

Measuring Engagement with Editorial Content

Conceptualization, Scale Development, its
Effects on Advertising, and a Cross-Media
Comparison

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Engagement \neq Usage

- Instead, Engagement **causes** usage and me to
 - Be “attentive”
 - Regard it as “one of my favorites”
 - Be “very satisfied” with it or parts of it
 - “Recommend it to a friend”
 - Think “I would miss it if it were no longer published”
- The absence of Engagement causes me to stop using it
- Engagement is more fundamental (and actionable) than its consequences. It more actionable because it is more directly under the control of content producers

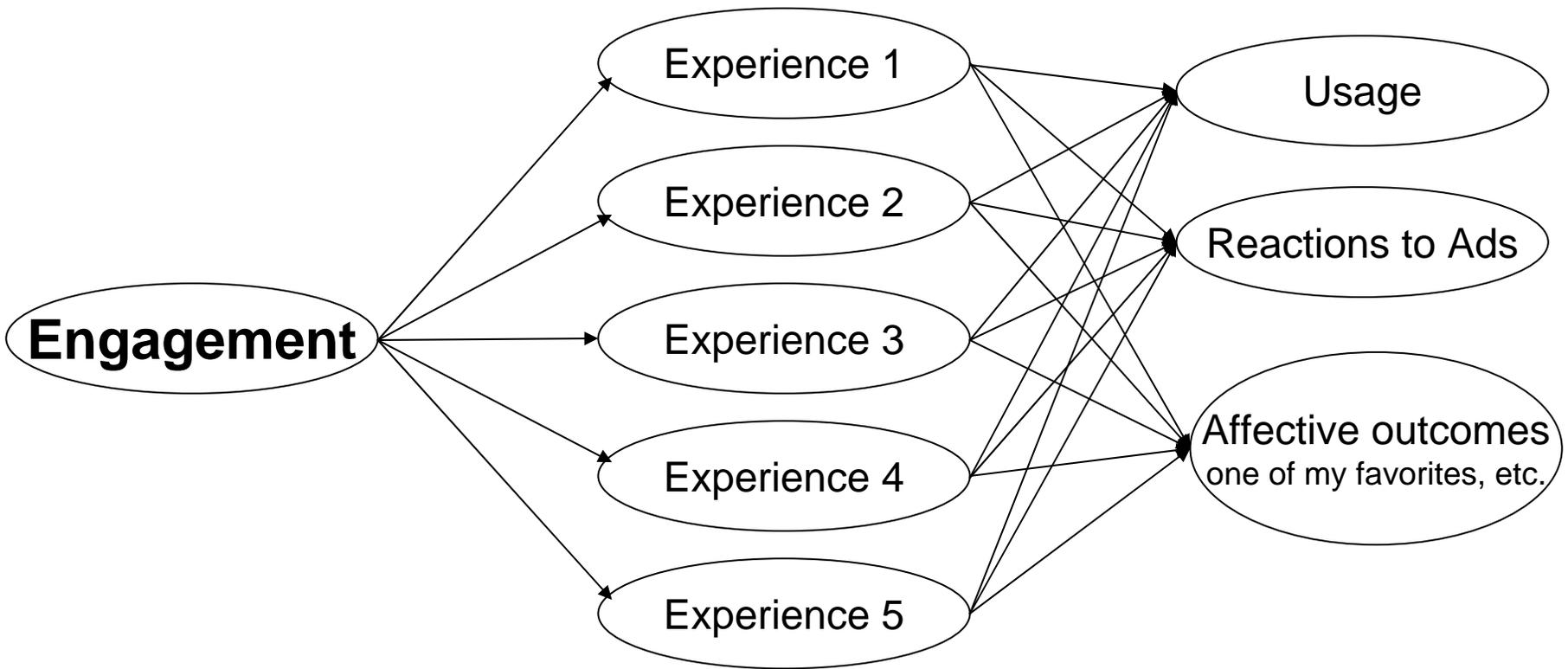
What is Engagement?

**The collective qualitative
experiences with content**

**Experiences are the thoughts,
feelings and beliefs of readers about
their program/publication**

Specific Experiences with Publications

Consequences of Engagement



Theoretical Motivation for Experience-Ad Effects

- See Dahlén (2005) for review
- Mood Congruency-accessibility hypothesis: context makes a certain mood or affect more accessible and relieves the processing of stimuli with similar moods or affects (e.g., DePelsmacker, et al. 2002; Lord, et al. 2001)
- Congruency principle (Fuchs 1964): the medium and advertised brand converge and become more similar in consumers' minds (e.g., Kamins 1990; Solomon, et al. 1992; Till, et al. 2000)
- Cognitive priming (e.g., Yi 1990, 1990, 1993; Meyers-Levy and Sternthal 1993)

Published Engagement Studies

Medium	Publications Studied	Total Sample Size	Experiences Identified or Studied
Newspapers	101	10,858	44
	52	4,444	33
Magazines	100	4,347	39
	72	25,000	4
Media Web Sites	39	2,127	22
	7	11,541	22
TV	In progress, To be released 21 July 2007		

Newspapers: <http://www.medill.northwestern.edu/faculty/malthouse/ftp/npexp.html>

Magazines: <http://www.medill.northwestern.edu/faculty/malthouse/ftp/magexp.html>

Web sites: <http://www.medill.northwestern.edu/faculty/malthouse/ftp/prague.html>

Our Research Approach

1. (Exploratory Research) Qualitative interviews with consumers generate descriptive statements (items)
 - *I lose myself in the pleasure of readings this site/mag/NP.*
2. (Descriptive Research) Survey (agree-disagree with items)
3. Exploratory factor analysis to identify latent dimensions and purify scales
 - *Intrinsic “timeout” experience, also indicated by:*
 - *It’s an escape that takes my mind off other things.*
 - *Reading is my time alone.*
 - *I feel less stress after reading it.*
 - *I like to kick back and wind down with this site/mag/NP.*
4. Confirmatory survey and factor analysis (CFA)
5. Higher-order CFA models identify Engagement
6. Evaluate effects on readership and advertising

Intrinsic and Imagery Experiences In *Country Homes Magazine*



GOOD TO KNOW:

For easy summer get-togethers, pick a bouquet of fresh herbs for the table. Cut sprigs of rosemary, basil, mint, and oregano, and place them in a jar or small pitcher of water. It makes a sweet-smelling centerpiece and comes in handy for instant seasoning.



TIP IF YOU OPT FOR AN OUTDOOR SHOWER, SPLURGE ON COMFORT.

An on-demand, tankless water heater makes showering outdoors as warm and comfortable as inside. Aromatic herbs, such as creeping thyme and lavender, planted between pavers and in vintage watering cans emit scents as soothing as the spa.



**Utilitarian
Experience**

I learn about things to do or places to go in this newspaper

This newspaper has columns that give good advice

I really like the tips in the magazine

It shows me how to do things the right way

It helps me make up my mind and make decisions

You learn how to improve yourself from this site.

I get good ideas from this web site

I look at the magazine as educational. I am gaining knowledge

This site provides information that helps me make important decisions

PC WORLD

Search PC World

Search

Browse by Topic

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Most Popular Search Terms

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- iPod Nano
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Windows Tips

Living with Windows is a whole lot easier with the tips, tools, and techniques from Contributing Editor Scott Dunn's bottomless bag of tricks.

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The Simple Way to Keep Your Private Files Private

Make encrypted files stand out, control access to secure files, and a freebie turns folders invisible.

Scot Dunn and Scott Spanbauer

Tuesday, March 20, 2007 1:00 AM PDT

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There's only one way to keep your files truly confidential: Encrypt them. The Encrypting File System (EFS) in most versions of Windows Vista, XP, and 2000 scrambles the contents of files and folders, making it very difficult for snoops to read them. It's easy to make encryption a part of your security arsenal.

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Best Mexican food in Rogers Park?

Living where we do, when we want a quick and delicious Mexican meal, we generally go to Clark Street in Rogers Park. Any favorites there? We go about three times a year, since one son isn't really fond of Mexican food, so it's hard to remember what we really liked. Your recommendations?

 **Anne H** Dec 20, 2006 03:43AM

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27 REPLIES SO FAR

I like Taqueria Uptown, on Clark at about the latitude of the Metra stop nearby (it's a small chain, so I'm sure you could Google the exact location). Clean and neat and the food is fresh and good.

 **Akatonbo** Dec 20, 2006 06:21PM

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WHO'S TALKING?



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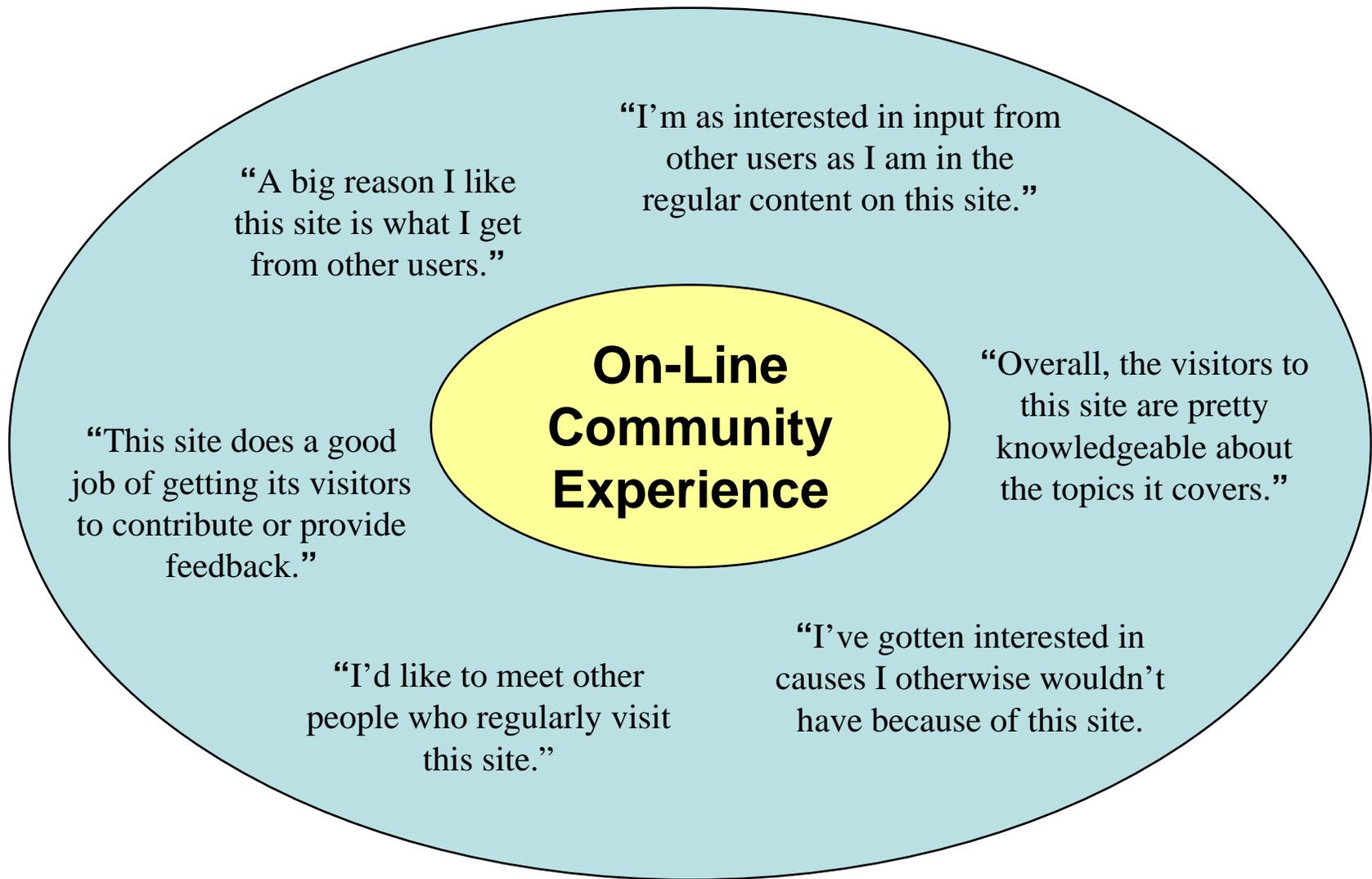
[Find out more about the Kentucky Derby >](#)

LIFE TAKES VISA

IN THE BOARDS

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Reliability = .86

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Your Comments On...

The GOP's Identity Crisis

The great drama in American politics today revolves around the question: What is the Republican Party?

- By E. J. Dionne Jr.

Comments

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filmex wrote:

Ahhh, I love the smell of toasted Republicans in the morning.

With younger voters repelled by the GOP's reliance on cruelly divisive issues like gay marriage, GOP membership continues to decline.

With their embrace of foreign wars, bankrupting the treasury to fund them, and overall stench of corruption and war profiteering, their masses shrink.

With legal Latinos the fastest growing demographic in the nation, and those voters currently registering Democratic 4-to-1, it's just a matter of time until the GOP will be as relevant as Confederacy.

That is more than a little ironic in that it was the low-brow Neo-Confederacy they turned over their party to back in the 70s under Nixon's grand plan. The Southern Strategy...Karma, ya gotta love it.

6/15/2007 12:57:27 AM

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balataf wrote:

Much of the answer to this puzzle will come with reaction to whoever the Democrats nominate. If they continue to McGovernize themselves with big liberals like Obama and Hillary, there may be a surprize.

6/15/2007 1:01:08 AM

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red kite wrote:

Once again, E.J. Dionne's point of departure is his own particular world-view from which he attempts to find and arrange facts to support that view. In short, Dionne is backing-in his premise.

Turning the thrust of Dionne's piece on its head, I think that it would more appropriate to suggest that at the moment the Republican Party welcomes debate and diversity of ideas, whereas, the Democratic Party demands that its followers subscribe to its party's orthodoxies. Moreover, anyone within the Democratic Party fold who strays off the ideological reservation faces ostracism.

**Social
Experience**

I bring up things I have seen/read on the news in conversations with many other people

I like to talk about national news and current events I read about in it

I give advice and tips to people I know based on things I've read

I show things in the newspaper/mag/web to people in my family

Reading this mag/site is a little like belonging to an organization or group

I use things from this site in discussions or arguments with people I know

Watching/reading the news makes me a more interesting person

N.Z. couple can't name their son '4real'

AP Associated Press



1 hour, 33 minutes ago

WELLINGTON, New Zealand - [New Zealand](#) authorities have blocked a couple's bid to officially name their new son "4real," saying numerals are not allowed.

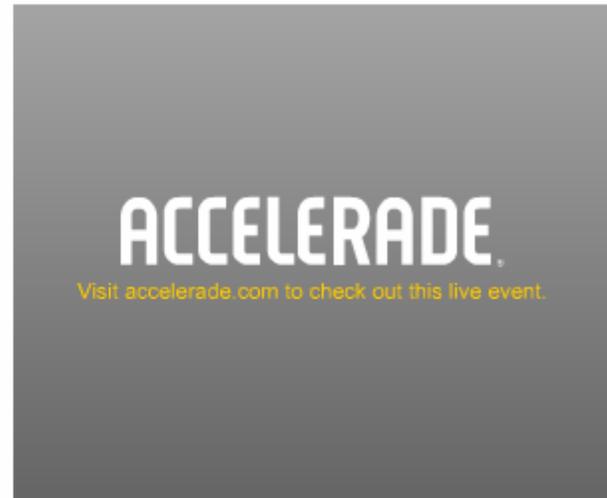
ADVERTISEMENT

Pat and Sheena Wheaton said they decided to name their new baby "4real" shortly after having an ultrasound and being struck by the reality of his impending arrival.

"For most of us, when we try to figure out what our names mean, we have to look it up in a babies book and ... there's no direct link between the meaning and the name," Pat Wheaton told TV One on Wednesday. "With this name, everyone knows what it means."

But when the parents filed the name with New Zealand's Registry of Births, Deaths and Marriages, they were told names beginning with a number were against the rules.

The government office has opened negotiations with the parents about the name under a policy that says all unusual names must be given case-by-case consideration.



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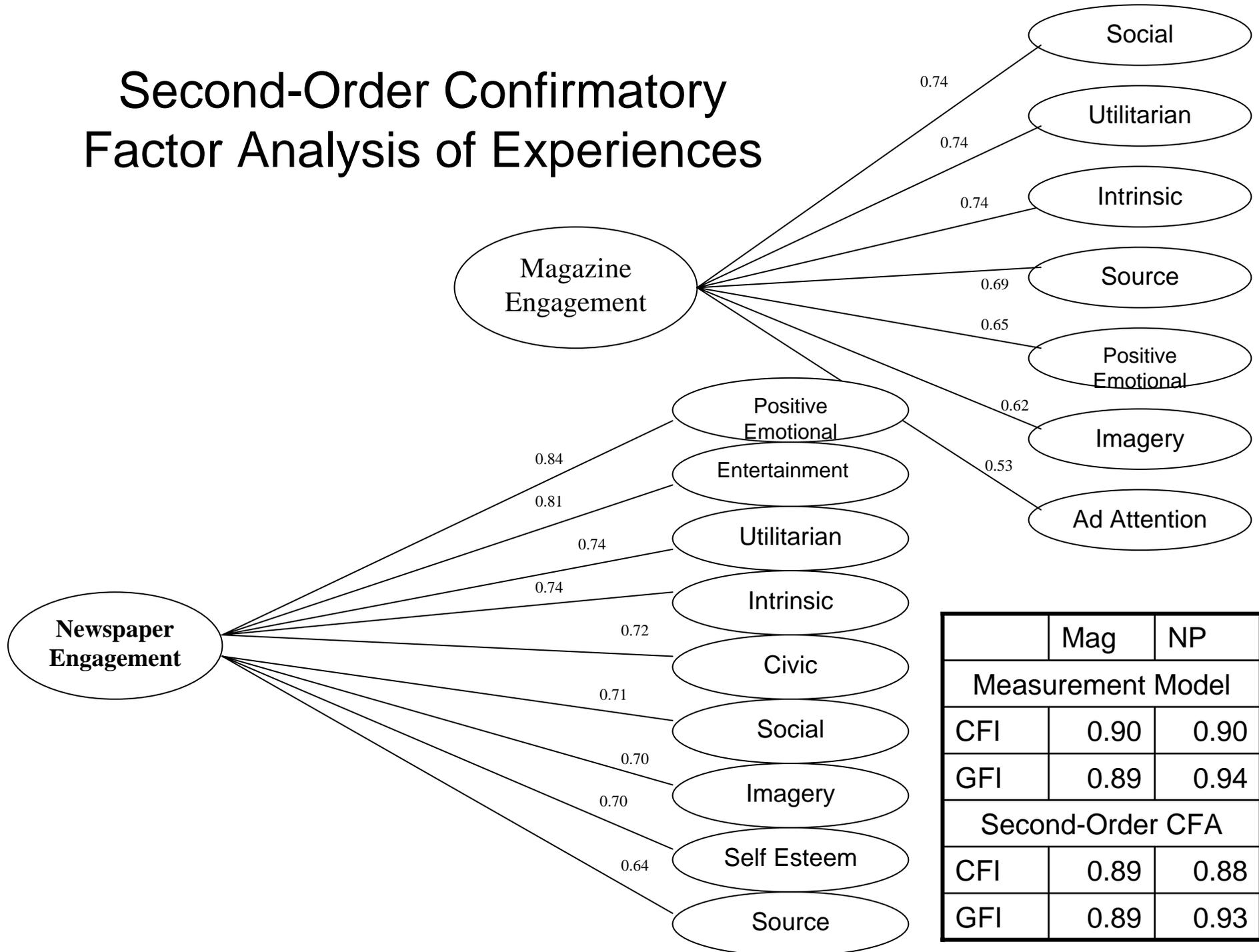
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ELSEWHERE ON THE WEB

CNN.COM
16 die in Iraq suicide bombing

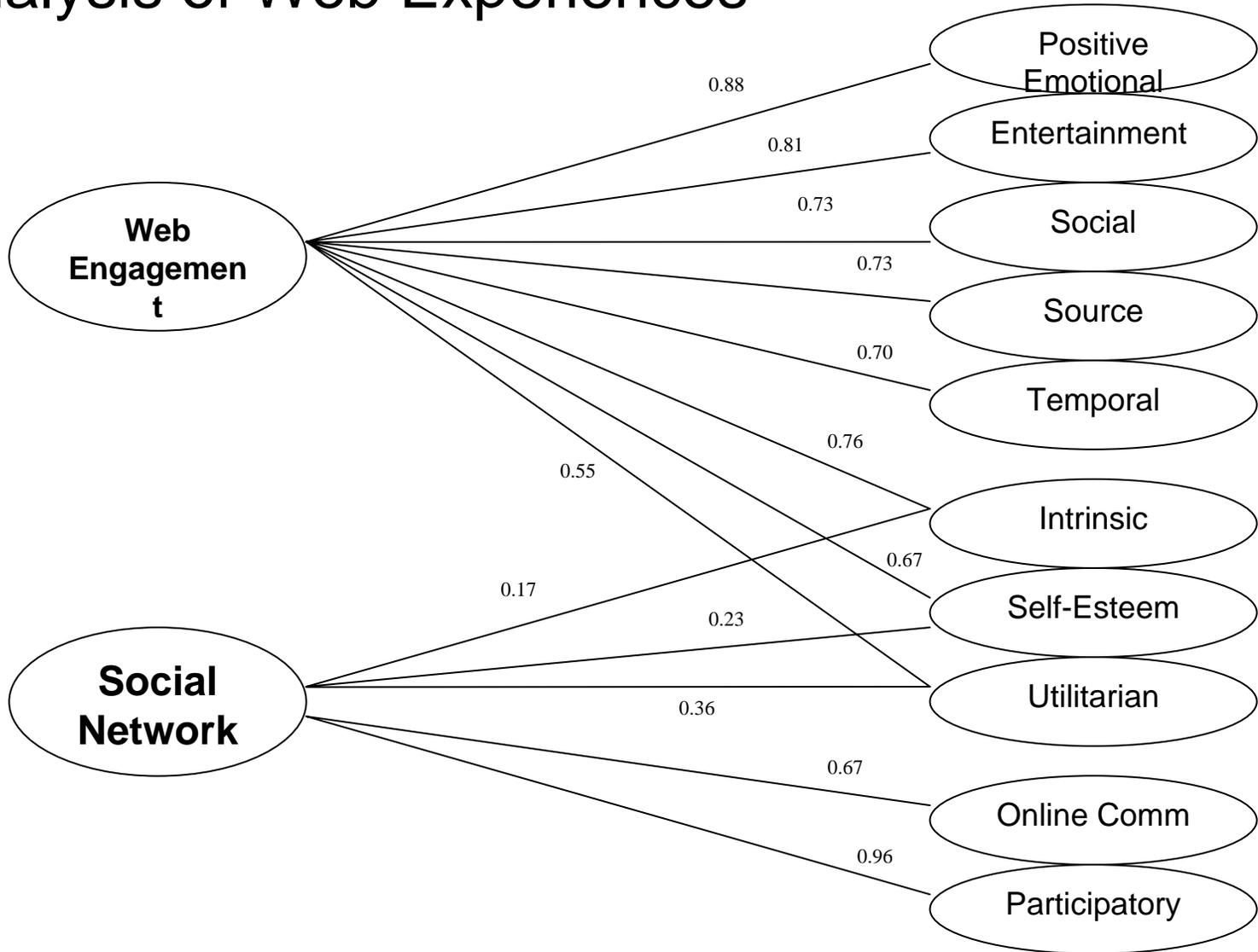
ABC NEWS
Alternatives to the iPhone

Second-Order Confirmatory Factor Analysis of Experiences



	Mag	NP
Measurement Model		
CFI	0.90	0.90
GFI	0.89	0.94
Second-Order CFA		
CFI	0.89	0.88
GFI	0.89	0.93

Second-Order Confirmatory Factor Analysis of Web Experiences

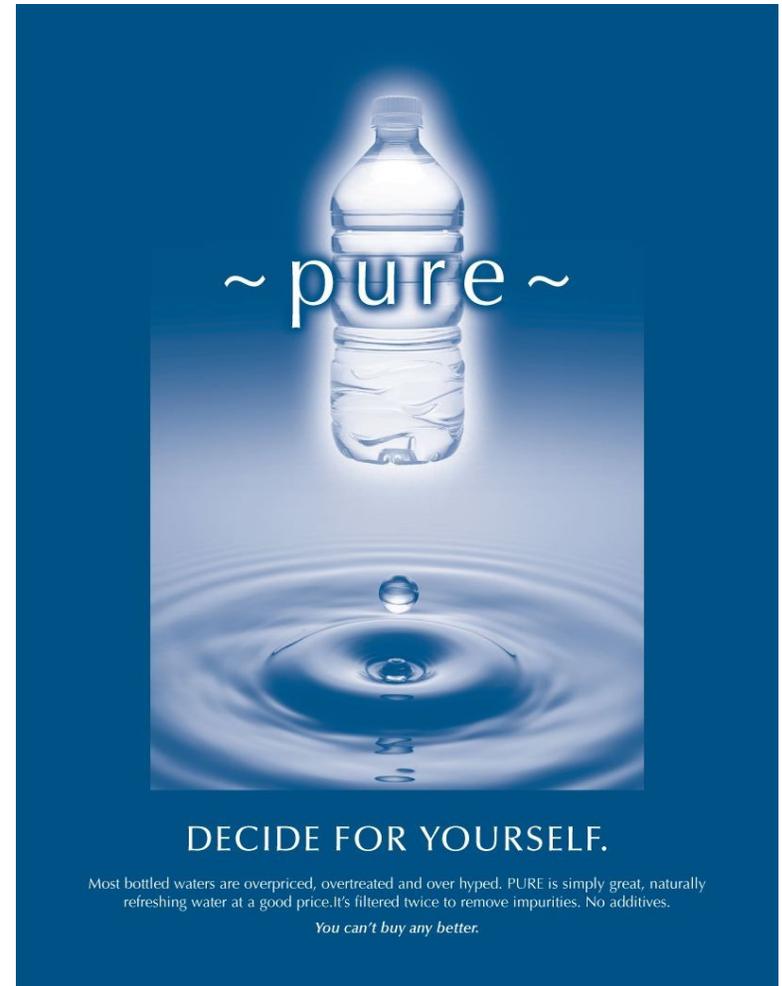


Does Media Engagement affect Usage and Reactions to Advertising?

- Engagement predicts usage across magazines, web sites and newspapers based on correlations and multiple regressions – see paper for details
- Engagement-Advertising studies:
 - Magazines: Pure Water ad ($n=3654$, 100 mags)
 - Newspapers: Pure Water ad ($n=4100$, 101 NPs)
 - Web: iPod & Orbitz banner ads ($n=11541$, 7 sites)
 - Magazines: Affinity ad copy-testing study ($n=25000$, 5,000 ads executions, 72 mags)

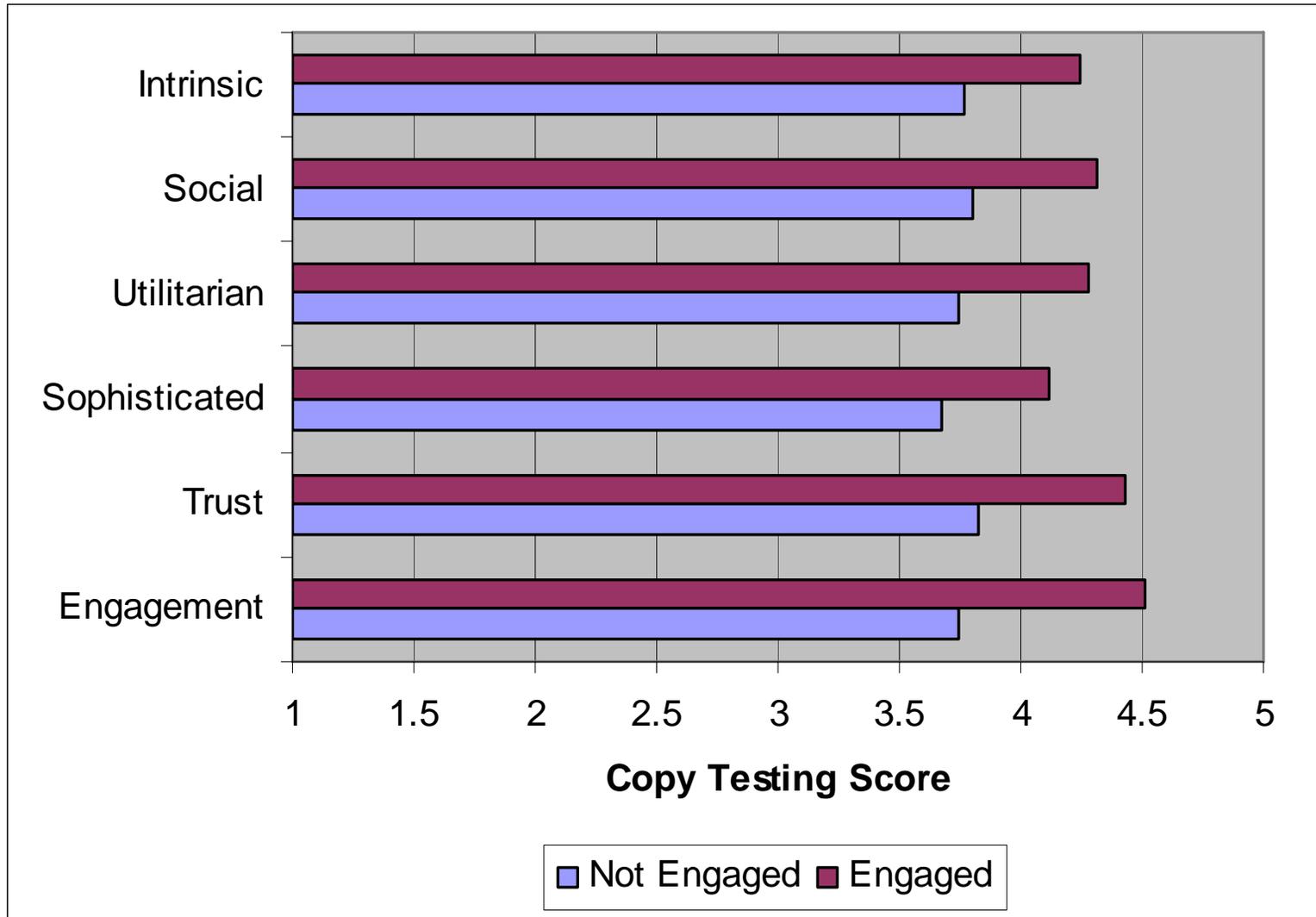
Design of Ad Studies

- Measure experiences with a specific publication
- Measure confounding variables, e.g., product usage, ad receptivity
- Show ad that either appeared or tell respondents it will appear in their publication
- Measure reactions to ad
 - Pure Water: copy test
 - Web: intent to click, copy test
 - Affinity: recall, actions taken
- Mag and Web studies: context-free control groups

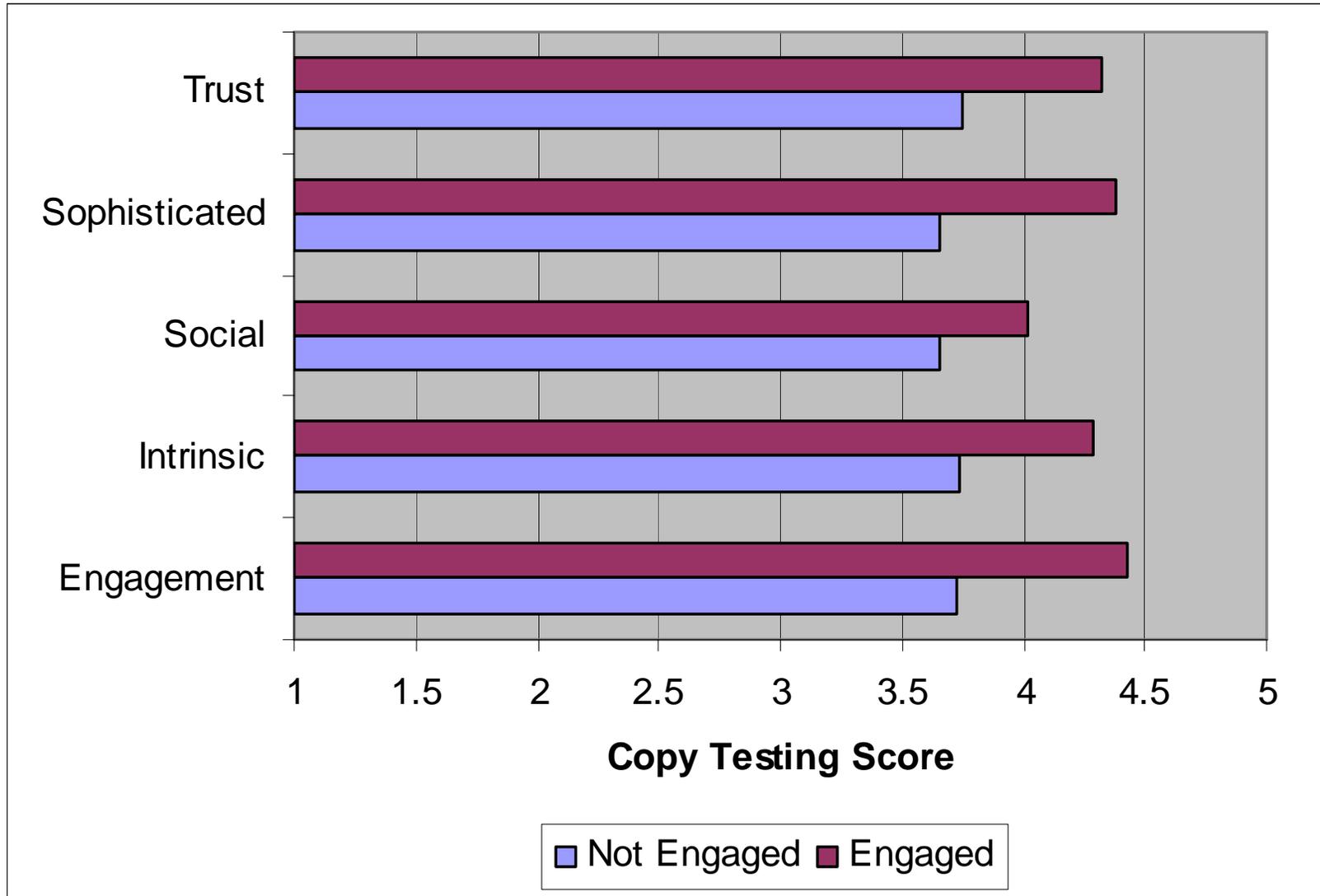


Affinity study: experiences measured after ad measures, no confounding variables measured

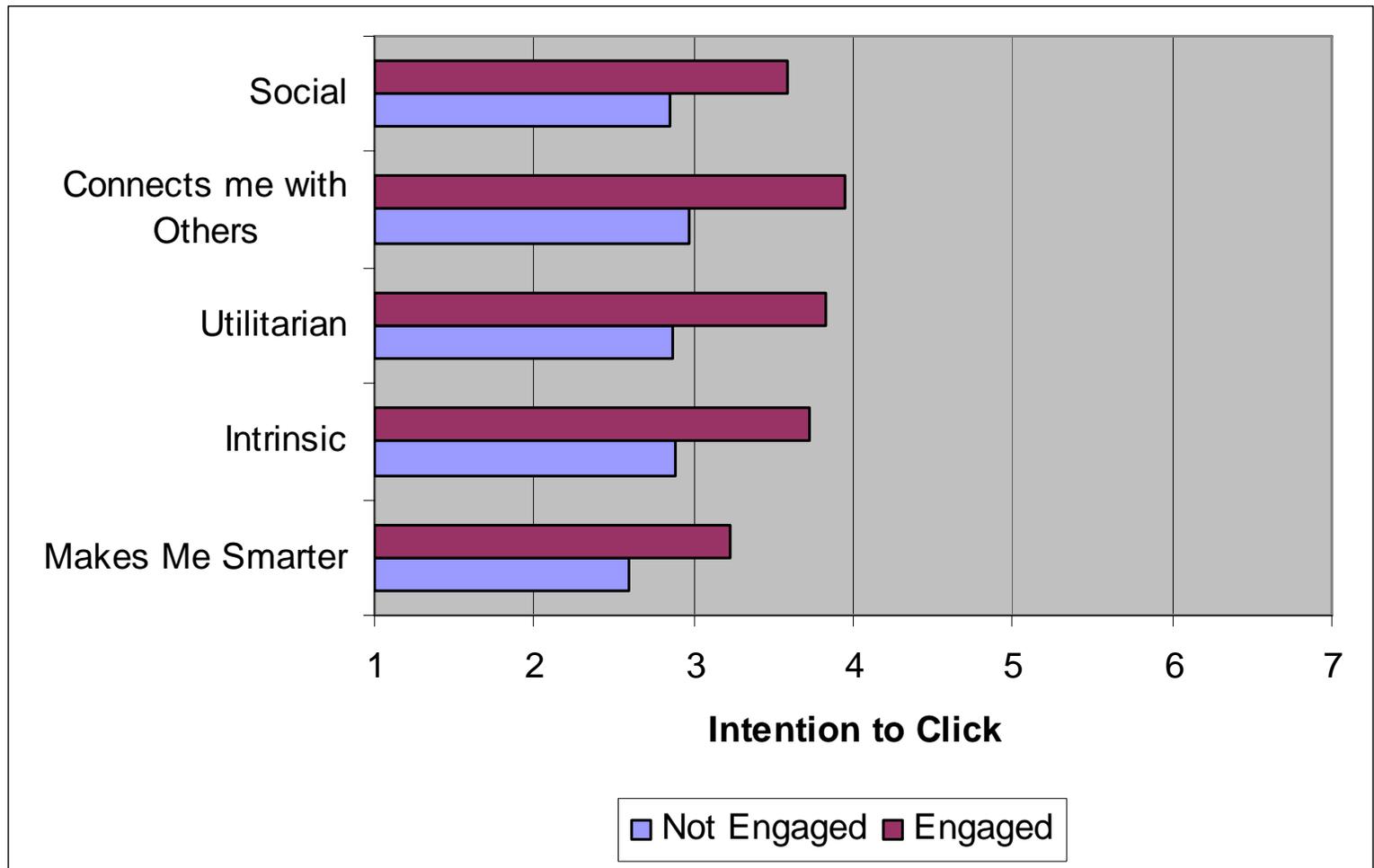
Effect of Some Magazine Experiences on Pure Water Ad



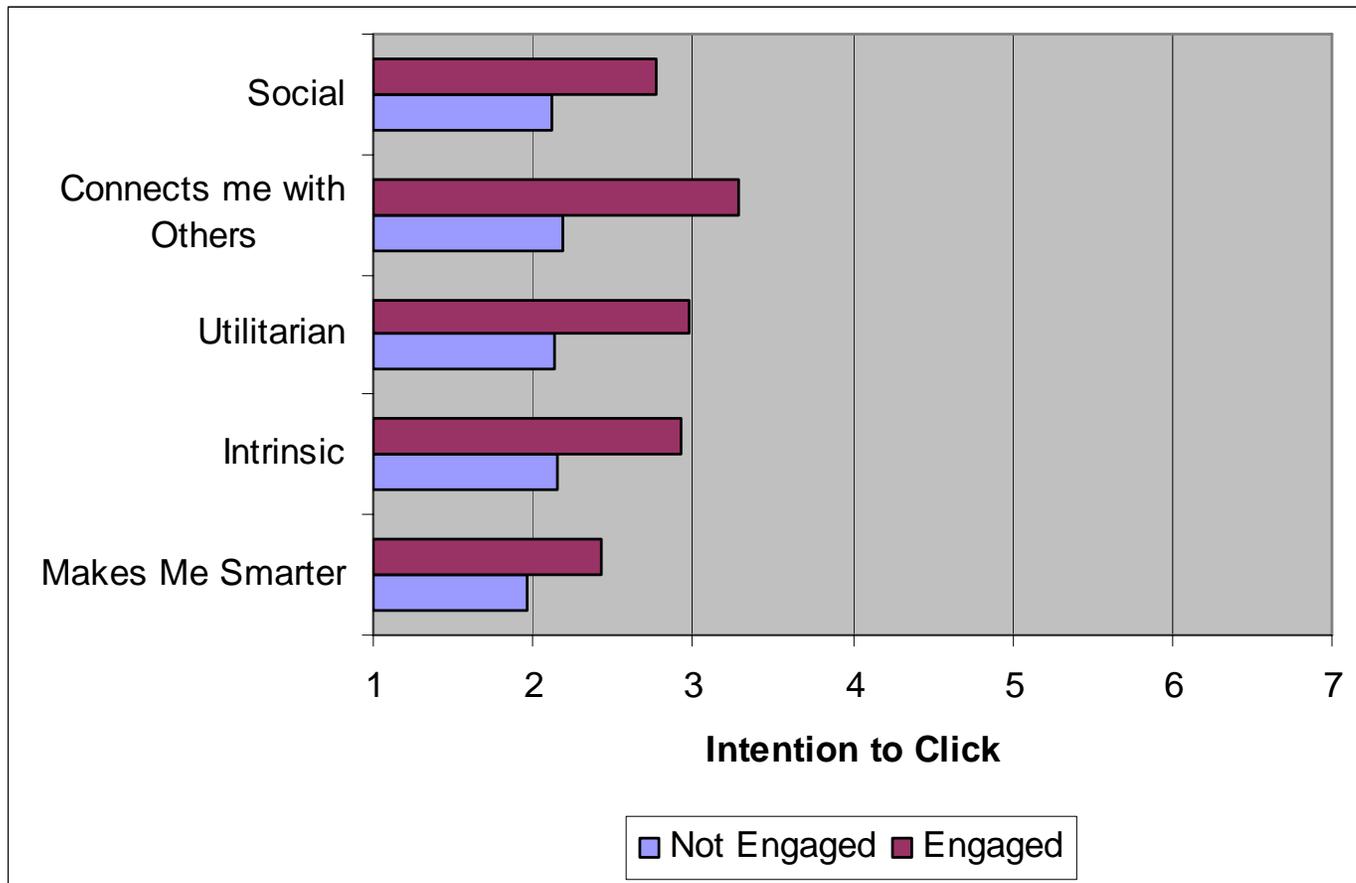
Pure Water Ad, 101 Newspapers, 4,100 Respondents



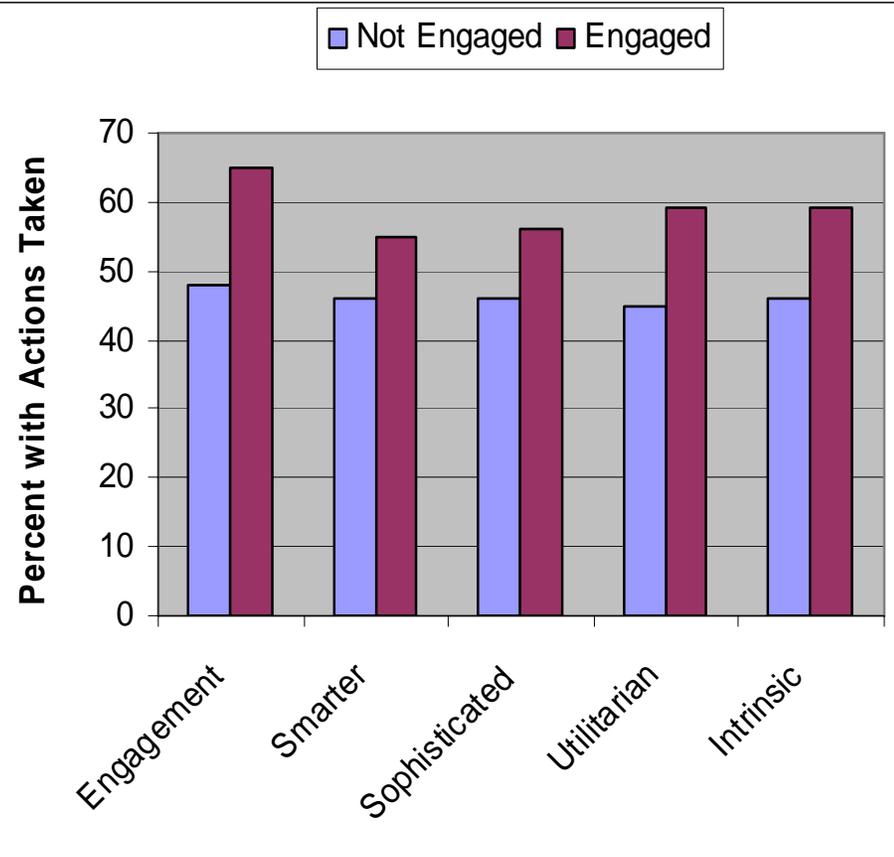
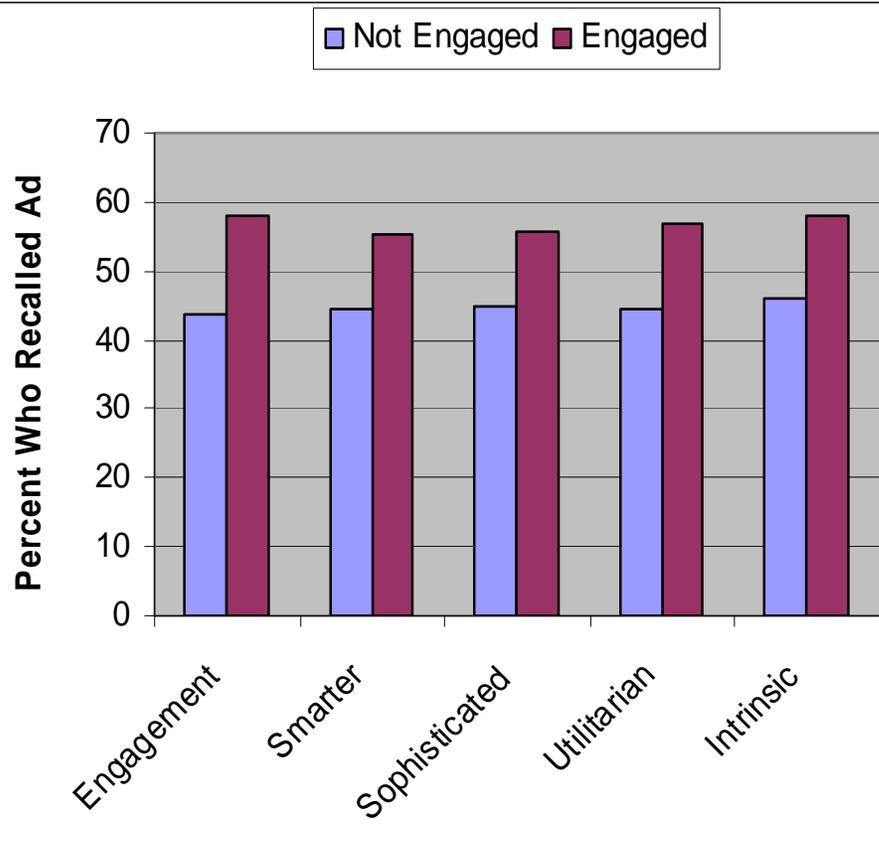
Orbitz Ad, 7 Web Sites, 11,541 Respondents



iPod Ad, 7 Web Sites, 11,541 Respondents



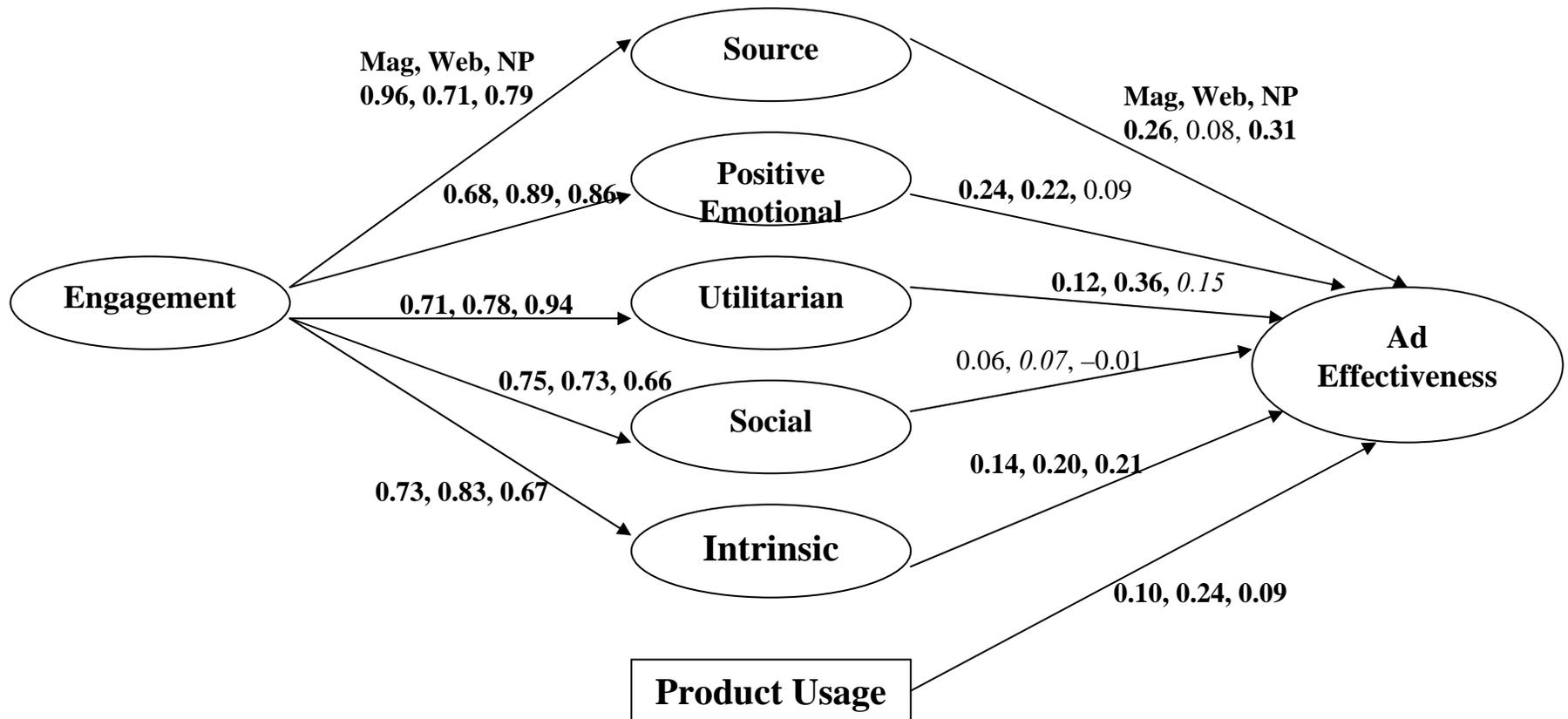
5,000 ads, 72 Magazines, 25,000 Respondents



Engaged readers are those with an average of 3.5 or more on the scale.

Second-Order CFA Estimates

HLM Coefficients Predicting Ad Effectiveness



In each triplet, the first number is for magazines, the second for web, and the third for newspapers. Bold slopes are significantly different from 0 at the 0.01 level and italic at the 0.05 level.

The Effect of Magazine Engagement on Ads

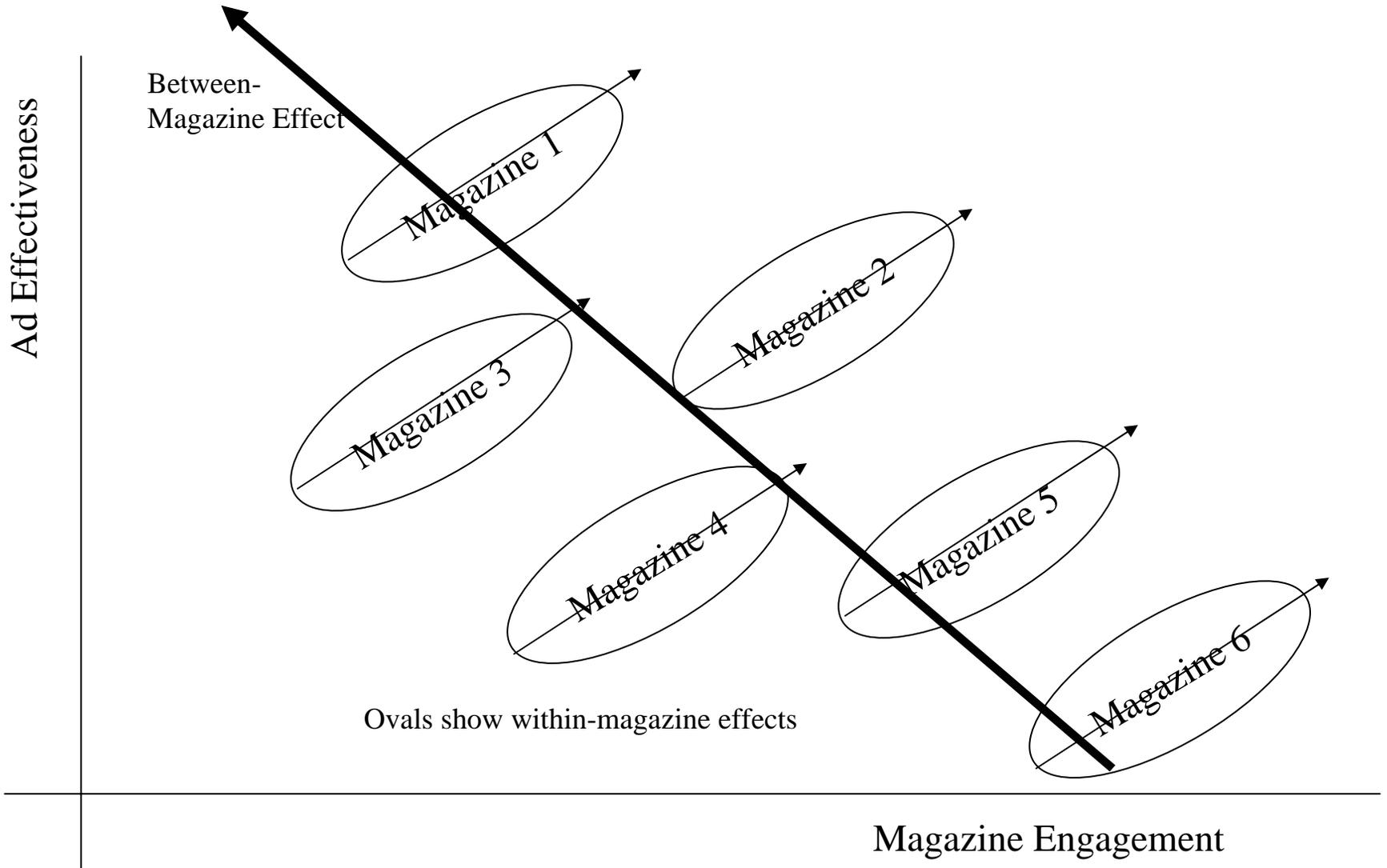
- Draw random sample of 436 ads (60,007 recall measures, 31,631 recalled ads)
- Let y_{ijk} be the rating of ad i , by respondent j , reading mag k , x_{ijk} mag engagement, m_k mean engagement for mag k , and a_i and b_i normal random variables.

$$y_{ijk} = (\alpha + a_i) + (\beta + b_i)x_{ijk} + \gamma m_k + e_{ij}$$

- Engagement (x) affects a broad class of ads, since $\beta - 3\sigma_b \gg 0$.
- Variability in intercepts captures differences across ads (e.g., strength of brand, quality of creative)
- Negative slopes for mean engagement (γ) indicate people pay less attention to ads in highly engaging magazines. (But $\beta > 0$ suggests that within a mag, more engaged readers pay more attention to ads).
- Execution variables (size, position, color) were added, but did not change story.

	Recall		Actions Taken	
	Estimate	Std Dev	Estimate	Std Dev
Intercept	$\alpha = 0.60^{**}$	$\sigma_a = 0.0960^{**}$	$\alpha = 12.16^{**}$	$\sigma_a = 0.7122^{**}$
Engagement	$\beta = 0.14^{**}$	$\sigma_b = 0.0147^*$	$\beta = 0.83^{**}$	$\sigma_b = 0.1663^{**}$
Mean Engagement	$\gamma = -0.16$		$\gamma = -0.82^{**}$	
Residual		$\sigma_e = 0.4819^{**}$		$\sigma_e = 2.9298^{**}$

Illustration of Within- and Between-Magazine Effects for Makes Me Smarter (Exaggerated)



The Effects of Experiences on Ads

	Recall		Actions Taken	
	Estimate	Std Dev	Estimate	Std Dev
Intercept	0.66**	0.0915**	12.88**	0.6852**
Transportation	0.033**	0.0019	0.32**	0.0320
Smarter	0.037**	0.0060	0.12**	0.1362*
Utilitarian	0.043**	0.0117	0.041**	0.0989
Sophistication	0.023**	0.0088	0.003	0
Mean Transport	-0.032		-0.47*	
Mean Smarter	-0.15**		-0.93**	
Mean Utilitarian	-0.031		-0.12	
Mean Sophisticated	0.039		0.51*	
Residual		0.4818**		2.9252**

- All four experiences affect recall.
- Transportation has a large effect for actions taken.
- Smarter has the largest negative effect at the magazine level.
- Sophistication has a positive mag-level effect.

Does Media Engagement Affect Advertising?

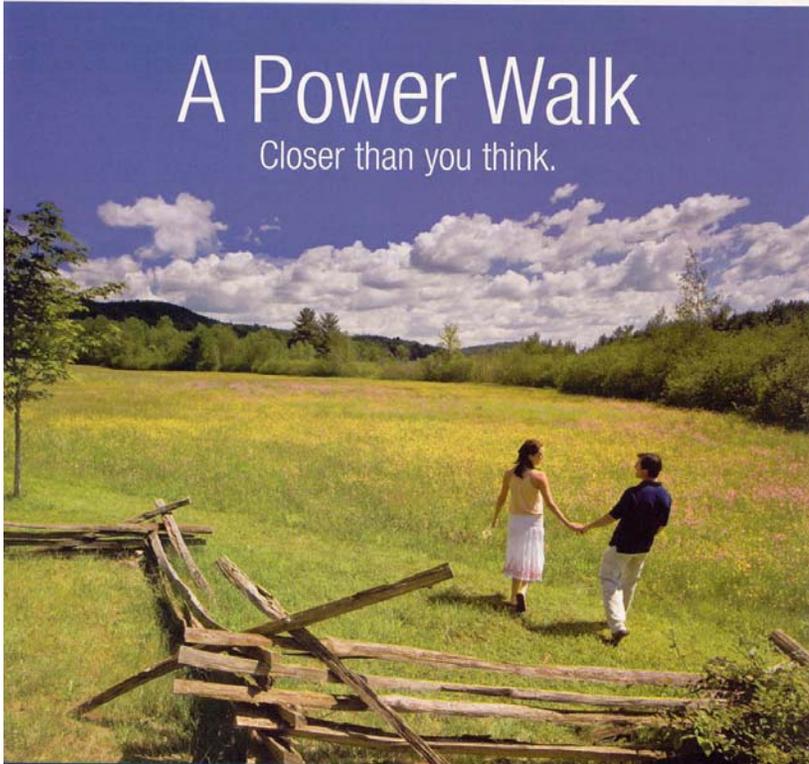
- Conclusion: we have shown that Engagement with web sites, newspapers, and magazines affects reactions to many different ads
- See papers for multivariate hierarchical linear model analysis
 - Conclusion holds across publications, effectiveness measures, and ads, even after controlling for other factors
 - Some experiences are more closely associated with ad effectiveness than others, depending on publication and ad

Cross-Media Conclusions

- There are many ways that media can be involving. Different vehicles within a medium can be stronger or weaker on delivering specific experiences.
- For each experience, there is substantial variation across titles within a medium.
- While there are differences in the median Engagement/experiences levels across media, there tends to be more variation across titles within a medium.
- For magazines and to a lesser extent for web sites, there is substantially more variation across titles in experiences than for overall Engagement.

The Congruency Conjecture:

The amount of improvement in advertising effectiveness depends on the congruence between the advertisement and the experiences offered by a particular vehicle.



A Power Walk
Closer than you think.

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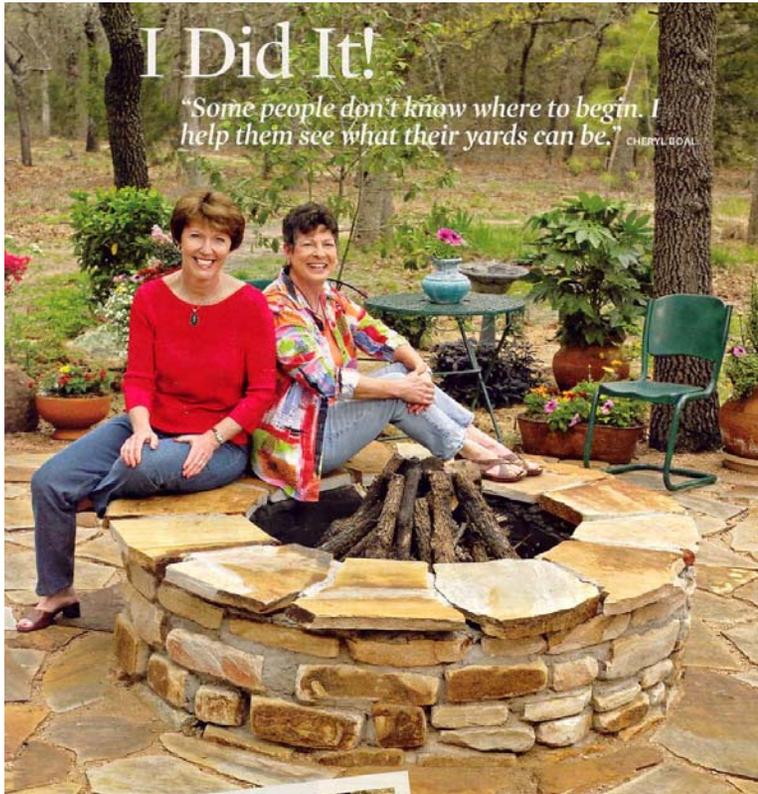
If migraines are disrupting your life, ask your doctor about prescription IMITREX. You can take IMITREX at the first sign of migraine pain. It was specifically made to target the nerves and blood vessels that are believed to trigger your total migraine—the pain, nausea, sensitivity to light and sound. So tame that migraine monster and get the relief you need, without drowsiness.

Save up to \$25 on your next refill of IMITREX.* Visit imitrex.com today.

IMITREX Tablets are prescription medicine for the acute treatment of migraine attacks in adults. You should not take IMITREX if you have certain types of heart disease, a history of stroke or TIAs, peripheral vascular disease, Raynaud syndrome, or blood pressure that is uncontrolled. If you have risk factors for heart disease, such as high blood pressure, high cholesterol, diabetes, or are a smoker, you should be evaluated by your doctor before taking IMITREX. Very rarely, certain people, even some without heart disease, have had serious heart-related problems. If you are pregnant, nursing, or taking medications, talk to your doctor.
Please see the important information on reverse. *Subject to eligibility.

Better Homes and Gardens Congruence: Matching Inspirational, Visual and Utilitarian Experiences

I Did It!
"Some people don't know where to begin. I help them see what their yards can be." CHERYL BOAL



DURING HER YEARS AS A CPA, Cheryl Boal, at left in photo above, designed landscaping projects for herself and friends just to relieve stress. Now she's making a second career of helping her Texas neighbors get their garden projects off the ground. "She has a real talent for design and a big heart for helping others," says friend Diane Blais, who recently completed this patio with fire pit. "Six tons of flagstone—I still can't believe I did it! If it weren't for Cheryl, I'd still be thinking about it." — MIKE BUTLER

BEFORE



312 JUNE 2007 BETTER HOMES AND GARDENS

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1. Take a digital photo of the room you'd like to paint.
2. Go to behr.com and get unlimited photo uploads with Paint Your Place for just \$4.95 a year.
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BEHR
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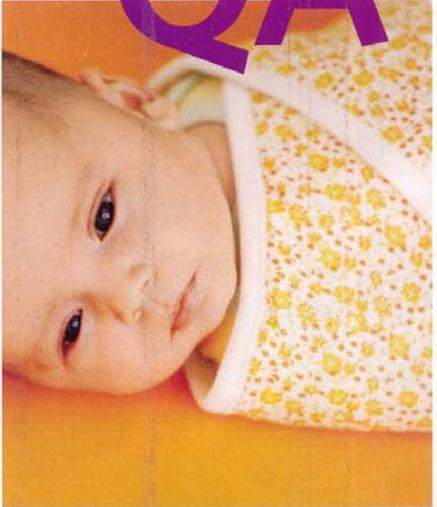
Wall: Rain Washed
 Adjoining Room Wall: Zorfee Crunch
 Top: Swiss Coffee
 Floor: Hollowed Hutz, Rain Washed

With Paint Your Place, you can preview color combinations on your own uploaded photos.

Matching the Positive Emotional and Utilitarian experiences of Parenting Magazines and Web Sites

behavior **QA+**

your child



Q My 18-month-old joyfully throws everything—from his toys and his sippy cup to my cell phone. When I say “no” and take the object away, he just laughs. I’m really afraid he’s going to hurt someone.

A This is probably a new skill, so he’s legitimately quite pleased with himself. “As soon as toddlers learn to do something, they practice over and over,” says Claire B. Kopp, Ph.D., author of *Baby Steps: A Guide to Your Child’s Social, Physical, and Emotional Development in the First Two Years*. Developmentally, that’s great, but you do want to begin letting him know that certain things are for throwing and others are not. Keep stuff like your phone and keys out of his reach, but don’t discourage your little pitcher. When he’s in the mood for a game of catch, swoop in with a stuffed animal or a soft ball. If he throws something inappropriate, like a bowl full of Cheerios, don’t overreact. Just move the object out of his reach. You’ll have to repeat this over and over, but he’ll eventually get the idea.

Q My 5-month-old is addicted to swaddling. She can’t fall asleep—or stay asleep—unless she’s tightly wrapped. Have I started a bad habit?

A Babies feel secure when they’re swaddled because it mimics the snug feeling of the womb. Some are ready to give it up when they’re 3 or 4 months old, while others take a little longer—so relax. She’ll let you know when she’s ready. However, you might want to introduce a new sleep aid before your baby grows out of this one: “Start using a CD of white noise,” suggests Harvey Karp, M.D., *Parents* advisor and creator of the DVD *The Happiest Baby on the Block*. Once she gets used to the soothing sound, swaddle her as usual, but with one arm out. If she sleeps just as well that way, try putting her to bed without her blanket, says Dr. Karp.

QUICK QUESTION

Q We’re taking our 3-year-old on her first plane ride. She’s extremely anxious about it. How can I get her to be excited instead of afraid?

A To help ease her fears, talk about how planes work and get her excited about flying—read books, visit travel Websites, and even help her create a “plane journal” to take along.

Q My 2-year-old is well-behaved around everyone but me. I’m the one who spends the most time with her. What’s going on?

A It may not make life any easier, but you should know that kids test limits with the person they trust the most,” says Tovah Klein, Ph.D., director of the Barnard Center for Toddler Development, in New York City. Continue to discipline her consistently and calmly, but avoid power struggles. “Ask yourself whether it really matters if your daughter pours milk on her mashed potatoes,” says Dr. Klein. The idea is to let as much go as you

64 May 2007 *Parents* BY SALLY LEE

“I will never leave another cut untreated.”



A Mother’s Story

“Last year, Melanie got this little scrape on her knee. It didn’t look like much, so I just rinsed it off. Three days later, we were in the emergency room with an infection.”

Even the most caring mom can’t tell which cuts or scrapes, no matter how small, might lead to a serious infection. So stop guessing and treat them all with NEOSPORIN®

NEOSPORIN® kills more types of infectious bacteria than even the leading topical prescription. And NEOSPORIN® is clinically proven to heal cuts four days faster than a bandage alone. Remember—nothing protects against serious infection better than NEOSPORIN.®



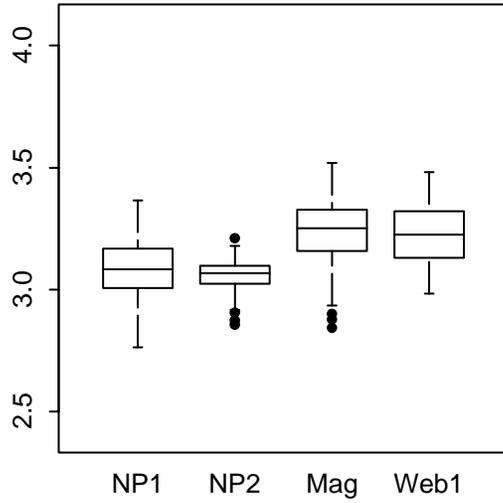
Every cut. Every time.®

*In laboratory tests. [®]Comparison among OTC antibiotic brands. Use as directed. © Johnson & Johnson Consumer Companies, Inc. 2007

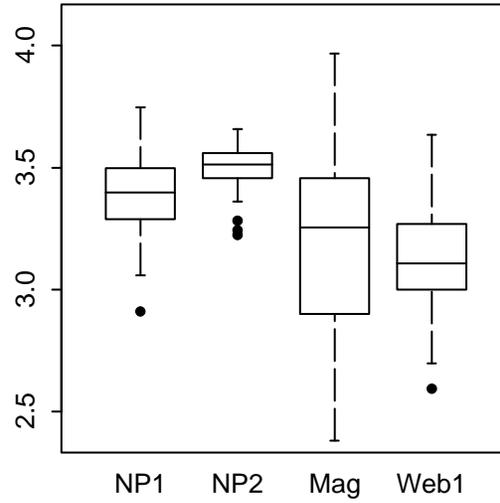
Cross-Media Experience and Engagement Comparisons

- Which medium is most involving?
- Compute Engagement measures for large samples of web sites, magazines and newspapers (measure = average over respondents)
- Compare distributions of Engagement measures across publications within a medium and across media

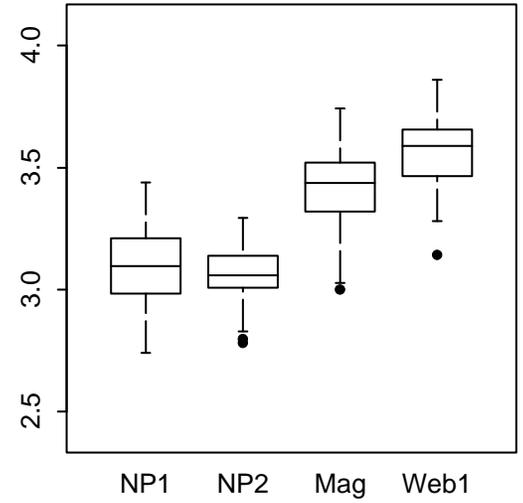
Involvement



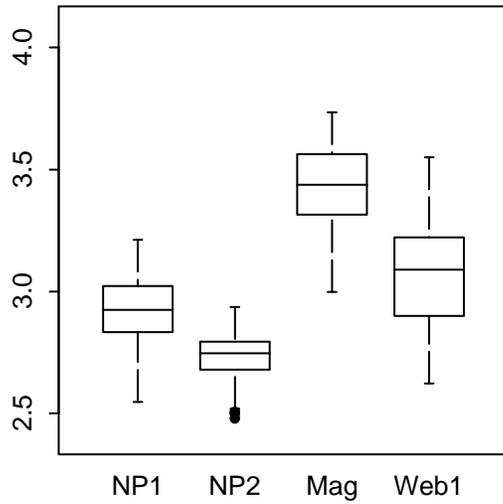
Utilitarian



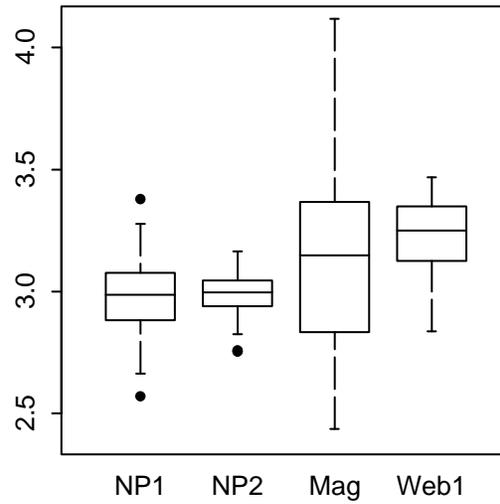
Source



Intrinsic



Positive Emotional



Social

