad+	1.341*	1.125	1.598	1.267*	1.049	1.529
Some College vs. Post-College Grad+	1.213*	1.036	1.420	1.095	.929	1.292
4 yr College Grad vs. Post-College Grad+	1.073	.863	1.333	1.020	.825	1.260
Employment Status						
Employed vs. Not Employed	1.027	.915	1.153	1.030	.912	1.163
Marital Status						

Married vs. Single, Never Married	.796*	.699	.906	.997	.855	1.164
Divorced/ Separated/ Widowed vs. Single, Never Married	1.037	.845	1.272	1.271*	1.018	1.586
Race/Hispanic Origin						
Other Race vs. White/Caucasian	1.238*	1.054	1.455	.959	.773	1.189
Black/African American vs. White/Caucasian	1.334*	1.061	1.679	1.324*	1.059	1.656
Spanish, Hispanic, or Latino vs. Not Spanish, Hispanic, Latino	1.424*	1.190	1.704	1.475*	1.181	1.841

* Significant at α=0.05

In general, the logistic regression results are similar to those found in Table 2, with some notable exceptions. Differentials by gender, income and education, marital status, race, and ethnicity do not generally change with adjustment for other variables. We note however a directional switch for Other Race vs. White and a loss in significance for the odds-ratio among persons 18-24, Less than High School Graduate, and Married. These latter changes may be a function of either sample size or a lessening in the true contribution of the characteristic. We also note that there was a gain in magnitude, as well as a shift to significance, for Divorced, Separated, Widowed vs. Never Married.

Readership Quality Measures of the Confused Reads

It has been assumed, hypothesized and conjectured that confused readers are typically quite casual in their contact or reported contact with the specific magazines for which confusion occurs. Our findings provide strong empirical evidence that these assumptions, hypotheses and conjectures are correct. In Table 4 we show numbers of total reads, confused reads and indices for various readership quality measures. We also show the standard error (absolute) associated with each percentage[7].

Table 4: Readership Quality Measures of Confused Reads

	Reads (000)	**Confused Reads (000)**	% **Confused Reads**	% **Standard Error (Absolute)**	**Index**
How obtained					

[7] Given the fact that these variables are characteristics of the confused reading claim, we have not used logistic regression to produce odds-ratios.

HH subscription	163020	9464	5.81%	0.41%	63
HH purchase	86728	6453	7.44%	0.51%	80
Other	226314	28181	12.45%	0.41%	134
Where read					
In Home	253474	15473	6.10%	0.25%	66
Out of Home	222587	28624	12.86%	0.49%	139
Average Number of Issues Read or Looked Into out of 4					
0 of 4	22622	5640	24.93%	3.30%	269
1 of 4	106343	15437	14.52%	0.58%	157
2 of 4	108529	11396	10.50%	0.50%	113
3 of 4	71467	4967	6.95%	0.41%	75
4 of 4	167101	6657	3.98%	0.24%	43
Time Spent Reading					
30 minutes or less	228201	27121	11.89%	0.38%	128
31 minutes to 1 hour	150848	10345	6.86%	0.32%	74
More than 1 hour	97013	6631	6.84%	0.79%	74
TOTAL	**476062**	**44097**	**9.26%**	**0.28%**	**100**

We note that confused reads are associated with source of copy, frequency of reading, and time spent reading. In all cases the increase or decrease in the probability of confusion is in the expected direction. Reads associated with subscription copies, copies read at home, often read titles and long reading occasions are less likely to be confused reads. Confused reads tend to be associated with reading that is out of home, with copies obtained other than by subscription, of short duration and not often read titles.

The Impact of Data Collection Method on the Extent of Confused Reads

In Table 5 we show the total number of reads as well as the number and percent of confused reads for the various levels of the two treatments: IDENTIFICATION and PLACEMENT as well as the 6 IDENTIFICATION by PLACEMENT combinations.

Table 5: Measure of Confused Reads by Data Collection Treatment

	Reads (000)	**Confused Reads (000)**	% **Confused Reads**	% **Standard Error (Absolute)**	**Index**
Title Identification					

Logos only	228373	21371	9.36%	0.45%	101
Covers and Logos	247689	22726	9.18%	0.36%	99
Title Placement					
Same page	159240	12679	7.96%	0.42%	86
Different page	160882	15828	9.84%	0.42%	106
Random mix	155941	15591	10.00%	0.63%	108
Combined Treatments					
Same page, logos only	75494	6414	8.50%	0.72%	92
Different page, logos only	78016	7112	9.12%	0.52%	98
Random mix, logos only	74863	7844	10.48%	1.06%	113
Same page, covers and logos	83746	6265	7.48%	0.48%	81
Different page, covers and logos	82865	8716	10.52%	0.67%	114
Random mix, covers and logos	81077	7746	9.55%	0.71%	103
TOTAL	**476062**	**44097**	**9.26%**	**0.28%**	**100**

We note that the Covers and Logos produced a larger number of reads (statistically significant at 5%) than did Logos only, but did not produce statistically significant differences in the percentage of confused reads.

The picture is quite different for the placement of stimuli. When similar magazines appear on the same screen the percentage of confused reads is lower by approximately 2% absolute and about 20% on a relative percent. Both of these comparisons are relative to random placement across pages. This provides confirming evidence for prior conjectures and assumptions that proximity lessens confusion.

We also conducted a logistic regression analysis to determine if there was an interaction between IDENTIFICATION and PLACEMENT; we found there was. In Table 6 we show odds-ratios, both overall and conditional, for the logistic model that includes both main effects and interactions. We have shown a number of odds-ratios in this table. The first set of odds- ratios show the odds-ratios for a standard main effects model. We look at the impact of the two types of treatments taking into account the impact of each on the other using the overall marginal effect. The second set of odds-ratios shows the impact of taking into account "interactions." Interactions in this case mean that the 2 categories of IDENTIFICATION may impact the effect of each of the 3 PLACEMENT treatments differently. We show these ratios for completeness, but we also show odds-ratios that were computed using subsets of the data. We believe that these odds-ratios which are labeled "conditional" are more informative.[8]

These subset based odds-ratios show that the impact of Same versus Different Pages on confusion is more pronounced when used in combination with Covers and Logos. We note that statistical significance at the 5% level is restricted to the Covers and Logos condition.

[8] We note that the odds-ratios shown for PLACEMENT conditional on COVERS and LOGOS is the same as the odds-ratios shown for the MODEL with INTERACTION. This is a result of how interactions are treated in the coding of dummy variables for interaction models. We believe that the use of conditional odds-ratios is more understandable and informative.

Table 6: Odds-Ratios for Confused Reads by Data Collection Treatment

	Odds-Ratio	Lower 95% limit	Upper 95% limit
MODEL without INTERACTION			
Title Identification			
Logos vs. Covers and Logos	1.020	.906	1.149
Title Placement			
Same page vs. Random mix	.779*	.665	.912
Different page vs. Random mix	.982	.851	1.134
MODEL with INTERACTION			
Title Identification			
Logos vs. Covers and Logos	1.108	.874	1.405
Title Placement			
Same page vs. Random mix	.765*	.634	.924
Different page vs. Random mix	1.113	.927	1.335
CONDITIONAL ON LOGOS			
Same page vs. Random mix	.793	.617	1.020
Different page vs. Random mix	.857	.688	1.067
CONDITIONAL ON COVERS AND LOGOS			
Same page vs. Random mix	.765*	.634	.924
Different page vs. Random mix	1.113	.927	1.335

* Significant at α=0.05

From these tables we see that IDENTIFICATION does not have a significant impact on the chance of confusion but

PLACEMENT does. When we examine odds-ratios for the two IDENTIFICATION types, we find that PLACEMENT does not produce statistically significant differences relative to Random when we consider Logos, but does produce significant differences from Random when Covers and Logos are used.

Readership Quality and Quantity Measures of the Confused Readers (other non-confused reads)

Our final analysis focuses on individuals rather than confused reads. Various analyses (carried out but not shown in this paper) indicate that the factors identified in this paper as being associated with confused reads are also associated with individuals who generate these confused reads. However, in addition to these already discussed factors associated with confused reads and readers, we wanted to examine whether individuals who reported reading more magazines were more or less likely to exhibit confusion. In Tables 7 and 8 we show the average of the proportion of persons with at least one confused read and the average of the proportion of confused reads by Total Reads (Table 7) and Total Non-Confused Reads (Table 8). In both tables we see a clear increase in the mean proportion of persons with at least one confused read as the number of all titles and non-confused titles increases. This is certainly expected. We note, however, an increase in the average proportion of confused reads as the total number of claimed titles increases (Table 7). We note also (Table 8) that there are readers who claim a relatively large number of magazines who seem to exhibit a lower average probability of a confused read.

Overall, we believe that these two tables show that confused reads are not all concentrated in a singular group of individuals. There is certainly some concentration, but these mean probabilities show that confused reads occur at all levels of reading volume. That is they occur among individuals who read very few titles, as well as those who read a moderate and a large number of titles.

Table 7: Confused Readers* and Reads by Total Reported Reads

Total Reads	**% of Persons**	**Mean Probability of at least one Confused Read**	**Mean Proportion of Confused Reads**
0	35.9%	0	0
1	15.9%	0.1120	0.1120
2	14.4%	0.1339	0.0804
3	9.7%	0.1999	0.0849
4	7.6%	0.2340	0.0871
5	5.1%	0.2830	0.0844
6	3.8%	0.2732	0.0745
7	2.5%	0.3536	0.0904
8	1.7%	0.3852	0.0879
9	1.1%	0.4115	0.0976
10 or more	2.4%	0.4698	0.1171
TOTAL	**100.00**%	**0.1299**	**0.0590**

* Defined as a reader with at least one confused read

Table 8: Confused Readers and Reads by Total Non-Confused Reads

Total Non-Confused Reads	**% of Persons**	**Mean Probability of at least one Confused Read**	**Mean Proportion of Confused Reads**
0	38.3%	0.0635	0.0635
1	16.2%	0.1252	0.0686
2	14.6%	0.1439	0.0564
3	9.4%	0.1772	0.0547
4	7.2%	0.1926	0.0503
5	4.6%	0.2078	0.0464
6	3.6%	0.2296	0.0496
7	2.1%	0.2341	0.0415
8	1.4%	0.2567	0.0441
9	0.9%	0.2611	0.0408
10 or more	1.8%	0.2960	0.0446
TOTAL	**100.00**%	**0.1299**	**0.0590**

SUMMARY

In our companion paper it is shown that confused reads do not appear to differentially affect competitive publications to the extent feared. The research reported in the present paper generally shows that these confused reads skew in the directions previously hypothesized. Confused reads occur more often among non-core readers. Furthermore they tend to occur more often with lower income and education. Some of the reporting of confused reads may also be associated with cultural factors. Finally, method of presentation appears to influence the reporting of confused reads.

CONCLUSION

We believe that the results of this research will increase our understanding of some of the issues associated with potential title confusion. We caution others that our method of data collection and our sampling process for this research is quite different from the methods that are generally used to produce many of the currently accepted estimated of audience size. We believe that others should be very cautious about applying the "magnitudes" found in this study to the results produced by the use of strict probability sampling as well as in-person interviewing.

REFERENCES

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