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Nielsen
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ONLINE ADS

- Everywhere
- Small
- Fleeting
- Not very memorable
- Visual component as well as text
- Typical ad recall question not very memorable either:
 - Do you recall seeing an ad for Brand X?
 - Yes
 - No
 - Not sure

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EXPLICIT VS. IMPLICIT MEMORY

- Explicit Memory
 - Conscious recollection of past experience and information
- Implicit Memory
 - Unconscious, unintentional retention of information
 - Can affect thoughts and behavior outside of one's awareness
- Online users may only spend seconds looking at an ad, resulting in poor explicit memory
- Despite absence of explicit recall, ad exposure may be stored in implicit memory

PRIMING

- Process by which recent experiences activate a related concept or memory
- In this research, we utilize priming to trigger implicit memory of an online ad
- Specifically, we utilize a visual cue with ad effectiveness questions (ad recall, purchase intent)

PREVIOUS RESEARCH

- Implicit memories can be activated by priming ^{1,2,3}
- Providing a cue related to a memory facilitates its retrieval ⁴
- In particular, ad retrieval cues (portions of ad pictures and ad headlines) have been shown to increase ad recall ^{5,6,7}
- Enhanced recall of positive claims from ads is associated with more positive product and brand evaluations ^{5,6,7}

¹ Tulving, E., et al., "Priming Effects in Word Completion are Independent of Recognition Memory," *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 1982

² Tulving, E., & Schachter, D. L., "Priming and Human Memory Systems," Science, 1990.

³ Mitchell, D. B., "Nonconscious Priming after 17 Years: Invulnerable Implicit Memory?," Psychological Science, 2006.

⁴ Fisher, R. P., & Craik, F. I. M., "Interaction Between Encoding and Retrieval Operations in Cued Recall," *Journal of Experimental Psychology: Human Learning and Memory*, 1977.

⁵ Keller, K. L., "Memory Factors in Advertising: The Effect of Advertising Retrieval Cues on Brand Evaluations," *Journal of Consumer Research*, 1987. ⁶ Keller, K. L., "Memory and Evaluation Effects in Competitive Advertising Environments," *Journal of Consumer Research*, 1991.

Macklin, M. C., "The Effects of an Advertising Retrieval Cue on Young Children's Memory and Brand Evaluations," Psychology and Marketing, 1994.

SURVEY EXPERIMENT

- Day 1 survey
 - Online article (about 750 words)
 - Respondents randomized:
 - Exposed to online ad for coffee (wide, general appeal)
 - Not exposed to online ad
 - Additional questions
 - Interest in article, ease of reading
 - Reading comprehension

SURVEY EXPERIMENT

- Day 2-3 survey
 - Ad recall and purchase intent questions
 - Respondents randomized:
 - Exposed to prime
 - Not exposed to prime
 - Additional questions
 - Recall of online article
 - Demographics

SURVEY DETAILS

- 2009 respondents from Harris Interactive
- Field dates: Sep 30-Oct 21, 2014
- Incentives: 100 Hipoints (\$.80)

	MEDIAN COMPLETION TIME (MINS)	SURVEY COMPLETES	COMPLETION RATE
Day 1 survey	4.1	2981	Unknown
Article webpage	2.3		
Day 2-3 survey	1.7	2009	67%

ONLINE ARTICLE WITHOUT AD

Published 2:59 pm, Friday, July 11, 2014

Have you read the story about a new study purporting to show that people prefer being shocked with electricity to being left alone with their thoughts?

At least six or seven people sent it to me - and perhaps you - over the past week. The study was published in Science, and led by Timothy Wilson, a researcher at the University of Virginia. His team performed 11 experiments that asked people to sit, undistracted, and entertain themselves with only their thoughts for six to 15 minutes.

Most of the results aren't news to anyone who's ever taken a meditation class: Sitting by yourself, alone with your thoughts, can be difficult. Fifty-eight percent of participants in the first six studies rated the experience as at least somewhat hard; 32 percent of people in the seventh study, which they were able to do at home, admitted to cheating. (I suspect that many of the other subjects were lying.)

The study that got the most attention, though, was the one that hooked subjects up to electrical wires. Fully a quarter of the women and two-thirds of the men zapped themselves rather than sit silently and do nothing at all. Most subjects shocked themselves around seven times, Wilson reported.

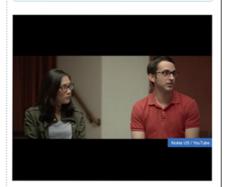
The behavior is unexplained and unexplainable.

"We weren't even sure it was worth doing," said Wilson, speaking about the idea of wiring the subjects. "I mean, no one was going to shock themselves by choice."

But they did, and they did it over and over again.

Most Popular

- What was that mystery mega-yacht in San Francisco Bay?
- Notes: James not claimed; Skuta recalls picture-perfect hit
- Yusmeiro Petit, wow SF Giants beat Diamondbacks 5-1
- All the details about Apple's new iPhone 6 and iPhone 6 Plus
- Style on the streets at New York Fashion Week
- 6. 9 big relationship red flags
- 7. Search for missing Hayward teen escalates



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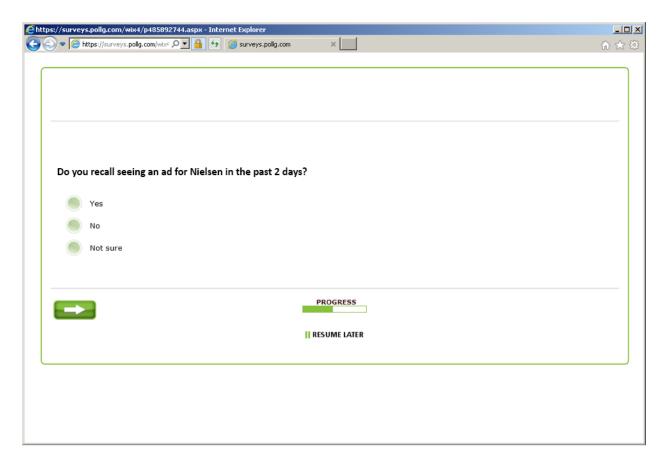
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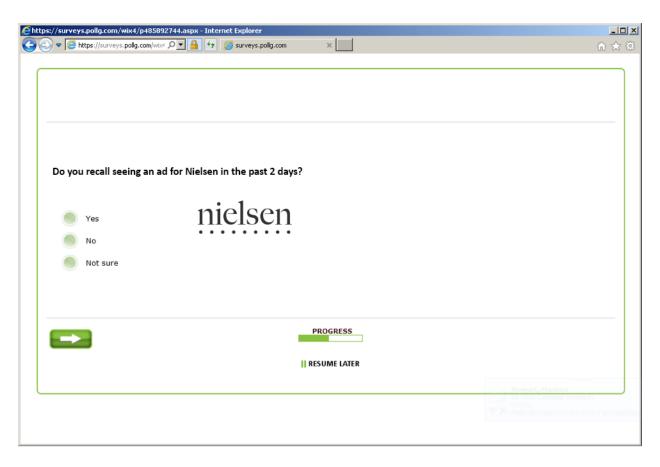
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AD RECALL QUESTION WITHOUT PRIME



AD RECALL QUESTION WITH PRIME



EXPOSURE TO AD	EXPOSURE TO PRIME	
	YES	NO
YES	1	2
NO	3	4

- Prime will trigger implicit memory and increase ad effectiveness measures
- Main hypothesis: Difference_{PRIME} > Difference_{NO PRIME}

SUMMARY OF EXPERIMENTAL DESIGN

EXPOSURE TO AD	EXPOSURE TO PRIME	
	YES	NO
YES		2
NO	3	4

- Prime will trigger implicit memory and increase ad effectiveness measures
- Main hypothesis: Difference_{PRIME} > Difference_{NO PRIME} (1-3) > (2-4)
- Done to net out false positives

RESULTS – AD RECALL

	AD RECALL	DIFFERENCE
Prime		
Exposed to ad	27.6%	
Not exposed to ad	3.8%	23.8
No prime		
Exposed to ad	22.6%	
Not exposed to ad	7.9%	14.7
Total	15.4%	

Main hypothesis is supported:
Difference_{PRIME} > Difference_{NO PRIME}

RESULTS – AD RECALL

	AD RECALL	DIFFERENCE
Exposed to Ad		
Prime	27.6%	
No prime	22.6%	5.0
Not Exposed to Ad		
Prime	3.8%	
No prime	7.9%	-4.1
Total	15.4%	

- Prime increases true positives <u>and</u> decreases false positives
- Assimilation effects and contrast effects

RESULTS – PURCHASE INTENT

	PURCHASE INTENT	DIFFERENCE
Prime		
Exposed to ad	7.0%	
Not exposed to ad	7.1%	0.1
No prime		
Exposed to ad	7.1%	
Not exposed to ad	7.1%	0.0
Total	7.1%	

Main hypothesis is NOT supported: Difference_{PRIME} > Difference_{NO PRIME}

Purchase intent is related to several other factors

NEXT STEPS

- Logistic regression to predict ad recall, purchase intent
- Exposure to ad
- Exposure to prime
- (Ad recall)
- Article-related variables
 - Interest, ease, previously read
 - Reading comprehension, time spent on page
- Demographics
 - Age group, gender, region, race, Hispanic origin, education,
 HH income

SUMMARY

- Survey experiment
- Test whether priming improves online ad effectiveness
- Prime (visual cue) improves measure of online ad recall
 - Consistent with common sense given visual nature of ads
 - Increases true positives
 - Reduces false positives
- Story with purchase intent is less clear
 - Exposure to ad, prime have no impact on purchase intent
 - Ad recall has large impact
 - Several other factors influence purchase intent

THANK YOU FOR ATTENDING!

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