

Impact on Decision Making and Behavior

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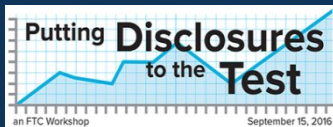
Information Scientist
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Into the Breach: Consumer Attitudes Toward Breach Notifications and Data Loss

Lillian Ablon

Paul Heaton, Diana Lavery, Sasha Romanosky



The research presented was funded by the RAND Corporation's Institute for Civil Justice





76 million accounts



110 million



80 million



22 million



Adobe Systems Incorporated

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October 2, 2013

Joseph Foster
Attorney General
New Hampshire Department of Justice
33 Capitol Street
Concord, NH 03301

Mr. Delaney:

On behalf of Adobe Systems, I am writing to inform you about a recent incident involving information maintained by Adobe and relating to New Hampshire residents.

We recently discovered that an unauthorized third party illegally accessed certain customer order information. We began investigating the incident as soon as we learned of it. Although our investigation is ongoing, we believe that the third party likely removed from our systems certain

Are data breach notifications helping?

- All but 3 states now require companies to notify people about the loss of personal data
- Purpose is two-fold
 - Allow people to take quick action to reduce risk
 - Create incentives for companies to improve data security
- Very little research on consumer response

This study focused on the consumer experience

- Frequency of breach notifications and type of data lost
- Consumer response
- Perceived cost of the breach to consumers

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We used the **American Life Panel** survey
Instrument for this study

American Life Panel (ALP) survey was a useful instrument for our study

- Nationally representative panel of over 6,000 individuals
- Internet-based survey, allowing for a “real-time pulse” of the American public
- Yields a relatively high response rate

Benefits and costs of our methodology

- Our survey method is useful for policymakers to get a pulse of the American public
 - Repeatable, nationally representative, high response rate
- Responses are based on consumer recall
 - Consumer recall is likely not perfect
 - Consumers may say one thing but act a different way
 - Consumer response and behavior may change over time

Survey details



-
- Last 2 weeks of May 2015
 - (OPM breach disclosed June 4; notifications sent in July & August)
 - 2,618 adults
 - 2,036 respondents
 - 78% response rate

Findings



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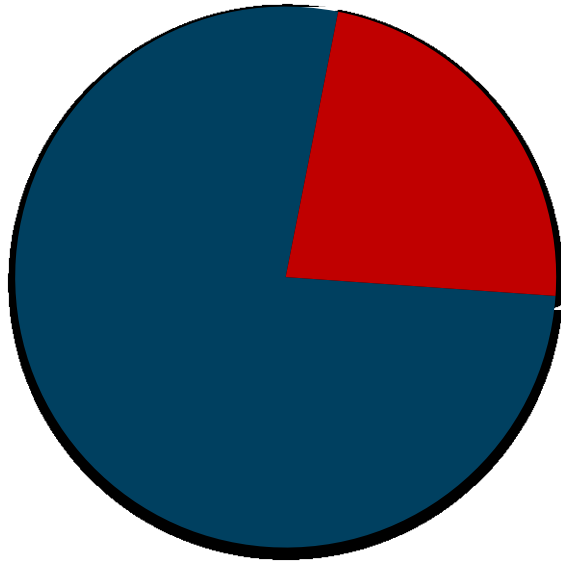
How often does this happen? What kind of data is lost?

Mr. Delaney:

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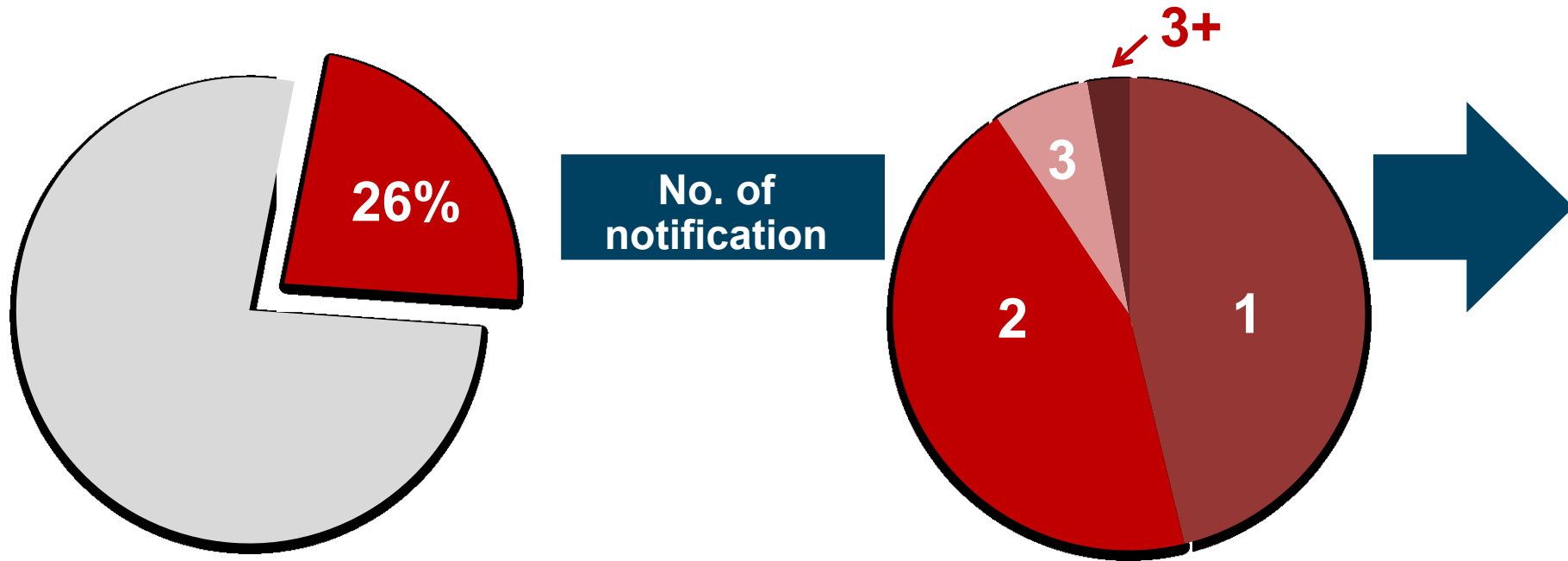
We recently discovered that an unauthorized third party illegally accessed certain customer order information. We began investigating the incident as soon as we learned of it. Although our investigation is ongoing, we believe that the third party likely removed from our systems certain

Of those surveyed, **26%** recalled receiving a breach notification in the **last 12 months**



An estimated
64 million Americans

Of those alerted, **over 50%** recalled receiving more than one notification



Many respondents learned of the breach *before* they received the notice

From the company **56%**

Through other means **44%**

- Media reports
- Bank or other third party
- Identified suspicious activity on their own

Most common types of data compromised



- Credit card information **49%**



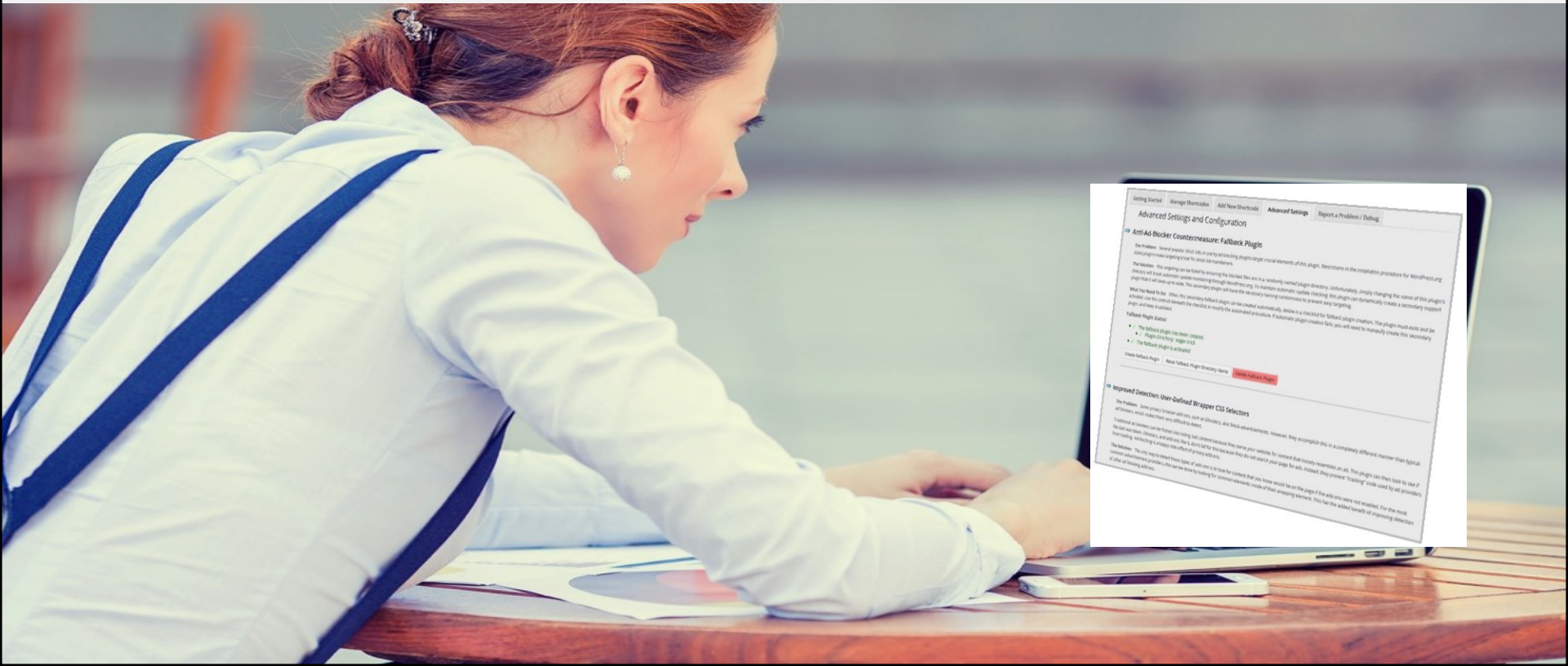
- Health information **21%**



- Social Security number **17%**

- Other personal data **13%**

How did consumers respond?



Getting Started | Manage Shortcodes | Add New Shortcode | **Advanced Settings** | Report a Problem / Debug

Advanced Settings and Configuration

⇒ **Anti-Ad-Blocker Countermeasure: Fallback Plugie**

The Problem: Several website third-party users by blocking scripts target crucial elements of this plugie. Notifications in the installation procedure for WordPress.org warn plugie users regarding how to block list resolutions.

The Solution: This plugie can be fixed by enabling the included file via its randomly named plugie directory. Unfortunately, simply changing the name of this plugie's directory will not work. The secondary plugie will have the necessary naming conventions to prevent any targeting.

What You Need to Do: Check this secondary fallback plugie on whether automatically. Below is a checklist for fallback plugie creators. The plugie must exist and be plugie and was installed.

Fallback Plugie Status:

- The fallback plugie has been created
- The plugie directory is correct
- The fallback plugie is activated

Check Fallback Plugie:

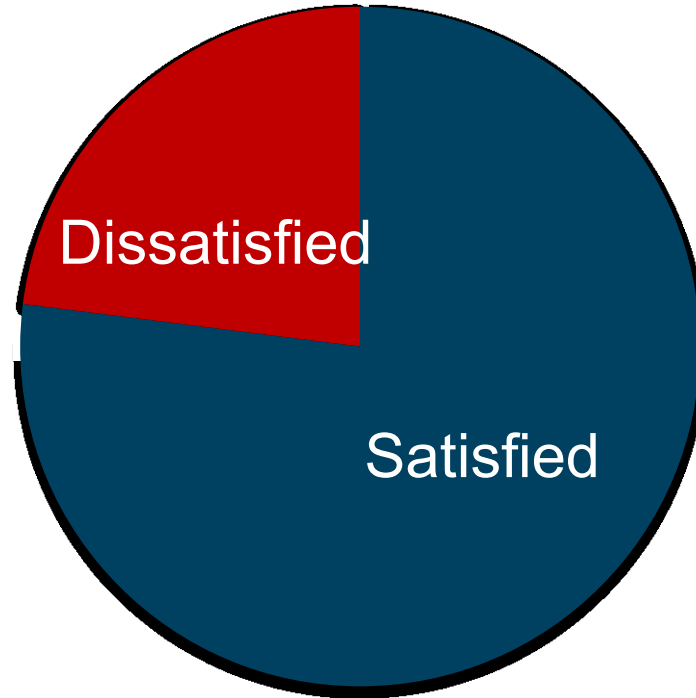
⇒ **Improved Detection: User-Defined Wrapper CSS Selectors**

The Problem: Some privacy to remove ads via, such as blockers, also block advertisements. However, they accomplish this in a completely different manner than typical ad blockers which merely block the ads themselves.

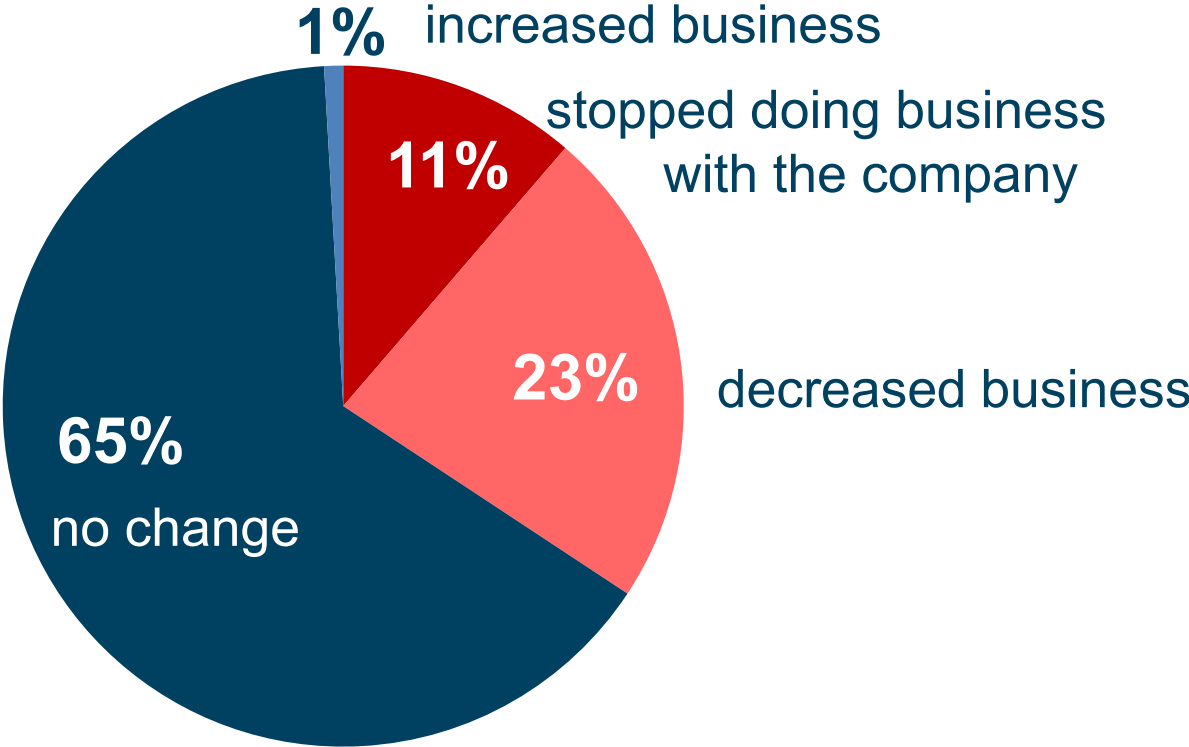
The Solution: Advertisements can be blocked by using CSS selectors because they target your website for removal that rarely interferes with ads. This plugie can then look for user-defined wrappers and add on the CSS selectors to block ads for you. You can also target your page for ads, instead, they prevent "tracking" cookies used by ad providers from being collected if it is not the effect of privacy settings.

The Solution: The only way to block these types of ads is to use the CSS selectors that you know would be on the page if the ads are not loaded. For the most precise advertisements, this can be done by looking for common elements inside of their wrapping network. This list the ad network of improving detection of other ad loading ads.

77% were satisfied with the company's response



Most remained loyal to the company



Anthem.

1-01

Anthem, Inc.
P.O. Box 260
Monroe, WI 53566 - 0260

February 25, 2015

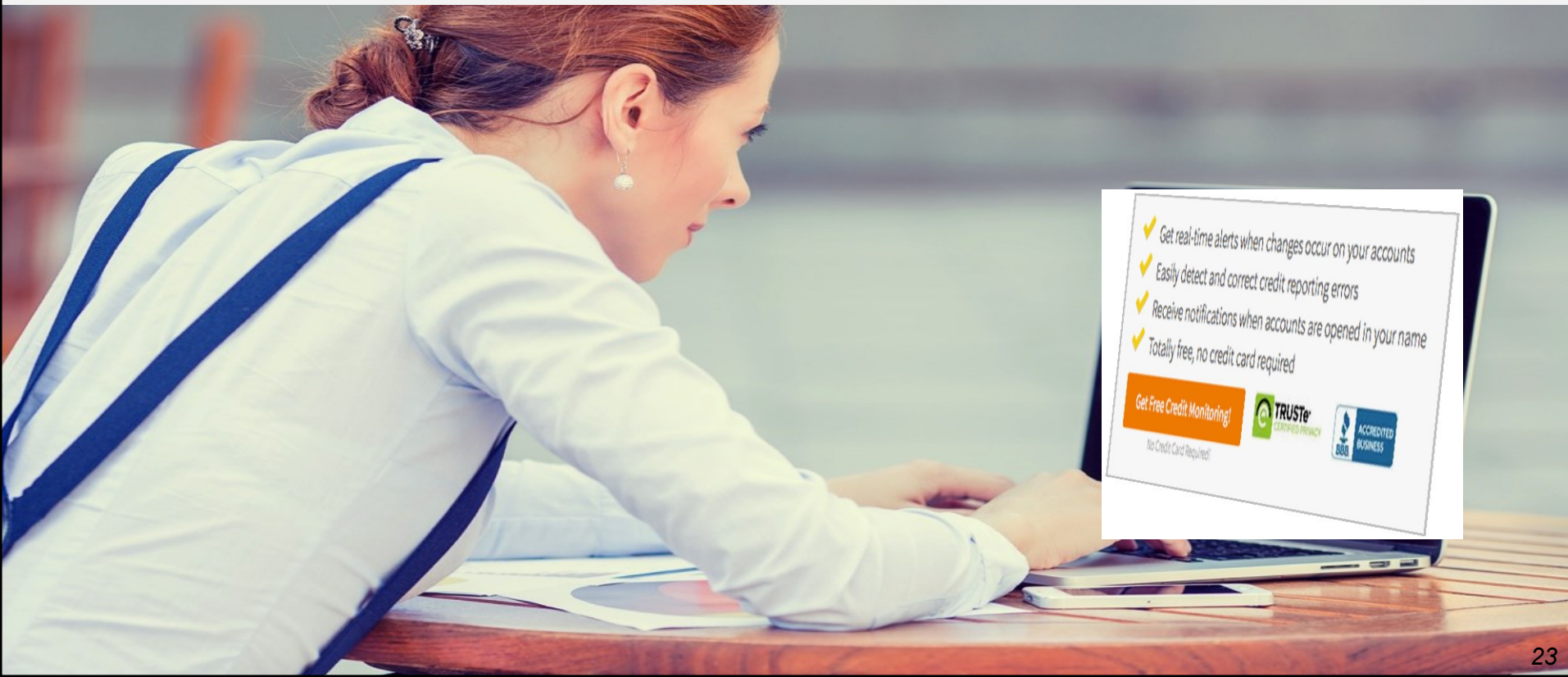
Dear :

On January 29, 2015, Anthem, Inc. (Anthem) discovered that cyber attackers executed a sophisticated attack to gain unauthorized access to Anthem's IT system and obtained personal information relating to consumers who were or are currently covered by Anthem or other independent Blue Cross and Blue Shield plans that work with Anthem. Anthem believes that this suspicious activity may have occurred over the course of several weeks beginning in early December 2014.

Identity Protection Services

Anthem has **AllClear ID protect your identity for two (2) years at no cost to you.** The following identity protection services start on the date of this notice, or the date you previously enrolled in services based on information posted on AnthemFacts.com. You can use them at any time during the next two (2) years after

When free credit monitoring was offered, 62% accepted



- ✓ Get real-time alerts when changes occur on your accounts
- ✓ Easily detect and correct credit reporting errors
- ✓ Receive notifications when accounts are opened in your name
- ✓ Totally free, no credit card required

Get Free Credit Monitoring!



No Credit Card Required!

Many took steps to improve their data security

- Changed PINs or passwords 51%
- Became more diligent 24%
- Closed or switched accounts 24%
- Notified others 17%
- Started using a password manager 4%

Consumer recommendations for breached firms “to greatly improve satisfaction”

- | | |
|--|------------|
| 1. Apologize | 24% |
| 2. Notify consumers immediately | 63% |
| 3. Take measures to prevent future breach | 68% |
| 4. Donate money to a cyber security organization | 11% |
| 5. Compensate for financial loss | 54% |
| 6. Offer free credit monitoring, similar services | 64% |

How do consumers estimate the cost of the data breach?



Overall, they estimated a modest cost

- 32% reported no cost at all
- \$500 was the median cost
- 6% put inconvenience cost at \$10,000 or more

Conclusions and implications

Are data breach notifications serving their purpose?

Do they allow people
to take quick action
to reduce risk?

Do they create incentives
for companies to improve
data security?

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No: 44% already knew of the breach

Yes: 78% took additional action

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No: 44% already knew of the breach

Yes: 78% took additional action

Do they create incentives for companies to improve data security?

No: Most were satisfied and loyal

Yes (no? maybe?): Breaches appear to be on the rise

Idris Adjerid

Mendoza College of Business
University of Notre Dame

FRAMING, DISCLOSURES, AND THE RATIONALITY OF PRIVACY CHOICES

IDRIS ADJERID – UNIVERSITY OF NOTRE DAME

EYAL PEER – BAR ILAN UNIVERSITY

ALESSANDRO ACQUISTI – CARNEGIE MELLON UNIVERSITY

THE RESEARCH PRESENTED WAS FUNDED IN PART BY THE NATIONAL SCIENCE
FOUNDATION, THE ALFRED P. SLOAN FOUNDATION, AND THE CARNEGIE
CORPORATION OF NEW YORK.

Motivation

35

- **When disclosures are effective:** Objective differences in the content of privacy disclosures are the main determinants of consumers' choices
 - ▣ **Why:** consumers use disclosure to weigh the expected benefits of privacy choices against their potential costs, and make privacy choices accordingly

- **When they aren't:** Factors independent of the objective features of privacy disclosures can consistently and powerfully impact consumers' choices
 - ▣ **Why:** predictable and replicable deviations from rational models of privacy choice arise due to their susceptibility to behavioral heuristics and decision biases

Relative Privacy Protection

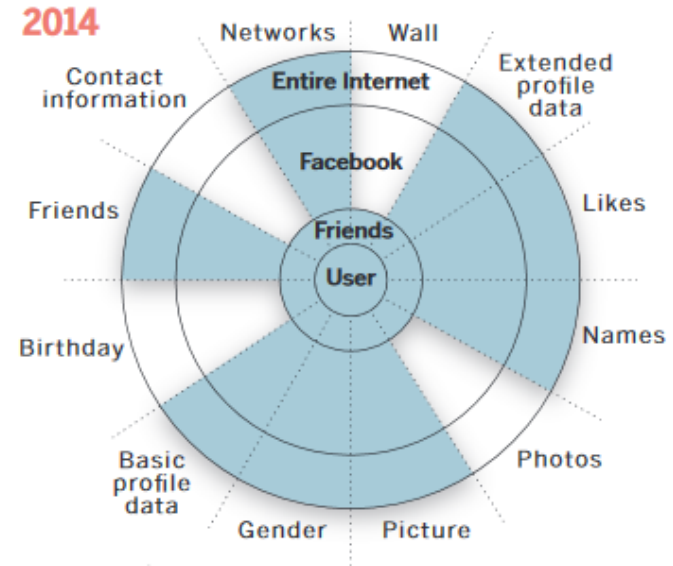
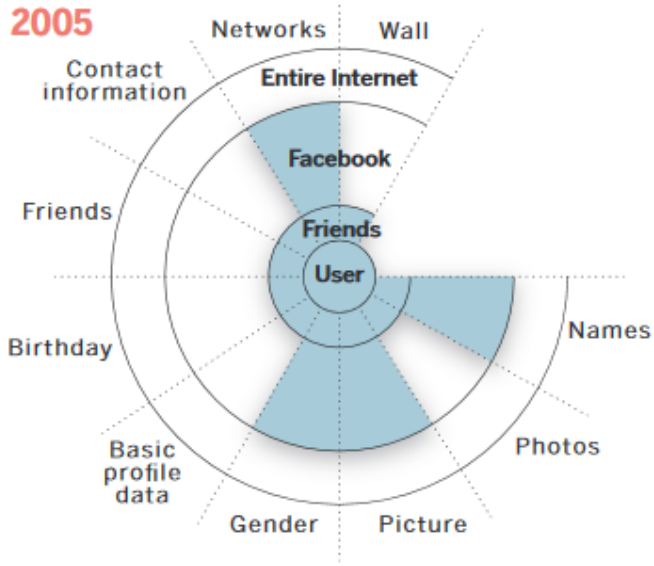
36

Visible (default setting)

Not visible

Visible (default setting)

Not visible



Source: Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). Privacy and human behavior in the age of information. *Science*, 347(6221), 509-514.

Overview

37

Hypothesis: Consumer response to privacy disclosures can be predictably manipulated by framing that alters the relative perception (but not objective content) of privacy disclosures

Results: Holding the objective privacy disclosures constant, individuals are significantly more likely to share personal information if they perceived a relative increase in privacy protection and vice versa

Implication: Subtle changes to the framing and presentation of privacy disclosures can have powerful (and sometimes perverse) impacts, limiting the intended benefits of privacy disclosures.

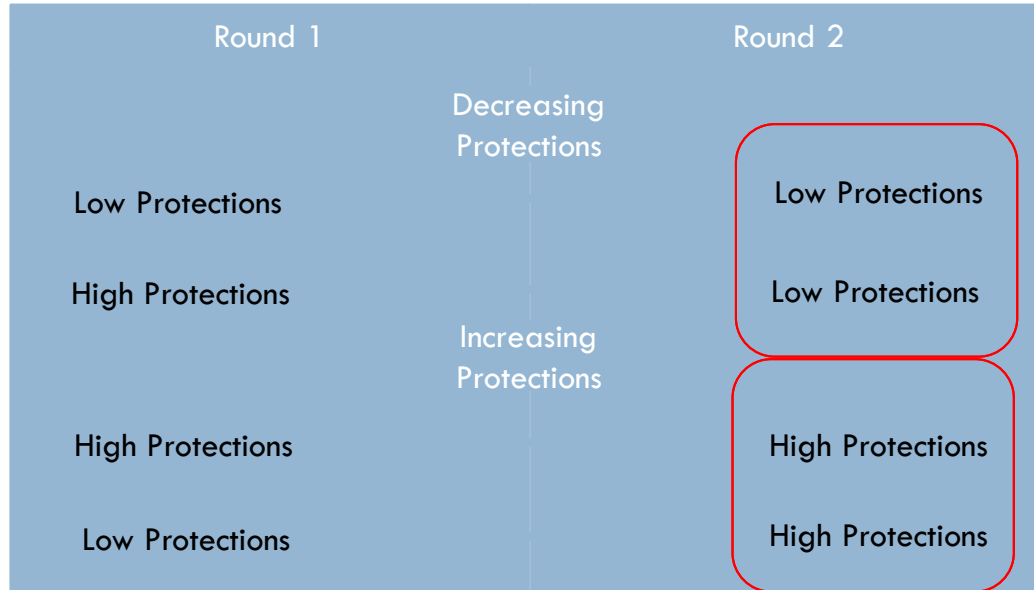
Methodology

38

- Participants are recruited using crowdsourcing services
 - ▣ Amazon Mechanical Turk, Prolific Academic, etc.
- Study presented as a study on “ethical behavior”
- Manipulation: simple privacy disclosures (notices)
 - ▣ Text and Graphical Notices
- Behavioral Measure: Sharing of sensitive information
 - ▣ “Have you ever looked at pornographic material”
 - ▣ “Have you ever cheated on a partner”

Experimental Design

39



Privacy Disclosures

40

High Protection

The analysis for this study requires that your responses are stored using a randomly assigned ID. All other information that could potentially be used to identify you (email, zip code, etc.) will be stored separately from your responses. As such, your responses to the following set of questions cannot be directly linked back to you.

Low Protection

The analysis for this study requires that your responses are stored using your email. As such, your responses to the following set of questions may be directly linked back to you.

Behavioral Measures

41

* Have you ever fantasized about doing something terrible (e.g. torture) to someone?

- Yes
- No
- Prefer Not to Answer

* Have you ever let a friend drive after you thought he or she had had too much to drink?

- Yes
- No
- Prefer Not to Answer

* Have you ever looked at pornographic material?

- Yes
- No
- Prefer Not to Answer

Results

42

- Relative increase in protection results in a 7% increase in the sharing of sensitive information
- Relative decrease in protection results in a 8-10% decrease in sharing of sensitive information
- Objective differences (High vs. Low) resulted in a 5% difference in sharing of sensitive information, but only in first round

Advantages of Methodology

43

- Actual sharing of sensitive information as opposed to hypothetical behavior or scenarios
- Cost-efficient to run so it is easy to tweak and replicate
- Minimal amount of deception
- Privacy considerations are not explicitly primed
- False information (lying) is a feature of the design, not a limitation
- Does not require developing an IT artifact (e.g. a new mobile app or plug-in)

Disadvantages of Methodology

44

- Behaviors of individuals may not perfectly reflect real world actions
- Difficult to manipulate differences in objective risk
 - ▣ Participants may assume some level of riskless-ness in an academic study
- Difficult to study long-term effects
- May still trigger some suspicion about purpose of study
- Ethical behavior may not translate well to other privacy decision contexts

Conclusions

45

- Framing of privacy disclosures can have a significant impact on sharing of sensitive information
- Online experiments and crowdsourcing platforms can provide a replicable and reliable methodology for evaluating the impact of privacy disclosures
- This approach may not be a great fit if real-world behavior is highly desirable or longitudinal studies are useful.

Full Paper

Adjerid, I., Peer, E., & Acquisti, A. (2016). Beyond the privacy paradox: Objective versus relative risk in privacy decision making. *Available at SSRN 2765097.*

Ginger Zhe Jin

Director
Bureau of Economics, FTC

Impact of Disclosure on Economic Behavior

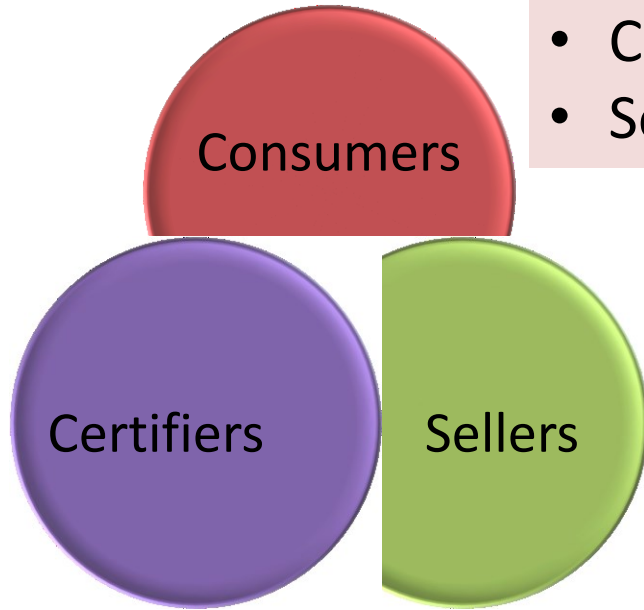
Ginger Zhe Jin
Director, Bureau of Economics
Federal Trade Commission

This presentation is based on my own research and the economic literature of quality disclosure and certification. The research presented was funded in part by the National Science Foundation, the Net Institute, the Alfred P. Sloan Foundation, and the National Bureau of Economic Research. Views expressed are my own, not necessarily those of the Federal Trade Commission or any of its Commissioners.

I will focus on **quality disclosure that is truthful.**

- could be made by firms or a third party;
- could be mandatory or voluntary.





How do consumers respond to disclosure?

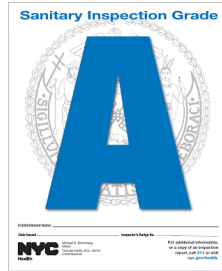
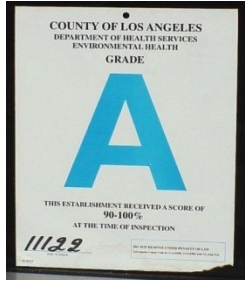
- Pay attention
- Comprehend
- Sort & match

How do sellers respond to disclosure?

- Comply
- Adjust price
- Adjust quality
- Entry/exit
- Game the system

Does disclosure improve consumer choice?

A positive example



Citations:

- Wong et al. (2015) “Impact of a Letter-Grade Program on Restaurant Sanitary Conditions and Diner Behavior in New York City”, American Journal of Public Health.
- Jin and Leslie (2003) “The Effects of Information on Product Quality: Evidence from Restaurant Hygiene Grade Cards” Quarterly Journal of Economics.

- **Public perception in NYC (18m after):**
 - 90% consumer approval
 - 81% have seen cards
 - Among those that have seen the cards, 88% consider it in dining decisions
- **Revenue in LA county (1y after):**
 - A grade: + 5.7%
 - B grade: + 0.7%
 - C grade: – 1.0%
 - Industry revenue increases by 3.3% (\$250 million / year)

Does disclosure improve consumer choice?

A counter example



Bruce Schneier: “they don’t tell people what they can do — they just make people afraid.”

Homeland Security Department on replacement:

“The goal is to replace a system that communicates nothing ... with a partnership approach ...”

(NY Times 11/24/2010)

Does disclosure improve consumer choice?

Another counter example



Lacko and Pappalardo (2004): “The Effect of Mortgage Broker Compensation Disclosures on Consumers and Competition: A Controlled Experiment” FTC BE staff report.

Lab test using:

- Mortgage cost disclosures
- With and without HUD-proposed mortgage broker compensation disclosure

Tested effect of disclosure on:

- Accuracy of consumer cost comparisons
- Consumer loan choice (hypothetical)

500+ consumers

Does disclosure improve consumer choice? Another counter example

Lacko and Pappalardo find:



HUD disclosure caused:

- Consumer confusion about which loan was less expensive
- Mistaken loan choices leading a significant proportion to choose more expensive loans
- Bias against mortgage brokers which would put brokers at a competitive disadvantage, leading to possibly higher cost for consumers



Consumers

Does disclosure change
consumer behavior?

- (+) more informed choice
- (0) no response
- (-) wrong impression, wrong choice



Sellers

Does disclosure change
seller behavior?

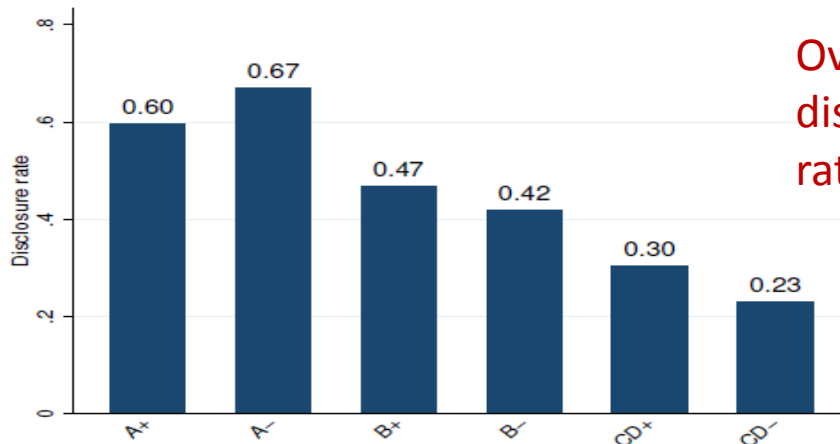
Does voluntary disclosure lead all firms to disclose? Theory predicts (almost) yes ... because of unraveling

Grading System						
Priority Violations	Count of Violation(s)	Priority Foundation Violations				
		0	1	2	3	4+
0	0	A	B	B	C	D
1	1	B	B	B	C	D
2	2	C	C	C	C	D
3+	3+	D	D	D	D	D

•Four or more Core violations drops one grade level
•Any legal action results in a D

Maricopa, AZ adopted voluntary restaurant grade card in Oct. 2011

Figure 3: Disclosure by Grade



Overall disclosure rate = 57.6%

Inspected Date	Purpose
8/27/2013	Re-Inspection
8/8/2013	Routine Inspection
4/12/2013	Routine Inspection
2/11/2013	Routine Inspection
11/26/2012	Routine Inspection
7/26/2012	Routine Inspection
5/18/2012	Routine Inspection
1/31/2012	Routine Inspection
6/15/2011	Routine Inspection

Bederson et al. (2016) "Incomplete disclosure: evidence of signaling and counter-signaling" working paper.

Similar test in a lab

Sender:

- Learn the true number {1,2,3,4,5} secretly
- Decide to disclose it or not

Receiver:

- Observe message from the sender
 - “The number I received is xxx” or
 - (blank)
- Guess the true number

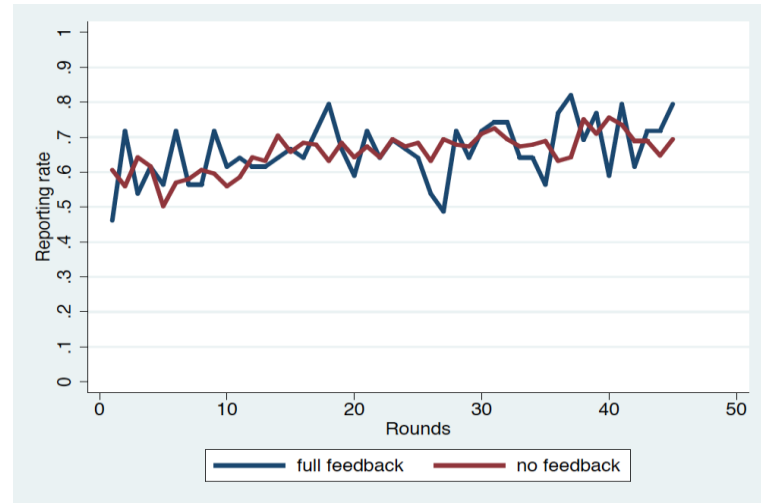
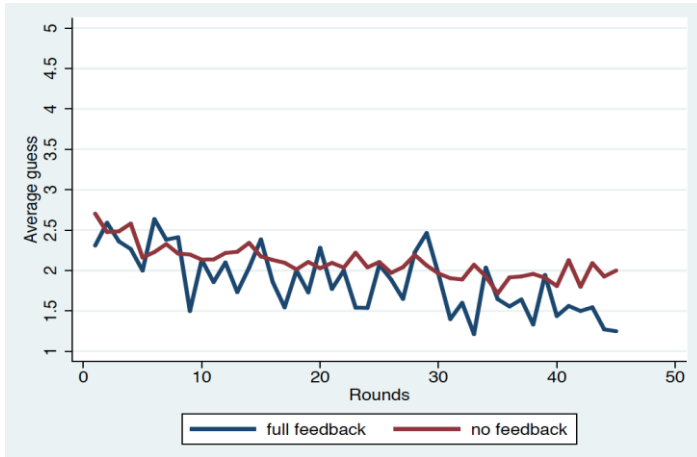


Key conflict:

- Sender wants the highest guess
- Receiver wants to guess correctly
- With economic incentives
- cannot lie



Sender's report rate



Receiver's guess conditional on blank report



Does disclosure lead to price changes?



For high quality



For low quality



For high quality
when there is
price or capacity
constraint

Sort and match

Disclosure does
not necessarily
improve every
consumer's
welfare

Does disclosure improve quality?

A positive example: restaurant grade cards

- % of A restaurants increases significantly
- Significant public health improvements:
 - Food-borne illness hospitalizations drop in LA county, relative to other parts of California (at 1y and 3y marks)
 - Sanitary conditions improve in NYC (at the 18m and 2y marks)
 - Salmonella infections decline in NYC relative to rest of NY, NJ and CT (at the 18m mark)

Citations:

- NYC health department: “Restaurant Grading in New York City at 18 Months”, accessed on <http://www1.nyc.gov>.
- Wong et al. (2015) “Impact of a Letter-Grade Program on Restaurant Sanitary Conditions and Diner Behavior in New York City”, American Journal of Public Health, January 2015.
- Jin and Leslie (2003) “The Effects of Information on Product Quality: Evidence from Restaurant Hygiene Grade Cards” Quarterly Journal of Economics.
- Simon et al. (2005) “Impact of Restaurant Hygiene Grade Cards on Foodborne Disease Hospitalizations in Los Angeles County” Journal of Environmental Health.

Does disclosure improve quality?

A counter example



NY and PA mandated report cards on physician and hospital cardiac surgery mortality rates (1991, 1993)

Survey evidence:

- 63% of cardiac surgeons reported accepting only healthier patients due to report cards.
- 59% of cardiologists reported that report cards made it more difficult to place severely ill candidates for CABG.

Empirical evidence:

- Cherry picking healthier patients
- Higher medical expenditure and worse health outcomes, particularly for sicker patients

Truthful quality disclosure is a double-edged sword

- **Consumer behavior after disclosure**

- May make more informed decision
- May sort and match
- May take wrong or no action due to unclear, incomprehensible, duplicative disclosure

- **Seller behavior after disclosure**

- May or may not disclose
- May adjust price according to disclosed quality
- May or may not improve quality
- May game the system
- May enter, stay or exit

Further Remarks

- **Remaining questions**
 - What to include or exclude from report card?
 - Sample size, risk adjustment, weighting, mean reversion
 - How does disclosure regime affect the certifier's incentive?
 - Incentives to be truthful and thorough, financial stake, competition
- **Methodology**
 - Surveys
 - Observational studies
 - Lab experiments
 - Field experiments

Adair Morse

Finance Group, Haas School of Business
UC Berkeley

Engagement with the Private Sector in Testing

Adair Morse

Associate Professor of Finance,
University of California, Berkeley

FTC Workshop: Putting Disclosures to the Test, September 15, 2016

“Information Disclosure, Cognitive Biases and Payday Borrowers” Bertrand & Morse 2011 *Journal of Finance*

Topic: Even if payday loans are priced fairly and non-predatory, one has to wonder whether cognitive limitations or biases by some borrowers explain the use of payday loans

Idea (not just for this setting) : Mandate disclosure that is

- Better informed as to what mistakes are being made
- Better targeted to de-bias potential cognitive biases causing these mistakes

Field experiment at national chain of payday stores

- Can we impact future borrowing with debiasing disclosure.

Information Treatment 1

Potential problem : People may not internalize APR because focus in store is the dollar fee structure on the wall.

Treatment: Reinforce understanding of APR by presenting it next to other (smaller) APRs.

Annual interest rates on different types of loans

	Median Annual Interest % (from government surveys)
Payday Loan	443%
Installment Car Loans	18%
Credit Card	16%
Subprime Mortgages	10%

Information Treatment 2

Potential Problem: People fail to add up cost of single decision over time

Treatment 2: Present additive dollar costs of payday loan fees into future

How much it will cost in fees or interest if you borrow \$300

PAYDAY LENDER (assuming fee is \$15 per \$100 loan)		CREDIT CARD (assuming a 20% APR)	
If you repay in:		If you repay in:	
2 weeks	\$45	2 weeks	\$2.50
1 month	\$90	1 month	\$5
2 months	\$180	2 months	\$10
3 months	\$270	3 months	\$15

Results

- De-biasing failure to add up DOLLARS over time reduces future borrowing by 10%. Not APR treatment
 - How: People saved more in the interim
 - Why I like that result: Economists forget that people are very constrained and can't make decisions in rates, but rather live month-to-month in dollar terms
 - But people do not go through exercise of thinking about the adding-up
- Paper advocates for
 - Understanding the specific cognitive biases that may lead to suboptimal decision-making
 - And subsequently designing some correcting or “de-biasing” information disclosure

Challenges of implementation (a sample of headaches)

- Implementation challenges:
 - Training store clerks to be uniform!
- Randomization details matter:
 - Stores not comparable, cannot randomize implementation by store.
 - Cannot randomize by customer, impossible for clerk to keep track
 - Randomize by day of the week, but need distribution across days of the week, because borrowers on different days of the week not random
- Estimation details matter:
 - Observations by store may not be independent (same shocks faced by location)

Why did the Lender agree to do this study?

Why do any companies want to do testing in partnership with unbiased academics or government researchers?

(I) Discussions with private sector about objectives must be done upfront

- Objectives are not to show that their product is great. They understand this.
- But they have a pre-determined view of what an unbiased approach will show. If you tell them that it may not show that. Then they want a veto right.
- Researchers must plan ahead.
 - I say: “The reason you are talking to me is because I have credibility for producing unbiased research. If you go to a research organization with an agenda, the credibility of the study will be questioned. You decide which you want.”

Why did the Lender agree to do this study?

Why do any companies want to do testing in partnership with unbiased academics or government researchers?

(2) Essential to understand incentives

- The payday lender understood that I might find that disclosure reduces demand for their product because people acted differently in the interim to save for paying back the loan.
 - But maybe people would default less
 - And, besides, they were facing only negative media from researchers with a bias to show them to look bad
 - They needed to take a risk on unbiased research

Why did the Lender agree to do this study?

Why do any companies want to do testing in partnership with unbiased academics or government researchers?

(2) Essential to understand incentives

▫ Other incentives I encounter

- Companies want to have research to genuinely evolve products to make people satisfied
 - Fine line: Some companies want to have research to evolve to cater to behavioral biases or lapses to make as much profits
- Companies simply trying to learn from the engagement with a research team on how to think about testing and what skill sets they need to acquire

Final thought

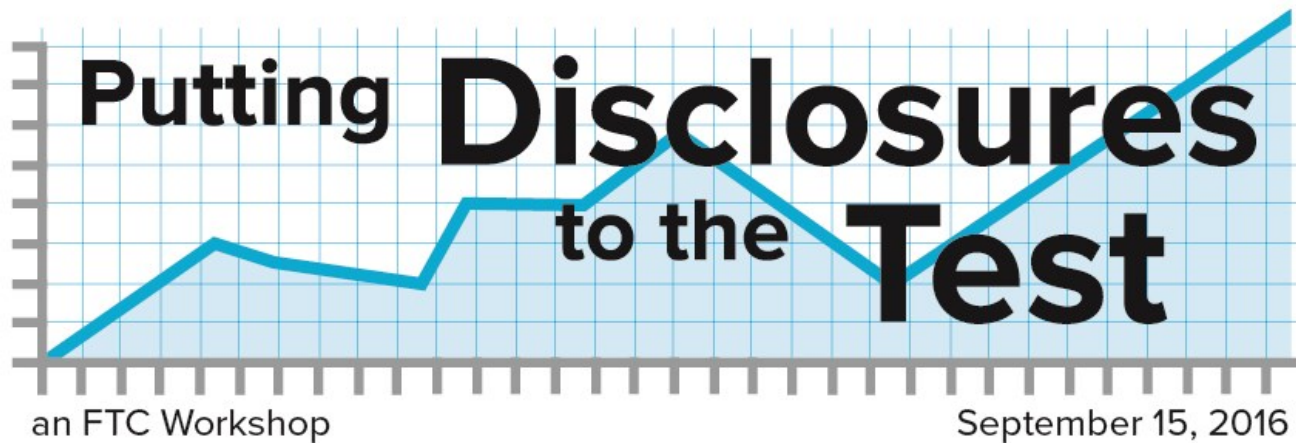
- In consumer finance (and other fields), we are starting to learn about heterogeneities in people's use of products or information
 - Next slide (not covered in this presentations) has some examples
- Need to take next step:
 - Implement methods to test designs for “pareto” policy or product improvements across heterogeneity of people
 - I.e.: Make disclosure changes or regulator-governed product changes help some people with certain characteristics without hurting others
 - **** Requires understanding the heterogeneities (in use of a product and in understanding disclosure) and **then** designing remedies

Next generation: Use the literature on people's use of borrowing to improve product design

- Studies of why people get into trouble
 - Smoothing issues/making ends meet: Stephens('03), Parsons van Wesep('13), Leary Wang('16)
 - Preferences: Laibson (1997), Meier Sprenger (2010), Kuchler (2012)
 - Neglect: Berman, Tran, Lynch, Zauberman (2015)
 - Aging: Agrawal, Driscoll, Gabaix, Laibson (2009)
 - Cognition/Focus: Morse Bertrand (2011), Stango Zinman (2011), etc.
- Studies of marginal use of income (helicopter drop studies)
 - Johnson, Parker Souleles (2006;2013 w McClelland); Agrawal, Liu, Souleles ('07); Bertrand Morse ('09)
- Studies of consumer loan contract form
 - 1980s literature Stiglitz Weiss, Hertzberg, Lieberman, Paravisini('15); Carter, Skiba, Sydnor ('13)

Impact on Decision Making and Behavior

- **Moderator:** Janis Pappalardo
Asst. Director for Consumer Protection
Bureau of Economics, FTC
- Lillian Ablon
Information Scientist
RAND Corporation
- Idris Adjerid
Mendoza College of Business
University of Notre Dame
- Ginger Zhe Jin
Director
Bureau of Economics, FTC
- Adair Morse
Finance Group, Haas School of Business
UC Berkeley



Case studies

- **Moderator:**
Hampton Newsome
Division of Enforcement, FTC
- Colin Campbell
Dept. of Marketing and
Entrepreneurship
Kent State University
- Sarah J. Farnsworth
Vice President, Scientific Affairs
PEGUS Research, Inc.
- Manoj Hastak
Department of Marketing
Kogod School of Business
American University
- Heidi Johnson
Office of Research
Consumer Financial Protection Bureau

Colin Campbell

Dept. of Marketing and Entrepreneurship
Kent State University

When Disclosure May Not Be Enough: Social Media Native Advertising and Multiple Ad Recognition Cues

Colin Campbell and Larry Marks
Kent State University

Motivation

- Native advertising on the rise
- Industry research suggests ad recognition may be as low as 41% (Mane and Rubel 2014)
- Much of social media advertising is native
- Social media commonly viewed on mobile devices (Cohen 2016; Lella and Lipsman 2014; Tadena 2014)

Project Fi 1:24 PM 82%

10 2 Comments

Like Comment Share

Hanne-Sophie Y. Solhaug was tagged in a post.

Sean Pham with Hanne-Sophie Y. Solhaug and 3 others at Lofoten.
4 hrs · 🌐

Been living in an idea,
An idea from another man's mind,
Maybe I'm a fool,... See More



Hanne-Sophie Y. Solhaug and 31 others 3 Comments

Like Comment


Suggested App

Project Fi 1:21 PM 83%

Suggested Post

OFF Sponsored · ⚙️

With rising temperatures and high humidity, this is the most ideal time for mosquito breeding.



Free to soak in every last second of summer.

2.6K 94 Comments 168 Shares

Like Comment Share

Project Fi 1:22 PM 82%

Like Comment Share

Zach W Thoren was tagged in 2 photos.

Rachael Phillips with Zach W Thoren.
Yesterday at 9:09 PM



Justine Michelle Yu added 4 new photos — with Chris Luehmann at Hide Sushi Japanese Restaurant.
Yesterday at 11:23 PM · Los Angeles, CA · 🌐

We Focus on Social Media Native Advertising

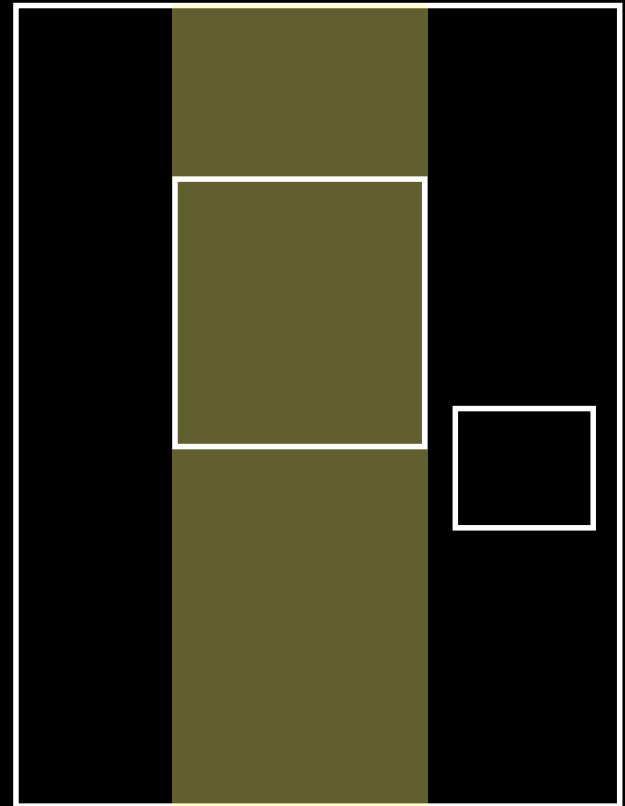
- Native advertisements (like advertorials/ infomercials) generally match form & style of non-ad content
- Social media = majority of native ad spend
- Social media content = fun & entertaining
- Consumers engage in peripheral processing
(Hoffman and Novak 2013; Schulze, Scholer, Skiera 2014)

Academic Understanding of Native Still Developing

- Persuasion knowledge activation and awareness of persuasive intent = more critical processing (Campbell and Kirmani 2000; Kirmani and Zhu 2007)
- Existing research focuses on article-style native advertising (Wojdynski and Evans, 2015)
- Overt disclosures such as “Advertising” or “Sponsor Content” resulted in increased ad recognition rates of 12% and 13%

Multiple Recognition Cues

- **Ad position** (van Reijmersdal, Neijens, and Smit, 2009)
- **Central region gets more attention** (Leonhardt, Catlin, and Pirouz 2015; Tatler 2007)
- **Brand familiarity** (Keller 1993; Kent and Allen 1994)



Study 1

- 2 (**brand familiarity**: high or low) x 2 (**ad position**: in-stream or sidebar) design
- Participants (N = 165, $M_{age} = 36$, 57% female)
- Facebook-style mockup site used
 - All mockups used “Suggested Post”

Study 1 - Stimuli

Home Notifications Messages Search

Your Name
1000 Profile


What's going on?

Zach Thornlike
18 years (Columbus, NY)
Getting my zen on. Also found out my local watering hole has the Sunday NFL ticket, go team.
Like Comment Share

TRENDING


- **Airbus:** Aircraft Manufacturer to Open New Plant
- **Obama:** Photos Show President Opening New Library for Veterans
- **China:** Xi Jinping Pledges to Work with U.S. to Stop Cybercrimes
- **Ellen:** TV Host Announces New Magazine Aimed at Pet Owners
- **Weather:** 2015 on Record to Be Warmest Year in Past Decade

Suggested Post

Ford Motor Co.
47 years (Dearborn, MI)
Let's go on an adventure

Like Comment Share

SUGGESTED FRIENDS

- **Kathy Thompson**
Ford Request
- **Gail Zikhan**
Ford Request
- **Jeff Baker**
Ford Request
- **Paul Johnson**
Ford Request

Jen Cavallio
1 hour (Akron, OH)
First birthday! :)

Like Comment Share

Home Notifications Messages Search

Your Name
1000 Profile


What's going on?


Zach Thornlike
18 years (Columbus, NY)
Getting my zen on. Also found out my local watering hole has the Sunday NFL ticket, go team.
Like Comment Share


TRENDING

- **Airbus:** Aircraft Manufacturer to Open New Plant
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- **Ellen:** TV Host Announces New Magazine Aimed at Pet Owners
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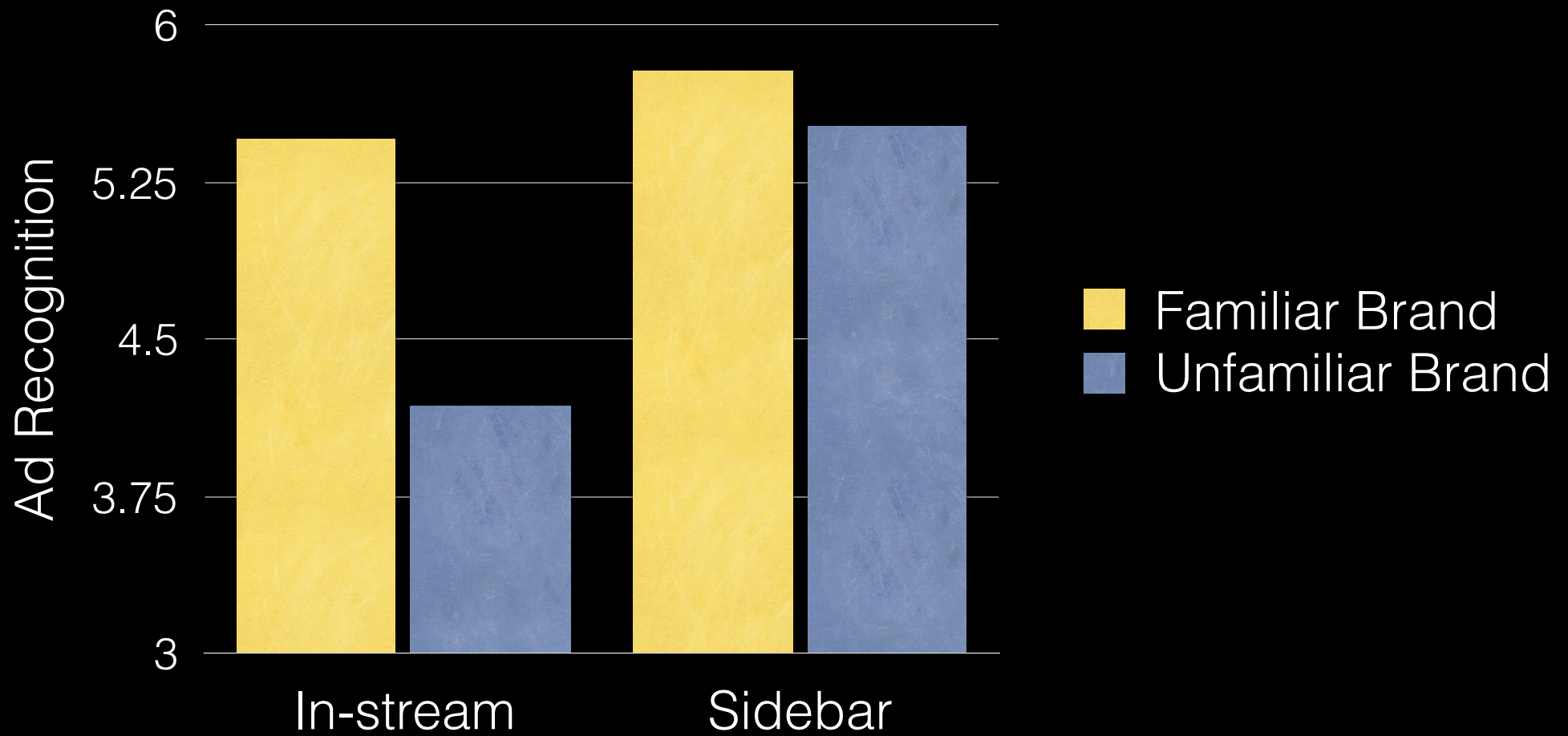
Suggested Post

Ford Motor Co.
47 years (Dearborn, MI)
Let's go on an adventure

Like Comment Share

Jen Cavallio
1 hour (Akron, OH)
First birthday! :)

Like Comment Share

Michael Kemp
20 years (Columbus, MI)
I feel like I've stepped into someone's turf...

Like Comment Share

Study 1 Results



Study 2

- 2 (**brand familiarity**: high or low) x 2 (**image professionalism**: high or low) x 5 (**disclosure type**)
- 723 participants ($M_{age} = 35$, 51% female)
- Examine ads alone - mirrors mobile experience

BE REAL WITH YOUR AUDIENCE AND THEY'LL BE REAL WITH YOU.



75%

OF UGC OUTPERFORMED
BRAND CREATIVE

67%

OF TARGET AUDIENCE
REACHED WITH UGC

7,000+

UGC PHOTOS IN 60 DAYS

Study 2 - Stimuli

Promoted by Doughboys Doughnuts

 **Doughboys Doughnuts**
2 hours ago

Donut time!



 Like  Comment  Share

Promoted by Dunkin Donuts

 **Dunkin Donuts**
2 hours ago

Donut time!

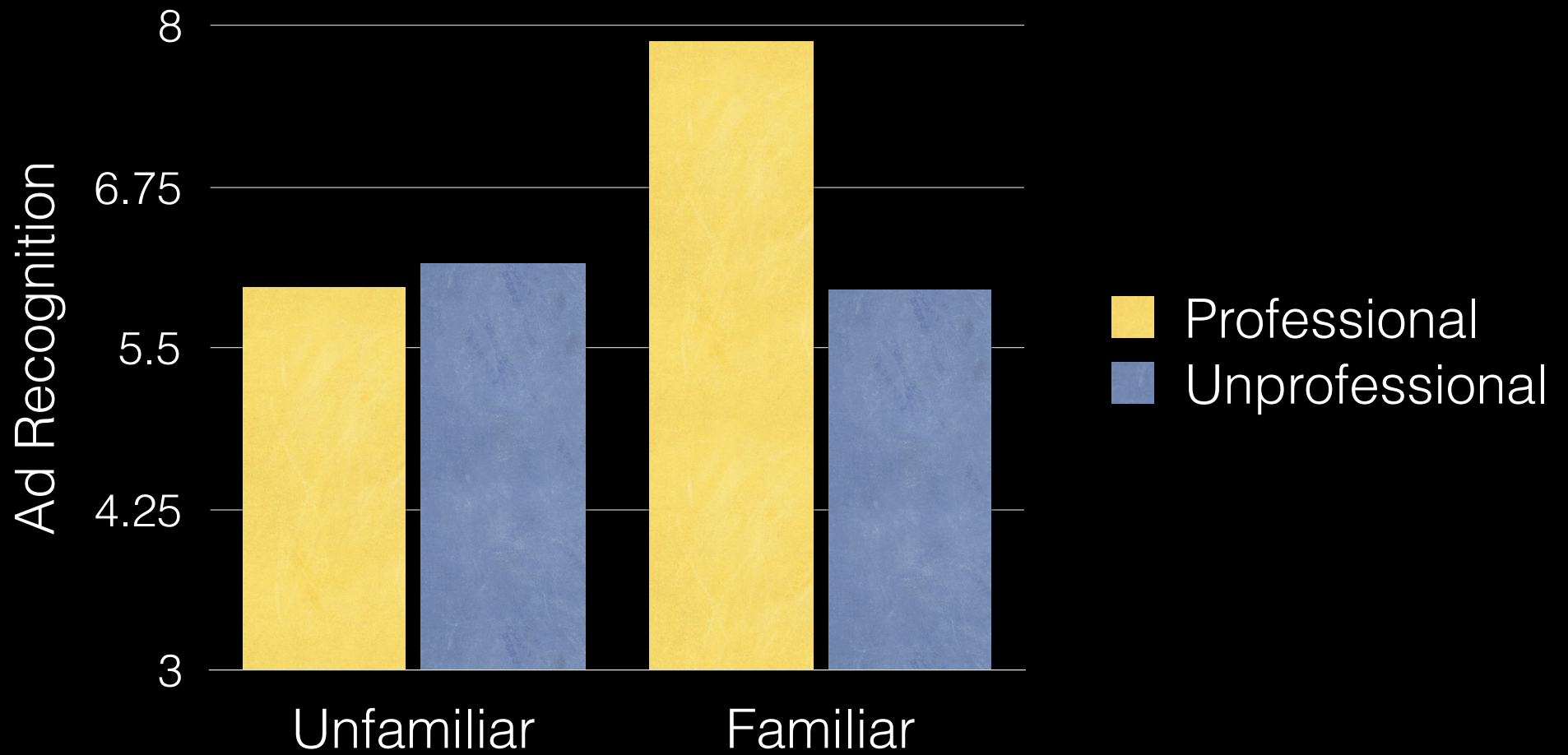


 Like  Comment  Share

Study 2 Results

Ad Recognition Increases with...	Advertisement	Sponsored Post	Suggested Post	Promoted by [Brand]	No Disclosure
Professional Image	✓		✓		
Professional Image <i>when paired with a Familiar Brand</i>		✓			✓

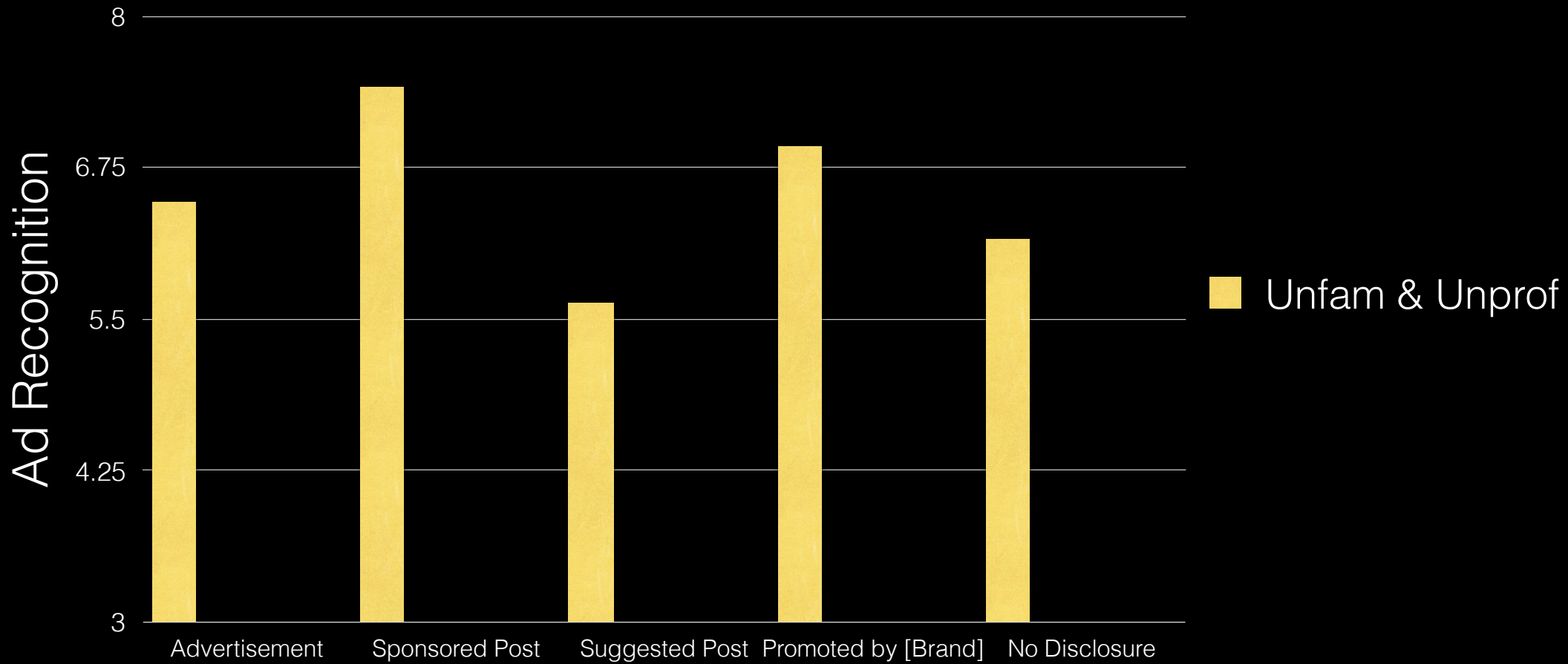
Study 2: No Disclosure



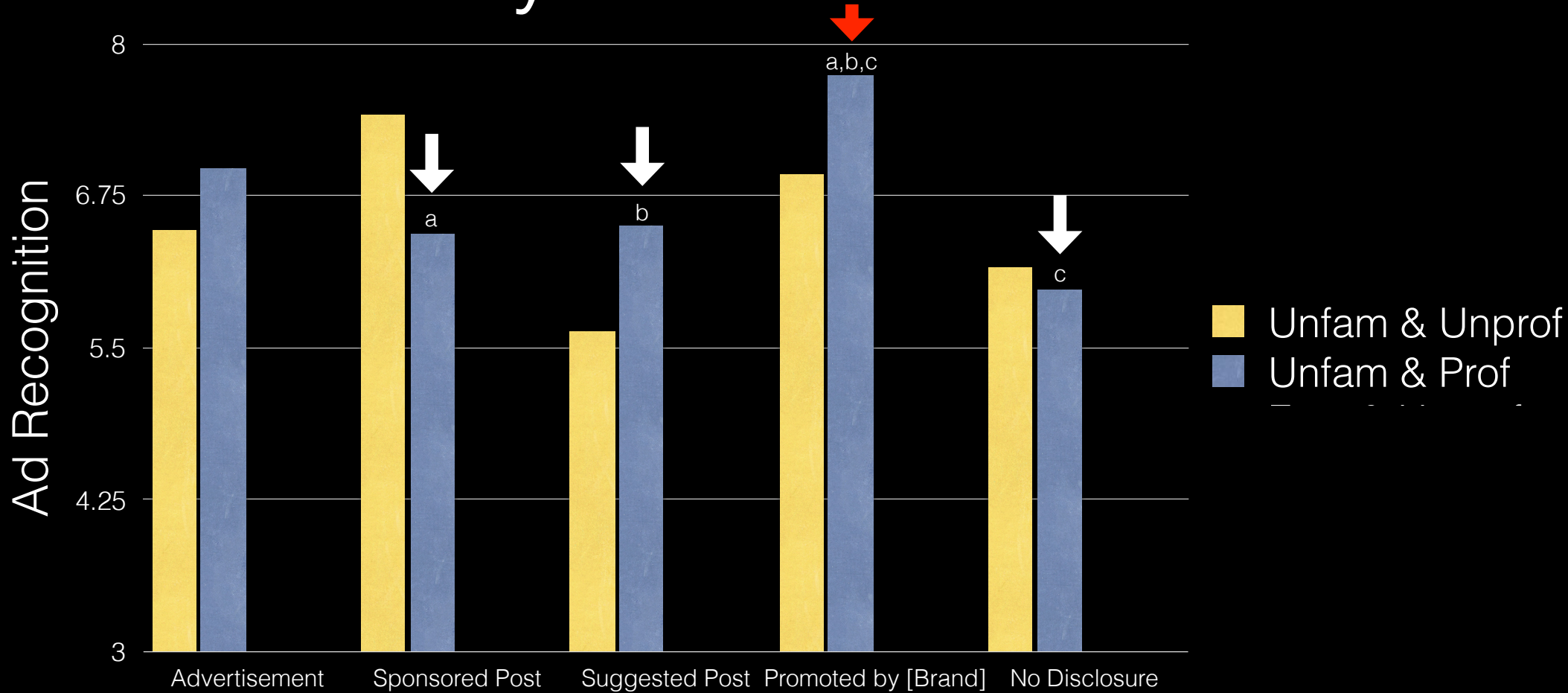
Threshold Effects

- Disclosure *will not* have an effect when:
 - no other ad recognition cues are present, or
 - multiple ad recognition cues are present
- Disclosure *will* have an effect when a single ad recognition cue is present

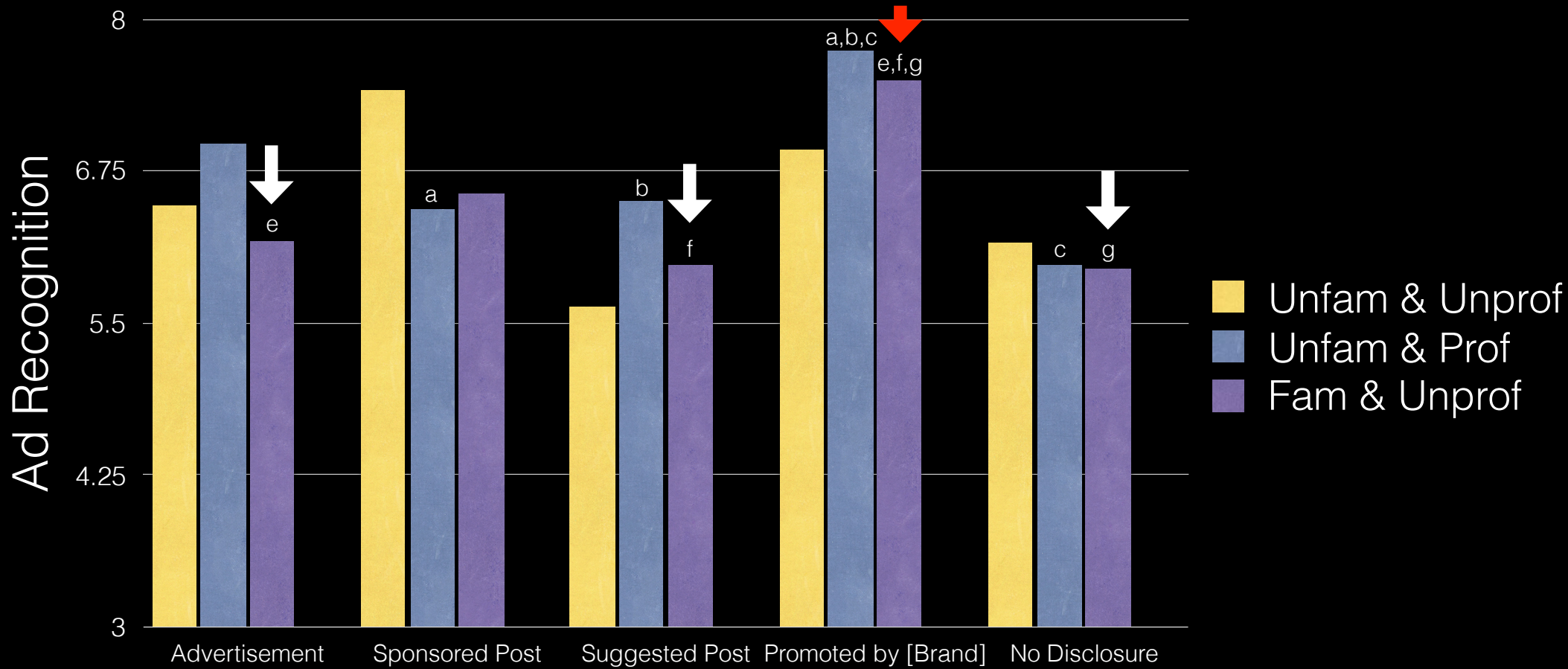
Study 2: All Conditions



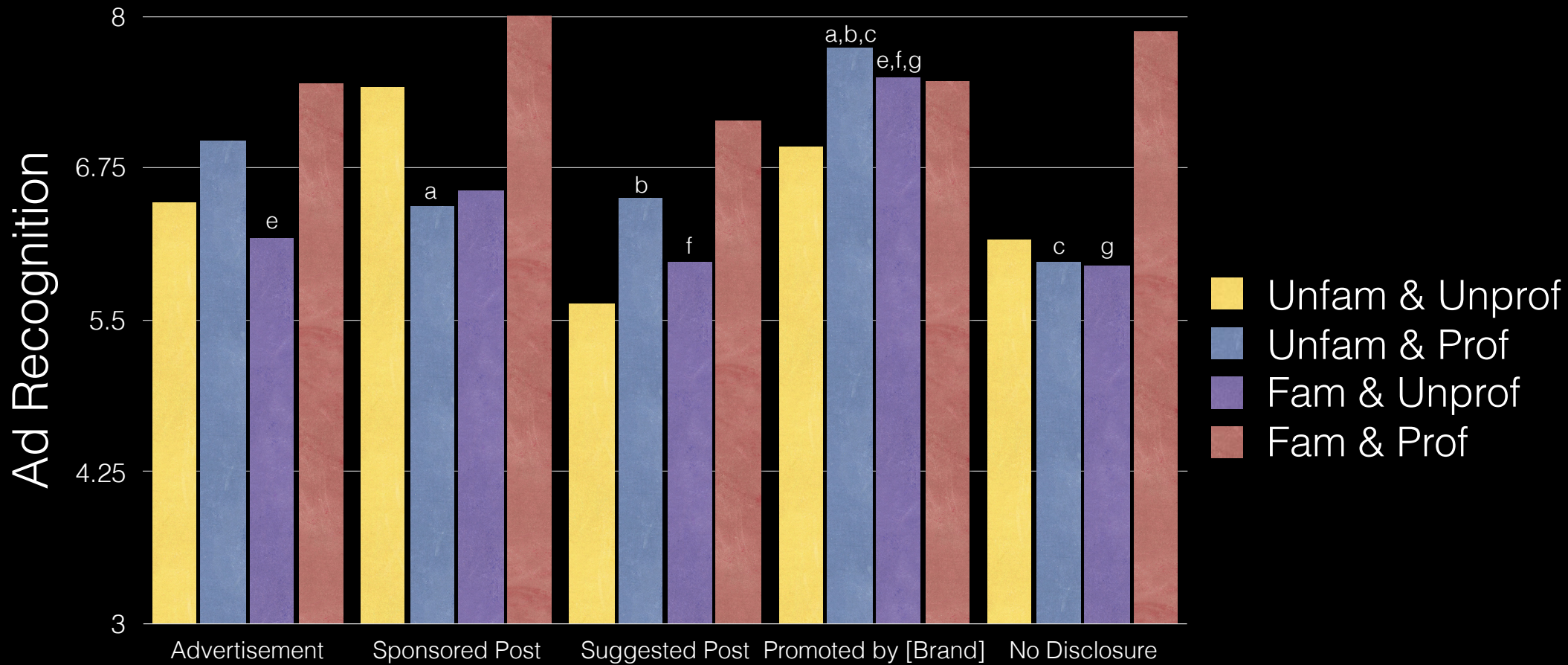
Study 2: All Conditions



Study 2: All Conditions



Study 2: All Conditions



Results

- Multiple ad recognition cues are needed to affect ad recognition
 - Only “Promoted by [Brand]” was effective
- Consumers *can* identify native advertising in a social media setting

Discussion

- Consumers do not seem to be processing social media content deeply
- Current disclosures may need strengthening
- Supports FTC perspective that disclosure isn't the only ad recognition factor
- Disclosure finding contradicts enforcement guide language recommendations

Thank You

Sarah J. Farnsworth

Vice President, Scientific Affairs
PEGUS Research, Inc.

Methods for Testing Consumer Comprehension of Product Labeling: Implications for Putting Disclosures to the Test

Sarah Farnsworth, Ph.D.

Vice President, Scientific Affairs
PEGUS Research, Inc.

BACKGROUND

- An important factor that impacts the effectiveness of disclosures is whether or not consumers comprehend them.
- We propose that the model currently used to test OTC drug product labeling may be relevant to evaluating other product information, such as disclosures.
- Today I will discuss some studies used in the approval of an OTC medicine by the Division of Nonprescription Drug Products (DNDP) at the FDA as an illustration of this model.



INTRODUCTION TO PEGUS RESEARCH

PEGUS Research designs and conducts studies to determine if consumers:

- Adequately **comprehend** the information on product labels
(Label Comprehension Studies)
- Can use the information to make a **correct decision** if the product is appropriate for their use based on their own medical history
(Self-Selection Studies)
- **Use the product safely** in a simulated OTC setting by following the label directions and warnings *(Actual Use Studies)*

The results of these studies are submitted to DNDP at the FDA for review decisions on approval of a new OTC product.

LABEL COMPREHENSION STUDIES (LCS)

- OTC labels must be “...likely to be read and understood by the ordinary individual, including individuals of low comprehension, under customary conditions of purchase and use” (21 CFR 330.10 (a)(4)(v))
- Consumer understanding of OTC labels is demonstrated by conducting an LCS.
- LCS utilize one-on-one standardized interviews with a general population of consumers to collect data on comprehension.
- FDA issued a Guidance for Industry¹ on conducting LCS to help standardize the conduct of these studies.



LABEL COMPREHENSION STUDIES (LCS)

- Content and structure of drug product labeling is governed by regulations
- Wording (and other package elements) should be developed and optimized through a series of **iterative** qualitative and quantitative comprehension studies
- Testing is prioritized to focus on messages with the greatest **clinical consequence** associated with a consumer failing to understand each label direction or warning.
- Messages with the greatest clinical consequences are deemed primary endpoints for the study, and assigned a target performance threshold.



OTC DRUG FACTS LABEL COMPREHENSION TESTING MODEL

1. Create content (stimuli)
2. Early qualitative research to refine language, formatting, etc.
3. Identify key messages (endpoints) and ultimate performance targets (i.e. how good is good enough?)
4. Develop assessment questions and scoring criteria
5. Pilot test the content, questions and scoring
6. Refine
7. Test and refine the content, question and score again (iterative)
8. Evaluate final results against targets

CASE STUDY: NASACORT ALLERGY 24HR



CASE STUDY – NASACORT ALLERGY 24HR

- A series of LCS conducted in 2011 and 2012 to develop labeling that was adequately understood by the general population.
- Qualitative and pilot studies were first conducted to refine the label language and data collection tools in an iterative fashion.
- Study protocols describe study design, endpoints, statistical analysis plan, and other key elements.



STUDY DESIGN

- Pivotal studies for FDA submission were conducted in two phases.
- Both the outside package (Drug Facts Label) and package insert were tested in each phase, with participants randomized to view one or the other to limit influence or bias.
- Sample size was large enough to provide a reliable measure of comprehension. 886 consumers reviewed the product carton, and 734 reviewed the package insert.
- Very few exclusion criteria were applied to ensure a general population of subjects were represented, not just those who suffer from the symptoms or disease the drug is intended to treat.
- Participants (≥ 16 yrs of age) were recruited in 15 retail (mall) sites across the USA to ensure diversity and a representative sample.



STUDY DESIGN

- Data collected in one-on-one standardized interviews, with data entered real-time in an internet-based electronic data capture system.
- Each key message on the package had an associated question(s) to measure the proportion of subjects who comprehended the direction or warning.
- Questions had a pre-specified answer key, so that correct responses were determined *a priori*.
- FDA usually requests that 20-30% of study participants qualify as low literacy. Approximately 30% of the entire sample qualified as low literacy as defined by The Rapid Estimate of Adult Literacy in Medicine (REALM) Test², a validated instrument.

² Murphy PW, Davis TC, Long SW, Jackson RH, Decker BC. (1993). Rapid Estimate of Adult Literacy in Medicine (REALM): A quick reading test for patients. *J of Reading* **37(2)**: 124-130.

DRUG FACTS LABEL TESTED

Drug Facts

Active ingredient (in each spray)

Triamcinolone acetonide

(glucocorticoid) 55 mcg.....Nasal allergy symptom reliever

Purpose

Uses

temporarily relieves these symptoms of hay fever or other upper respiratory allergies:

- nasal congestion
- runny nose
- sneezing
- itchy nose

Warnings

Do not use

- in children under 2 years of age
- if you have ever had an allergic reaction to any of the ingredients

Ask a doctor before use if you

- have had recent nose ulcers or nose surgery
- have had a nose injury that has not healed
- are using a steroid medicine for asthma, allergies or skin rash
- have an eye infection
- have or had glaucoma or cataracts

When using this product

- the growth rate of some children may be slower
- some symptoms may get better on the first day of treatment. It may take up to one week of daily use to feel the most symptom relief.
- do not share this bottle with anyone else as this may spread germs
- remember to tell your doctor about all the medicines you take, including this one

Stop use and ask a doctor if

- you have, or come into contact with someone who has, chickenpox, measles or tuberculosis
- you have or develop symptoms of an infection such as a persistent fever
- you have any change in vision
- you have severe or frequent nosebleeds

If pregnant or breast-feeding, ask a health professional before use.

Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.

Directions

Read insert (inside package) on how to:

- get a new bottle ready (primed) before first use
- prime bottle again if not used for more than 2 weeks
- use the spray
- clean the spray nozzle

Drug Facts (continued)

ADULTS AND CHILDREN 12 YEARS OF AGE AND OLDER

- | | |
|---|--|
| adults and children 12 years of age and older | <ul style="list-style-type: none"> ■ once daily, spray 2 times into each nostril while sniffing gently ■ once your allergy symptoms improve, reduce to 1 spray in each nostril per day |
|---|--|

CHILDREN 2 TO UNDER 12 YEARS OF AGE

- the growth rate of some children may be slower while using this product. Talk to your child's doctor if your child needs to use the spray for longer than two months a year.

- | | |
|-------------------------------------|--|
| children 6 to under 12 years of age | <ul style="list-style-type: none"> ■ an adult should supervise use ■ once daily, spray 1 time into each nostril while sniffing gently ■ if allergy symptoms do not improve, increase to 2 sprays in each nostril per day. Once allergy symptoms improve, reduce to 1 spray in each nostril per day. |
|-------------------------------------|--|

- | | |
|------------------------------------|---|
| children 2 to under 6 years of age | <ul style="list-style-type: none"> ■ an adult should supervise use ■ once daily, spray 1 time into each nostril while sniffing gently |
|------------------------------------|---|

- | | |
|-------------------------------|--|
| children under 2 years of age | <ul style="list-style-type: none"> ■ do not use |
|-------------------------------|--|

- do not use more than directed
- if you forget a dose, do not double the next dose
- do not spray into eyes or mouth
- if allergy symptoms do not improve after one week, stop using and talk to a doctor
- do not use for the common cold
- shake well before each use

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Chattanooga, TN 37409-0219
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www.pegus.com

EXAMPLES OF COMPREHENSION QUESTIONS

- Scenario questions are typically used, as they require a higher degree of assimilating package information into a made-up real-life situation.
- Questions are read out loud by the interviewer, and are open-ended and neutral to avoid leading the participant to a correct response.
- Silent, pre-coded answer options are programmed for the interviewer.



Message Tested on Label / Endpoint:

Directions

■ **The pump must be prepared before first use.** For complete directions on preparing the pump for use, using the spray and cleaning the spray nozzle, see the package insert.

adults and children 12 years of age and older	<ul style="list-style-type: none">■ once daily, spray 2 times into each nostril■ once allergy symptoms improve, you may reduce to 1 spray in each nostril per day
children 6 to under 12 years of age	<ul style="list-style-type: none">■ once daily, spray 1 time into each nostril■ if allergy symptoms do not improve, increase to 2 sprays in each nostril, once daily■ once allergy symptoms improve, reduce to 1 spray in each nostril per day
children 2 to under 6 years of age	<ul style="list-style-type: none">■ once daily, spray 1 time into each nostril
children under 2 years of age	do not use

children under 2 years of age

do not use

- I. Julie has a daughter who is one-year old. Her daughter has upper respiratory allergies, and Julie is thinking about buying this medicine for her to use. Is it okay or not okay for the daughter to use this product?**

Do not read answer alternatives

Check only one box

- OK/ Yes
 Not OK/ No
 Don't know / Not sure

Ia. Please explain your answer

Do not read answer alternatives

Check all that apply

- Do not use (if under 2)
 She is too young / not old enough
 Talk to a doctor
 Other: _____
 Don't know / Not sure

Correct: Box 2 in Q1 and Box 1 or Box 2 in Q1-a

Warnings

Do not use if you are allergic to any of the ingredients

Ask a doctor before use if you

- have had recent nasal ulcers, nasal surgery or nasal injury that have not healed
- are using an asthma medicine or prescription steroid medicine
- currently have an eye infection
- have or had glaucoma or cataracts

When using this product

- symptom improvement can start within the first day of treatment
- it may take up to one week for 24-hour symptom relief
- do not share this bottle with anyone else as this may spread germs

Stop use and ask a doctor if

- you have an allergic reaction, such as a rash, problems swallowing or breathing, swelling of your lips, face or tongue. Seek medical help right away
- you have, or come into contact with someone who has, chickenpox, measles or tuberculosis
- you have or develop symptoms of an infection such as a persistent fever
- you have any change in vision
- you have severe or frequent nosebleeds

If pregnant or breast-feeding, ask a health professional before use.

Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away. ▶

Stop use and ask a doctor if

- you have an allergic reaction, such as a rash, problems swallowing or breathing, swelling of your lips, face or tongue. Seek medical help right away



2. Bill used the product last night and wakes up with a rash on his chest. What, if anything, does the label say about this?

Do not read answer alternatives

Check only one box

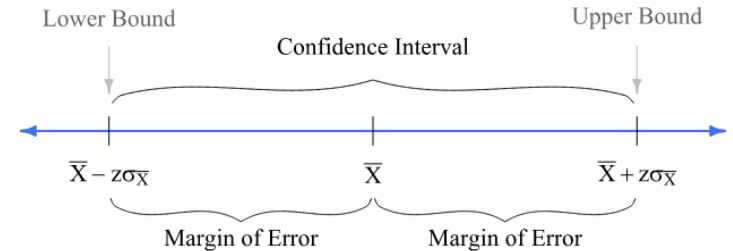
- Stop use
- Ask a doctor
- Seek Medical help
- Seek Medical help right away
- Nothing
- Other: _____
- Don't know / Not sure

Correct: Box 1 and Box 2 is checked, or Box 4 is checked

Acceptable: Box 1 or Box 2 or Box 3 is checked

DATA ANALYSIS AND PRESENTATION OF RESULTS

- Proportions of subjects who provided a correct or acceptable response were calculated with a corresponding 95% Confidence Interval for each key communication message.
- Data were analyzed and presented by normal and low literacy subgroups in statistical tables and a study report.
- While not applicable to this case study, various other subgroup comparisons may be made depending on the nature of the product and study sample.



OUTCOME

- Statistical tables, study report, and raw data were submitted to the FDA
- Data were presented to the FDA and an Advisory Committee in an all-day meeting in which the committee votes for or against approval
- FDA approved the product for OTC sale in 2013



LCS ADAPTATION FOR PRODUCT DISCLOSURES

This model could be adapted to test product disclosure statements. Possible adaptations include:

- Randomize subjects to view different modalities of disclosure statements in order to test the impact of various forms of delivery, phrasing, or formatting on comprehension or other outcomes.
- Those randomized to a television or radio commercial would view or hear the commercial, and then proceed to a standardized interview with comprehension questions.
- Those randomized to a website or printed advertisements could proceed with a very similar standardized test of the information as is used for the current LCS model for testing OTC package information.



CONCLUSIONS

- Label comprehension studies provide evidence of consumer comprehension of OTC product labeling of package information
- Similar studies could be conducted to provide FTC with information about comprehension of product disclosures.
- These studies would need to be adapted to differences between OTC products and product disclosure statements, as product disclosures come in various methods (e.g., television, radio, websites, print).
- Other consumer behavioral research could also be relevant in this arena, such as adapting self-selection study designs to evaluating the effect disclosure statements may have on impacting consumer decision-making behavior.



Manoj Hastak

Dept. of Marketing, Kogod School of Business
American University

"Assessing the Efficacy of Qualifying Disclosures in Advertising: Methodological Considerations"

Manoj Hastak, Ph.D.
Professor of Marketing
American University

Presented at the FTC Workshop "Putting Disclosures to the Test"
September 15, 2016. Some of this research was conducted for and
funded by the FTC

Personal Background

- Long time association with the FTC
- Lead and/or participated in dozens of FTC-sponsored research projects
- Focus today on a couple of these projects as well as some ongoing (non-FTC) research on disclosures

Three Methodological issues Re Assessing Disclosure Effectiveness

- Assessing Ad Communication vs. Believability
- Probing for consumer interpretation of disclosure intent
- Using eye-tracking data

Study #1: FTC Study on “Up To” Claims in Advertising



allii. the new way to help boost your weight loss by up to 50%.

It's frustrating. You work hard to lose weight. You exercise and eat healthy, and you really want the results to be more rewarding. Now there's a brand-new product called **allii** which helps some of the fat you eat from being absorbed. And when added to a lower fat, reduced calorie diet, it could boost your weight loss by up to 50%. So for every two pounds you lose through healthy eating, you could lose one more with **allii**. Available exclusively at pharmacies, **allii** is the first pharmacy-only weight loss aid.



www.allii.co.uk

For overweight adults with a BMI of 30 or over. Contains orlistat. Always read the label. Follow a reduced calorie, lower fat diet. Individual results may vary. © 2012 Allii. All rights reserved. Allii is a registered trademark of Allii Pharmaceuticals.



FREE FOR KIPLINGER'S READERS WHO WANT TO KNOW |||||

How To Make Up To \$500 In The First 59-Minutes Of Every Trading Day

BY JIM WALSH

MANNY BACKUS is a soft-spoken chess prodigy obsessed with the stock market. Four years ago, he discovered a trading shortcut that produces up to \$500 during the first hour the market opens. Stock market experts were amazed when the Los Angeles resident explained his secret to profitable stock picking even during a market crisis. Some questioned whether he gets illegal tips from an inside source. However, the facts show he developed an ingenious trading system that is...

NOT AVAILABLE TO THE GENERAL PUBLIC.

According to Mr. Backus, every morning a certain pattern happens during the first 59-minutes of trading. When you understand this predictable pattern, you can place one or two roundtrip trades between 9:30 a.m. and 10:30 a.m. Eastern Standard Time and make substantial gains. On most days you're done within 15-30 minutes. Then you close out all open positions and...

TAKE THE REST OF THE DAY OFF TO ENJOY YOUR PROFITS.

The reason Mr. Backus is so accurate at picking stocks poised to make money is simple. He was born and raised in Peru and

groomed to become a champion chess player. The task was made easier due to his certified genius I.Q. of 157. In his early teens, he became passionate about trading stocks. By the age of 19, he actively traded his own account with real money. A few years later, Mr. Backus, started figuring out how to...

MAKE MONEY AS FAST AS POSSIBLE IN THE STOCK MARKET.

He spent over \$40,000 creating a proprietary chart analyzing tool that reveals which stocks to buy or sell and the exact minute to enter and exit trades. Almost all the guesswork is taken out of the process. The results are nothing short of astonishing.

overjoyed since they get profit-rich trades without doing any of the work. They just copy his trades and often earn huge returns. Some have made as much as \$2,000 in a single day. Mr. Backus is extending a Free Trial of his alert service to 575 Kiplinger's readers. By accepting his invitation today you could...

START MAKING MONEY AS SOON AS TOMORROW MORNING.

You get 30 days to test drive First Hour Trading absolutely free with no obligation plus: a Welcome Package sent by postal mail with a DVD showing how to get the most out of your trial, printed tutorial and membership card with contact info for the support center.

"YOU CAN MAKE ENOUGH MONEY IN THE FIRST HOUR OF TRADING TO TAKE OFF AND DO WHATEVER YOU'D LIKE FOR THE REST OF THE DAY." – MANNY BACKUS

Mr. Backus does not share his system with anyone. But does provide an exclusive alert service called First Hour Trading to traders who want to benefit from his uncanny ability to pick winning stocks. Subscribers are

Only 575 free spots available on a first come, first served basis.

For complete details and to secure one of the few remaining spots go to:
www.FirstHourTradingKip.com

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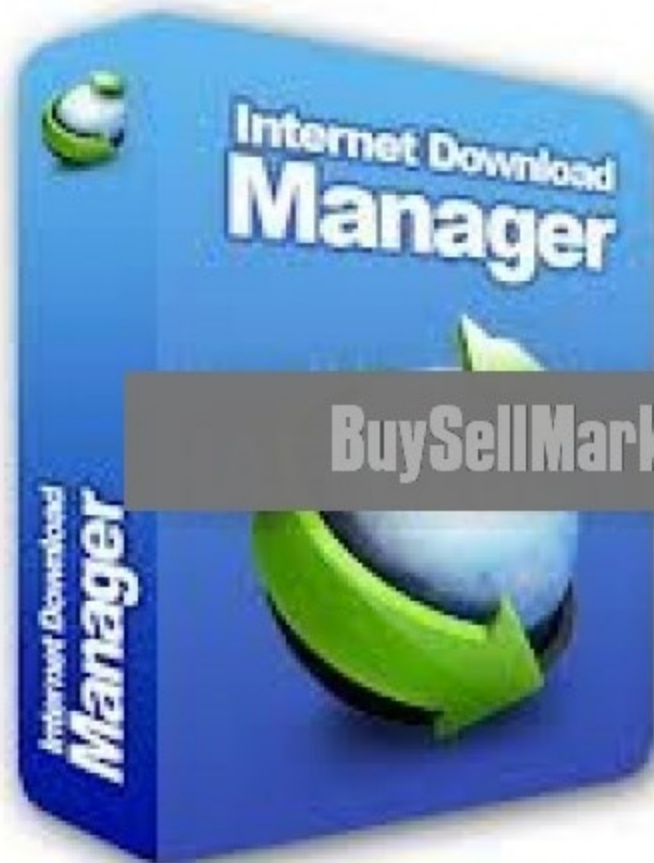
Earn up to \$1000 per day

Get Registration **FREE**

www.mypakistan.com

CLICK HERE TO JOIN

Call us Now **+913416452779**



**Increase
Internet**

**Upto
5 Times**

Study Overview

- Mall Intercept, 344 respondents
- Print ad for “Bristol Windows”
- Three ad treatments
- Cell sizes = 114 - 115

Original Ad

LIMITED TIME SAVINGS ON ALL BRISTOL WINDOWS

BUY 2
GET 1
FREE



PROVEN TO SAVE UP TO 47%
ON YOUR HEATING AND
COOLING BILLS!

“Cleansed” Ad

LIMITED TIME SAVINGS ON ALL BRISTOL WINDOWS

BUY 2
GET 1
FREE



PROVEN TO SAVE 47% ON
YOUR HEATING AND
COOLING BILLS!

“Disclosure” Ad

LIMITED TIME SAVINGS ON ALL BRISTOL WINDOWS

BUY 2
GET 1
FREE



PROVEN TO SAVE UP TO 47%*
ON YOUR HEATING AND
COOLING BILLS!

*The average Bristol Windows owner saves about 25% on heating and cooling bills.

PROVEN TO SAVE UP TO 41%
ON YOUR HEATING AND
COOLING BILLS!

* The average Bristol Windows owner saves about 25% on heating and cooling bills.

Results: Ad Communication and Believability

% Saying “half” or more	Up To 47%	47%	Discl.
Based on ad, how many can expect to save about 47%?	48%	40%	46%
In personal opinion, how many will save about 47%?	43%	45%	46%
In personal opinion, what would be the average savings?	40%	38%	37%

Study #2: “Up To” Claims – Replication and Extension

- With Nelson Amaral (American University)
 - Do findings replicate with a different ad and target market?
 - Concurrent “think aloud” protocols
 - Eye-tracking measures
 - Student subjects, lab study
 - Three ad treatments (n=135)
 - Preliminary results

LIMITED TIME OFFER FOR RAVPOWER® PORTABLE CHARGERS

Buy 1
Get 1
FREE



CHARGE YOUR PHONE 43% FASTER THAN
A STANDARD WALL CHARGER.

LIMITED TIME OFFER FOR RAVPOWER® PORTABLE CHAGERS

Buy 1
Get 1
FREE



CHARGE YOUR PHONE UP TO 43% FASTER
THAN A STANDARD WALL CHARGER.

LIMITED TIME OFFER FOR RAVPOWER® PORTABLE CHARGERS

Buy 1
Get 1
FREE



**CHARGE YOUR PHONE UP TO 43%* FASTER
THAN A STANDARD WALL CHARGER.**

*On average the RavPower Charger charges 17% faster than other portable chargers

Results: Ad Communication and Believability

% Saying “half” or more	Up To 43%	43%	Discl.
Based on ad, how many can expect to achieve charge about 43% faster?	72%	85%	37%
In personal opinion, how many will achieve charge about 43% faster?	39%	47%	46%
In personal opinion, what would be the average savings?	19%	22%	15%

Results: Eye Tracking Data

Measure	Up To 43%	43%	Discl.
Disclosure dwell count	1.67	2.00	5.08
Disclosure dwell duration	2.22	1.86	7.13

Study 3: FTC Dietary Supplement Study

- Probing for Consumer Interpretation of Disclosure Intent
- Modified Promotion Booklet for Vitamin O
- Cover Page + 3 Pages of Consumer testimonials
- Mall intercept, 200 respondents
- 6 treatments

**What People
Are Saying
About
“Vitamin O”**

"She Runs & Plays with Other Children"



for making it available.
- Darlene Owen, WA

My granddaughter, Destiny, four years old, has had asthma for three years. Her mother had to give her three breathing treatments per day, just to keep her well, which she never was. She has been in and out of hospitals and always ill. She has now been on "Vitamin O" for approximately four months, 20 drops, morning and night. She gets no more breathing treatments, the dark circles are gone from under her eyes, she is not sick anymore, and she runs and plays with other children. I can't thank you enough

"I Never Get Tired"

I have been taking "Vitamin O" for one year now and I would hate to think about not taking it forever, as I am 76 years old and I need all the energy I can get. My two daughters can't get over the energy I have. I take 30 drops in the morning and 15 drops in the afternoon. I am busy all day and never get tired, thanks to "Vitamin O".

- Margie Owings, Florida

"I Have More Energy"



I am a retiree working at a local elementary school in Food Service. I have been taking "Vitamin O" since March of this year. My allergies bothered me a lot in the spring, but "Vitamin O" helped me, and I have more energy, plus I have lost some weight. I take thirty or forty drops of "Vitamin O" every day. I told my stepson about it. He is a family man and a runner. Now he has been taking it for about two months.

- Sylvia Moore, North Carolina

"I Was Having Asthma Attacks Day and Night for a Long Time"

I am 80 years of age and have terrible lungs and was having asthma attacks day and night for a long time. I received some literature about "Vitamin O" about five months ago and I ordered four bottles and have been taking it since that time. Am I a believer? I swear I have not had even one attack since starting on it. I was on Theodur and Albuterol inhalers. Three inhalers per month. Now I have almost forgotten about Theodur and inhalers.

Just a few days ago I ordered six more bottles of "Vitamin O" and will share these with friends until they are as enthusiastic as I am about the product.

- ID, Louisiana

"I'm Still Improving"

I have been suffering from low back pain due to spinal stenosis and arthritis. This was caused by my falling out the back door and I have had this trouble ever since. When I got a newsletter in the mail from this company telling about "Vitamin O" I got excited and decided I would try it. I am happy I did because it has helped me live with my pain. When I saw how much it eased my pain, I ordered some digestive enzymes. I'm still improving. Thanks to my God.

- WB, Georgia

"I've Had Pain for 35 Years"

I ordered "Vitamin O" sometime ago, but I didn't notice any immediate results, so I stopped taking it. Then I had a bad cold and was just about over it but felt ghastly, so I decided to try "Vitamin O" again. I have been taking a lot of vitamins and chondroitin, glucosamine, collagen, bromelain, and MSM for pain. I've had pain for 35 years and it was getting worse. I have arthritis and joint problems. I started with 10 drops of "Vitamin O", then increased to 15 at the end of the day. I took it four times. It ended the pain. I haven't had it since. I now take it twice a day. Amazing! Today I worked in the garden all afternoon in the heat, with no ill effects.

- Betty Koon, Oregon, age 73

NOTICE: These testimonials are based on the experiences of a few people. You are not likely to have similar results.

Results: Interpretation of Disclosure Intent

	Protect Company	Inform Consumers	Other
Base: Respondents who said there was a disclosure in booklet	45.2%	45.2%	16.1%
Base: Respondents who accurately recalled disclosure	45.7%	54.3%	8.7%

Final Thoughts

- Value of multiple measures
- Probing for disclosure comprehension as well as intent
- Value of replication

Heidi Johnson

Office of Research
Consumer Financial Protection Bureau

Disclosure research in the lab

Federal Trade Commission *Putting Disclosures to the Test* Workshop | September 15, 2016

Heidi Johnson, Consumer Financial Protection Bureau



Consumer Financial
Protection Bureau

Disclosure research at CFPB

Disclosure priority question areas

Efficacy

- Relationship between certain dimensions of disclosure and consumer response

Measurement

- How we learn about what works

Market effects

- Firm behavior

Priority area: Efficacy

Efficacy

- Relationship between certain dimensions of disclosure and consumer response

Dimensions of disclosure

- **Context**
- **Content**
- **Form**



Stages of efficacy

- **Attention**
- **Understanding**
- **Action**

Disclosure research approach

Sources of research

- Rulemaking-related
- Consumer-facing tools
- Collaborations with industry
 - Project Catalyst
 - 1032(e) disclosure waiver authority
- Foundational research

Methodologies

- Qualitative testing
- Quantitative testing
- Field trials
- Administrative data analysis
- Laboratory studies
 - Through contracts with several universities and other institutions

Laboratory study: Context and attention

Lab experiment on disclosure

- Studying in the lab enables us to:
 - Isolate effects in a controlled environment
 - Apply findings to future disclosures
- What affects attention to disclosures?
- Examine two factors
 - Design: Two versions of the disclosure
 - Context: Reading in isolation or in the presence of a researcher

Lab experiment on disclosure

- PIs: Dustin Beckett, PhD and Alycia Chin, PhD
- Conducted at the end of an economics experiment
- N = 192
 - Gettysburg College students
 - Groups of 12
- Provided information about the study and privacy rights to all participants
 - Environment randomized at the session level
 - Form design randomized at the participant level

Measure of attention

“Researchers conducting this study may be interested in contacting you regarding additional research studies in the next year. These future studies will provide compensation of approximately \$35/hour. Please initial anywhere on the bottom of this form if you would like us to contact you for these studies. Doing so will not affect any aspect of your participation today, including payment or privacy.”


(emphasis added)

➤ Did they initial?

Factor 1: Design

Forms: Two designs

Form 0122



By signing below, you affirm that: 1) you have carefully reviewed the information contained in this form, 2) you understand that you may ask questions about any aspect of this research study during the course of the study or in the future, and 3) you accept the terms of this research study.

SIGNATURE

DATE

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Privacy Act Statement, 5 U.S.C. 552(a)(e)(3)
The information you provide will assist the study sponsor, the Consumer Financial Protection Bureau ("CFPB"), in a two-part series of disclosure testing that studies the effects of different disclosure regimes on market outcomes.

The CFPB will obtain or access personally identifiable information such as your first name, last name and gender during the disclosure testing for the purpose of studying the effects of different disclosure regimes on market outcomes.


Information collected will be treated in accordance with the System of Records Notice ("SORN"), [CFPB 022-Market and Consumer Research Records SORN, 77 FR 67802](#). This information will not be disclosed as outlined in the Routine Uses for the SORN. Direct identifying information will only be used to facilitate the testing and will be kept private except as required by law.

This collection of information is authorized by Pub. L. No. 111-203, Title X, Sections 1013 and 1022, codified at 12 U.S.C. §§ 5493 and 5512.

Participation in this study is voluntary. You are not required to participate or share any identifying information and you may withdraw participation at any time. However, if you do not include the requested information, you may not participate in the study.

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By signing below, you affirm that: 1) you have carefully reviewed the information contained in this form, 2) you understand that you may ask questions about any aspect of this research study during the course of the study or in the future, and 3) you accept the terms of this research study.


SIGNATURE

DATE

Forms: Two designs

Top

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Researchers conducting this study may be interested in contacting you regarding additional research studies in the next year. These future studies will provide compensation of approximately \$35/hour. Please initial anywhere on the bottom of this form if you would like us to contact you for these studies. Doing so will not affect any aspect of your participation today, including payment or privacy.

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SIGNATURE

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Instructions on the form

- Participants asked to sign and affirm they have carefully reviewed the information
- Applying concept from Shu et al. (2012) on reporting accuracy to engagement with a disclosure

Forms: Two designs

Top

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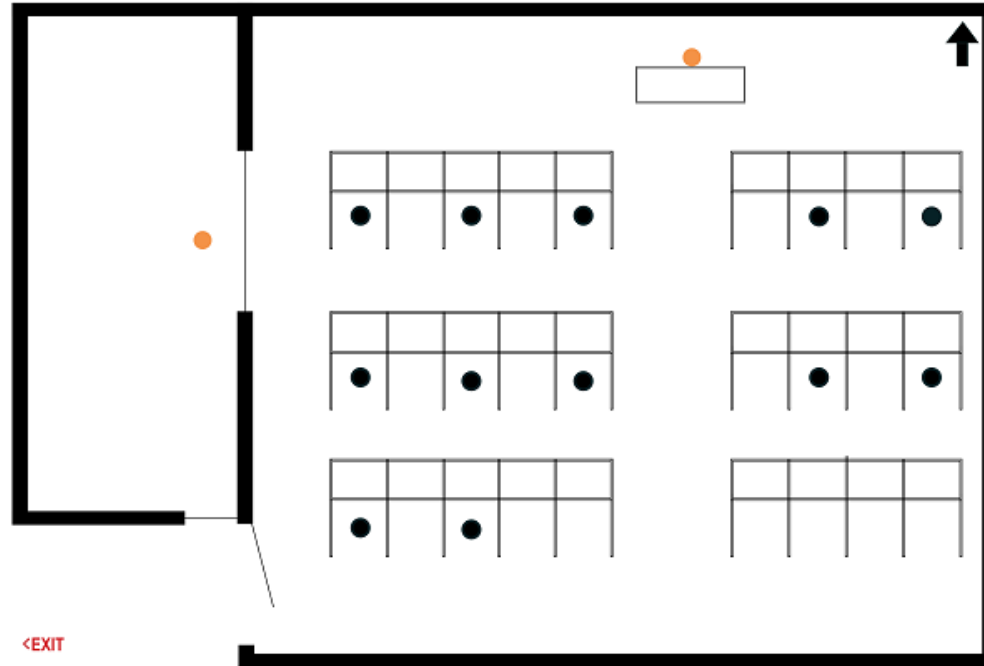
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SIGNATURE

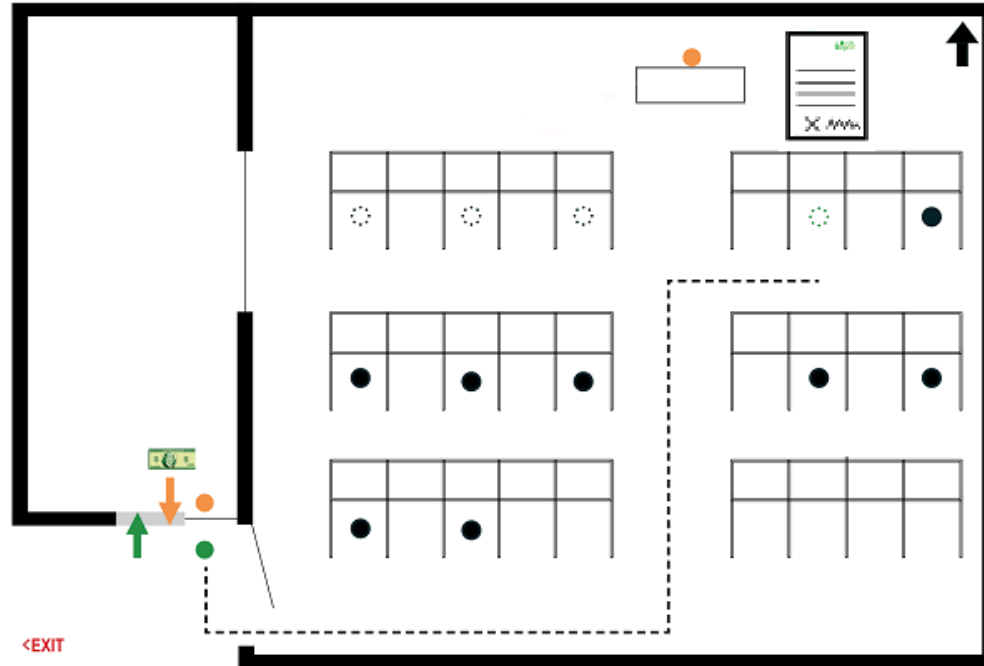
DATE

Factor 2: Environment

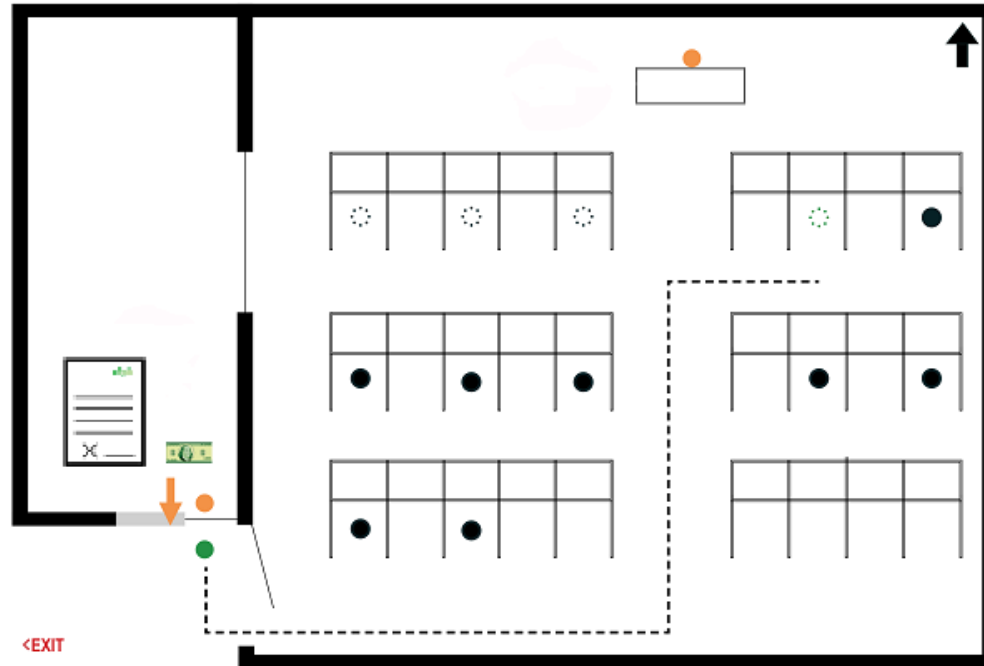
Gettysburg College laboratory setting



Environment: Reading in isolation

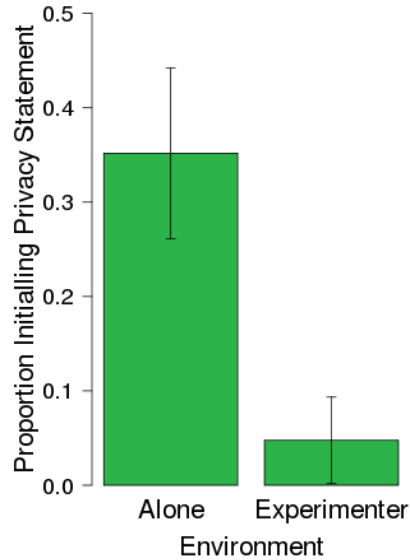
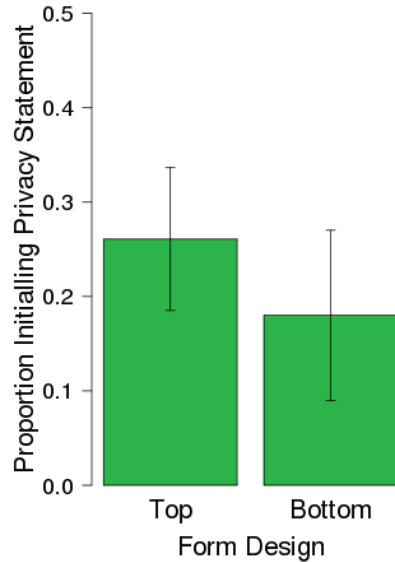


Environment: Researcher present



Results

Results: Context influences attention



Form Design: $\chi^2(1) = 1.391, p = .238$

Environment: $\chi^2(1) = 23.841, p < .001$

Discussion

- The form design tested did not significantly influence attention
- Context can significantly influence attention
 - 35% who viewed disclosure on their own initialed compared to 5% who viewed disclosure in the presence of a researcher
- Opportunity to further increase rates of attention
- Signatures may not indicate attention to other form elements
 - Setting specific outcome measures important

Case studies

- **Moderator:**
Hampton Newsome
Division of Enforcement, FTC
- Colin Campbell
Dept. of Marketing and
Entrepreneurship
Kent State University
- Sarah J. Farnsworth
Vice President, Scientific Affairs
PEGUS Research, Inc.
- Manoj Hastak
Department of Marketing
Kogod School of Business
American University
- Heidi Johnson
Office of Research
Consumer Financial Protection Bureau

Afternoon break

The next session begins at 4:30 pm

