

# The Power of Radio Through the Lenses of Emotional Engagement



Pedro Almeida  
MediaProbe

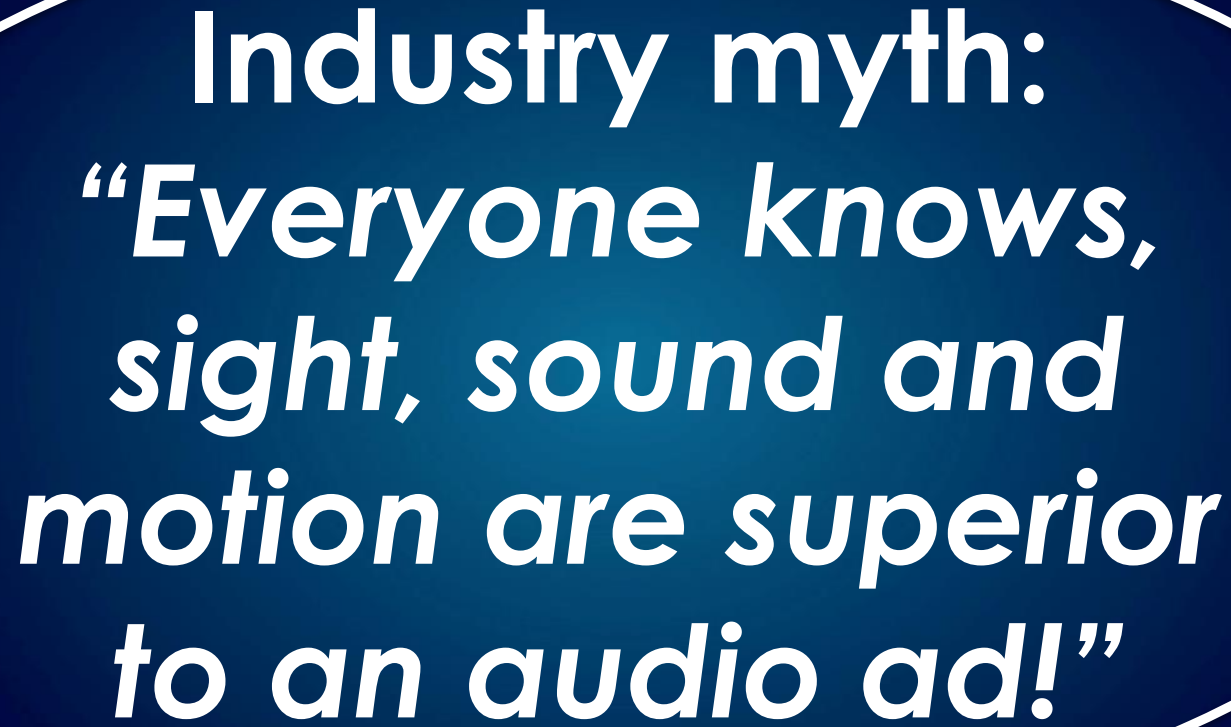


Pierre Bouvard  
Cumulus Media; Westwood One

 CUMULUS  
MEDIA |  Westwood One  
**AUDIO ACTIVE**  
G R O U P

  
**mediaprobe**  
Next Gen Media Measurement

**AM/FM radio outperforms TV ads  
in Mediaprobe neuro creative analysis**



**Industry myth:**  
***“Everyone knows,  
sight, sound and  
motion are superior  
to an audio ad!”***

# Background

The Cumulus Media | Westwood One Audio Active Group® commissioned Mediaprobe, a leader in neuro creative testing, to determine the emotional impact of AM/FM radio ads.

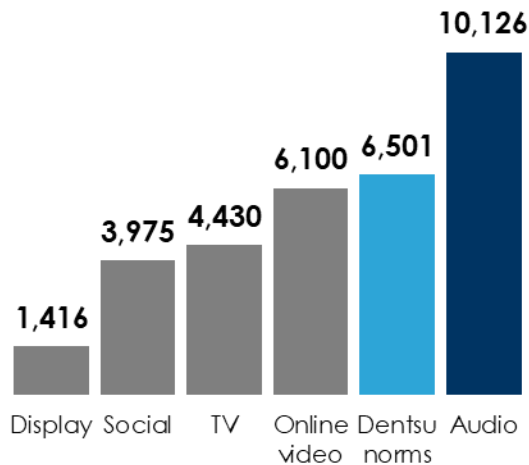
Mediaprobe measured second-by-second Electrodermal Activity (EDA) and dial data on the response of respondents to pre-recorded AM/FM radio segments in various genres for the purpose of understanding overall strength of ad engagement, brand fit, and recall of the AM/FM radio ads. 227 adult 18+ respondents participated. The study took place June 26–July 7, 2023.

The key learning objectives were understanding the emotional signature of successful AM/FM radio ads and comparing Mediaprobe AM/FM radio benchmarks against overall TV norms.

# Dentsu Lumen: Audio attention and brand equity are superior to visual media; Audio is the most cost efficient

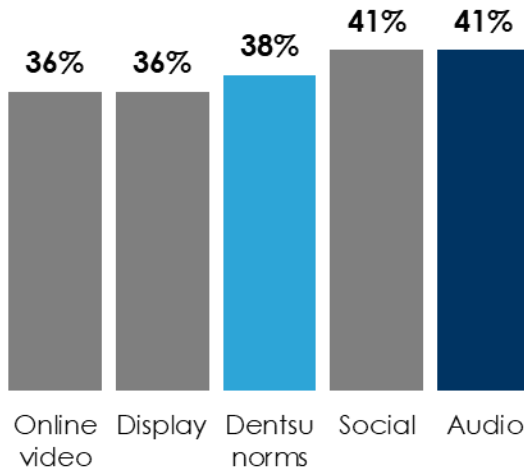
Audio has +56% greater attentiveness scores versus Dentsu norms

Average attentive seconds per (000) - APM



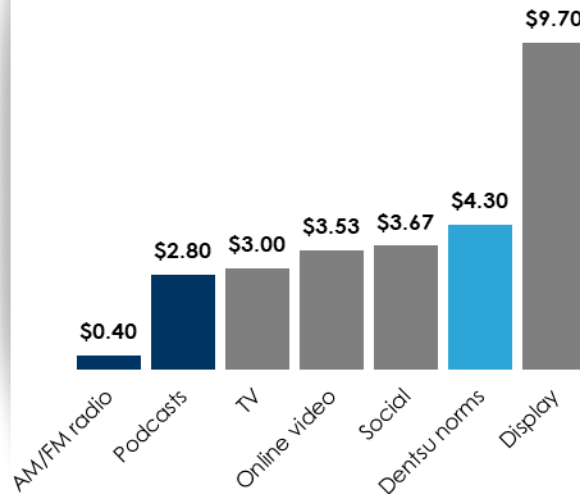
Audio generates +8% greater brand recall versus Dentsu norms

Brand recall



AM/FM radio and podcasts are more cost efficient than TV and Dentsu norms

Attention CPM (αCPM)



Source: Dentsu/Lumen Attention Economy Study 2023: Combined audio attention result highlights, TV not available for brand recall

**ABX conducted a comprehensive analysis of 40,000 ads over a two year period**

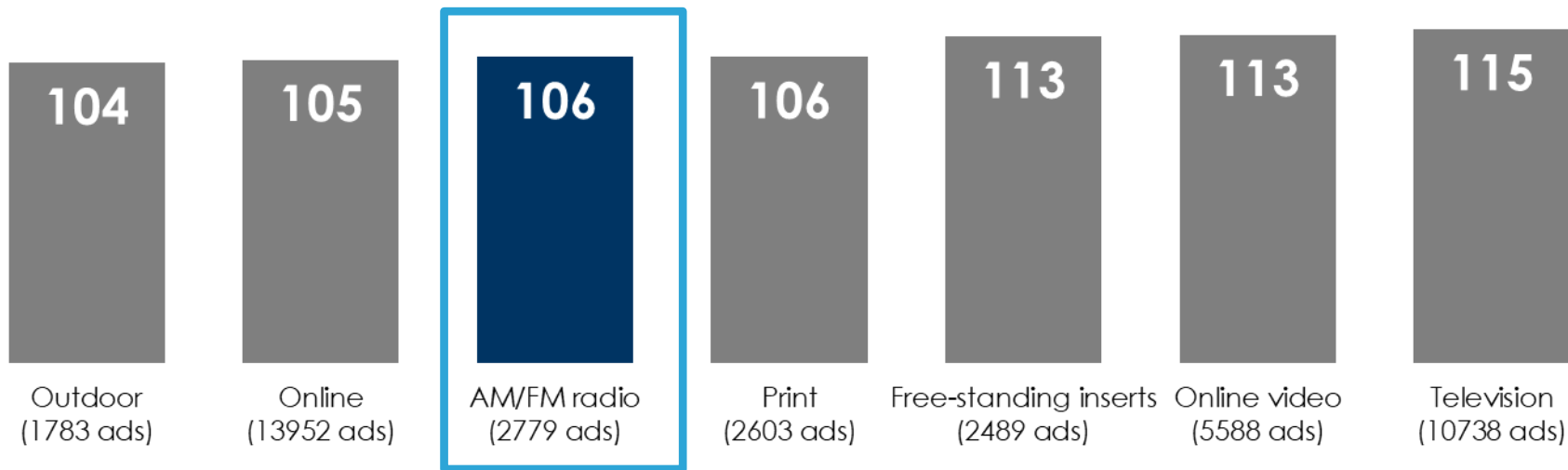
**Largest head-to-head examination of TV and AM/FM radio ads**

Study included:

- 10,738 TV ads
- 2,779 AM/FM radio ads

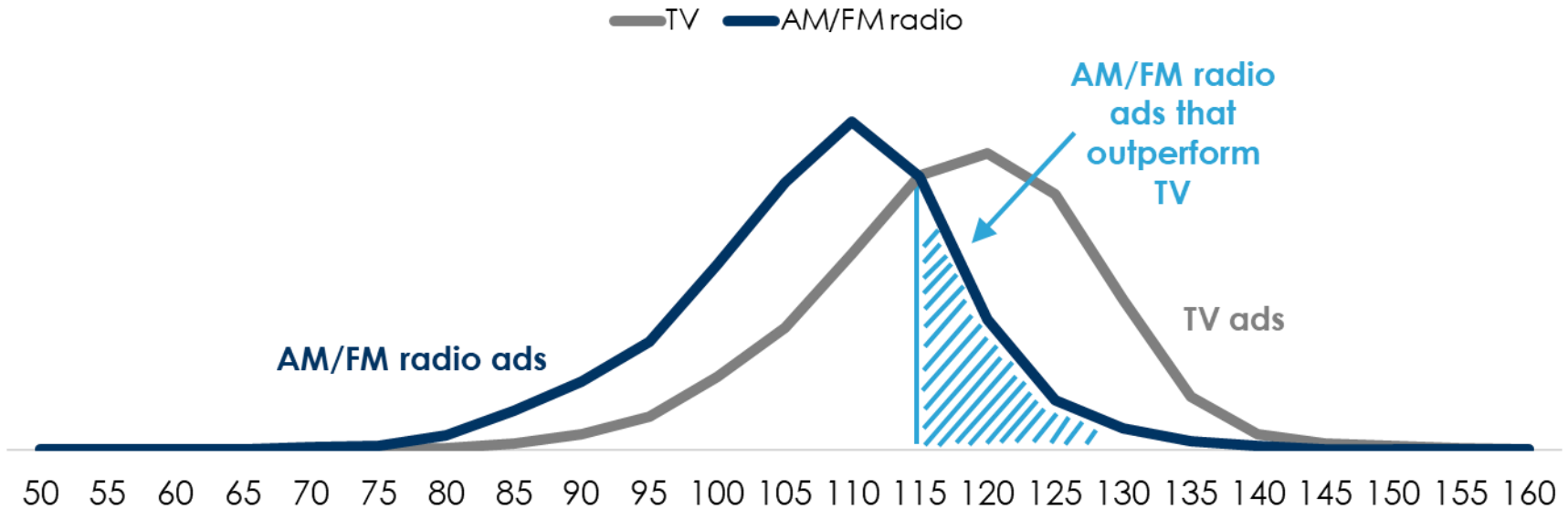
Of 40,000 recently ads tested, AM/FM radio is 92% as effective as TV at one-fourth the CPM and is comparable to print, online display, and outdoor

## Creative effectiveness by media type tested April 2020 – April 2022 ABX Index



# ABX: Best testing AM/FM radio ads outperform 48% of all TV ads even without sight/motion

## ABX Index: Creative effectiveness by media type



Source: ABX Creative Test; TV = 10738 ads; AM/FM radio = 2779 ads



# Mediaprobe metrics

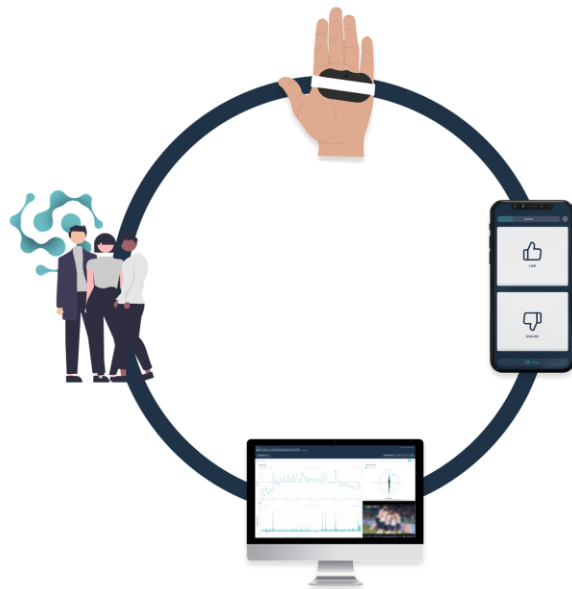


- The Mediaprobe sensor is worn on the hand as consumers are exposed to content in their home.
- **Electrodermal Activity (EDA):** second-by-second engagement is calculated from the average of electrodermal activity signal. This is a very robust measure of emotional activation.
- **Emotional Impact Score (EIS):** Mediaprobe's impact metric is calculated from the electrodermal activity (EDA) of the audience exposed to content.

# Measuring and activating emotion: Mediaprobe's sensor captures emotional engagement in the home and at scale

Panelists receive sensors in the mail and set them up

Mediaprobe manages a community of +3500 panelists



Panelists download the Mediaprobe MediaTest

Panelists listen to the content in their home

# Most decisions are made unconsciously not rationally

“In the words of Jonathan Haidt, “The conscious mind thinks it’s the Oval Office, when in reality it’s the press office. By this he means that we believe we are issuing executive orders, while most of the time we are actually engaged in hastily constructing plausible post-rationalizations to explain decision taken somewhere else, for reasons we do not understand. **But the fact that we can deploy reason to explain our actions post-hoc does not mean it was reason that decided on that action in the first place, or indeed that the use of reason can help obtain it.** Much of the time we pretend that conscious human agency is the only force that drives our behavior, and therefore disparage other less obvious behaviors that we have adopted to hack our unconscious processes as if they were irrational, wistful or absurd.”

Rory Sutherland, Vice Chairman, Ogilvy, in his book, *Alchemy: The Dark Art and Curious Science of Creative Magic in Brands, Business and Life*

# Measuring Electrodermal Activity is an objective way of quantifying emotion in media and advertising content

## What people feel: Implicit



Mediaprobe sensor captures emotional engagement with galvanic skin response (GSR)

## What they think: Conscious/dial



Explicit capture of likes and dislikes throughout the media content

## What they say: Survey



Panelist are asked pre and post session questions to enhance learning

# Ad block design: Consumers were exposed to a 30-minute simulation of an actual AM/FM radio broadcast that included talk content, songs, and ad breaks

Each “broadcast” was ~30 minutes across 4 genres (Urban, News, Adult Contemporary, and Rock/Oldies)

36 AM/FM radio ads were tested in total

Each “broadcast” had 3 ad breaks and the average commercial break had 3 ads

227 people took part in the study

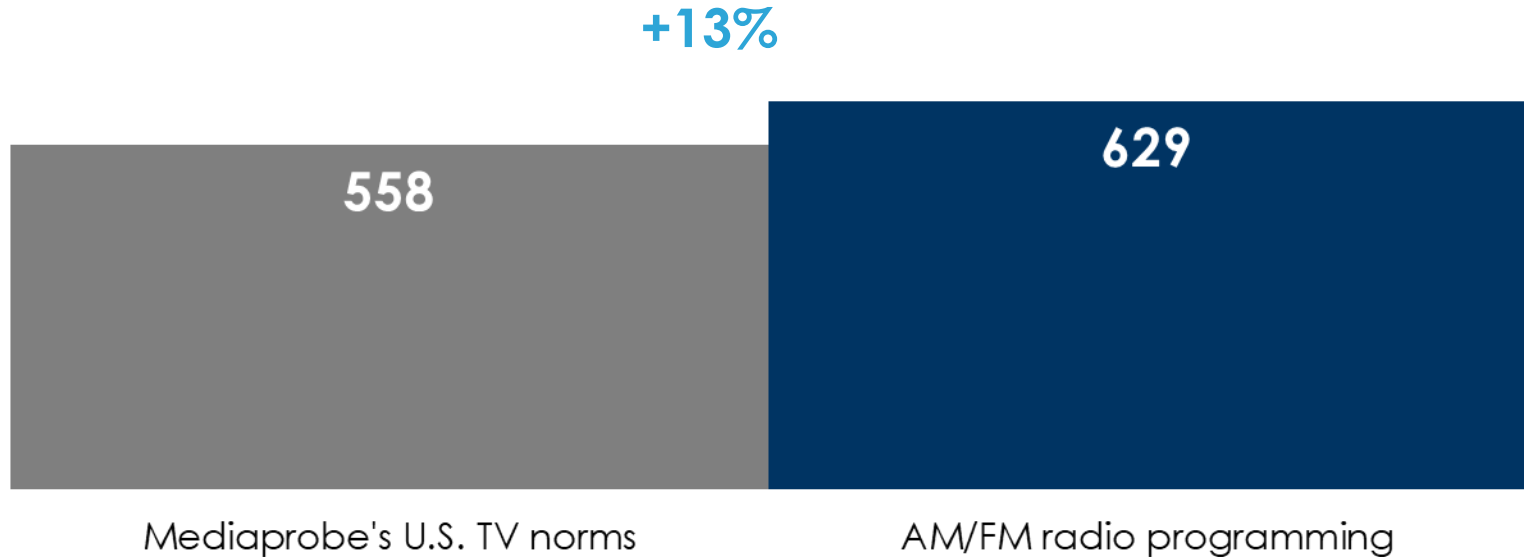
Each “broadcast” had a sample size of 75 people

Consumers listened to at least 3 of the 4 broadcasts

Each ad was exposed to 225 people

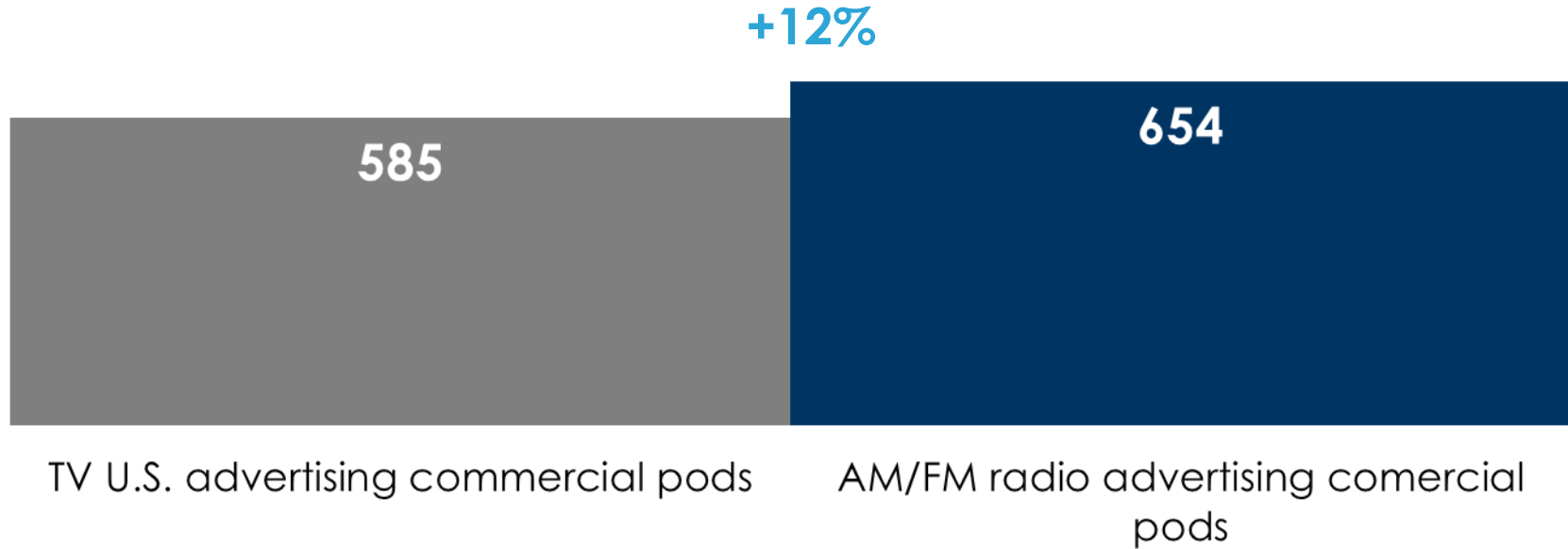
# AM/FM radio programming outperforms Mediaprobe's U.S. TV norm by +13%

## Emotional Impact Score



# The emotional impact of commercials: AM/FM radio advertising pods outperform TV advertising by +12%, making AM/FM radio a premium platform for brands

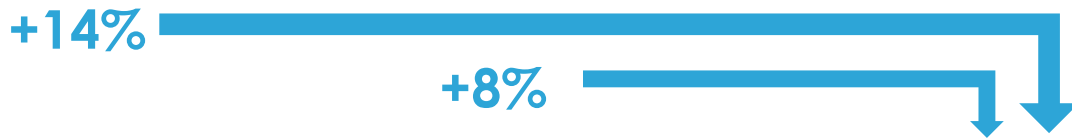
## Emotional Impact Score



# AM/FM radio News is the most impactful genre, outperforming AM/FM radio by +8% and TV News by +14%

News is consistently measured as a very high quality contextual environment for ads

## Emotional Impact Score



Mediaprobe's U.S. TV norms

Mediaprobe's TV News norms

AM/FM radio programming

AM/FM radio News

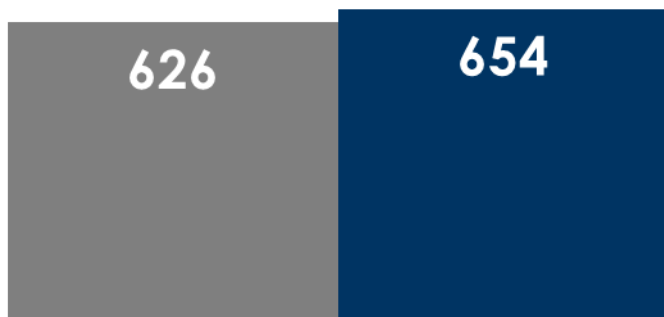


# AM/FM radio advertising blocks were more +4% emotionally engaging than radio programming blocks

## Emotional Impact Score

### AM/FM radio sessions

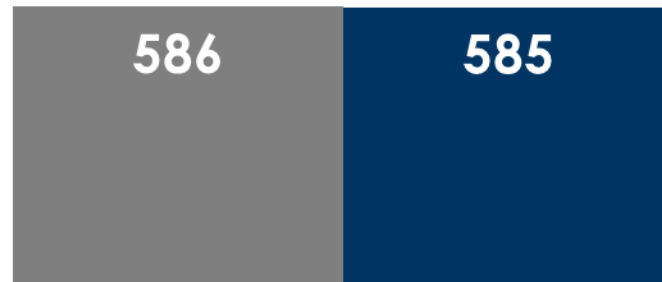
+4%



AM/FM radio non-advertising content

AM/FM radio advertising

### Mediaprobe TV data



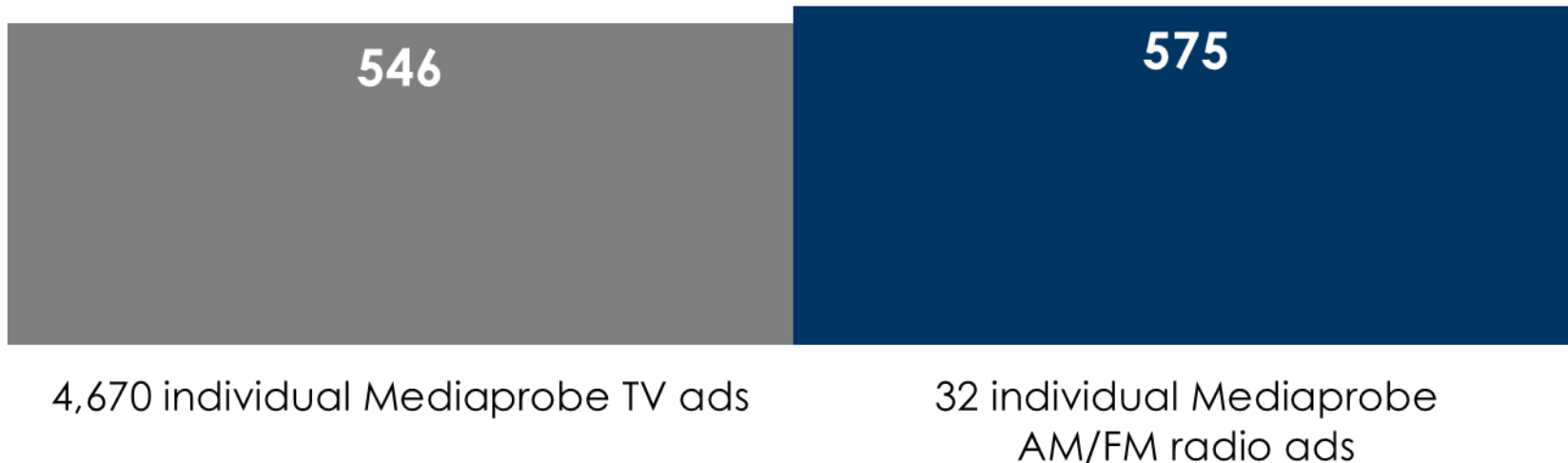
TV non-advertising content

TV advertising content

# Despite lacking “sight and motion,” AM/FM radio individual ads are +5% more impactful than individual TV ads

## Emotional Impact Score

+5%



# Audio trumps video in creating consumer engagement with emotion-based stories: *Game of Thrones* audio book beats the TV show in consumer engagement

Source: Engagement In Video And Audio Narratives: Contrasting Self-report And Physiological Measures, Nature Research

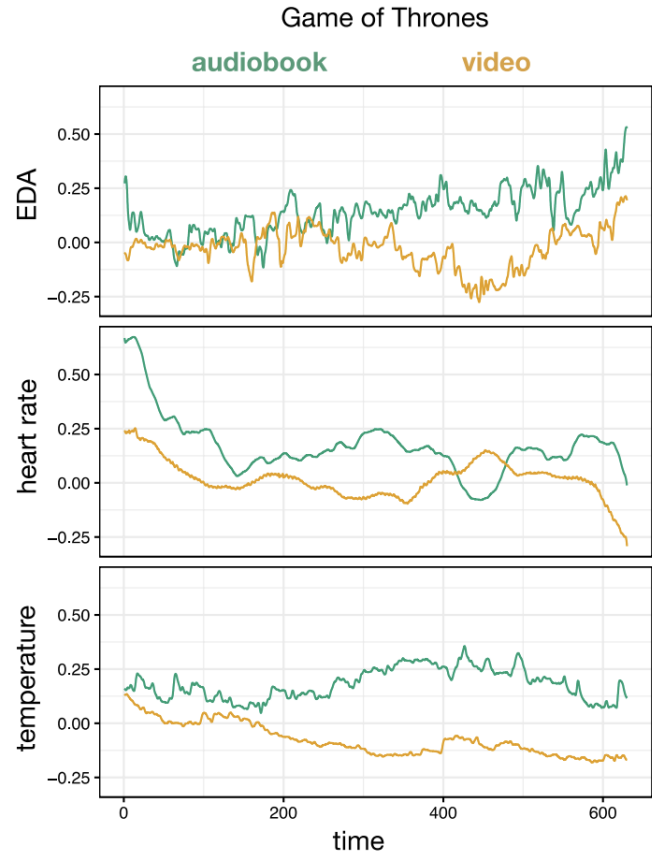
Published by Nature Research, a study of consumers who were exposed to video and audio narratives measured reactions with sensors placed at the wrists to measure heart rates, electrodermal activity, and body temperatures. The conclusion?

Consumers are far more engaged with an audio story than a video narrative. The *Game of Thrones* audio book audience showed greater physiological responses (heart rate, body temperature, and galvanic skin response) than viewers of the TV show.

The authors report: “Physiological responses revealed more cognitive and emotional engagement while listening to audio narratives. ... spoken narratives require the participant to be an actively engaged listener, whereas videos deliver rich stimulation to a more passive viewer. The pictures in the listener's mind [from the audio narrative] may not be as vivid and as detailed as those onscreen ... yet the **imaginative generation of those images requires greater cognitive and emotional processing, and so they are physiologically more engaging.**”

Consumers are far more engaged with an audio story than a video narrative

The *Game of Thrones* audio book audience showed greater physiological responses (heart rate, body temperature, and galvanic skin response) than viewers of the TV show



Source: Engagement In Video And Audio Narratives: Contrasting Self-report And Physiological Measures, Nature Research

# Mediaprobe also conducted a physical feature analysis of the creative

The analysis examined the physical sound features of the ads and the context (the show) to understand which physical elements determine a higher listener response to ads.

The analysis shows revealed:

- The higher pitch contrast between programming content and ads leads to higher impact. If the content has a low pitch, ads should be a high pitch, and vice versa.
- Louder ads lead to higher impact.

# A regression analysis isolated the best performing creative elements: Female voiceovers, jingles, music, and five brand mentions

Gender:  
**Female**  
voiceover

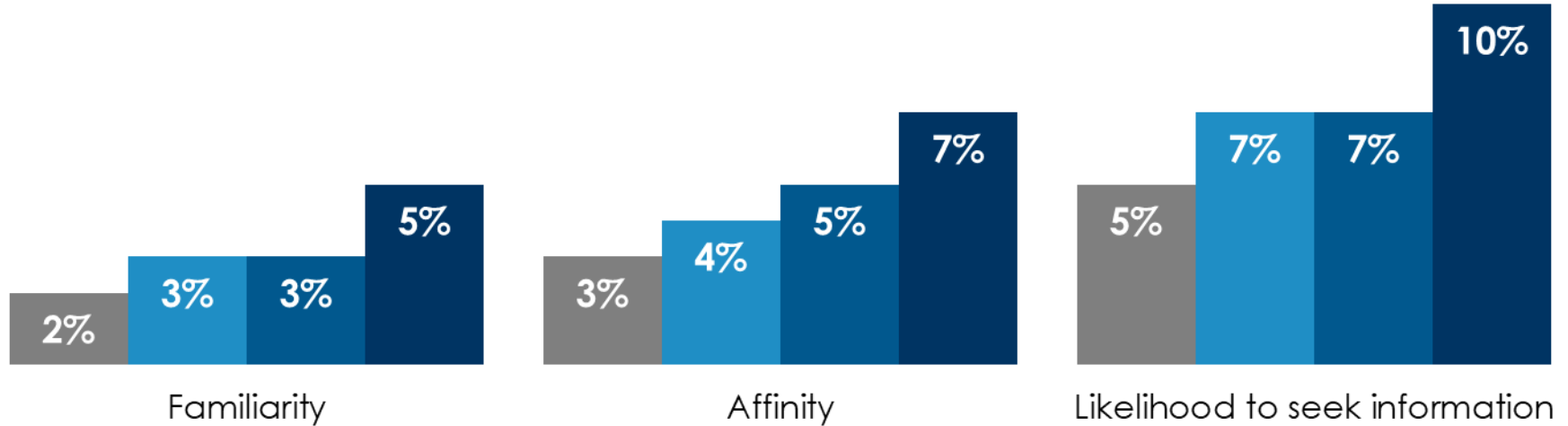
With  
**jingles**  
  
With  
**background  
music**

# of brand  
mentions:  
**Five** brand  
mentions

**Without  
disclaimer**

# Nielsen: More brand mentions drive lift so brand early and often

■ 1-2 mentions ■ 3-4 mentions ■ 5-6 mentions ■ 7-14 mentions



Source: Nielsen Podcast Brand Effect Study 2020; Chart figures reflect average Top 2 Box Exposed percentage. [FAMILIARITY] How familiar are you with the following retailers? [AFFINITY] How do you feel about the following retailers? [INFO SEEK INTENT] How likely are you to look up information on each of the following retailers in the near future?

# Key results

- Despite lacking “sight, sound, and motion,” AM/FM radio programming was +13% more engaging than Mediaprobe’s norm for television in the U.S. For advertisers, this means the AM/FM radio context for their ads has greater engagement than the TV context.
- Overall, AM/FM radio advertising outperformed TV advertising by +12%. These new findings validate the recently released Dentsu/Lumen and ABX studies, which revealed audio ads outperform video for attention and brand recall.
- AM/FM radio News was the most impactful genre, consistently measuring as a high-quality contextual environment for advertising (+14% than Mediaprobe TV News norms and +8% than total AM/FM radio).
- Mediaprobe audio benchmarks reveal the sound contrast between AM/FM radio programming and the ads drives higher attention and brand recall. For example, ads with music and jingles perform very well in spoken word programming due to the contrast.
- Creative best practices: Use female voiceovers, jingles, one voiceover, and include five brand mentions.





# Thank You

The intellectual property included in this presentation is property of Cumulus Media, including Westwood One, and may not be used without permission. Any details are subject to change. 2023 Cumulus Media, Inc.