

Qualitative Media Measures II: Magazine Experiences

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February 16, 2004

Abstract

This paper seeks to understand the experiences involved in reading a magazine. We study 100 magazines using qualitative and quantitative research and identify 39 experiences associated with magazines. Statistical models are used to compare the strength of each experience across magazines, and the extent to which readers of a particular magazine agree on the experience. We theorize that these experiences drive readership and develop a new measurement of magazine readership, the Readership Usage Measure (RUM), and link it to the experiences. We find that the experiences of reading newspapers and magazines are similar in some ways, but different in many other ways.

1 Introduction

This is the second article of a two-part series that provides quantitative measures of readership that reflect the qualitative experience of reading print media. The first article, Calder and Malthouse (2004), distinguishes between print medium *usage* and *experiences*, what people think and feel in reading. We posit that experiences drive usage. Moreover, we present a methodology for identifying media experiences and apply it to newspapers. This work identifies 44 distinct experiences for newspapers and relates them to readership (usage) across 101 daily newspapers.

This article reports the results of a large consumer study that applies the same methodology to magazines. The goal is to identify specific, measurable

experiences that characterize involvement with magazines. Qualitative research is used to gain insight into these experiences, which is then extended through quantitative analysis. This analysis focuses on two issues: The level of each experience across magazines and the association of each experience with magazine readership.

2 Methodology

Magazine Selection. A key feature of this research is that we wanted to reach conclusions about the experiences involved in reading magazines. Any one magazine may no doubt involve some experiences that are unique to it. But this research postulates and attempts to show that many important experiences exist across magazines. Whether such experiences exist is an empirical question to be answered by the research. Our approach was to use magazines with the largest U.S. audiences. By definition these magazines cover the experiences of a large number of people and span all of the major magazine categories. Specifically, we screened for readers of the top 100 MRI magazines. These magazines represent 96.2% of net readers of all MRI-measured titles. (See our web site for the categories of magazines.) Two titles were excluded; one no longer published and another that did not contain advertising as content. Two business magazines were added to better represent that category.

Qualitative Phase. Qualitative research generated the initial set of experience items. One hundred hour-long interviews were conducted with readers. Each interview focused on one of the 100 magazines. In-

interviews were conducted for 68 of the magazines.

The interviews followed a qualitative format but were structured around the following. Participants were first asked about what they liked or disliked about the magazine. They were then told: “I want to focus now on what reading (magazine) is like for you. What the experience of reading it is like. Do you understand what I mean? (If no, this was explained further.) I’ll ask you about this in a number of different ways. Try to tell me what reading (magazine) is really like for you personally.”

Participants were then asked about situations (times and places etc). They were probed about reading as an end in itself or as a means to an end or goal. They were asked about talking to others about what they read, how reading made them feel, what kind of mood it put them in and any behaviors that resulted from reading. They were also asked about their awareness and interest in advertising in the magazine. A final set of probes took the form of complete-the-sentence projective questions. Examples of these are: When I am not reading (magazine) I am most likely to think of it when _____. If I were to pick up (magazine) just before going to bed, I _____. A name that would better describe (magazine) would be _____. The pictures in (magazine) make me _____. I trust (magazine) not to _____. Another set of probes asked them to use a word (e.g., experience, want, anticipate, helps, worry) in a sentence about the magazine.

Items were developed from thoughts and feelings frequently expressed in these interviews. An example item is “I like to kick back and wind down with it.” The complete set of items generated is given our web site. These are shown in the form used in the quantitative survey. (Two different orders were used in the survey.)

2.1 Survey Phase

Sampling. The same sample of 100 magazines that was used in the qualitative phase was used in the survey phase. Studying 100 magazines provides a strong test of whether experiences are common across magazines.

We sampled readers of these magazines using a two-wave procedure. The first wave was a mail survey to identify readers of each of the 100 magazines.

The second wave mailed selected responders a longer survey containing the experience items from the qualitative research.

Wave 1. We mailed 22,810 surveys to a random sample of NFO household panel members. This included an over-sampling of teenagers, Generation X, African Americans, and Hispanics. A total of 11,494 usable questionnaires were returned, giving a 50.4% response rate. The survey asked up to three members of the household to complete the survey. The three members were indicated on the survey and selected from a sampling frame provided by NFO. From the 11,494 returned surveys by households, a total of 19,004 individuals completed the questionnaire. Individuals were asked whether or not they read each of the 100 magazines at least once during a typical month. The 19,004 individual respondents yielded a total of 80,536 magazine-person combinations.

Wave 2. The goal of this wave was to survey a random sample of *readers* of each of the 100 magazines. We define a reader as someone who reads or looks into the magazine at least once in a typical month. To avoid difficult problems with doing statistical inference during our analysis, we decided to interview at most one person from each of the households that returned a survey. Each person was asked about one of the magazines they read. We computed weights for each magazine-person experience and used a random sampling procedure with these weights to select roughly the same number of people for each of the 100 magazines. (The details for these weights are available from our web site.) This guarantees a random sample of magazine-person experiences. In total, 4,347 of the 6,085 surveys mailed were returned giving a 71% response rate to this wave of the survey. Overall the response rate was .50 (.71 = 36%. Respondents were weighted to the U.S. Census using age, gender, and race.

2.2 Measuring Readership and Consumer Experiences

Reader Usage Measure (RUM). As described above, our approach calls for relating experiences to readership to determine if experiences are common across magazines. Accordingly, the survey included questions measuring different aspects of how the respondent read the specific magazine. We measure read-

ership as a latent variable following the behavioral score approach outlined in Calder and Malthouse (2003). We call our measure the Reader Usage Measure (RUM). Specific manifestations of readership included RUM time spent looking into an issue; number of days read or looked at an issue; number of times per month that the respondent read or looked into any issues of the magazine; and total time per month reading any issue of the magazine. When these four items are factor analyzed, one eigenvalue is greater than one and all factor loadings are 0.81 or more. Coefficient alpha is 0.85, indicating a reliable scale. Details of computing RUM are provided on our web-site.

Experience Scores. The survey contained the 220 items, constructed from the qualitative research, measuring the experience of reading a specific magazine. We used exploratory factor analysis and coefficient alpha to develop 39 experience factors using the same methodology as in the companion paper on newspaper experiences, Calder and Malthouse (2004). See our web site for a list of items included in each scale, factor loadings, and coefficient alpha. The final scores (scale values) are the simple averages of the items. As future research, we recommend developing additional items for these scales to improve their reliability.

3 Results

As we did with newspapers in Part 1, we examine two issues for magazines. The first is whether magazine experiences differ in level. The second is whether experiences are indeed common across magazines. Finally, we compare magazines experiences with the newspaper experiences reported in Part 1.

Comparing Experiences Across Magazines. This section explores the extent to which the level or degree of an experience varies across magazines. For example, one might expect some magazines to be experienced by readers as being higher on Experience Score 16 (It helps me look good; it’s sensual, even sexy). We study this variation across magazines with the same random-effects ANOVA model as in the companion paper on newspapers. Table 1 gives estimates of overall means (μ) and variation across magazine (σ_m). Recall that experiences are

measured on five-point scales, where five indicates a high level of the experience. The experience with the highest average across magazines is Experience Score 27 (It’s brief and easy for me to read), with $\mu = 3.5$ indicating that readers, on average, rate magazines between “Neither agree nor disagree” (scale point 3) and “Agree” (scale point 4) on being brief and easy to read. Experience Score 9 (It reinforces my faith) has the lowest average experience with $\mu = 2.2$, indicating that across these 100 magazines, readers nearly “Disagree” (scale point 2) with statements regarding their faith being reinforced.

Table 1 also provides P values (sixth column) testing the null hypothesis that there is no variation in the means across magazines ($H_0 : \sigma_m^2 = 0$), implying that readers of all magazines have the same experience. For example, if the variance of Experience Score 16 were 0, we would conclude that all magazines are perceived as equally sexy. For all 39 experience factors, we reject the null hypothesis that there is no variation in mean experience level across magazines, and conclude magazines differ in the level or degree for each experience.

Values of σ_m (fifth column) indicate how much experiences vary across magazines. The highest variation is for Experience Score 14 (It helps me keep track of celebrities) with $\sigma_m = 0.42$. This indicates that magazines vary substantially on the celebrity experience. Under the assumption that means across magazines are normal, we conclude 68% of magazines have celebrity means between 3.1 ± 0.42 , 95% of magazines have means between $3.1 \pm 0.42 \times 2$, etc. Readers of some magazines have particularly high means on the celebrity factor, while readers of others have particularly low means on the celebrity factor. Other experiences that have large variation across magazines include Experience Score 16 (It helps me look good; it’s sensual, even sexy), Experience Score 11 (I save and refer to it), Experience Score 9 (It reinforces my faith), and Experience Score 6 (I’m touched). Experience Scores such as 31 (It’s part of my routine) have much smaller variation across magazines, indicating that magazines are more similar on these experiences.

It may also be of interest to examine the variation in experience in a different way. Values of σ (column 7) indicate the extent to which readers of a magazine agree on the experience. Experience Scores such as 11 (I save and refer to it) with $\sigma = .92$, 9 (It reinforces

my faith) with $\sigma = .81$, and 12 (This magazine’s web site is important to me.) with $\sigma = .81$ have particularly large values, indicating large within-magazine variation. Readers of magazines do not agree about saving a magazine — some save it and others don’t. There is more agreement on Experience Score 27 (It’s brief and easy for me to read) with $\sigma = .48$.

Relationship between Readership and Experience Scores. Parallel to the newspaper Experience study, we examine whether the 39 experience scores are common across magazines by relating each to RUM with the hierarchical linear models. Recall that the logic of our approach is that if an experience is common across magazines it should be related to readership across magazines. Experiences that are uncorrelated with readership for some magazines but correlated for others (positive variance) are said to be *idiosyncratic*. Experience uncorrelated readership for all magazines (variance not different from 0), then the experience is uninteresting.

Table 2 gives estimates from the 39 models, sorted in descending order of the slopes estimates. Experience Score 1 (I get value for my time and money) has the largest slope. Across magazines, its average slope is $\beta = .75$. Every unit increase in this scale is associated with a RUM increase of .75 scale points, on average. Some slopes are negative. The slope for Experience Score 20 (it disappoints me) is $\beta = -.73$, indicating the more people agree with this statement, the less they read the magazine.

Some experiences have slopes that are approximately 0. The P -values in the next column evaluate the null hypothesis $H_0 : \beta = 0$, that the experience factor has no linear effect on readership, versus a two-sided alternative. We cannot reject this null hypothesis for Experience Score 36 (I want more ad information), 12 (This magazine’s web site is important to me.), and 21 (It leaves me feeling bad). At least with these data, we cannot conclude these experiences are associated with RUM.

Values of σ_b tell how much slopes vary across magazines; $\sigma_b = 0$ indicates the slopes have no variance, implying all magazines have the same slope. For Experience Score 2 (It makes me smarter), SAS is unable to detect variance across magazines ($\sigma_b = 0$), indicating the slopes for Experience Score 2 do not vary across magazines. Making readers smarter has the same effect on readership for all magazines. This is

the case with most experiences. In some cases SAS is able to estimate positive variation across magazines, but the variance is not significantly different from 0. For example, Experience Score 1 (I get value for my time and money) has a standard deviation in slopes across magazines of $\sigma_b = .022$, but the P -value testing the null hypothesis that this standard deviation is 0 is .395.

But there is significant, or nearly significant, variation in slopes across magazines for some of the experiences. Factor 12 (This magazine’s web site is important to me) has $\sigma_b = .085$, which is highly significant ($P=.009$). This indicates that for some magazines, using the web is more correlated with readership than for others. Experience Score 21 (It leaves me feeling bad) has nearly significant variance in slopes, yet the grand slope β is not significantly different from 0 indicating this factor is idiosyncratic. For some magazines, making a person feel bad is associated with readership but not for others. Our sample sizes for each magazine are, on average, 40. Larger sample sizes would likely allow for more variation across magazines to be estimated.

In view of the across-magazine relationships between the experiences and usage behavior obtained here, the data is sufficient to establish that almost all of the experiences relate to RUM. Across magazines, experiences 36 (I want more ad information), 21 (It leaves me feeling bad.), and 12 (This magazine’s web site is important to me.) have correlations that are not significantly different than zero, suggesting at most only a weak relationship to RUM. The other experience scores relate to usage behavior across magazines in a manner that implies that they are potentially useful metrics for any magazine and certainly for magazines as a medium.

Comparing Newspapers and Magazines. It is instructive to compare the media to understand which experiences are common and which are different. The analysis of means presented in both papers have identified which experiences are strong for an individual medium and the analysis of slopes has identified which experiences are most highly associated with — and in theory *cause* or *drive* — readership. While it is important to understand a medium’s strengths and what drives usage, it is also important to understand what differentiates it from other media. Both means and slopes will be compared for this purpose.

The task comparing media is complicated by the fact that different items were by necessity included in the newspaper and magazines surveys, because the primary objective of this research was to identify experiences associated with individual media. Since consumers in the qualitative phase never described magazines as a local medium, localness was not measured on the magazine survey. But since most U.S. newspapers are local, it was often mentioned during the newspaper interviews and local items were measured on the survey. In addition, there is no a priori reason to assume that items that are common to the two surveys should correlate — and thus factor — in the same way. With these caveats understood, it is possible to compare the results of the two sets of analyses to examine experiences that have a common interpretation between newspapers and magazines and experiences that do not.

Perhaps the most interesting common experiences have to do with thought and time. “It makes me smarter” (magazine scale 2 and newspaper scale 13) has a large mean for both. Providing a personal timeout (magazine scale 15 and newspaper scale 2) is also common. Both media are heavily experienced as taking personal time for yourself that improves your knowledge. It is interesting to speculate that this may indeed be the defining *consumer* feature of the print media. Print is deeply personal and intellectually rewarding.

At the same time magazines and newspapers are different. As anticipated, local experiences are common with newspapers, but not for magazines. The vast majority of newspapers in the United States are local. “National” newspapers including *The New York Times*, *USA Today*, and *The Wall Street Journal* were omitted from the sampling frame of newspapers. Providing a local experience is a way for newspapers in the US to differentiate themselves from other media.

More generally, newspapers have many experiences that magazines do not have. On the positive side, “All sides of the story” (scale 12), “Taking a stand” (scale 36), “Looks out for my interests” (scale 1) and “Dining companion” (scale 32) are common newspaper, but not magazine, experiences. The first three, and possibly even the last, have to do with feeling that newspapers are more active and are a form of engagement with the world.

Newspapers are also experienced in negative ways more so than magazines. This is not surprising in that American consumers have much less choice among newspapers. There is less reason to read a magazine that one does not want to read than with a newspaper. Negative experiences with newspapers include “Too much” (scale 9), “Drowning in the news” (scale 31), “Awkward to handle” (scale 29), “Unappealing stories” (scale 34), “Poor service” (scale 23), “Makes me anxious” (scale 19). Note that most of these relate to the feeling that newspapers can be unavoidably burdensome and emotionally negative.

Some experiences associated with magazines but not newspapers include “It improves me, try new things” (scale 8), “It helps me keep track of celebrities” (scale 14), “It helps me look good; it’s sensual, even sexy” (scale 16), “I learn things first here” (scale 25), “I like its seasonality” (scale 33), and “I relate to the ads” (scale 38). These no doubt reflect the ability of magazines to focus on things that are relevant to these particular experiences. A strength of magazines as a medium is their ability to focus.

Newspapers and magazines are also different in the way experiences drive readership (from the slope analysis). While making a person smarter is among the top drivers for both media, the other top drivers are different. For newspapers the top drivers are “Something to talk about” (scale 5), “Looks out for my interests” (scale 1), “Regular part of my day” (scale 6), “Drowning in the news” (scale 31), “Wasting my time” (scale 14), and “People I know.” Again we see that newspaper reading is a more active, immediate experience, both on the positive and negative sides.

The top drivers for magazines are “I get value for my time and money” (scale 1), “The stories absorb me” (scale 3), “It’s my personal timeout” (scale 15), “I often reflect on it” (scale 32), “I learn things first here” (scale 25), and “It disappoints me” (scale 20). Magazines are experienced in a more personal way. The negative side to magazines is not finding what one expects to find in the magazine.

4 Conclusions

This research confirms that involvement with magazines, like newspapers, constitutes a rich set of multidimensional experiences. We have identified specific experiences that are common across 100 of the most widely read magazines. The data further indicates that these experiences apply not only to magazines as a medium but very generally to individual magazines. Individual magazines should realize that these experiences are likely to be important for their readers and that tracking them can provide strategic direction for editorial content and advertising decisions.

Beyond this the comparison of magazines and newspapers suggests that a very productive line of research would be to compare in detail consumer experiences across different kinds of media. We anticipate that the experience of television may be quite different from the magazine and newspaper experiences identified here and that further detailed analyses may reveal more subtle differences within print media.

5 References

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Table 1: Results from random-effects ANOVA model comparing mean experience levels across magazines (see text for definition of terms)

#	Label	μ	$SE(\mu)$	σ_m	P	σ
27	It's brief and easy to read	3.5158	0.0135	0.1083	<.0001	0.4771
25	I learn things first here	3.4879	0.0183	0.1546	<.0001	0.5800
2	It makes me smarter	3.4489	0.0211	0.1887	<.0001	0.5545
1	I get value for my time and money	3.4400	0.0192	0.1573	<.0001	0.6538
13	It grabs me visually	3.3960	0.0226	0.2059	<.0001	0.5472
29	I like seeing people of color in this magazine	3.3916	0.0266	0.2464	<.0001	0.5839
4	I trust it	3.3911	0.0199	0.1742	<.0001	0.5667
19	I like some of the ads a lot	3.3739	0.0165	0.1365	<.0001	0.5496
3	The stories absorb me	3.3690	0.0202	0.1769	<.0001	0.5729
5	I find the magazine high-quality and sophisticated	3.3332	0.0186	0.1558	<.0001	0.5977
33	I like its seasonality	3.3106	0.0345	0.3233	<.0001	0.6776
36	I want more ad information	3.2799	0.0195	0.1569	<.0001	0.6818
37	I think others in the household would enjoy this magazine	3.2747	0.0262	0.2409	<.0001	0.6008
28	I feel good when I read it	3.2356	0.0235	0.2106	<.0001	0.6102
15	It's my personal timeout	3.2065	0.0164	0.1294	<.0001	0.6057
32	I often reflect on it	3.1989	0.0165	0.1323	<.0001	0.5938
35	I get a sense of place	3.1545	0.0262	0.2350	<.0001	0.6733
14	It helps me keep track of celebrities	3.1023	0.0444	0.4234	<.0001	0.7553
22	It's relevant and useful to me	3.0953	0.0190	0.1572	<.0001	0.6307
31	It's part of my routine	3.0932	0.0171	0.1289	<.0001	0.6782
7	I'm inspired	3.0929	0.0250	0.2212	<.0001	0.6859
30	I find unique and surprising things	3.0922	0.0179	0.1469	<.0001	0.6021
38	I relate to the ads	3.0889	0.0274	0.2518	<.0001	0.6160
39	It requires me to focus	3.0525	0.0194	0.1442	<.0001	0.7811
6	I'm touched	3.0354	0.0347	0.3233	<.0001	0.7210
8	It improves me and try new things	3.0226	0.0297	0.2784	<.0001	0.5851
17	I read the ads	3.0177	0.0254	0.2242	<.0001	0.6969
24	It's for people like me	2.9700	0.0216	0.1904	<.0001	0.5958
11	I save and refer to it	2.9232	0.0341	0.3027	<.0001	0.9230
18	I dislike some of the ads	2.9151	0.0162	0.1321	<.0001	0.5552
20	It disappoints me	2.8978	0.0166	0.1420	<.0001	0.5140
10	I build relationships by talking about and sharing	2.8949	0.0180	0.1427	<.0001	0.6567
34	I feel I know the writers	2.8193	0.0234	0.1957	<.0001	0.7648
26	This magazine irritates me	2.6458	0.0159	0.1308	<.0001	0.5435
16	It helps me look good; it's sensual, even sexy	2.6121	0.0366	0.3507	<.0001	0.5807
23	I keep or share articles	2.5466	0.0226	0.1881	<.0001	0.7414
21	It leaves me feeling bad	2.5363	0.0300	0.2678	<.0001	0.7876
12	This magazine's web site is important to me	2.2297	0.0267	0.2298	<.0001	0.8056
9	It reinforces my faith	2.2233	0.0345	0.3156	<.0001	0.8129

Table 2: Results from HLM analysis regressing readership on each experience factor separately

#	Label	β	P	σ_b	P	σ^2
1	I get value for my time and money	0.7528	.000	0.0215	.395	0.9485
2	It makes me smarter	0.6882	.000	0.0000	.000	1.0401
3	The stories absorb me	0.5457	.000	0.0418	.220	1.0922
15	It's my personal timeout	0.5302	.000	0.0000	.000	1.0837
32	I often reflect on it	0.5239	.000	0.0000	.000	1.0950
25	I learn things first here	0.5169	.000	0.0000	.000	1.1010
31	It's part of my routine	0.4677	.000	0.0330	.241	1.0907
28	I feel good when I read it	0.4556	.000	0.0352	.282	1.1143
5	I find the magazine high-quality and sophisticated	0.4501	.000	0.0465	.151	1.1140
10	I build relationships by talking about and sharing	0.4446	.000	0.0000	.000	1.1035
4	I trust it	0.4375	.000	0.0000	.000	1.1292
22	It's relevant and useful to me	0.4269	.000	0.0392	.271	1.1196
27	It's brief and easy to read	0.3882	.000	0.0000	.000	1.1531
30	I find unique and surprising things	0.3775	.000	0.0000	.000	1.1373
8	It improves me and try new things	0.3684	.000	0.0000	.000	1.1357
11	I save and refer to it	0.3361	.000	0.0155	.434	1.0935
37	I think others in the household would enjoy this magazine	0.3360	.000	0.0348	.305	1.1474
24	It's for people like me	0.3330	.000	0.0000	.000	1.1495
6	I'm touched	0.3067	.000	0.0141	.452	1.1349
35	I get a sense of place	0.3034	.000	0.0000	.000	1.1435
7	I'm inspired	0.3002	.000	0.0000	.000	1.1431
13	It grabs me visually	0.2963	.000	0.0000	.000	1.1568
23	I keep or share articles	0.2927	.000	0.0183	.437	1.1420
34	I feel I know the writers	0.2656	.000	0.0178	.430	1.1502
33	I like its seasonality	0.2544	.000	0.0245	.373	1.1525
29	I like seeing people of color in this magazine	0.2522	.000	0.0000	.000	1.1714
19	I like some of the ads a lot	0.2394	.000	0.0000	.000	1.1732
14	It helps me keep track of celebrities	0.1934	.000	0.0000	.000	1.1673
17	I read the ads	0.1384	.000	0.0000	.000	1.1800
38	I relate to the ads	0.1315	.000	0.0000	.000	1.1797
39	It requires me to focus	0.1010	.000	0.0564	.037	1.1822
16	It helps me look good; it's sensual, even sexy	0.0864	.004	0.0000	.000	1.1897
9	It reinforces my faith	0.0442	.045	0.0192	.436	1.1913
12	This magazine's web site is important to me	0.0381	.115	0.0846	.009	1.1879
36	I want more ad information	0.0164	.533	0.0000	.000	1.1850
21	It leaves me feeling bad	-0.0049	.250	0.0600	.062	1.1882
18	I dislike some of the ads	-0.1967	.000	0.0380	.295	1.1784
26	This magazine irritates me	-0.2465	.000	0.0479	.213	1.1738
20	It disappoints me	-0.7278	.000	0.0000	.000	1.0486