



The Interactive Ad Effect: CTAs in Mobile Video Shoppable Ads

OCTOBER 2018

Sponsored by:

TREMOR
VIDEODSP

The study was produced by the IAB Digital Video Center of Excellence. The final report, findings, and recommendations were not influenced by our sponsor.

Commissioned Research Partner:

 **MEDIASCIENCE**

Acknowledgment

This research study would not have been possible without the financial support of our sponsor, Tremor Video DSP (tremorvideodsp.com).

The study was produced by the IAB Digital Video Center of Excellence. The final report, findings, and recommendations were not influenced by our sponsor.

What Are Shoppable Ads?

Mobile Shoppable Video Ads

Mobile shoppable ads are interactive ads designed to connect consumers with products, services or merchants within the ad itself.

They can provide product learning and exploration, links to additional information and in some cases may enable click-to-buy capabilities within the ad. The number of steps between content viewing and commerce can vary tremendously from platform to platform (and for instance from app based experiences to mobile web experiences).

For this initial IAB study we focused on video-based interactive ads in a mobile web environment with the goal of understanding what initial calls to action work best.

As this was a lab environment (not a live campaign) there was no behavioral or contextual targeting applied.

Why We Did This Study

Background

IAB set out to explore shoppable mobile video ads and how consumers interacted with them.

The study sought to use several methods to measure consumer response to these mobile shoppable interactive video ads: Biometrics, Eyetracking and Survey. Neuro and Eyetracking were used to measure subconscious responses that might not surface otherwise. Survey metrics were used to get consumers' conscious opinions on the ad formats.

Some of the key points IAB hoped to prove out were:

- Do mobile shoppable video ads with CTAs get consumers' attention?
- Which CTAs work best in getting consumers' attention?
- Do consumers' impressions of a brand improve after interacting with a shoppable mobile ad?

Key Takeaways: Mobile Shoppable Interactive Ads Work

- **Shoppable Ads with CTAs Get Attention:** Whether or not a user interacts with the ad, interactive ads with a call to action (CTA) get users' attention. Across different methodologies, users notice interactive calls to action and process the information, giving more thought and attention to mobile shoppable ads with CTAs.
- **Interaction with Shoppable Ads Raises Attention and Improves Ad Impact:** Consumers pay attention while interacting and afterwards give higher brand ratings.
- **'Learn More' CTA Works Best:** Consumers want to learn more from an interactive ad without leaving the page. As compared to ads with other calls to action or CTAs ('Shop Now', 'Sweepstakes' CTA, or no CTA), 'Learn More' ads got the most eyetracking fixation on the CTA and got the best biometric attention, better than 'Sweepstakes' ads, 'Shop Now' or no CTA. Brand ratings for 'Learn More' interactive ads were even more positive after consumers interacted.
- **'Learn More' Ads Familiarize the Consumer with the Product:** Survey findings support the biometric results showing that consumers like being able to learn more within the ad itself (#1 survey response: 'I like the convenience of choosing to get more information about a product advertised without leaving the page').
- **'Shop Now' Ads Hold Potential:** Consumers like being able to shop within the ad (#2 response: 'It's convenient to be able to buy directly from an ad'). This shows potential for shoppable ads in that if the ad were retargeted for something the consumer was interested in purchasing, the ads could have higher potential to convert to dollar sales.
- **'Learn More' as Primer, 'Shop Now' as Closer:** It's up to advertisers to correctly target consumers with 'Shop Now' ads. For untargeted ads or products with longer purchase decision cycles, 'Learn More' ads can help prime consumers in their first ad encounters.
- **Anatomy of a Shoppable Ad:** Put the CTA up front and if there's education to be done, employ 'Learn More.' The first 5 seconds of ads with CTAs get the most attention across categories tested and methods used. Further, 'Learn More' had the highest and longest engagement when served, even at the last 5 sec.

Summary of Methodology

- **In Lab:** Seventy Austin and Chicago residents participated in a lab-based study in which they were exposed to an unbranded mobile short-form video platform. They chose from a variety of short form video content to watch.
- **Mobile Interactive Ads:** Four :15 second pre-roll video ads were served during each session. Each interactive ad featured a different call to action (or no call to action) and featured 1 of 4 brands in the verticals of Auto, CPG, Entertainment-Movies or Retail. No participant saw the same ad or ad format more than once.
- **Three Methods:** Biometric, eye tracking, and survey tools were used to measure implicit levels of engagement and attention, as well as explicit responses such as brand memory and purchase intent.
 - **Biometric** measures included both skin conductivity (sweat) and heart rate.
 - Skin conductivity measures the intensity of a person's response to the content they encounter.
 - Heart rate measures attention (the heart slows as we process information - We report this as the Interbeat Interval, which is the amount of time between each heartbeat).
 - **Eyetracking** measures included % Who Looked, Relative Time Looked, Time Looked, Time participant looked at AOI, # Fixations (Frequency of Looks),# Revisits
 - **Survey** measures included Unaided Recall, Aided Recall, Brand Lift and Purchase Intent

Overview & Research Questions

Overview

IAB Members are interested in the effectiveness of different interactive ad models. Specifically, advertising effectiveness and consumer behavior related to ads which feature certain links and hot spots. The goal of such creative is often to give the user various options to engage with the message beyond viewing a video, to deliver a more immersive brand interaction, and to offer the consumer a measure of control in the ad experience.

This study utilized proper experimental design and lab-based research to measure the effectiveness of the interactive shoppable ad format specific to the mobile environment. Effectiveness of these formats were compared to effectiveness of a non-interactive video ad.

Research Questions

- 1) How effective is the shoppable interactive ad model when compared to traditional non-interactive video? (Eye Tracking, Biometrics, and Survey Metrics)
- 2) Does the shoppable interactive ad model produce the most favorable consumer evaluations/preferences? (Survey Metrics)
- 3) How are different executions of interactive ads evaluated by consumers? (Survey Metrics).



Test Environment

NeuroQube™ data collection stations in AUSTIN and CHICAGO with personal TVs, headphones, eye tracking & biometric equipment, and survey PCs.

Sample

N = 70
Male = 47%
Female = 53%

Biometrics



Biometrics inform Researchers, in real time, about internal states that are not articulated. By measuring skin conductance and heart rate, conscious and subconscious biases are removed. Advanced systems and analysis dig into target audiences' emotional, cognitive, physiological, and psychological reactions.

Eye Tracking



Eye tracking technology and analysis provides key insights to how viewers attend to and consume content. With a variety of metrics which indicate levels of attention, and attention patterns, Researchers can better optimize key visual messages and branding.

Survey



Survey is the icing on the cake. With our mixed methods procedure, surveys provide added knowledge pre- and post-exposure. Custom in-depth, refined surveys utilize established survey metrics to measure typical KPIs. When this data set is triangulated with that from other tools, a comprehensive assessment of performance is achieved.

Study Design

A within-subjects experimental design was applied for this research. All participants experienced all three interactive experiences with a control ad (order rotates):

Natural Interaction

Participants were told “We’re interested in your evaluations of online video experiences”

Brand A – ‘Shop Now’ Format

Brand B – ‘Learn More’ Format

Brand C – ‘Sweepstakes’ Format

Brand D – No Call To Action

Mid-Session Survey

Forced Interaction

Participants were told “We’re now interested in your opinions about interactive ads you may have been shown. Please click to interact with the ads we show you”. If they didn’t click, it went through anyway

Same experience as above. Except participants were forced to interact with the ads.

Post Exposure Survey

n = 70

Stimuli

Viewing Platform – Mobile Videos



Great Dane Dog Pouts Until Mom Gives Him A Morning Hug - KERNEL | The Dodo
The Dodo • 3.8M views



open world games
ProZD • 1.9M views

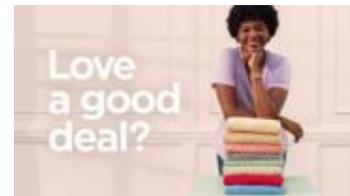


Entertainment - Movie (Trailer)

Auto



Retail

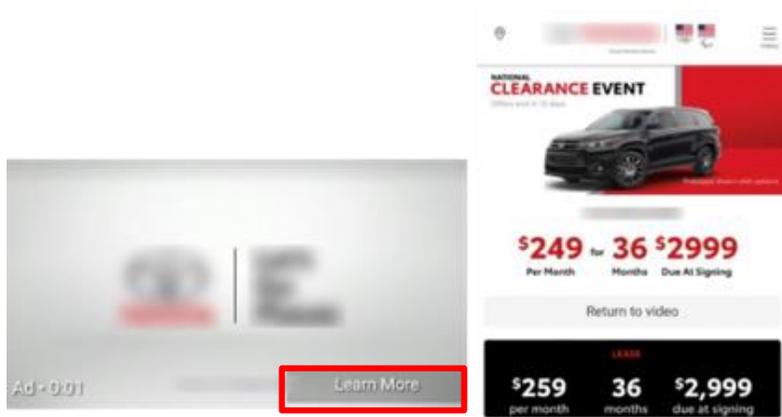


CPG



Ad Formats

'Learn More'

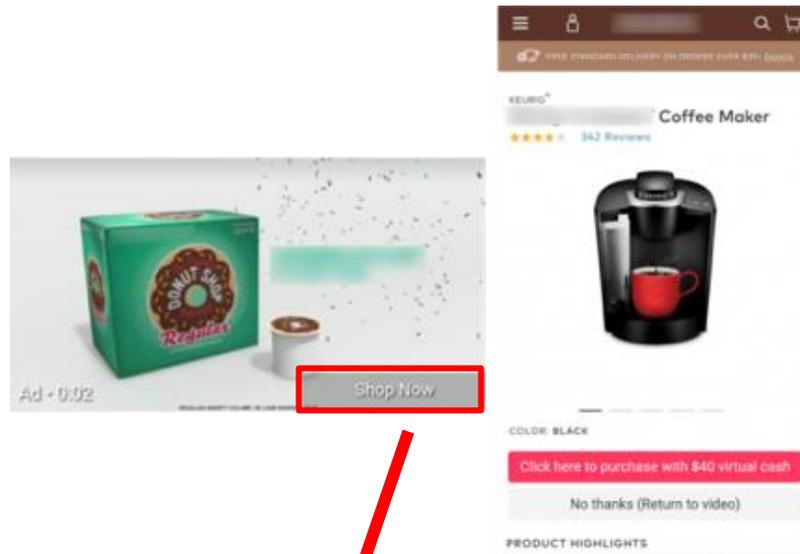


A screenshot of a car advertisement. The ad features a dark SUV and text including "NATIONAL CLEARANCE EVENT", "\$249 for 36 \$2999", and "Return to video". A red box highlights a "Learn More" button in the bottom right corner of the ad.



Learn More

'Shop Now'

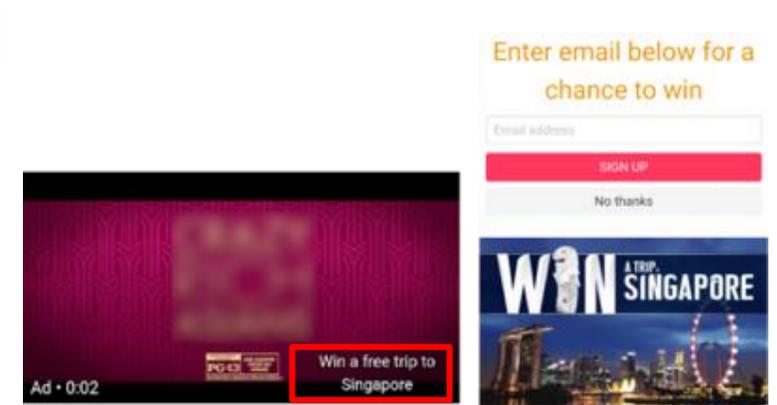


A screenshot of a coffee maker advertisement. The ad shows a black coffee maker and a box of donut coffee. Text includes "Coffee Maker", "342 Reviews", and "Click here to purchase with \$40 virtual cash". A red box highlights a "Shop Now" button in the bottom right corner of the ad.



Shop Now

'Sweepstakes' 2nd Step is 'Shop Now'



A screenshot of a sweepstakes advertisement. The ad includes a form to "Enter email below for a chance to win" and a "SIGN UP" button. Below the form is a banner for "WIN A TRIP TO SINGAPORE". A red box highlights a "Win a free trip to Singapore" button in the bottom right corner of the ad.



Win a free trip to
Singapore

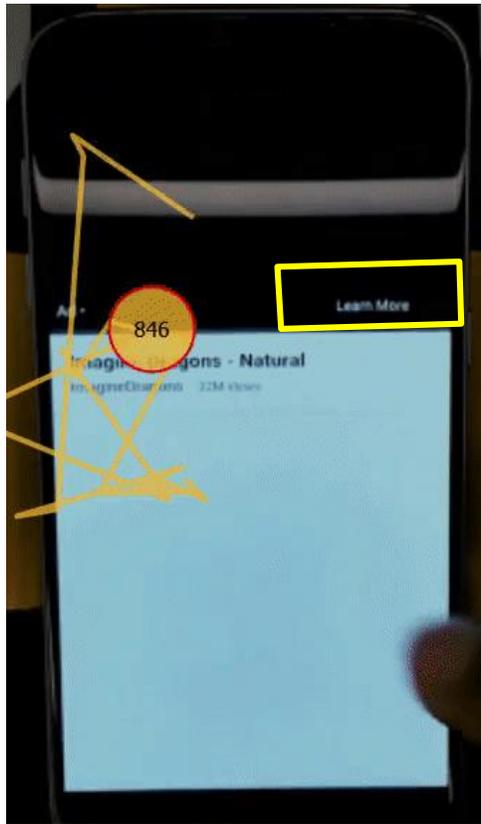
A close-up photograph of a person's eye, showing the iris, pupil, and eyelashes. The eye is looking slightly to the right. The skin around the eye is visible, showing some texture and a few small spots.

Mobile Shoppable Video Ads Work

CTAs Get Double the Eyegaze: Across all ads, consumers spent twice as long looking at an ad with a CTA than at an ad without a CTA.

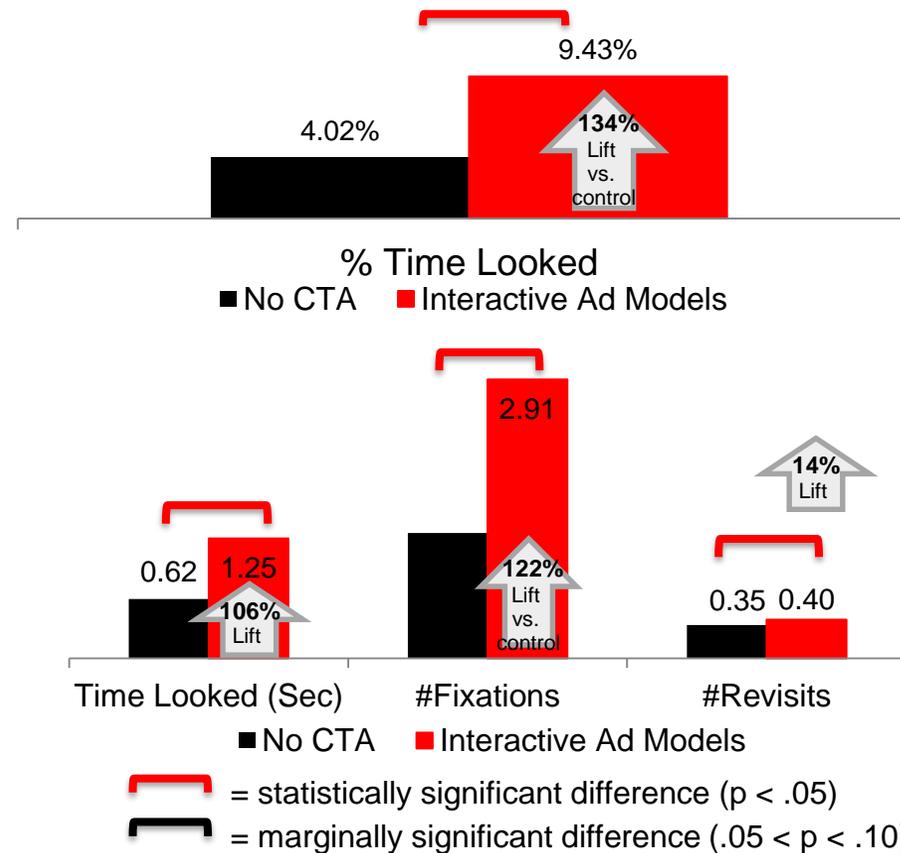


Mobile Shoppable Video Ads Work



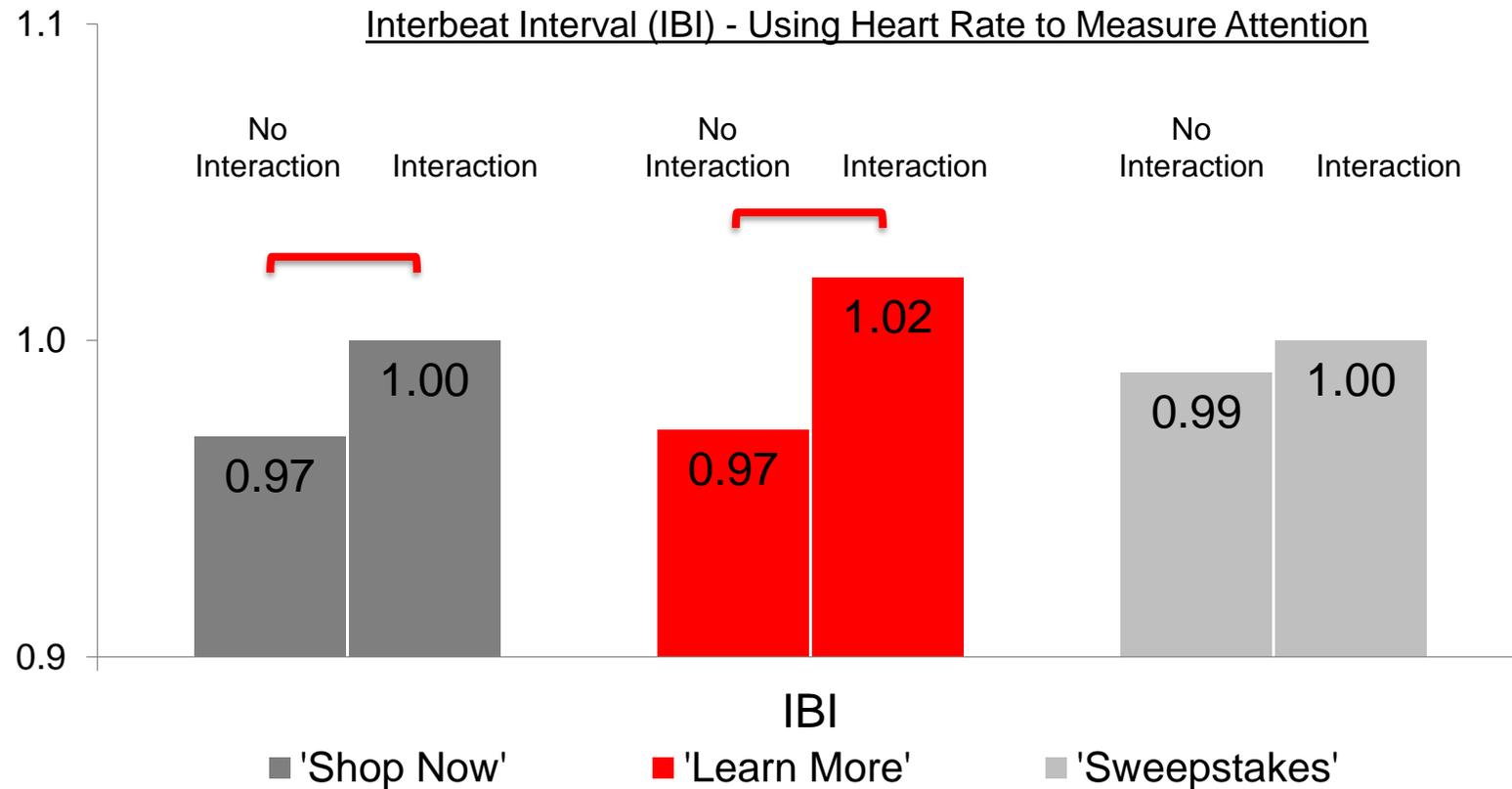
^Gif^

Eye Tracking – CTAs



Interaction Increases Positive Attention: Consumers Increase Attention When Interacting with Mobile Shoppable Video Ads

Mobile Shoppable Video Ads Work

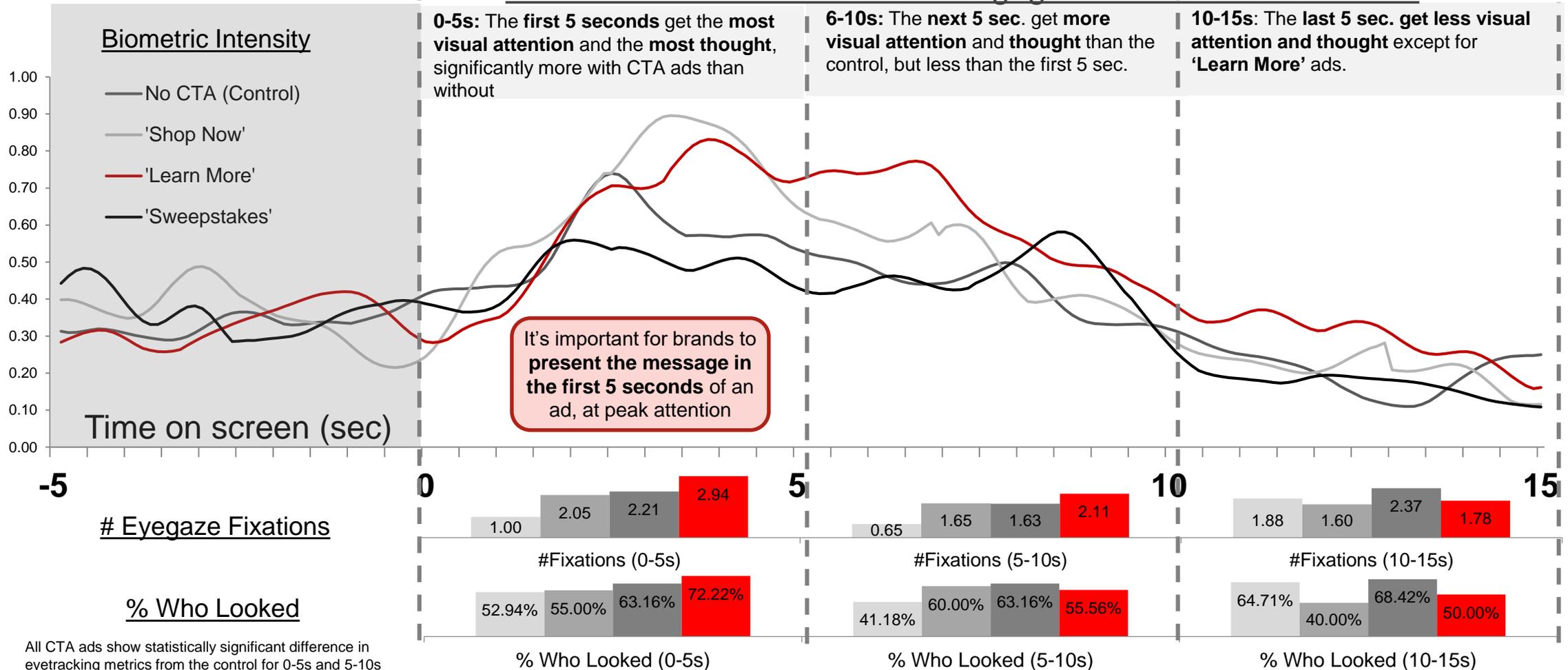


 = statistically significant difference ($p < .05$)
 = marginally significant difference ($.05 < p < .10$)

Tying it All Together: The first 5 seconds of ads with CTAs get the most eyetracking (visual) attention. This correlates to biometric intensity (heartrate) and thought attention.



Visual Attention and Biometric Engagement of an ad over time:



All CTA ads show statistically significant difference in eyetracking metrics from the control for 0-5s and 5-10s

The number of fixations that occur within an AOI (area of interest) when it was on screen. Fixation requires one to continuously look at one area for over 100ms. (Note: This is not the same as a person looking outside of the AOI and back at it. If a person looks at four items within an AOI and never leaves that AOI, then four fixations are still counted.)

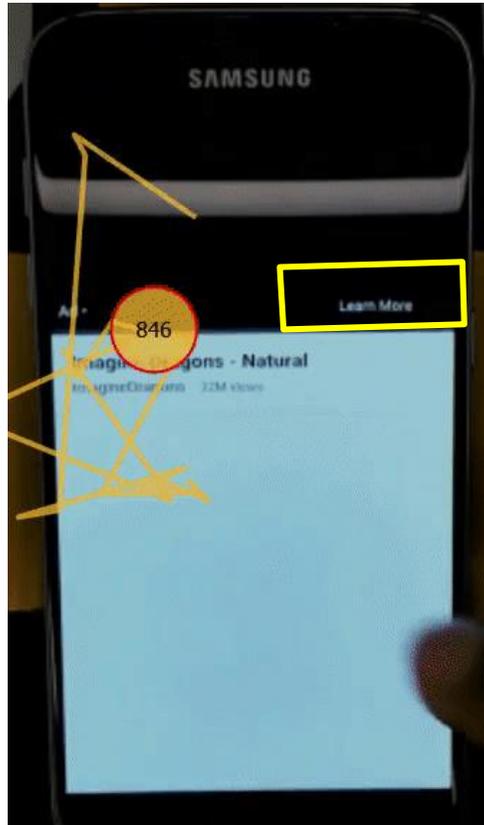


Shoppable Ads
with CTAs get
attention

Calls to Action Are Noticed: More people looked at the CTA, spent more time on it and looked at it again

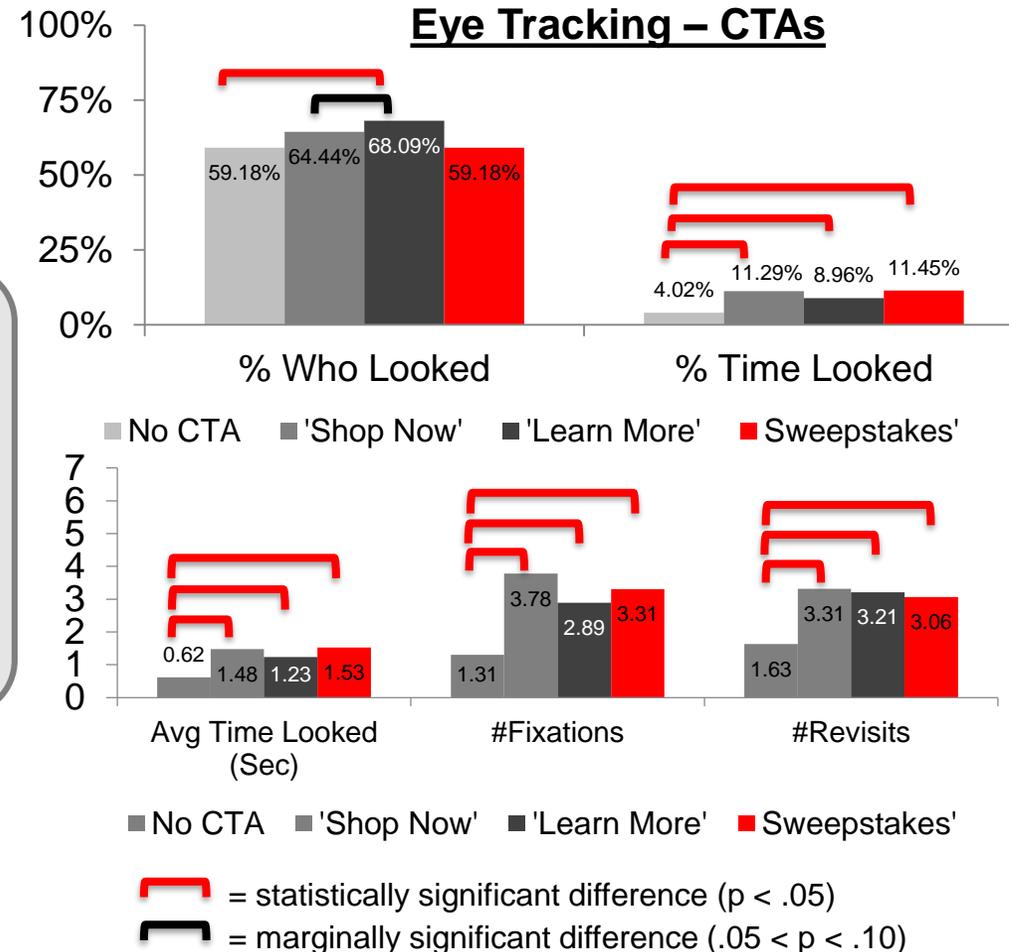


Shoppable Ads with CTAs Get Attention



^Gif^

Significantly more visual attention was paid to the call to action (CTA) area of the screen when a CTA was present





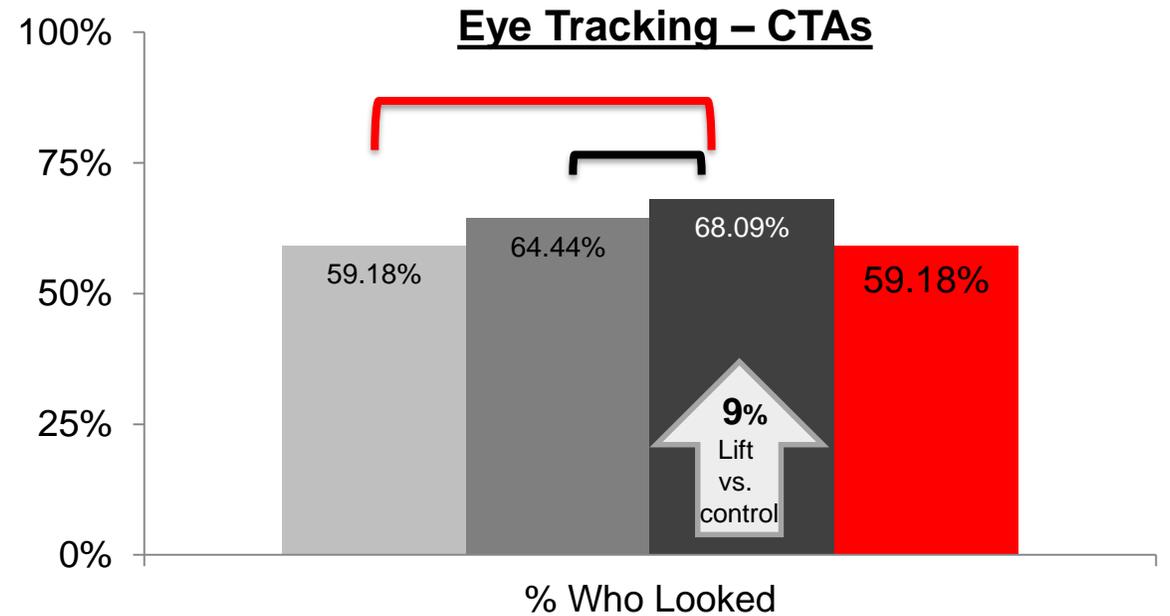
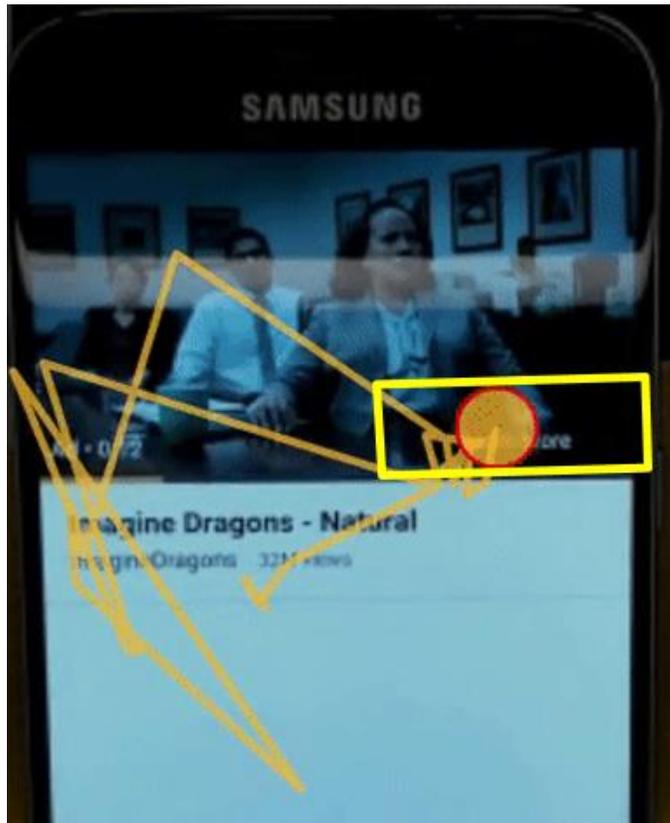
Which CTA
Works Best?

'Learn More' Call to Action Is the Most Eye Catching:

Over two-thirds of respondents looked at the 'Learn More' area



'Learn More' Works Best



■ No CTA ■ 'Shop Now' ■ 'Learn More' ■ Sweepstakes'

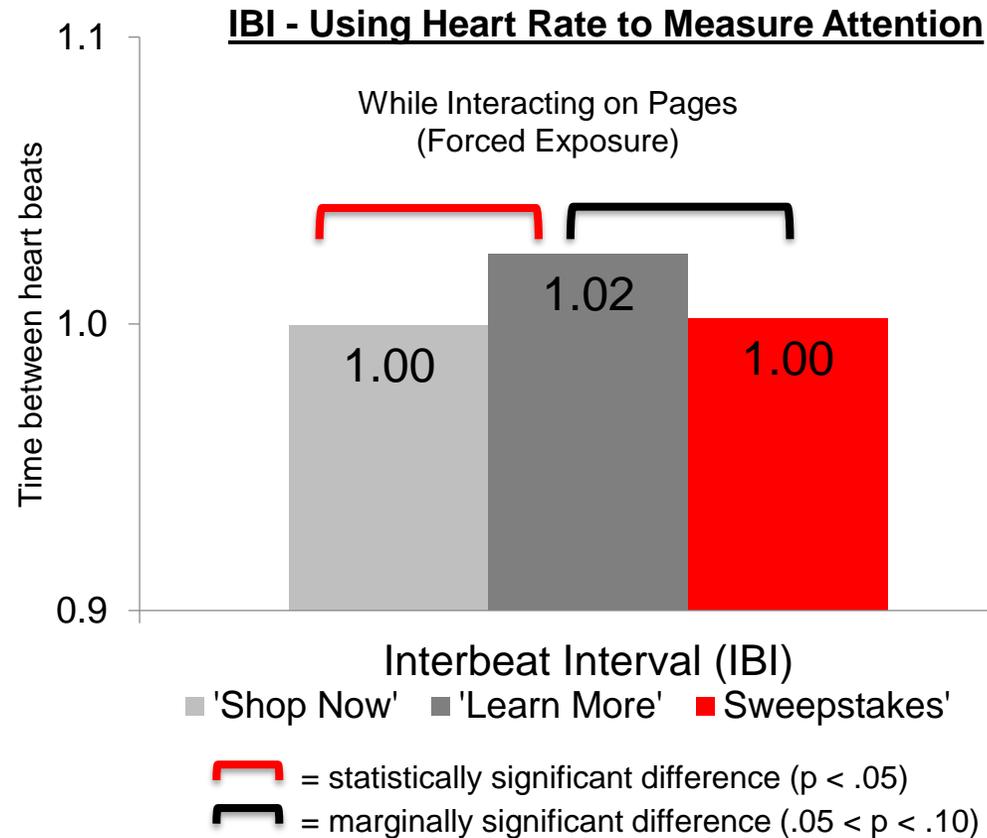
= statistically significant difference ($p < .05$)

= marginally significant difference ($.05 < p < .10$)

'Learn More' Ads Get Consumers Thinking: Heart rate (IBI) indicates higher attention



There is a significantly larger interval between heart beats while participants are viewing the 'Learn More' Pages, indicating that they're **devoting more resources to thinking while on 'Learn More' pages.**



Schedule Test Drive Now

NATIONAL CLEARANCE EVENT
Offers end in 12 days

Click here to schedule a test drive

No thanks (Return to video)

LEASE
\$259 per month 36 months \$2,999 due at signing

\$31,230 starting¹

- Safety Sense™ P (TSS-P)
- Seating for up to eight
- 60/40 split second- and third-

Learn More

NATIONAL CLEARANCE EVENT
Offers end in 12 days

\$249 for 36 \$2999
Per Month Months Due At Signing

Return to video

LEASE
\$259 per month 36 months \$2,999 due at signing

\$31,230 starting¹

- Safety Sense™ P (TSS-P)
- Seating for up to eight
- 60/40 split second- and third-

Want to win free gas for a year?

Enter email below for a chance to win

Email address:

SIGN UP

No thanks

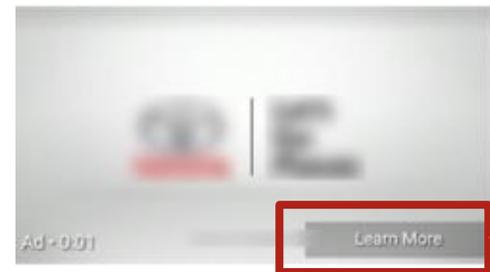
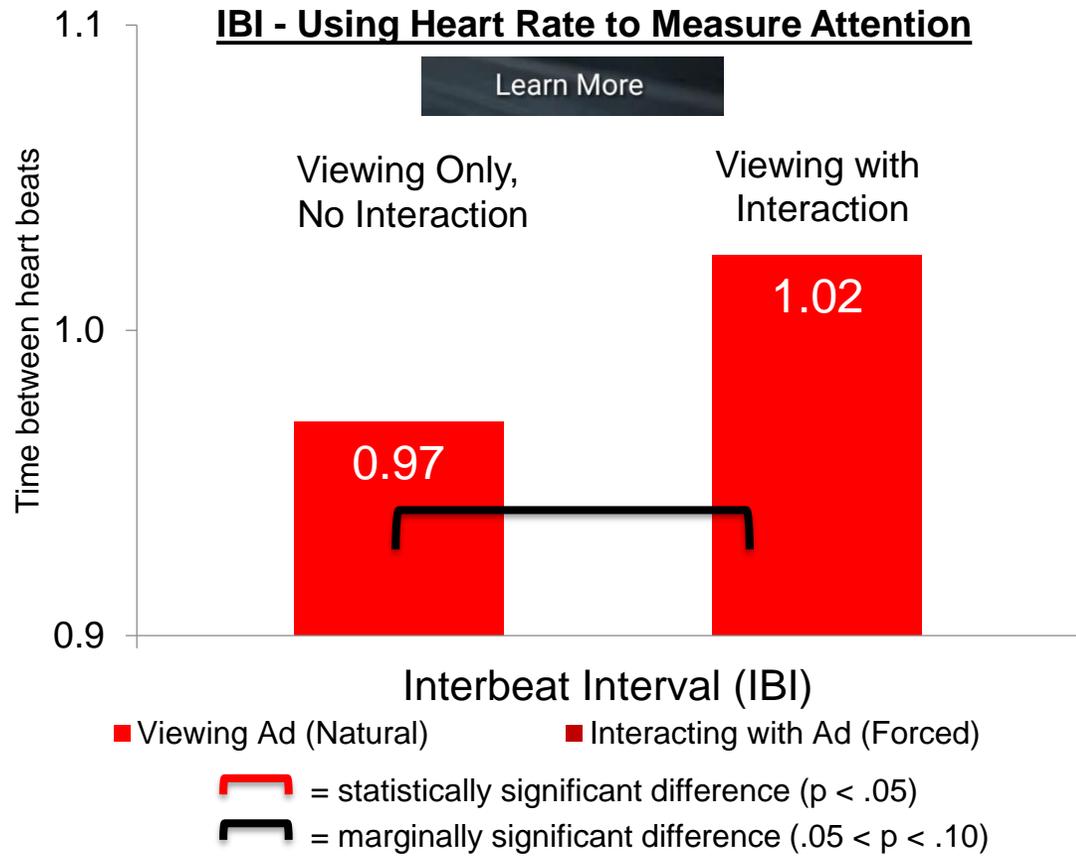
ENTER TO WIN
FREE GAS FOR A YEAR
LIMITED TIME ONLY!

Heart rate can provide a measure of attention (the heart slows as we process information - We report this as the Interbeat Interval, which is the amount of time between each heartbeat)

Interaction with 'Learn More' Ads Causes More Attention: Heart rate (IBI) indicates higher attention



Attention Increased **After Interacting** with 'Learn More' Ads



Learn More

Ad-001
Learn More

NATIONAL CLEARANCE EVENT
Offers end in 12 days

\$249 for 36 \$2999

Per Month Months Due At Signing

Return to video

\$259
per month
36
months
\$2,999
due at signing

\$31,230 starting ¹

- Safety Sense™ P (TSS-P)
36
- Seating for up to eight
- 60/40 split second- and third-

Heart rate can provide a measure of attention (the heart slows as we process information - We report this as the Interbeat Interval, which is the amount of time between each heartbeat)

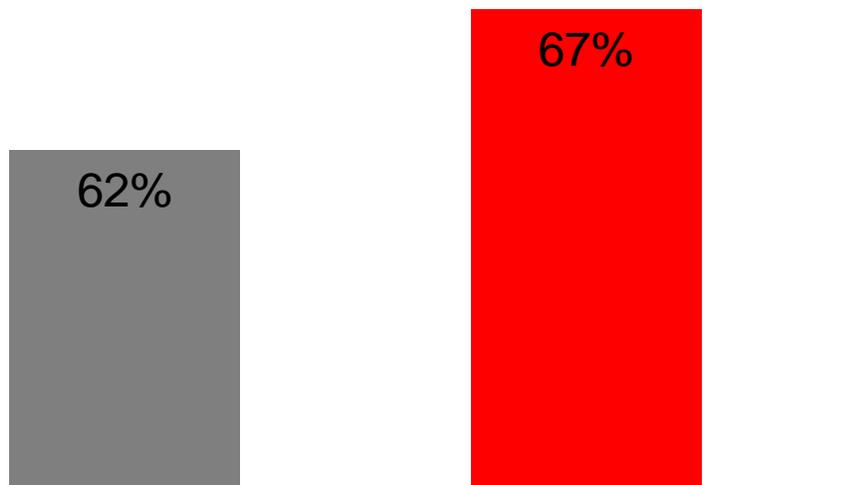
Purchase Intent is higher with 'Learn More' ads



Consumers have higher intent to buy the product after seeing an ad with the 'Learn More' CTA

Purchase Intent (Survey)

Learn More



Purchase Intent

■ Control (No CTA) ■ 'Learn More' Ad

After Viewing Ad (Natural Exposure)



Learn More

NATIONAL CLEARANCE EVENT
Offers end in 12 days

\$249 for **36** **\$2999**
Per Month Months Due At Signing

Return to video

LEASE
\$259 per month **36** months **\$2,999** due at signing

\$31,230 starting ¹

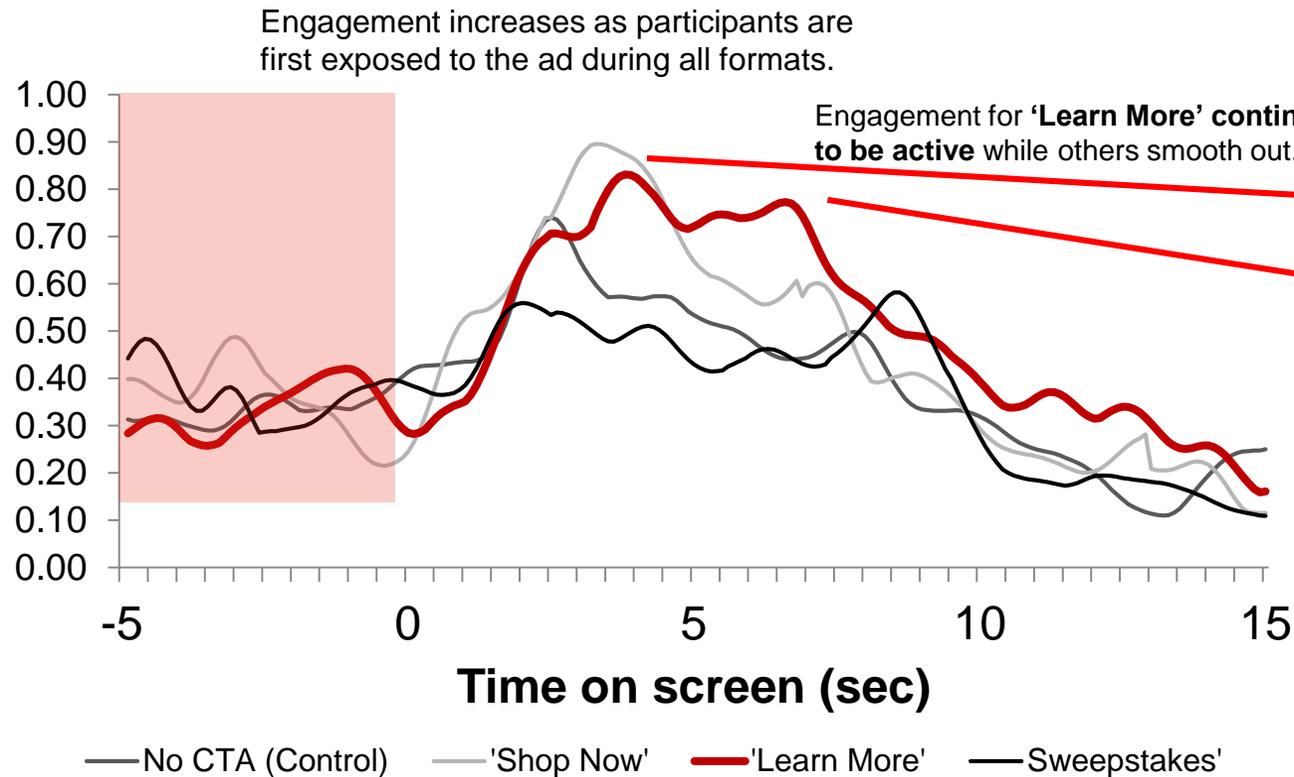
- Safety Sense™ P (TSS-P)
36
- Seating for up to eight
- 60/40 split second- and third-

'Learn More' is the Most Engaging:

Ads with the 'Learn More' CTA get more engagement



Biometric Intensity: Measuring the Physiological Reaction to an Ad



During Pre-roll Ads
Natural Exposure

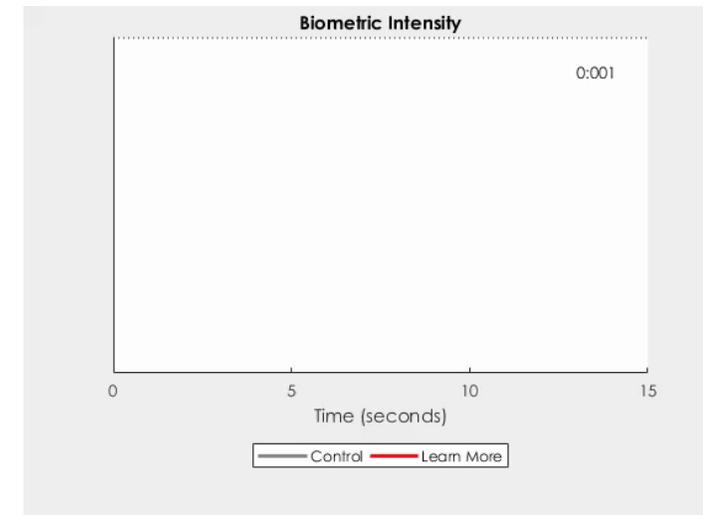
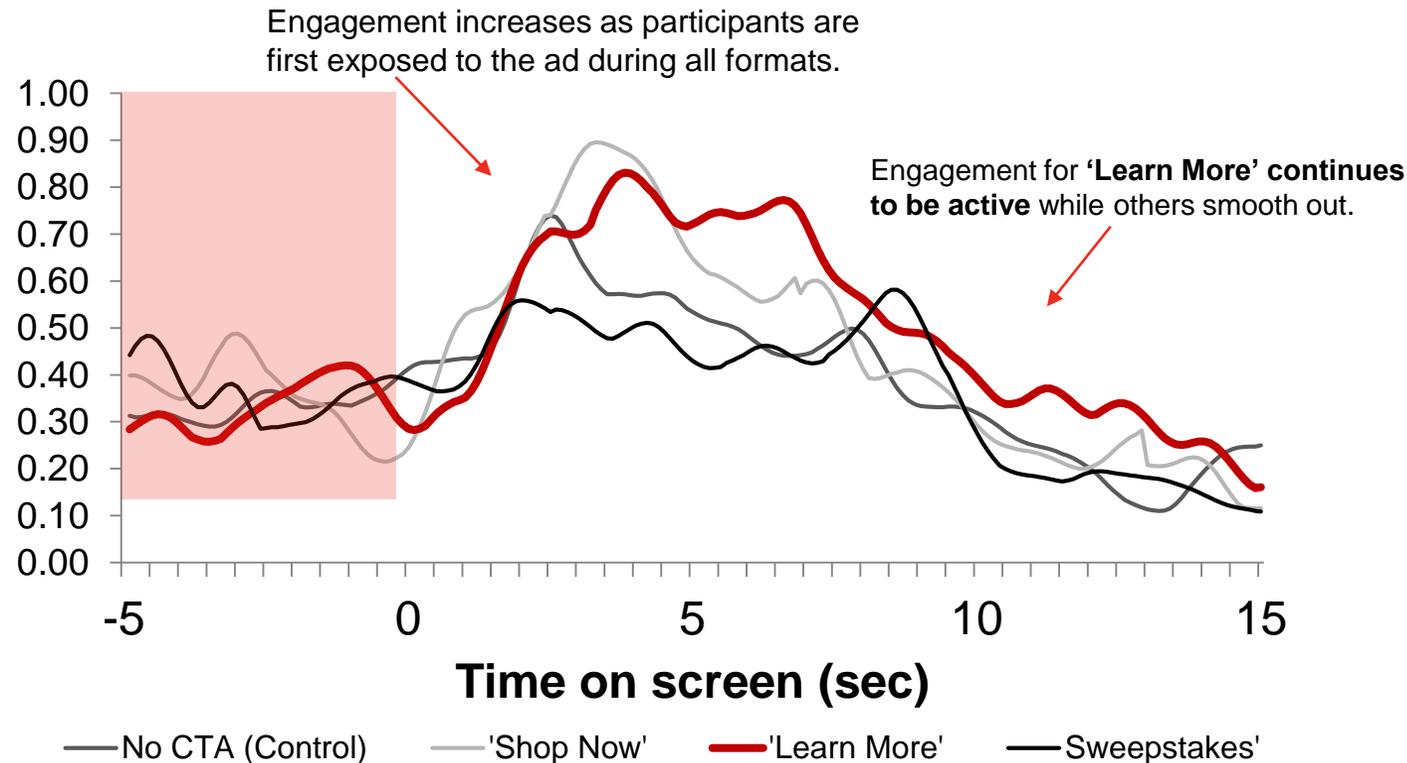
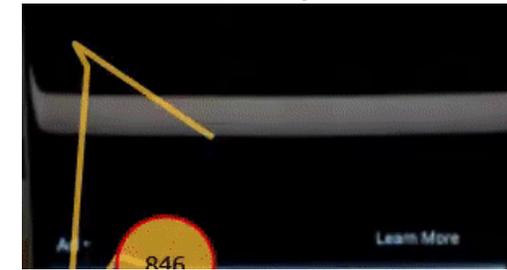


Biometric Intensity is a measure of Skin conductivity (also called Galvanic Skin Response). This measures the intensity of a person's physiological response to the content they encounter.



Biometric Intensity Proves that 'Learn More' is Most Engaging

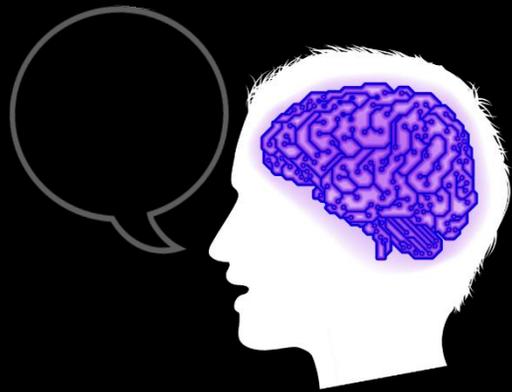
During Pre-roll Ads
Natural Exposure



Biometric Intensity is a measure of Skin conductivity (also called Galvanic Skin Response). This measures the intensity of a person's physiological response to the content they encounter.



Consumers' subconscious behaviors told us they paid attention to mobile shoppable video ads with CTAs and preferred the 'Learn More' ads.



Consumers' conscious survey responses confirmed these findings.



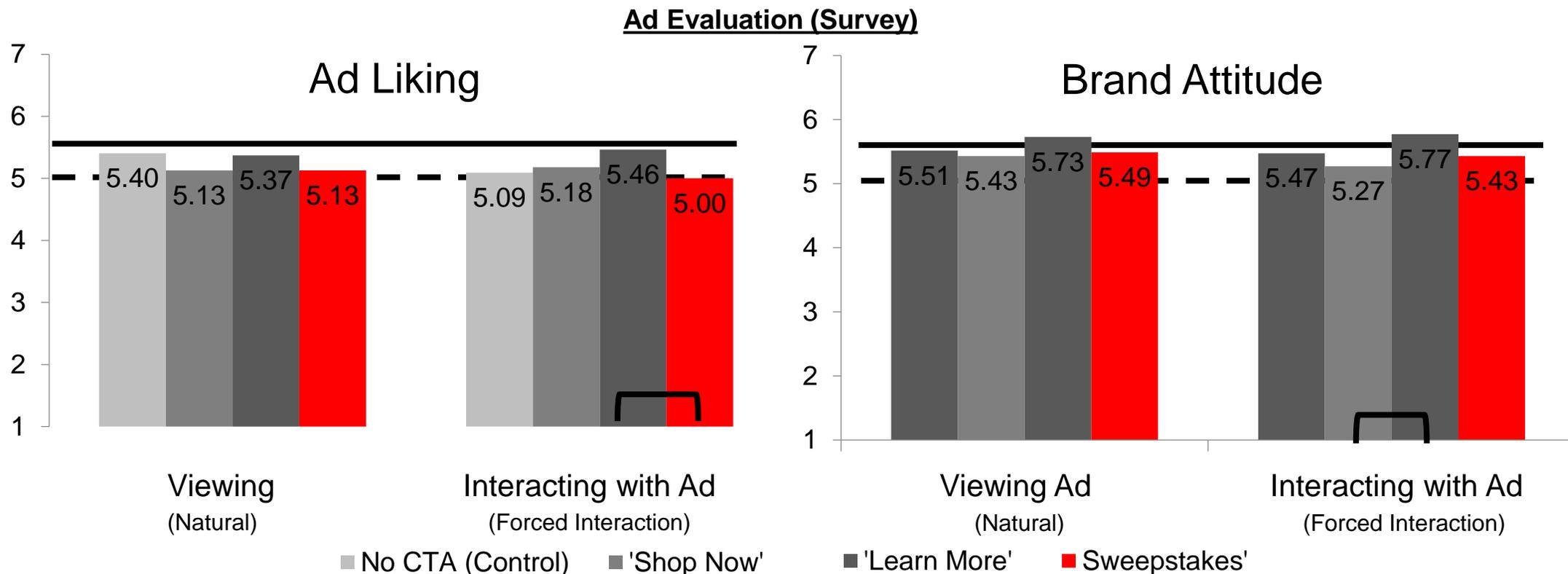
‘Learn More’ Ads
Are Higher Rated

'Learn More' Ads and Brands are Better Liked:

Interacting with 'Learn More' ads leads to higher brand and ad ratings



After interacting with the ads, consumers tended to like the 'Learn More' ads significantly more than the 'Sweepstakes' ads and had a more positive attitude toward the brands with 'Learn More' than 'Shop Now' CTAs.



Percentile scores are derived from computing the 95th and 50th percentiles from 43 studies that include both TV and Digital ads, and include over 75,000 ad evaluations.

High
 Average

= statistically significant difference (p < .05)
 = marginally significant difference (.05 < p < .10)

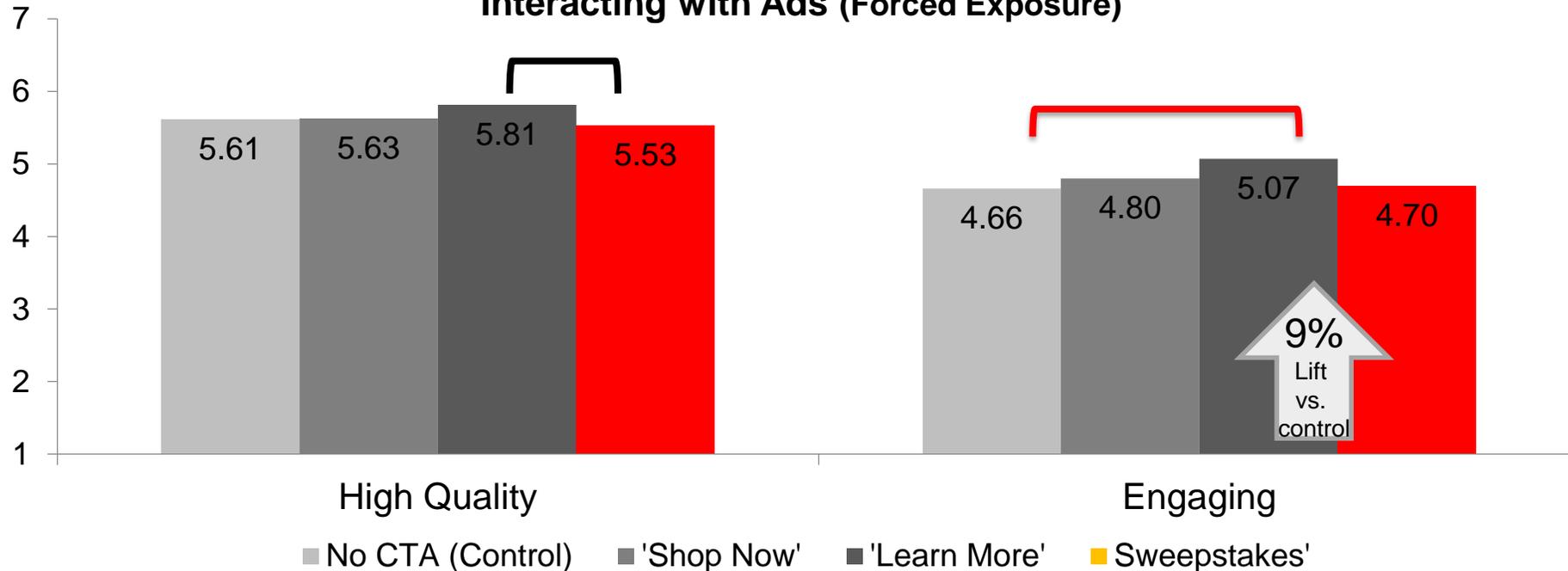
'Learn More' Ads Seen as More Engaging and Higher Quality: Interacting with 'Learn More' ads leads to higher quality and engagement ratings



After participants interacted with the ads, they tended to feel that 'Learn More' ads were higher quality than 'Sweepstakes' ads

Ad Evaluation

Interacting with Ads (Forced Exposure)

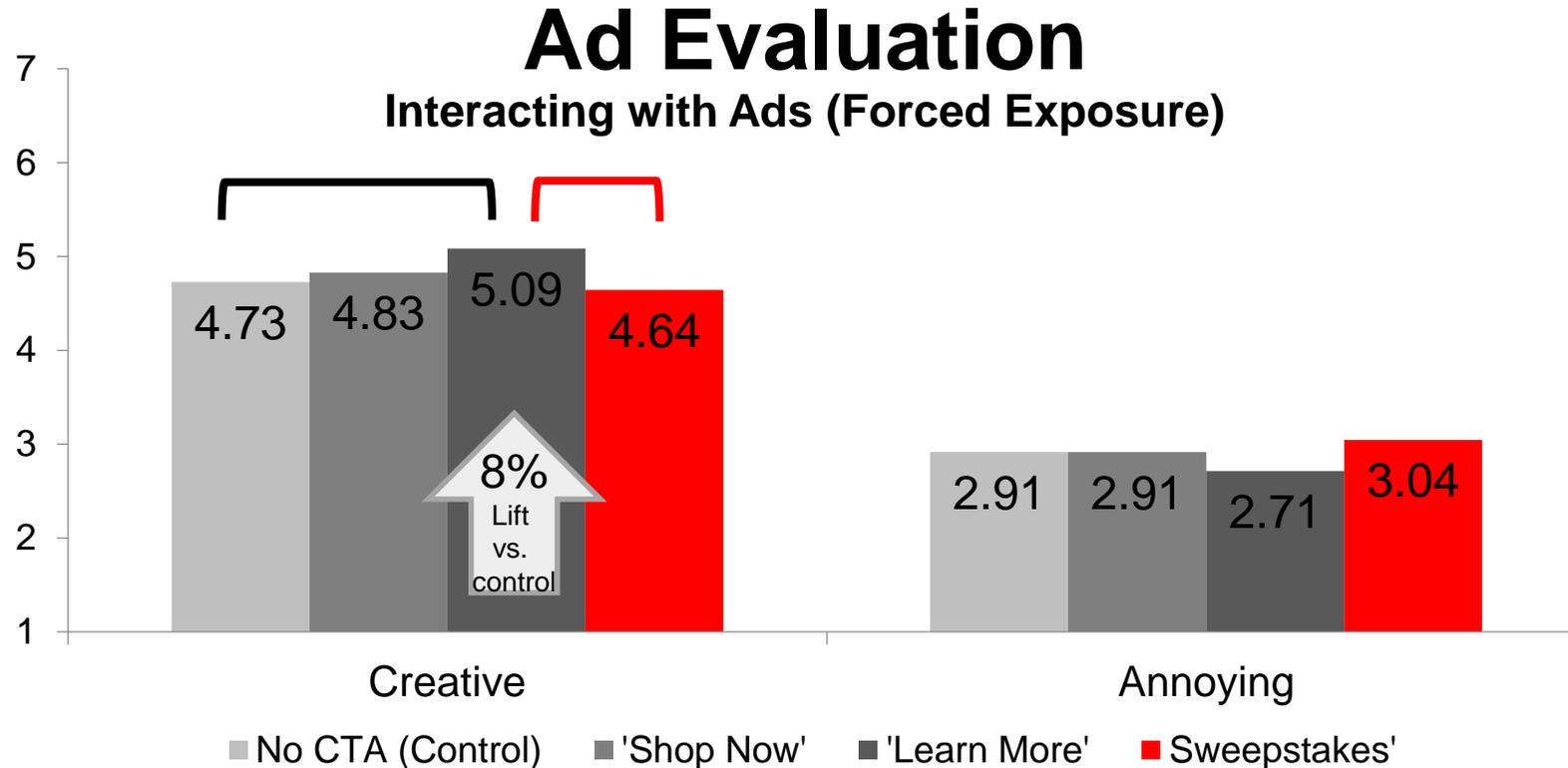


= statistically significant difference ($p < .05$)
 = marginally significant difference ($.05 < p < .10$)

'Learn More' Ads Seen as More Creative: Interacting with 'Learn More' ads leads to the perception that the ads are more creative and less annoying



After participants interacted with the ads, they tended to find the 'Learn More' ads to be more creative than the other formats (including the control with no CTA).



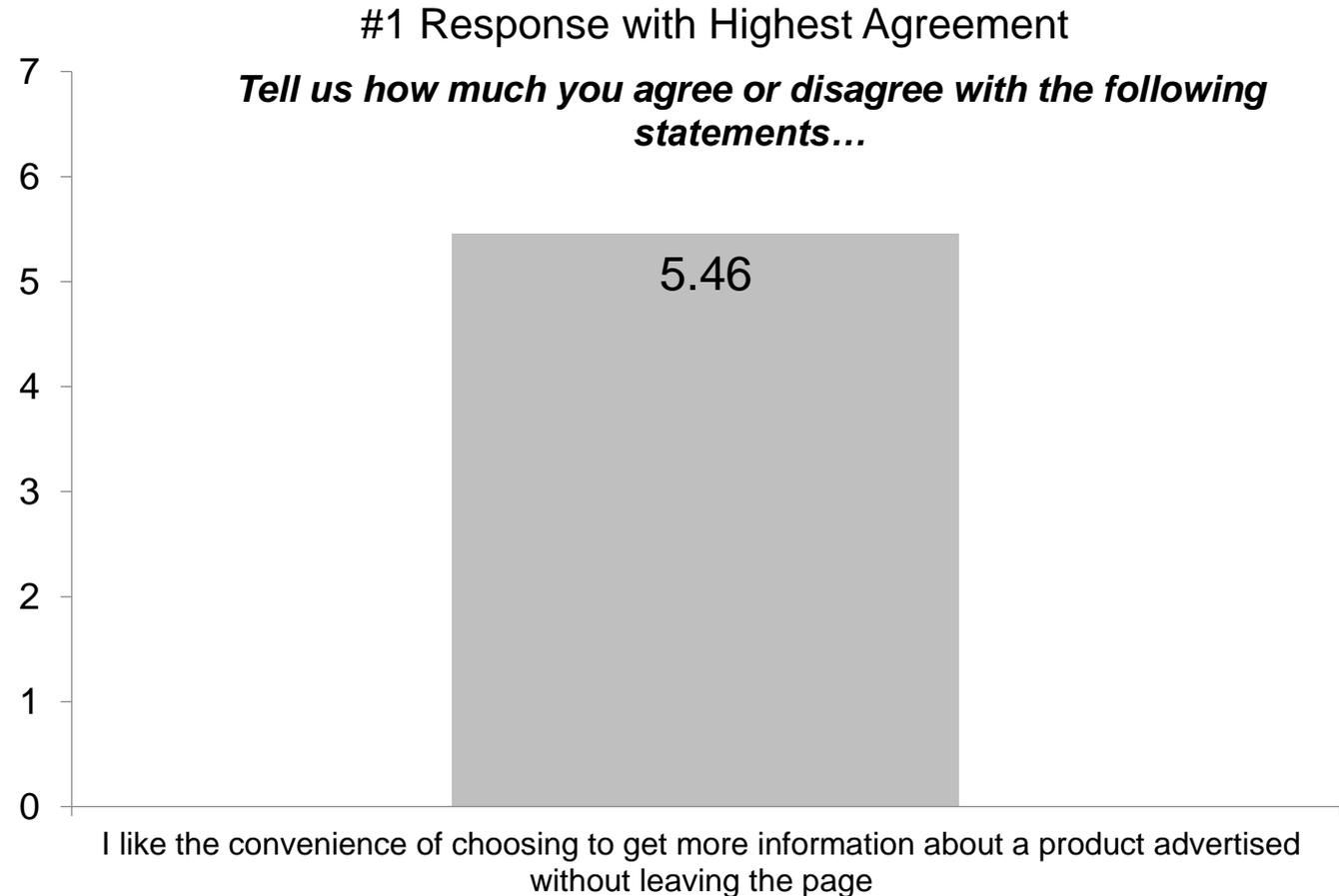
= statistically significant difference ($p < .05$)
 = marginally significant difference ($.05 < p < .10$)



Consumers Like Shoppable Ads

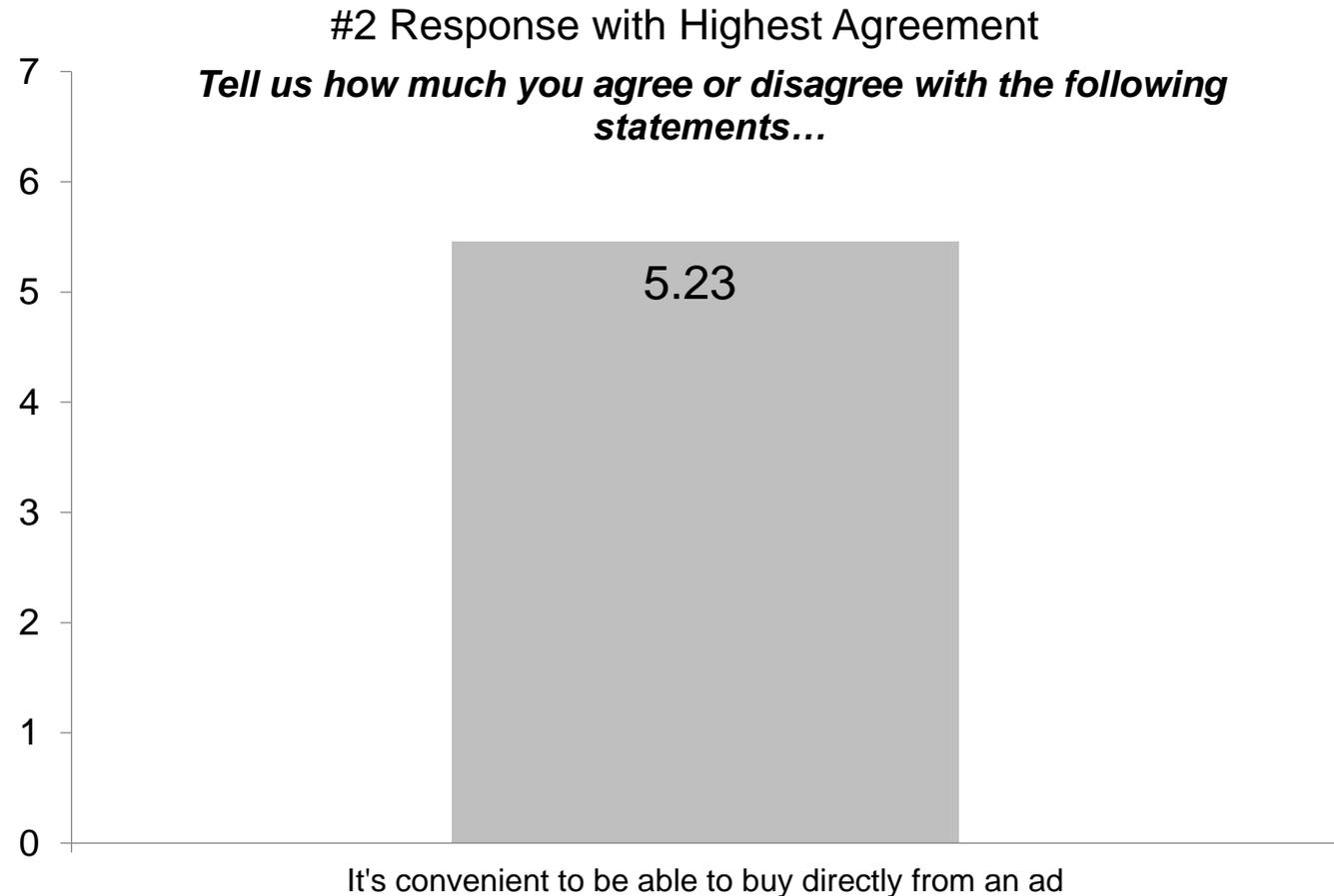
Consumers Want to 'Learn More' from a Shoppable Ad Without Leaving the Page

Interactive ads are useful for building upper funnel metrics and familiarizing the consumer with the product



Consumers Like the Concept of Shopping within the Ad

Proper targeting of shoppable ads holds promise: If the ad were retargeted for something the consumer was interested in purchasing, the ads could have higher potential to convert to dollar sales.

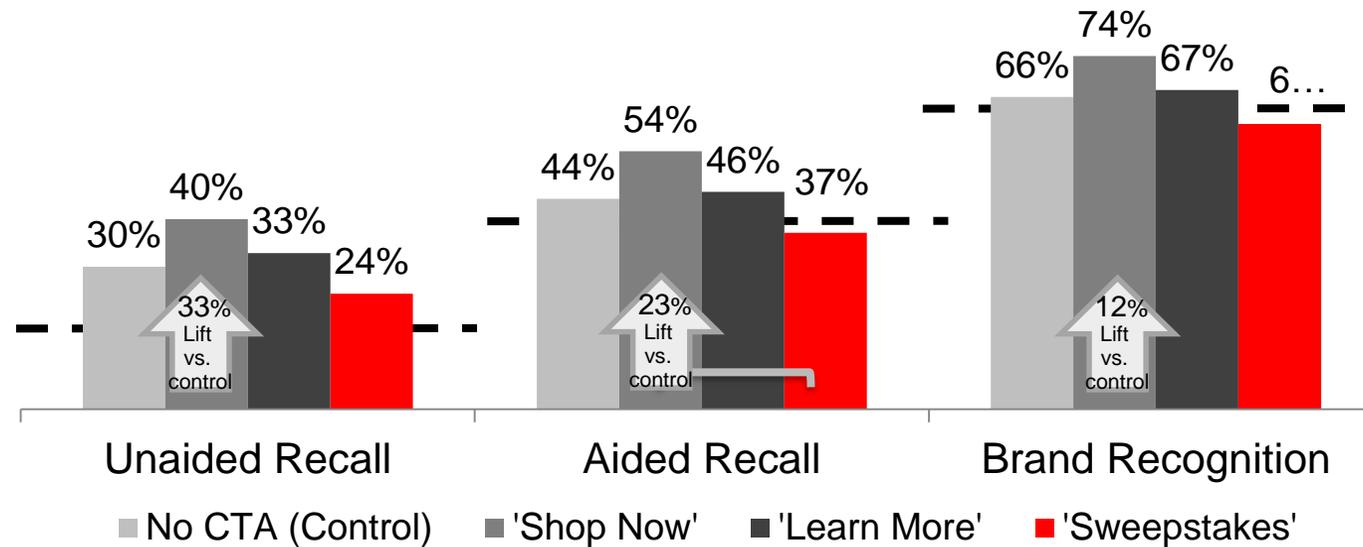


'Shop Now' Ads are More Memorable Among Those Who've Expressed Previous Interest in the Brand Categories

Higher Recall for 'Shop Now' ads by those interested in the brand categories implies that using 'Shop Now' ads for targeted audiences, or in-market consumers, could be effective.

Memory Effects

(Natural Exposure: Among participants who have interest in the brand categories)



--- Average
 --- Average percentile scores are derived from computing the 95th and 50th percentiles from 43 studies that include both TV and Digital ads, and include over 75,000 ad evaluations.

N=56

— = statistically significant difference ($p < .05$)
 — = marginally significant difference ($.05 < p < .10$)



Shoppable Video Ads Work

Consumers like shoppable video ads and paid more attention to ads that contained an interactive call to action component than to ads that did not. Attention increased when they interacted with these ads, showing that interactive shoppable ads with CTAs work. They also stated that they like these types of ads.

‘Learn More’ Ads Work Best

We learned that if a product reaches an unfamiliar audience, ‘Learn More’ works best. Consumers told us via survey that they like being able to learn about a product in an ad without leaving the page. Consumers also showed us via unconscious biometric reactions (Eyetracking, Heart Rate, Skin Conductance) that ‘Learn More’ ads are more enticing. ‘Learn More’ could be just the right measure to get consumers familiarized with a product and perhaps more open to clicking through and hitting the buy button at the next ad encounter.

‘Shop Now’ Ads Hold Potential

The ‘Shop Now’ CTA might be too hard of a sell to a new audience. But consumers told us they did like the concept of being able to shop within the ad itself. In the ‘real world’, where most ads are targeted to consumer interests and previous shopping behaviors, ‘Shop Now’ could prove effective in driving direct sales among consumers.

Memory Metrics & Implications



Unaided Recall

For unaided recall, participants were asked to “Please list the brands you remember. If you do not clearly remember any brands, please feel free to guess. Any response is encouraged. (If you remember no brands, type 'none')”.

Unaided Recall measures cognitive retrieval of information.

Aided Recall

For aided recall, participants were asked “Do you remember the brands that were advertised for each category? Please note that there might have been multiple products advertised for certain product categories. If you can remember multiple products for one category, please separate the products you list with a comma. (Again, guesses are encouraged.)”.

Aided Recall measures cognitive storage of information.

Recognition

For Brand Recognition participants were asked: “Can you identify the brands that were advertised during your session from the list below? Some are brands you actually saw and some are decoys.”

Recognition measures cognitive encoding of information.



Eye tracking metrics are averaged among all the valid (usable eye tracking data) participants

% Who Looked

Percentage of total participants who looked at an Area-of-Interest (AOI) or full screen

Relative Time Looked

Time participant looked at AOI/Ad exposure time (or Ad on screen time). (Note: This is a function of the time that the page was visible, so if the page was up for 3 seconds and they looked at it for 1, then it would be 33%.)

Time Looked

Time participant looked at AOI (absolute value in seconds)

Fixations (Frequency of Looks)

The number of fixations that occur within an AOI when it was on screen. Fixation requires one to continuously look at one area for over 100ms). (Note: This is not the same as a person looking outside of the AOI and back at it. If a person looks at four items within an AOI and never leaves that AOI, then four fixations are still counted.)

Revisits

The average number of revisits and one revisit is defined as a participant looked at an AOI after s/he looked outside of the AOI



Biometric Intensity

Electrodermal activity (EDA) is variation in the conductance of the skin due to sweat secretion. The sympathetic nervous system's fight-or-flight response triggers the activation of sweat glands when we experience something that captures our attention. The water and electrolytes in sweat increase the conductance of a small current passing between two sensors placed on the fingers, measuring the strength and timing of fight-or-flight responses to important stimuli.

MediaScience researchers take this raw, noisy measure of conductance and apply cutting-edge algorithms to isolate the activity of the neurons that drive the phasic release of sweat (the "phasic driver"). This provides a clearer, more fine-grained measure of physiological arousal. Because the average tonic skin conductance level varies person to person, we standardize each participant's Biometric Intensity measure as a z-score (the # of standard deviations from the mean).

Interbeat Interval (IBI)

The interbeat interval (IBI) is the time between each heartbeat, and is the reciprocal of heart rate. During the fight-or-flight response, heart rate increases (and thus the interval between heart beat shortens, i.e. a lower IBI). Conversely, when people allocate internal cognitive resources to 'thinking', heart rate decreases (allocating more physiological resources to cognitive processes), such as with the 'orienting response' (and thus the interval between heart beats increases, i.e. a higher IBI).

Demographic Information

Gender	
Male	33
Female	37
Age	
Mean	44.4
Range	22-76
Ethnicity	
White/Caucasian	31
African American	14
Hispanic	16
Asian	4
Pacific Islander	0
Other	1
Prefer not to answer	4

Education	
High school or equivalent	3
Vocational/technical school (2 year)	7
Some College	21
Bachelor's degree	28
Master's degree	7
Doctoral degree	1
Professional degree (MD, JD, etc.)	2
Income	
Mean	\$45,000 - \$59,999

Thank You

For more information, visit iab.com/mobile-video-shoppable-ads