

# Neuromarketing: Decoding Consumer Minds

by **NeuroLens - A customer insights platform**



# NeuroLens

by **causality.network**

We help businesses grow by providing deep customer insights through brainwave (EEG) analysis and other neuromarketing techniques.

By analyzing subconscious and immediate reactions to your product or service, we uncover what truly drives customer behavior, enabling you to make informed decisions that boost engagement and sales.

NeuroLens allows you as a business to **understand your customers' needs and appeal to their desires.**

Visit [causality.network/neurolens](https://causality.network/neurolens) to learn more.

# Services: Data-Driven Innovation

## New Product Launch

Find the right product for your audience (existing or new)

## Rebrands

Reinvigorate the identity of your brands in consumers' minds

## Market expansion

Find the right target markets for your existing products

## Marquee campaigns

Ensure that your Christmas, Diwali & other important campaigns are remembered

## Customer Retention

Boost loyalty with personalized experiences and emotional connections.

## Pricing Strategy

Use insights to craft pricing that resonates and drives profitability.

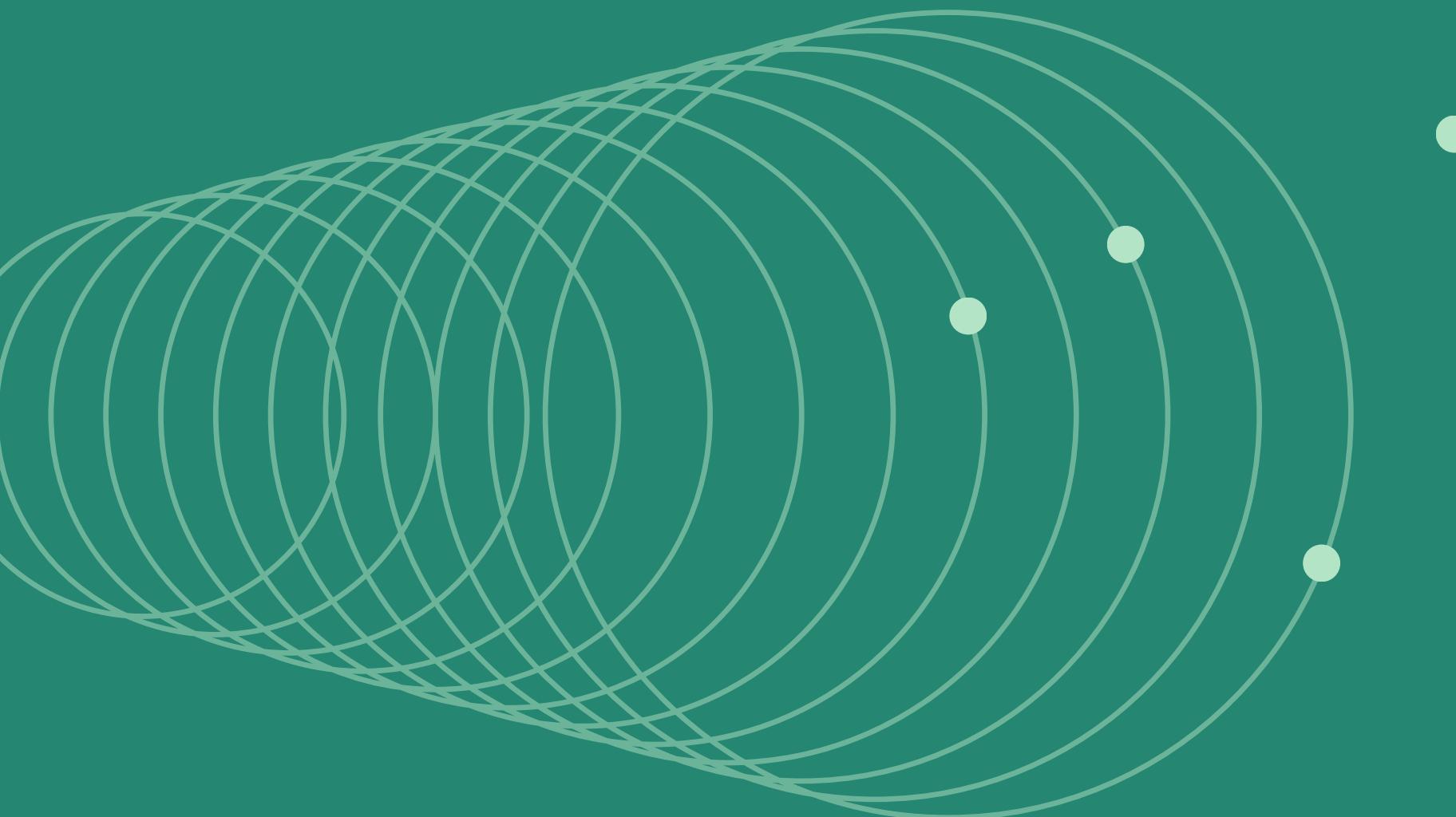
## Packaging Optimization

Enhance packaging to capture attention, boost brand recall, and drive purchase decisions.

## Ad Effectiveness

Optimize ads for higher engagement, conversions, and better ROI.

# Agenda



## **Study 1 - Packaging Design**

Packaging Design Variants

Insights Summary

Takeaways

## **Study 2 - Rebranding**

Rebranding - Before and After

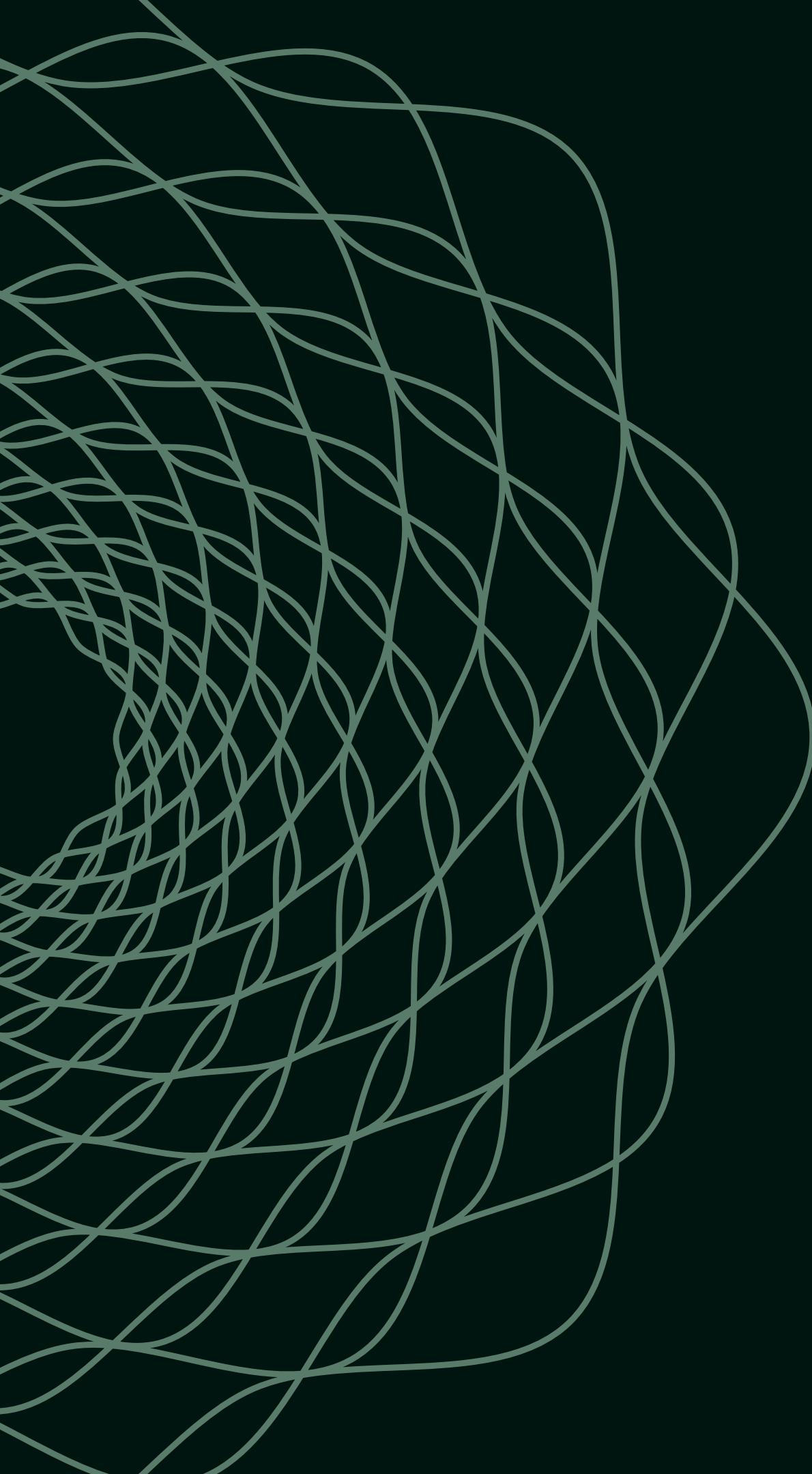
Insights Summary

Takeaways

## **Our Capabilities**

## **Appendix - Full Report**

## **Contact**



# Study 1 - Packaging Design

# Packaging Design Variants

**A.** Control  
- info  
dense



**B.** Nature  
& herbal  
inspired



**C.** Simple  
and  
minimalistic

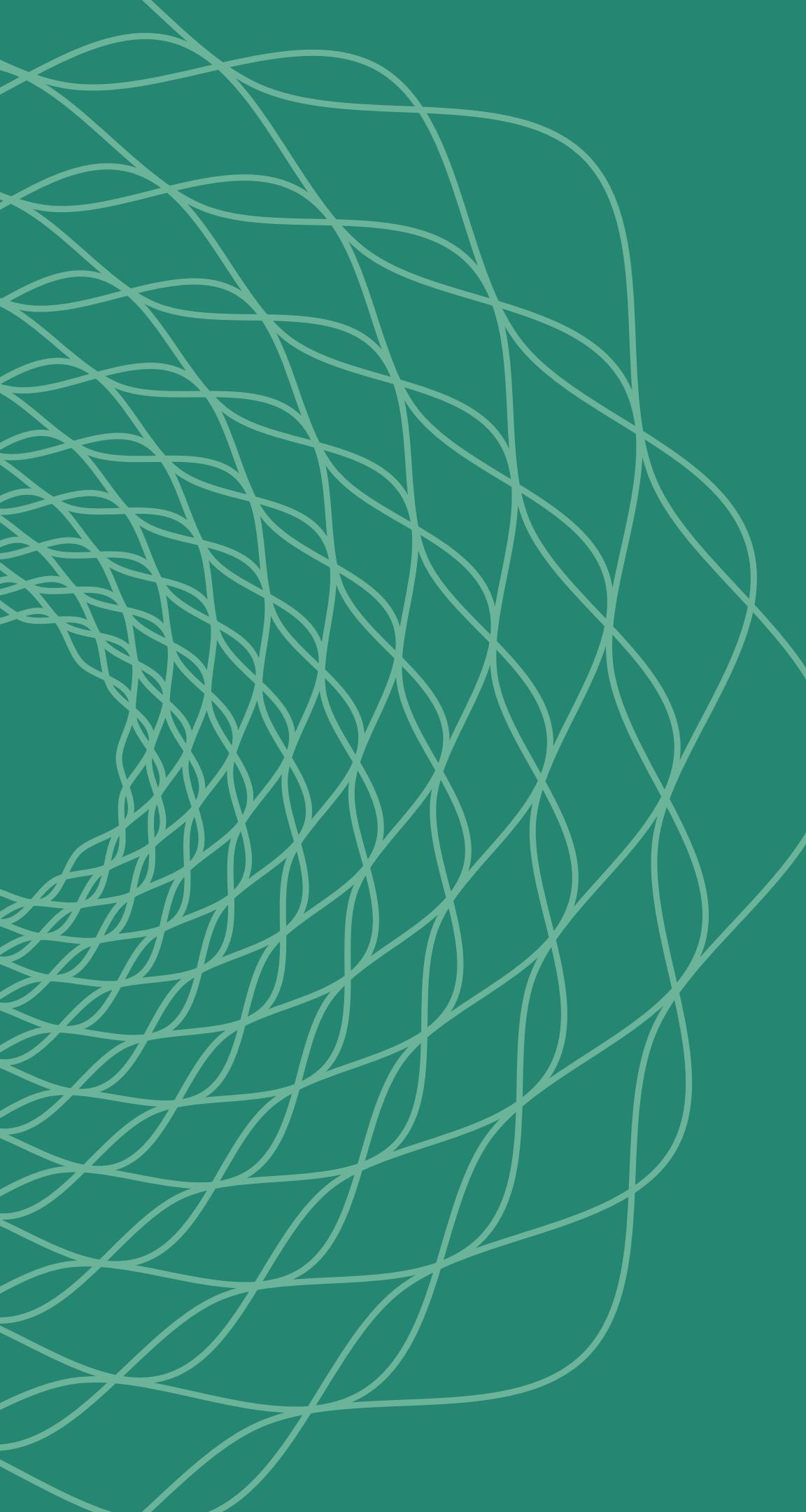


**D.** Bold and  
modern  
design



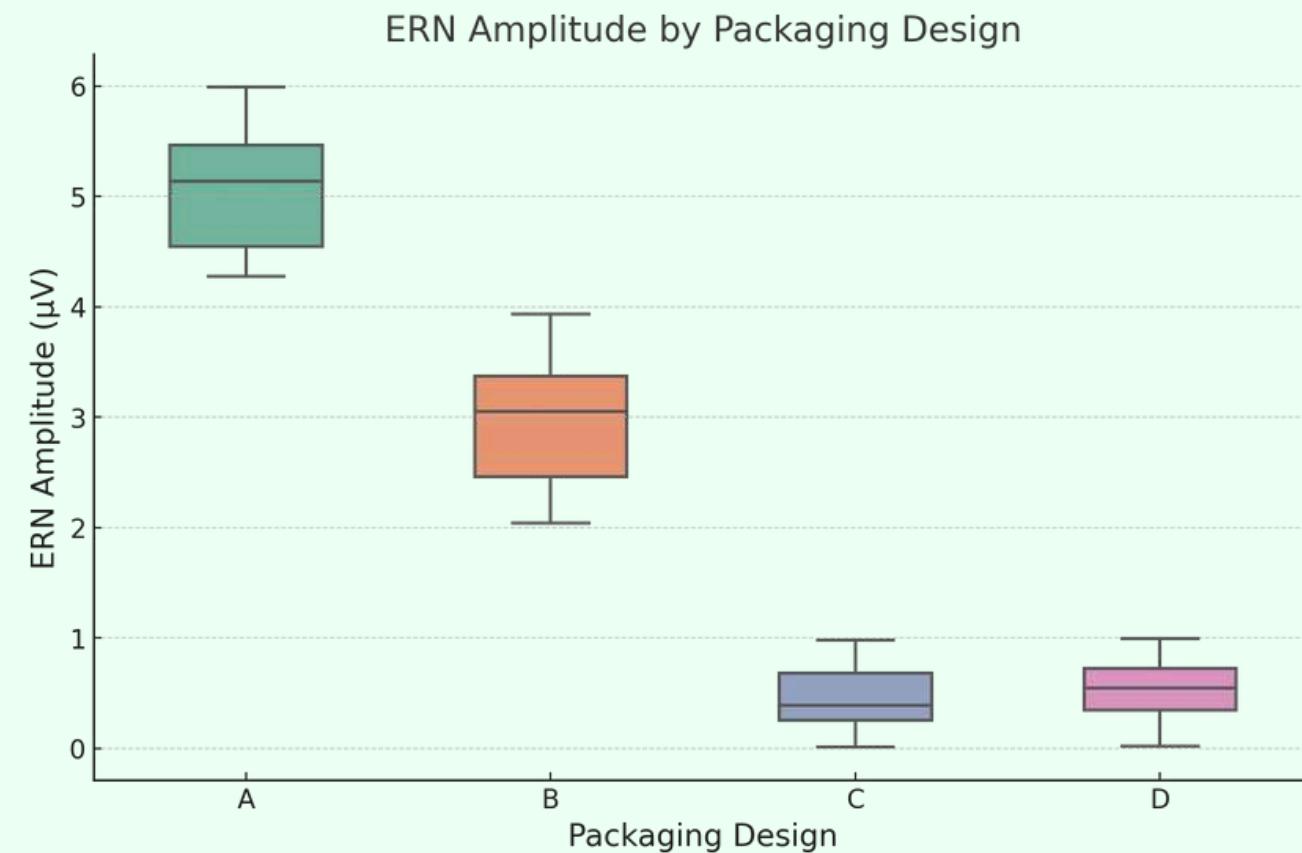
Four distinct cosmetics packaging designs were used as stimuli

Tested on 30 participants (see [appendix](#) for full report)



# Insights Summary

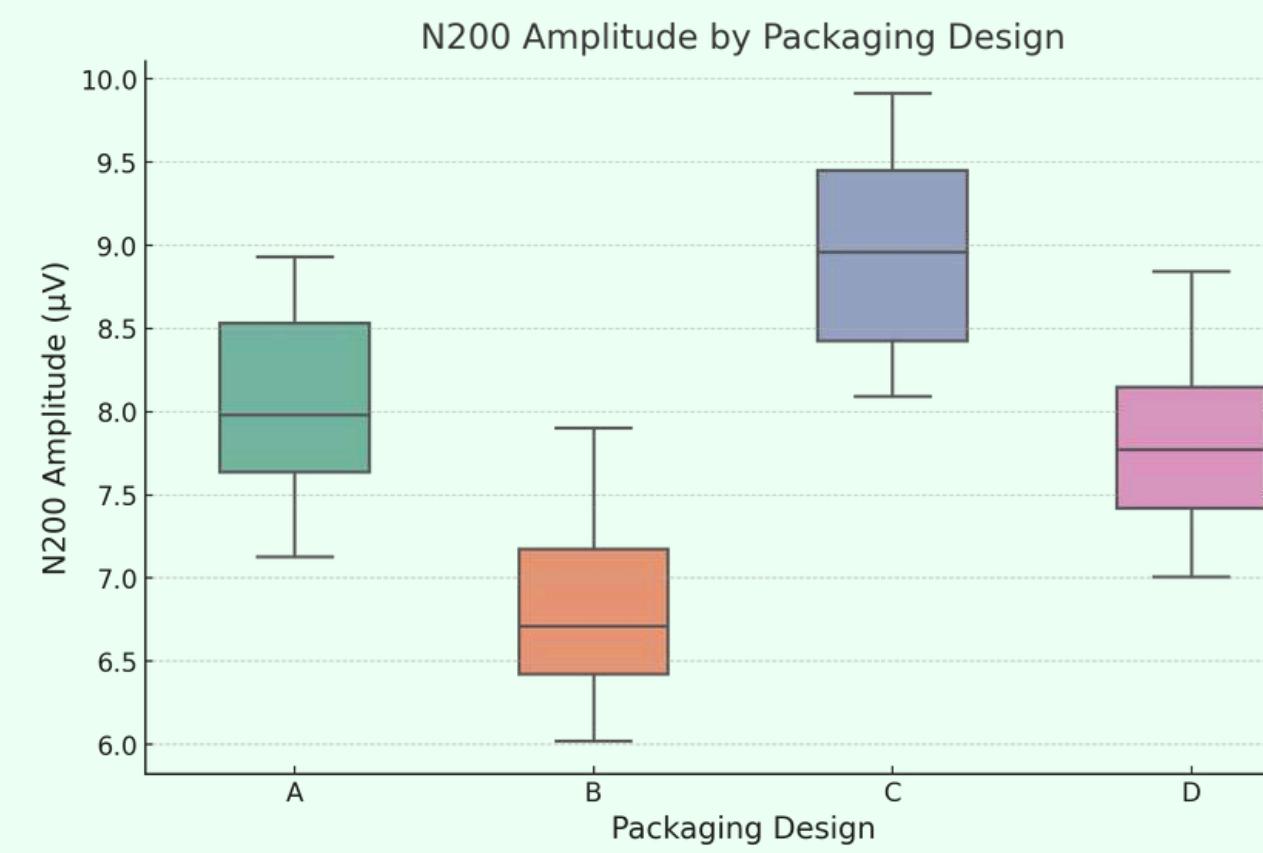
# negative reaction



Design A elicits a strong negative reaction  
Design B elicits moderate discomfort  
Designs C & D elicit low/no negative reactions

**Crucial for minimizing purchase resistance  
and ensuring positive customer reception**

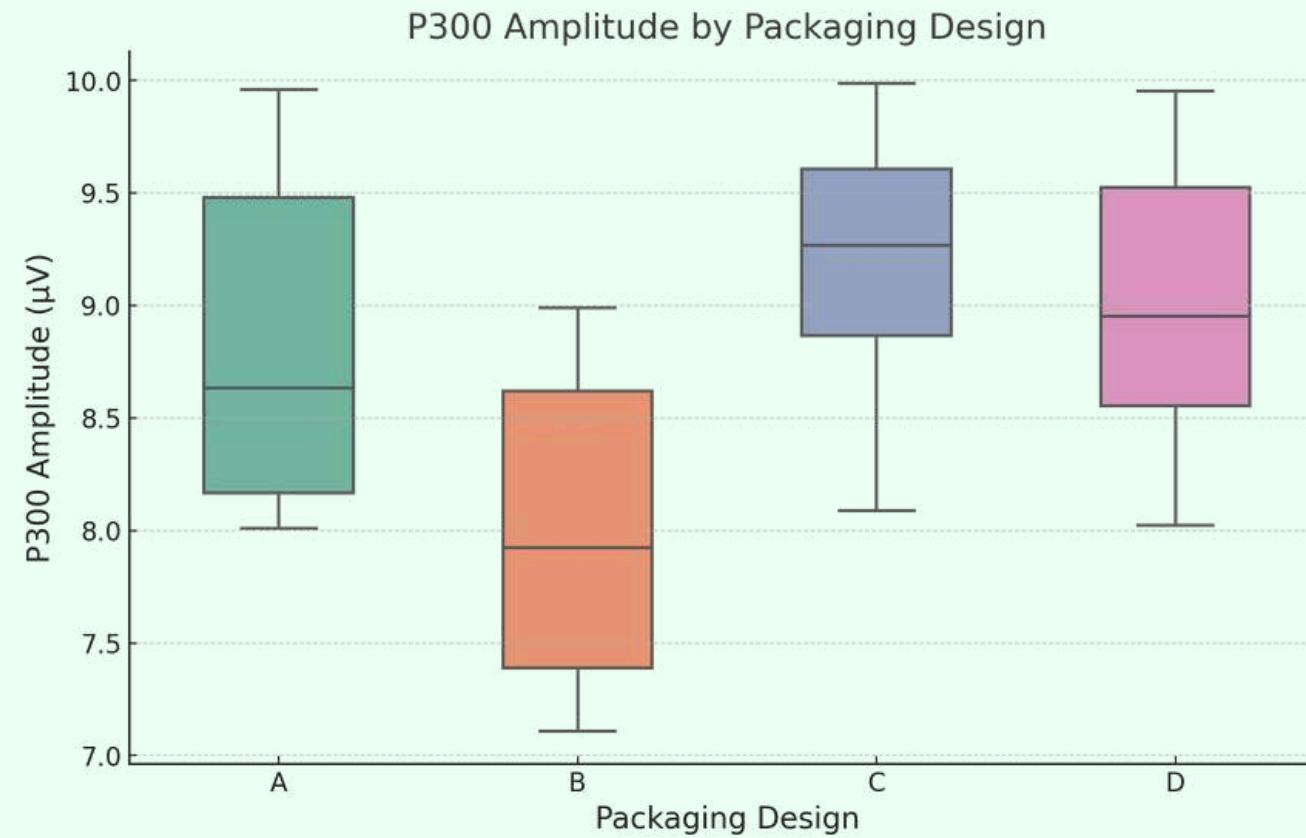
# attention capture



Design C most effectively captures attention  
Design A & D effectively capture attention  
Design B does not effectively capture attention

**This is important for engaging/aquiring new customers**

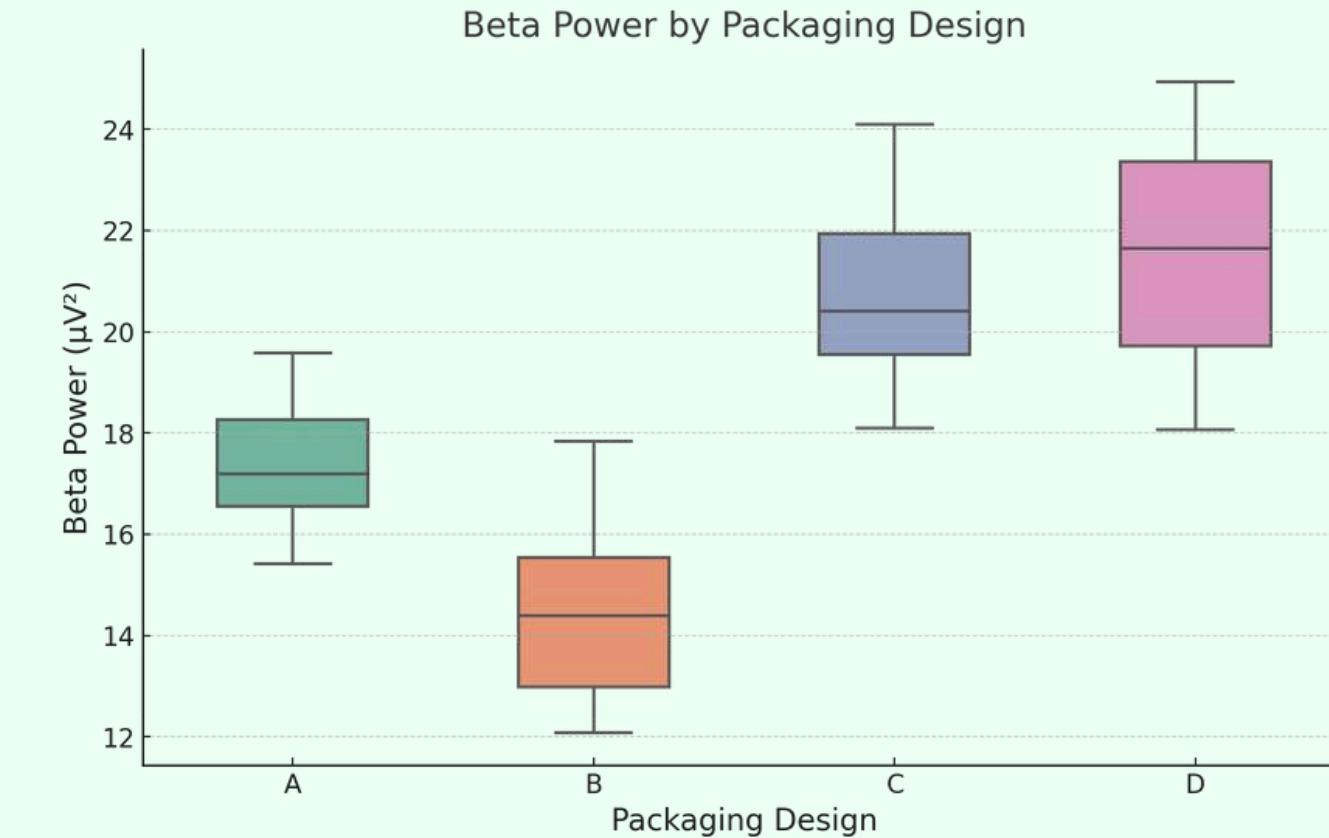
# memorability



Design C followed by D have high memorability  
Design A has moderately high memorability  
Design B has low memorability

**This is important for lasting impressions & brand recall**

# active engagement



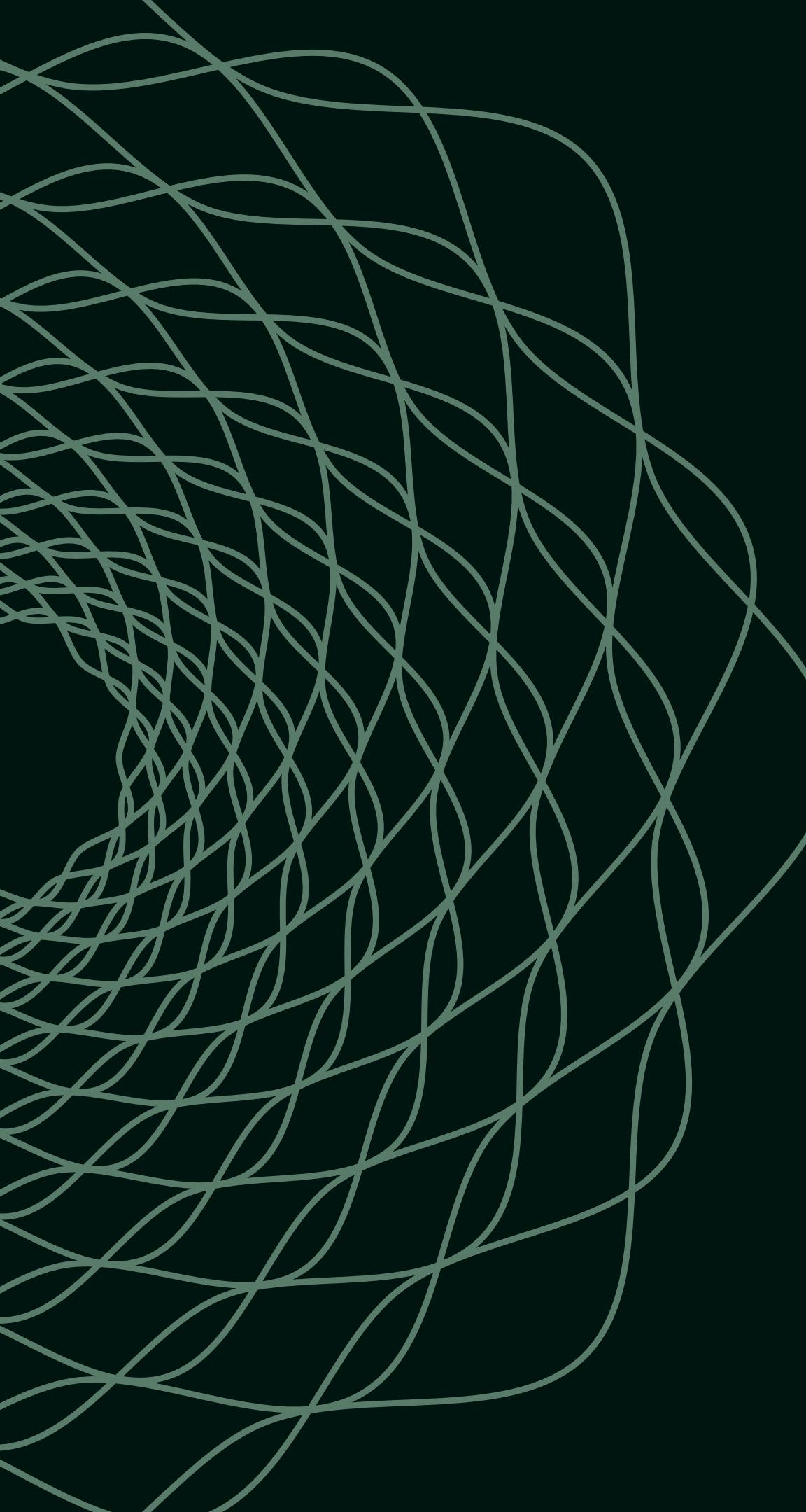
Designs C & D elicit the most active engagement  
Design A elicits moderate engagement  
Design B does not effectively engage

**This is important for brand loyalty & fans**

# Takeaways

Overall Design C was the strongest with the highest potential for increased consumer preference and purchase intent.

- Certain packaging designs will elicit stronger **positive emotional** responses, **higher attention** levels, and **better memory** encoding.
- This can be measured **before a brand or package design is finalized**, allowing a business to **rapidly test** multiple design variants.
- By doing this, companies can **identify the most effective option** that resonates with their target audience, maximizing engagement and boosting the chances of product success in the market.
- This approach helps **minimize costly mistakes**, **refine product positioning**, and ensure the packaging **aligns with consumer preferences** before launch.



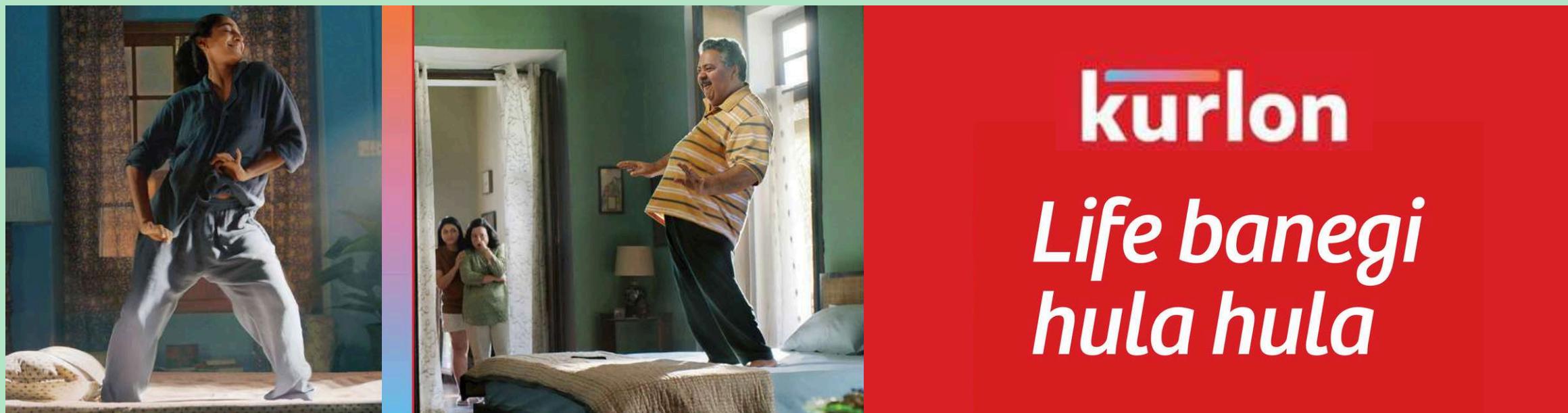
# Study 2 – Rebranding

# Rebranding – Before vs After

A. Pre  
rebrand



B. Post  
rebrand



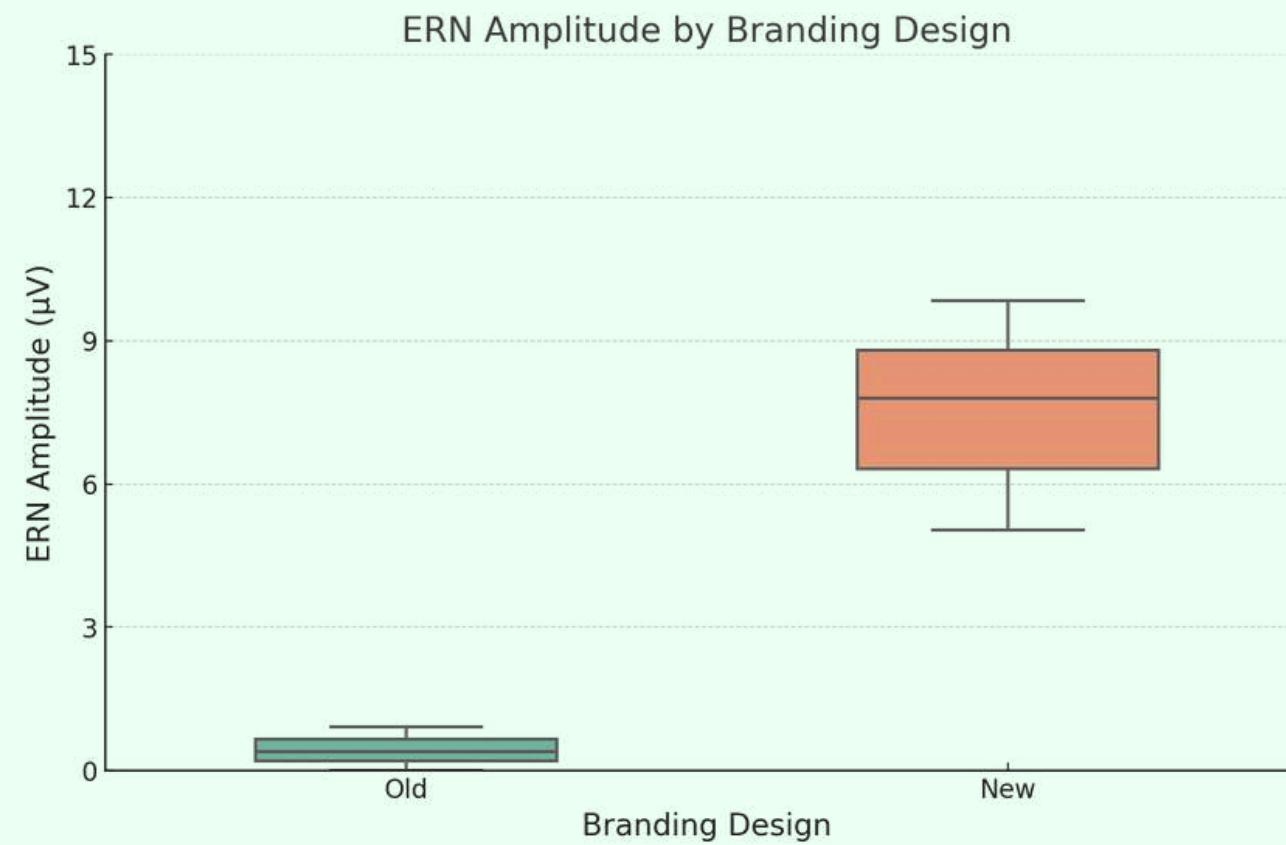
Two distinct designs and taglines were used as stimuli.

Tested on 30 participants (see [appendix](#) for full report)



# Insights Summary

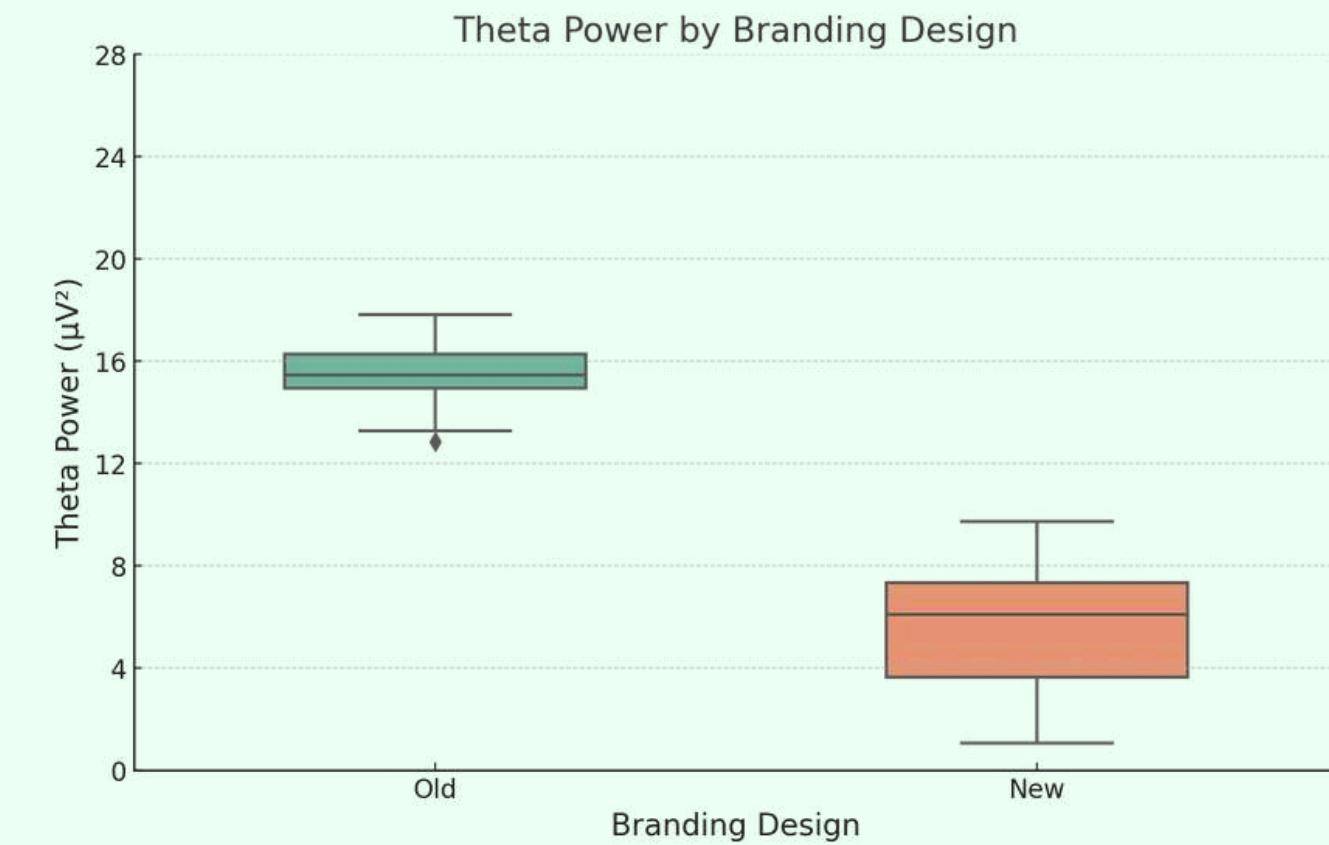
# negative reaction



New design has a high ERN suggesting significant conflict or perceived errors  
Old design suggests close to no conflict

**This is important for branding alignment**

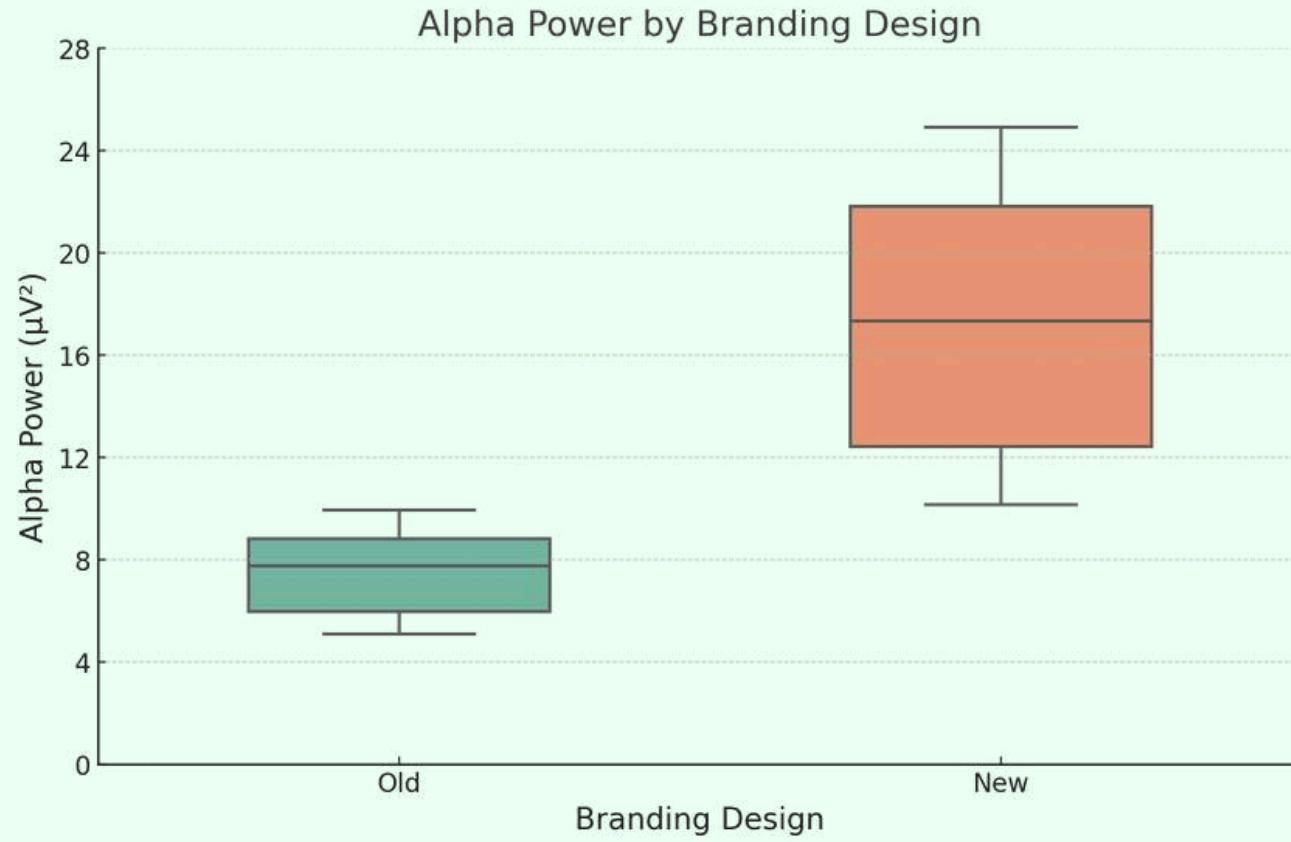
# active engagement



Designs C & D elicit the most active engagement  
Design A elicits moderate engagement  
Design B does not effectively engage

**This is important for brand loyalty & fans**

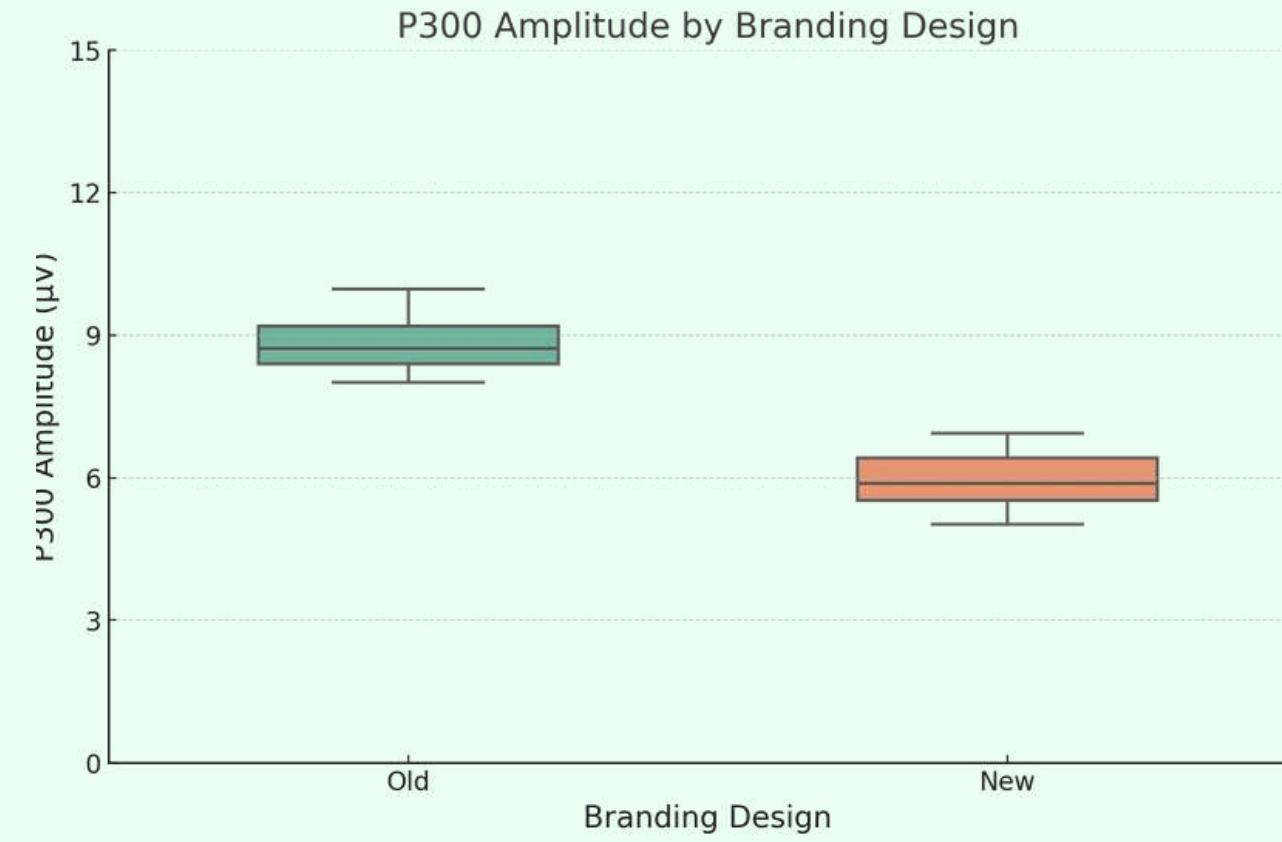
# memorability



New design indicates more relaxation and disengagement, reflecting a lack of interest

**This is important for lasting impressions & brand recall**

# also memorability



Reinforces the insight that memorability is higher for the old branding variant

**Better memory retention and potential influence on decision-making.**

# Takeaways

- Overall, participants preferred the original version over the rebrand.
- There was significant public outcry around how unrelated and cringe the rebrand and campaign was, helping validate our data. **This could have been prevented.**
- This type of feedback can be gathered before a rebrand goes live, allowing businesses to test different branding approaches and avoid costly mistakes.

Re: The Best & Worst Advertisements in India

Kurl-on hula hula ad. Nothing has been more irritating in recent times. The characters, senseless dance on mattress, the song and voice of the voiceover artist at the end. Can't decide which is more irritating than the other.

Ash Costello 85 days ago  
As soon as this ad comes, I am compelled to change the channel.. the worst and most pathetic ad ever made... It's simply repulsive and makes you hate the brand.. I guess the brand manager doesn't care about their job at all to have made such kind of an advertisement.

Karthik @beastoftraal  
I saw the two new Kurl-on ads with amusement, but not in the way the brand or the agency (Ogilvy) intended. Sure, it was cute to see a young girl, and a middle-aged, pot-bellied man dance on top of a bed to a

John-mera-naam 2 months ago  
Most irritating advertising. Aise bakchodi ads mat banao please

anilts3936 2 months ago  
I immediately change channel when I see this adv, what happened to company taste 😢

deepakmundhal1258 2 months ago  
Dumbest ad ever..... 🤦

akshaypravinpatil 2 months ago  
Pathetic ad ! Cringe pro Max ! Free mujra

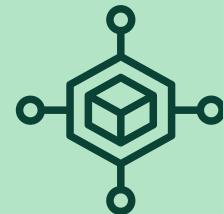
ashw23 2 months ago  
Most irritating ad in the history of entire mankind

ssunil4205 12 days ago  
we imediately change chanel when it comes worst of the worst

ssunil4205 2 months ago  
This irretating and worst add unpleasant to watch

# Our Capabilities

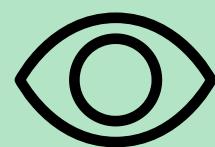
In this report, saw the type of insights generated via the **Muse EEG device** which records 4 channels of EEG data. Usually, pairing EEG data with supplementary data (like a survey) is great for deeper insights. Our capabilities and assistance extend to the following:



**Trusted data:** Our platform uses causality.network as the auth layer, so you can independently verify that data you see is authentic and not manipulated.



**Advanced EEG devices:** We are able to use 12-24 channel EEG devices which increases the accuracy and granularity of data.



**Eye tracking:** Can be used for visibility in shelf space, attention tracking in designs (generally for UI/UX), etc.



**Surveys:** While EEG recordings can reveal how the brain perceives stimulus, surveys can reveal user biases.

# Contact

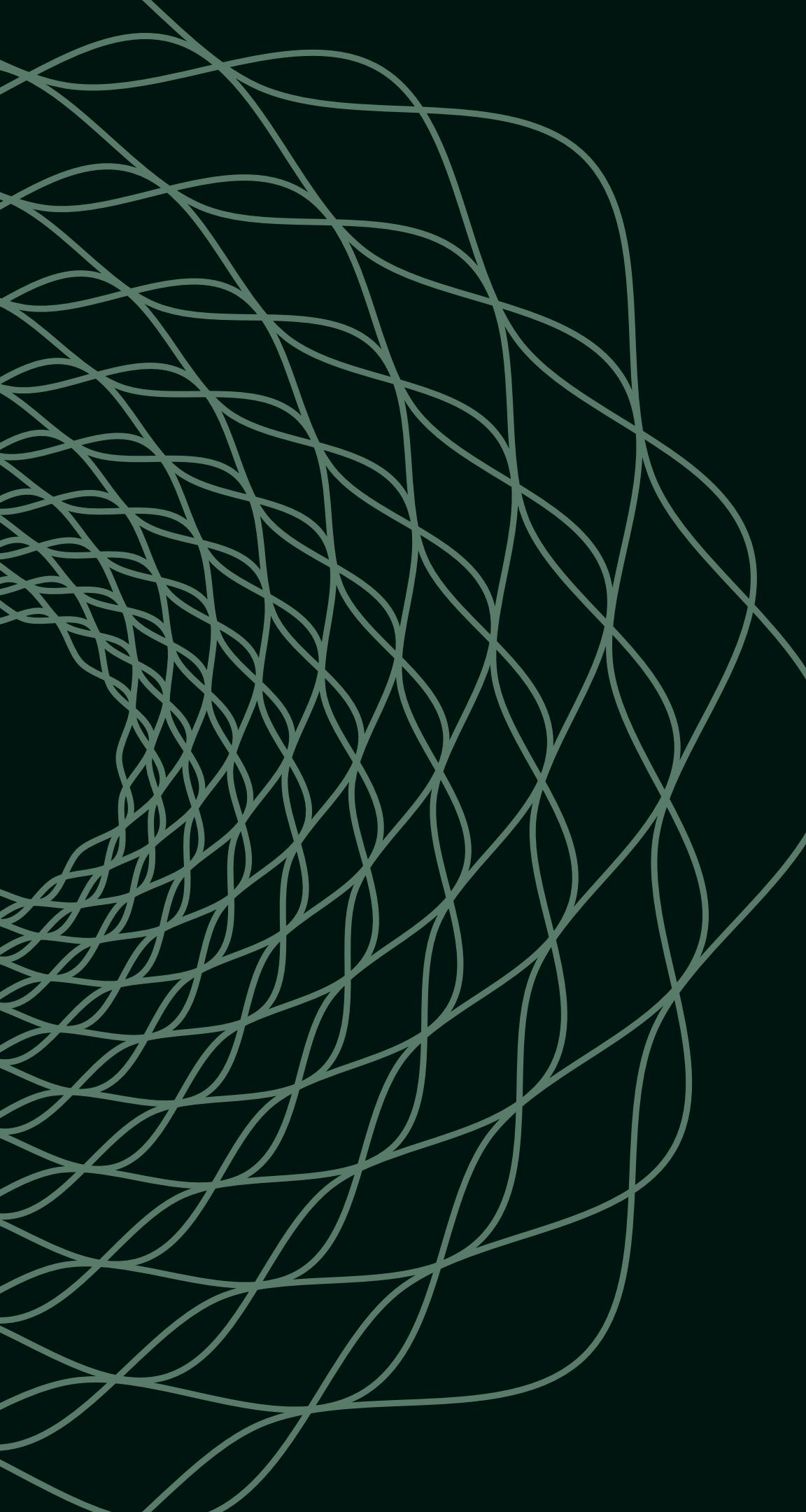
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**Telegram:** <https://t.me/causalitynetwork>

**Calendar:** <https://calendly.com/causalitynetwork>

**Website:** <https://causality.network>





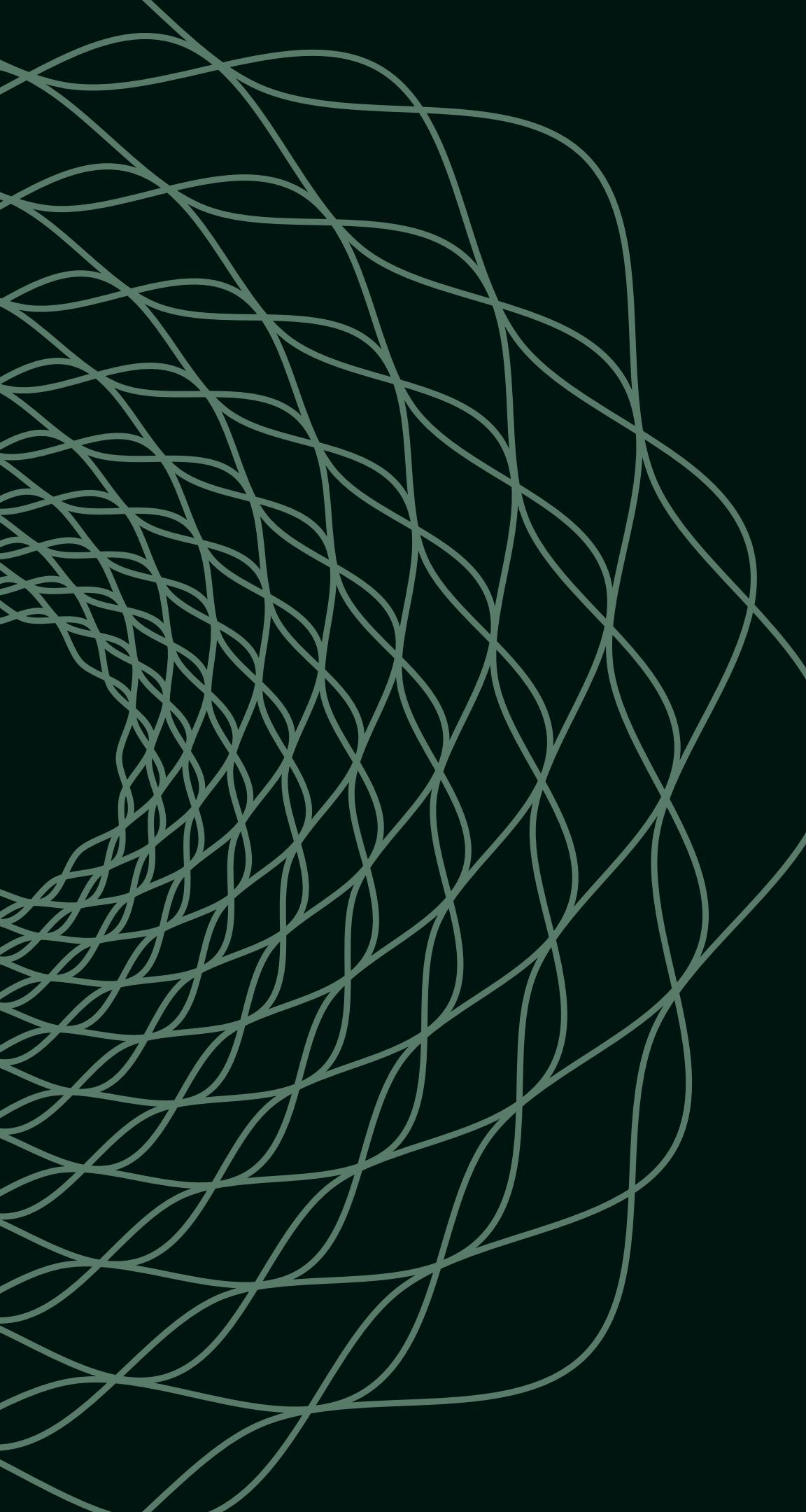
# Appendix – Full report

# Decoding Metrics

- **ERN (Error-Related Negativity):** Lower value typically suggests acceptance and higher, potentially negative reaction.
- **N200:** May indicate cognitive control and attention allocation to the packaging / branding designs.
- **P300:** Could reflect the cognitive processing and evaluation of the packaging / branding designs.



- **Alpha (8-12 Hz):** Inverse indicator of cortical activation; lower alpha power may indicate higher attention.
- **Beta (13-30 Hz):** Associated with active thinking and focus; higher beta power may indicate increased engagement.
- **Theta (4-7 Hz):** Related to memory encoding; increased theta power may suggest better memory formation.



# Research Module 1 – Packaging

# Details of the Study



## Hypothesis

Certain packaging designs will elicit stronger positive emotional responses, higher attention levels, and better memory encoding. This could translate to increased consumer preference and potential purchase intent.



## Demographics

The study included a diverse group of 30 participants, age range: 18–45 years

- Gender distribution: 60% female, 40% male
- Varied ethnic backgrounds and socioeconomic statuses

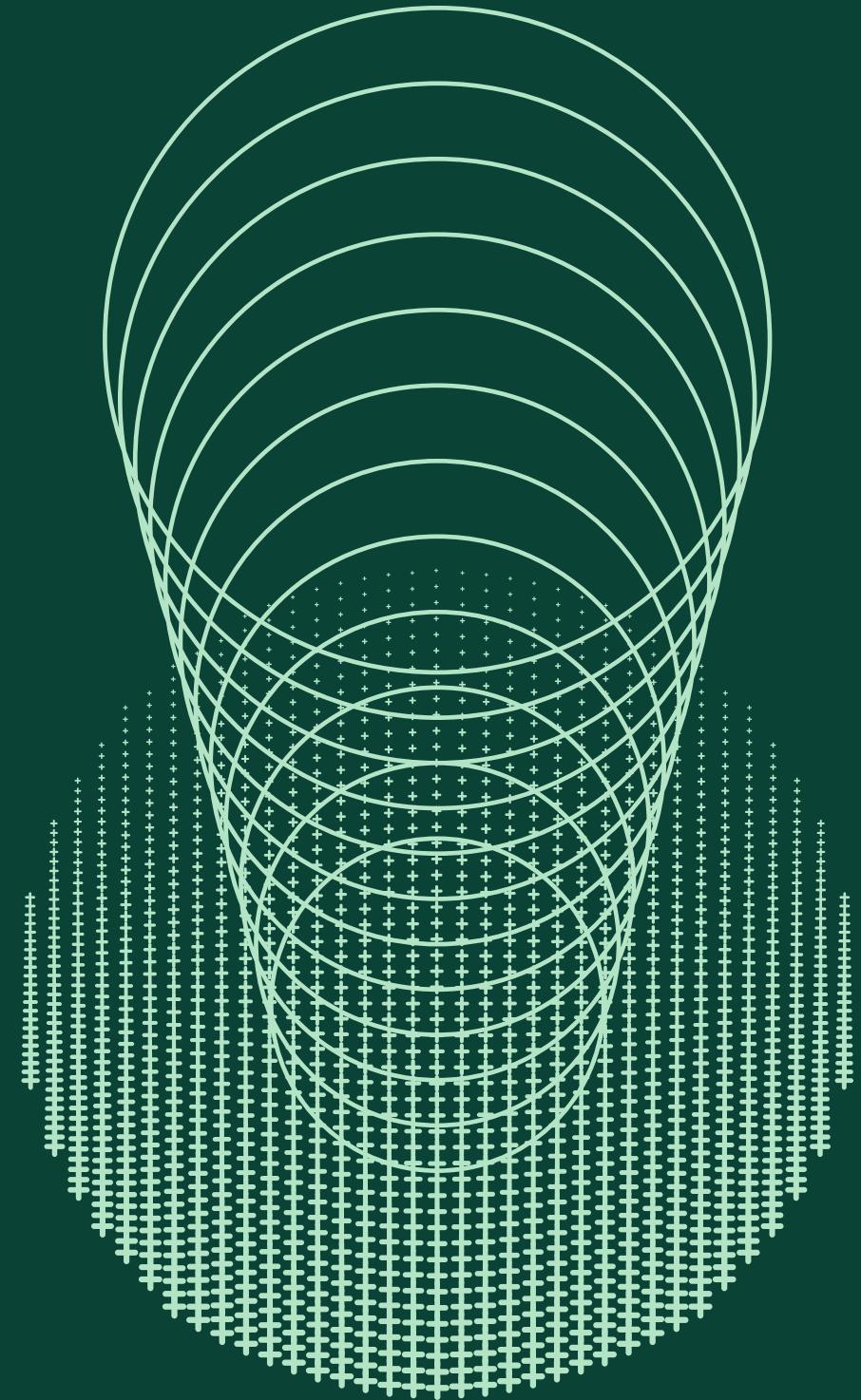


## Experiment Design

- 10-second baseline measurement (fixation cross) ; 4 packaging design images (10 seconds each) and 5-second resting period between images
- EEG data collection on a Muse EEG headband throughout the process

# Insights Summary

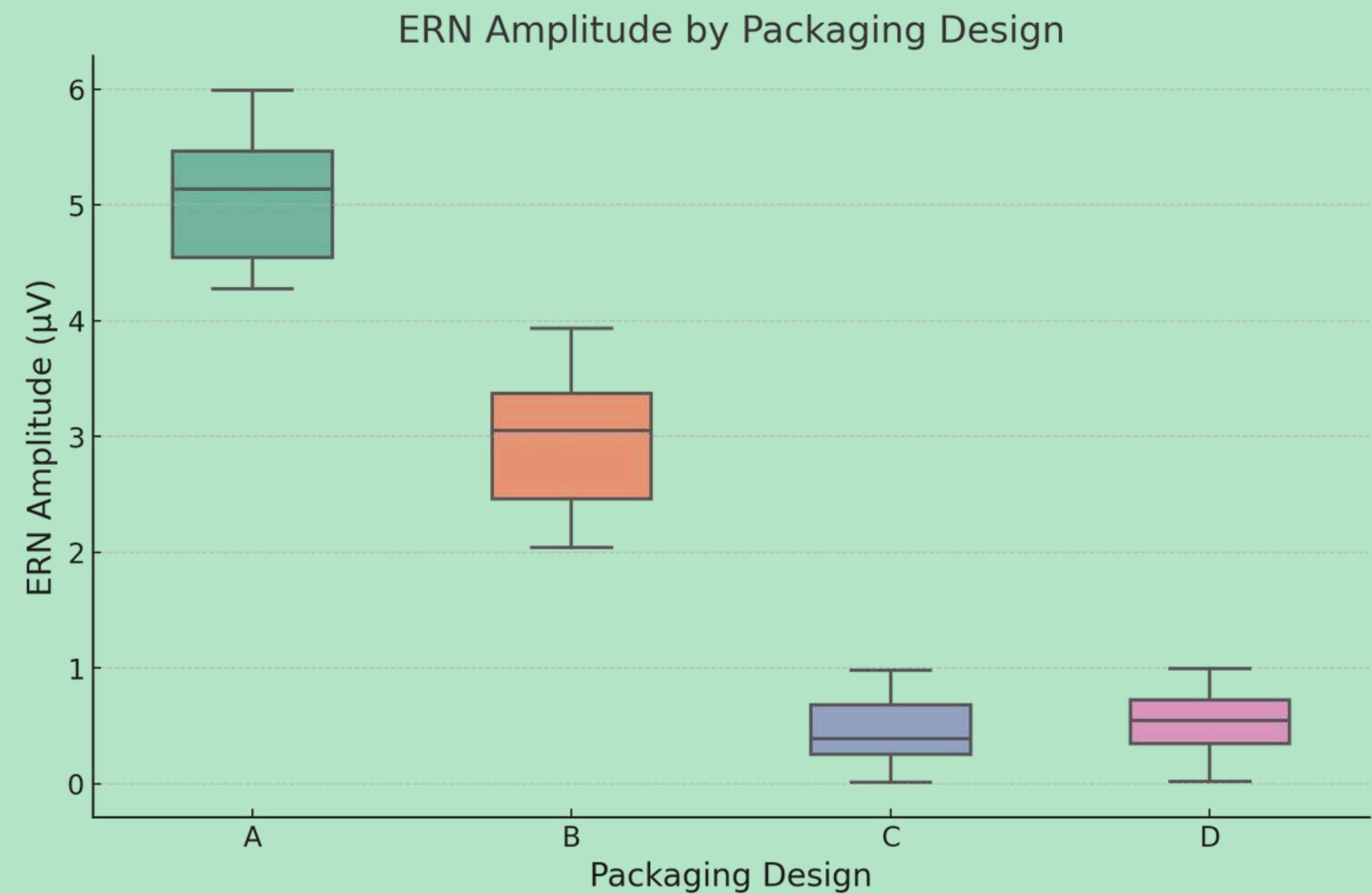
- Designs C (Minimalistic) and D (Bold and Colorful) are the most promising among the four packaging designs. They exhibit lower ERN amplitudes, higher N200 and P300 amplitudes, and favorable Alpha, Beta, and Theta power levels. This indicates that these designs are not only visually appealing but also effective at capturing attention, engaging cognitive processes, and enhancing memory retention. In contrast, Design A (Control) and Design B (Nature-Inspired) show moderate effectiveness but do not stand out as strongly in comparison.
- The insights suggest that focusing on Minimalistic and Bold designs could provide better consumer engagement, attention, and brand recall.



# ERN

A lower ERN value typically suggests a more acceptable or fitting design, while higher values indicate potential negative reactions.

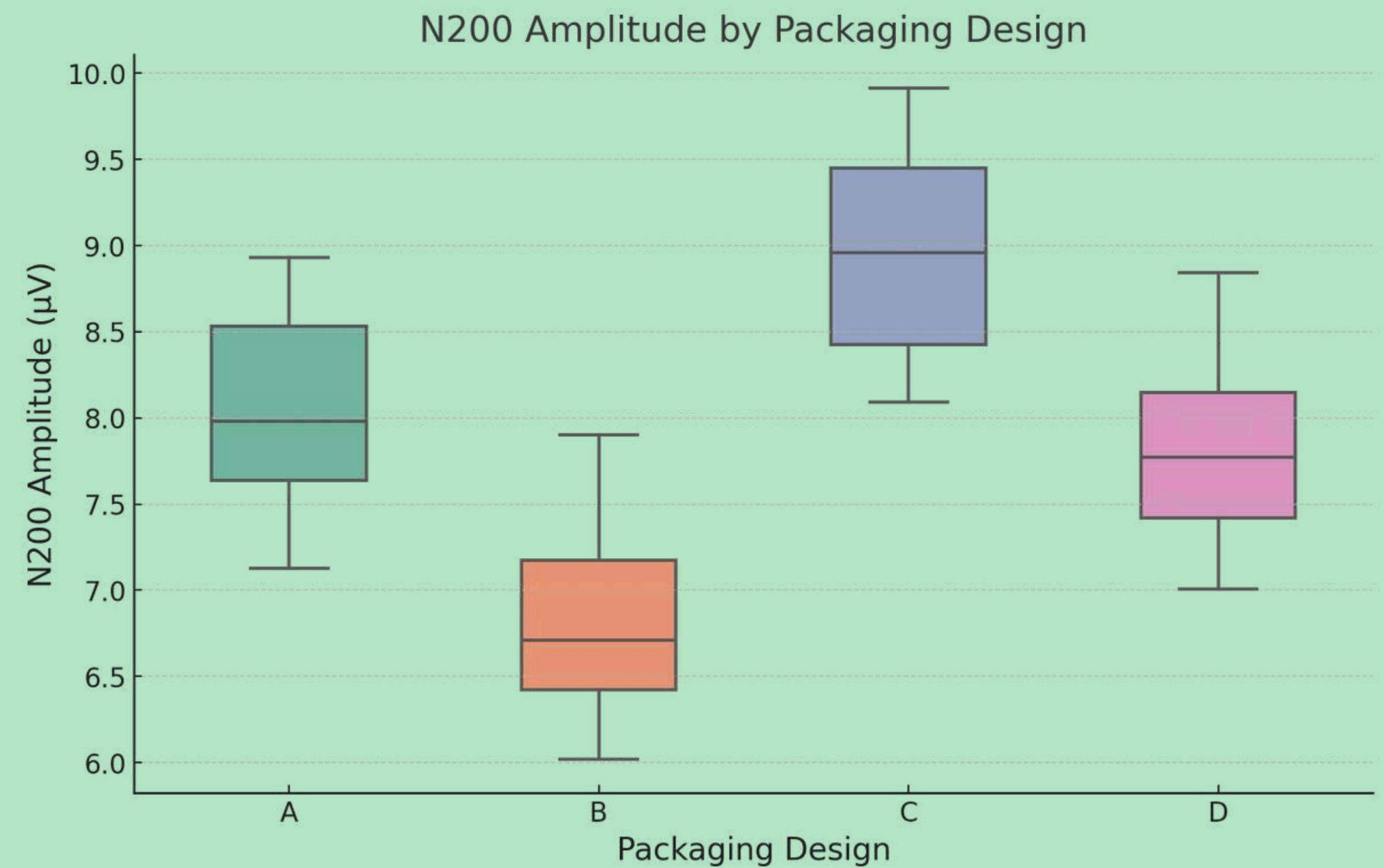
- Designs C (Minimalistic) and D (Bold and Colorful): Both designs have very low ERN amplitudes (close to 0  $\mu\text{V}$ ), indicating minimal conflict or error detection. Suggests that they align well with participants' expectations and create a positive impression with no perceived discrepancies.
- Design B (Nature-Inspired): Moderate ERN values suggest a relatively positive response
- Design A (Control): Shows moderately high ERN amplitudes, indicating some minor aversion.



# N200

Higher N200 values indicate effective capture of participants' attention.

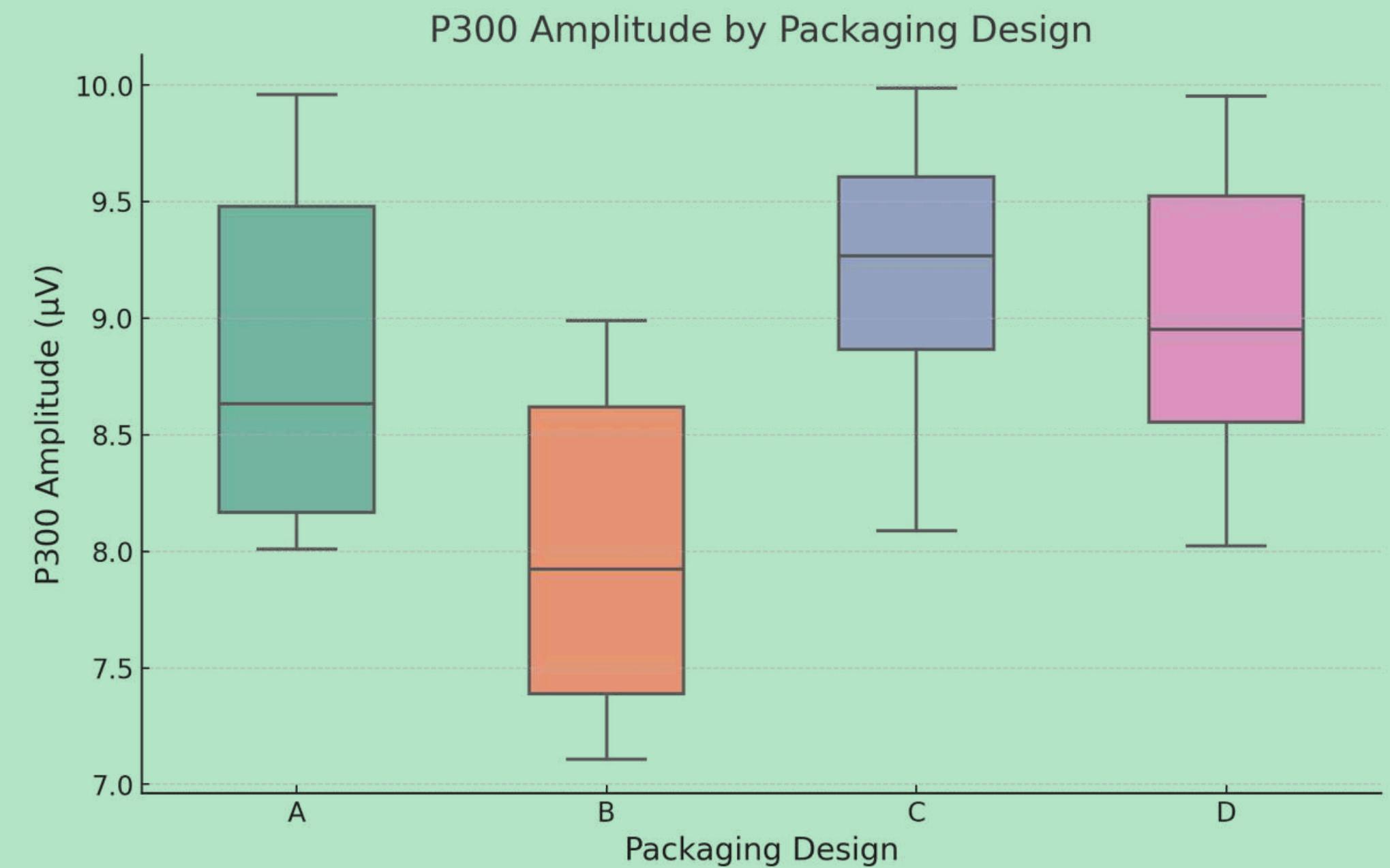
- Designs C: High N200 amplitudes suggest these designs effectively capture participants' attention. This is crucial for shelf appeal and drawing consumer focus in competitive retail environments.
- Design A and D: Moderate N200 amplitudes indicate a decent ability to attract attention, but not as strongly as Design C.
- Design B: Lower N200 amplitudes reflect that the control design is less effective at drawing attention, which may indicate that it is less visually stimulating compared to the other variations.



# P300

Higher P300 values suggest that a design is more memorable and could positively influence consumer purchase decisions.

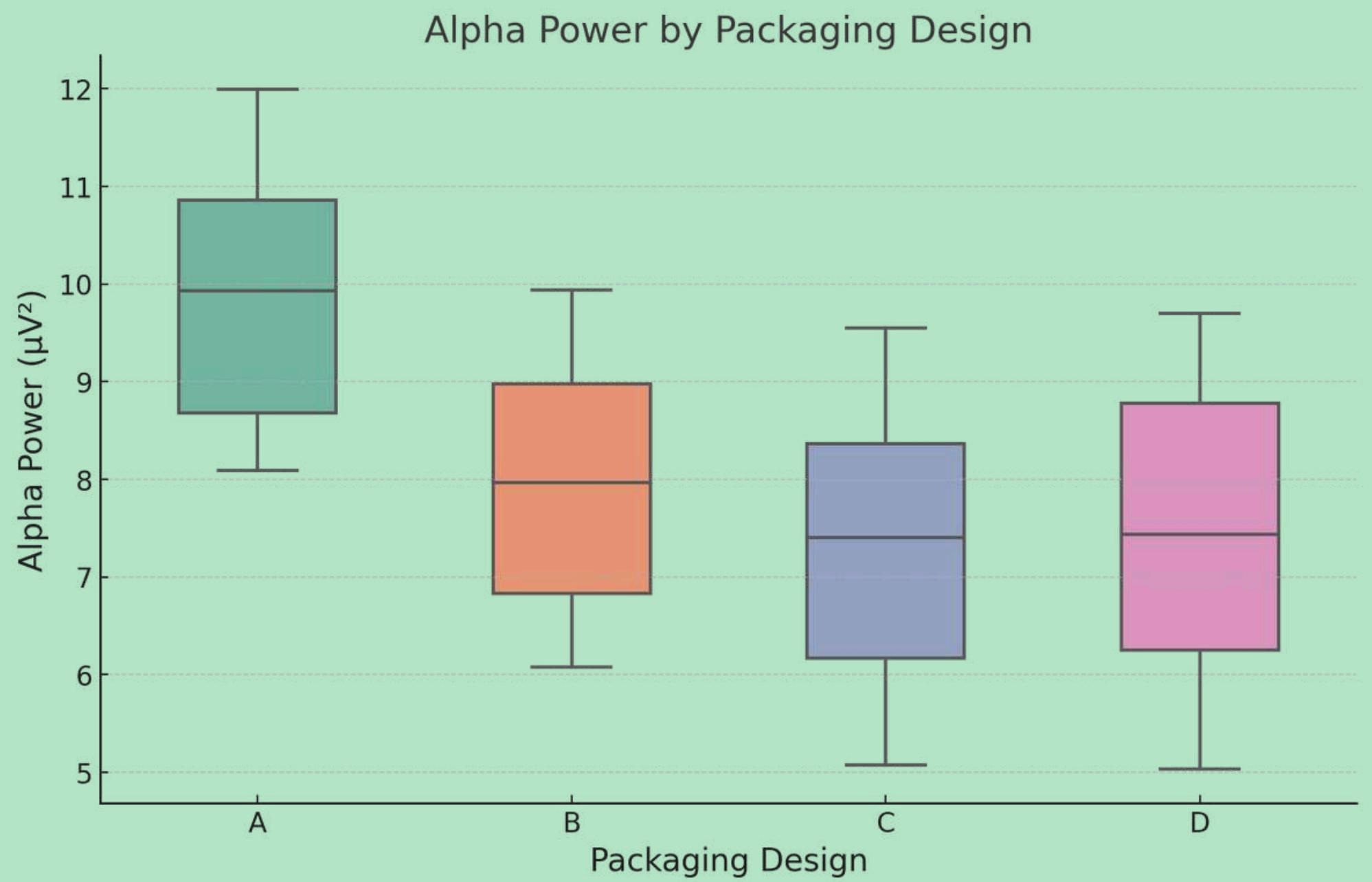
- Designs C and D: Higher P300 amplitudes are a positive sign, showing that they are memorable and likely to influence decision-making processes. Participants are more likely to remember these designs, potentially leading to better brand recall.
- Design A: Moderate P300 values indicate some memorability and decision-making potential, but not as strong as the more promising designs.
- Design B: Lower P300 amplitudes suggest less impact on memory retention, which could mean the design is less likely to leave a lasting impression on consumers.



# Alpha Waves

Lower alpha wave activity often indicates higher cognitive engagement or focus, while higher activity suggests relaxation or a less engaging stimulus.

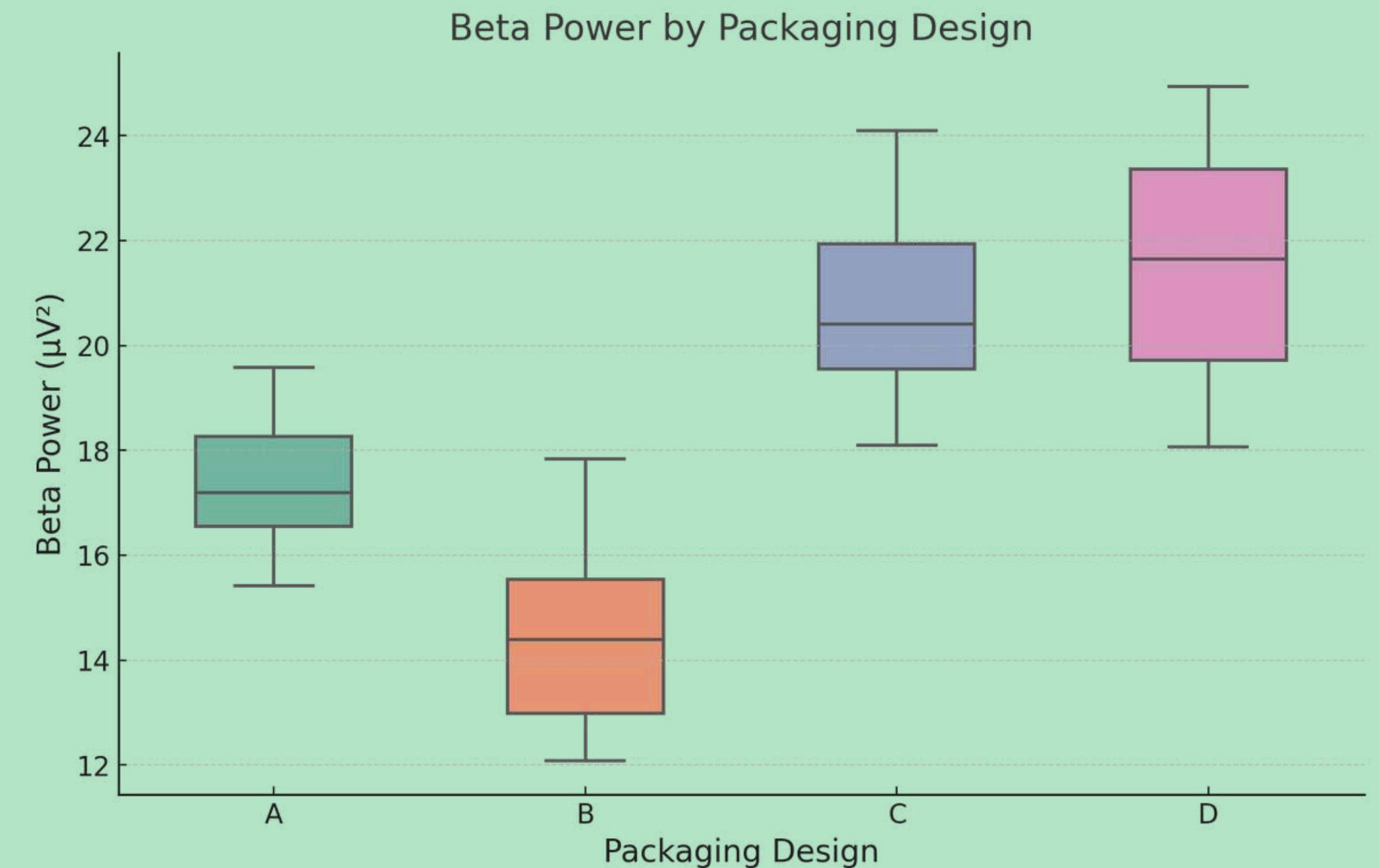
- Designs C and D: Lower Alpha power suggests participants are engaged and not overly relaxed or disengaged. This is optimal for capturing and retaining consumer attention.
- Design B: Moderate Alpha power reflects a balanced state of engagement and relaxation.
- Design A: Higher Alpha power values indicate participants may be more relaxed or less engaged, which could lead to reduced attention and interest in the design.



# Beta Waves

Higher beta wave activity can indicate increased cognitive load or active engagement.

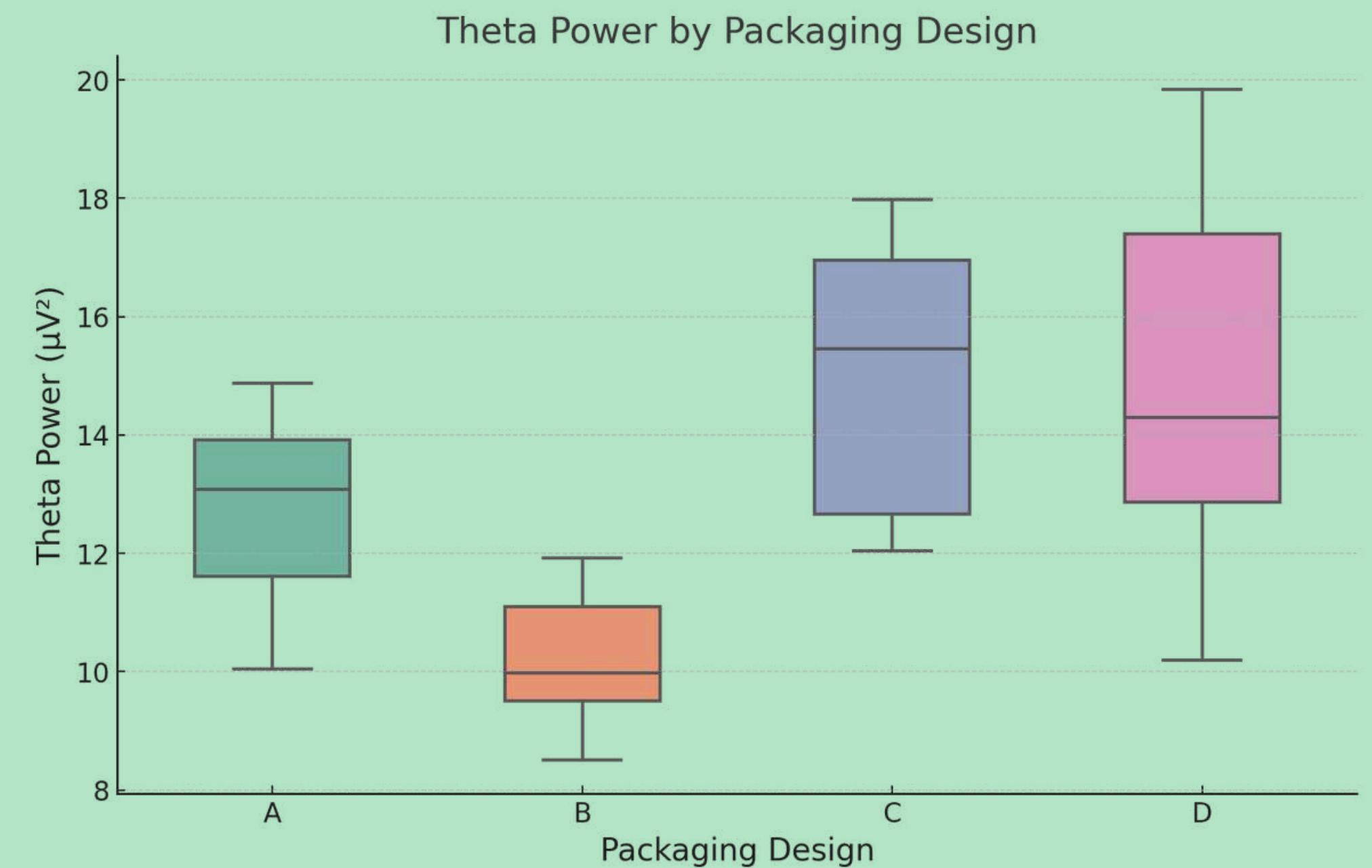
- Designs C and D: High Beta power indicates active cognitive processing and engagement, which are critical for designs meant to stand out and stimulate consumer interest.
- Design B: Lower Beta power reflects a lack of cognitive stimulation and engagement, suggesting that the control design does not encourage active thinking about the product.
- Design A: Moderate Beta power suggests some cognitive engagement, but not as strong as the more compelling designs.

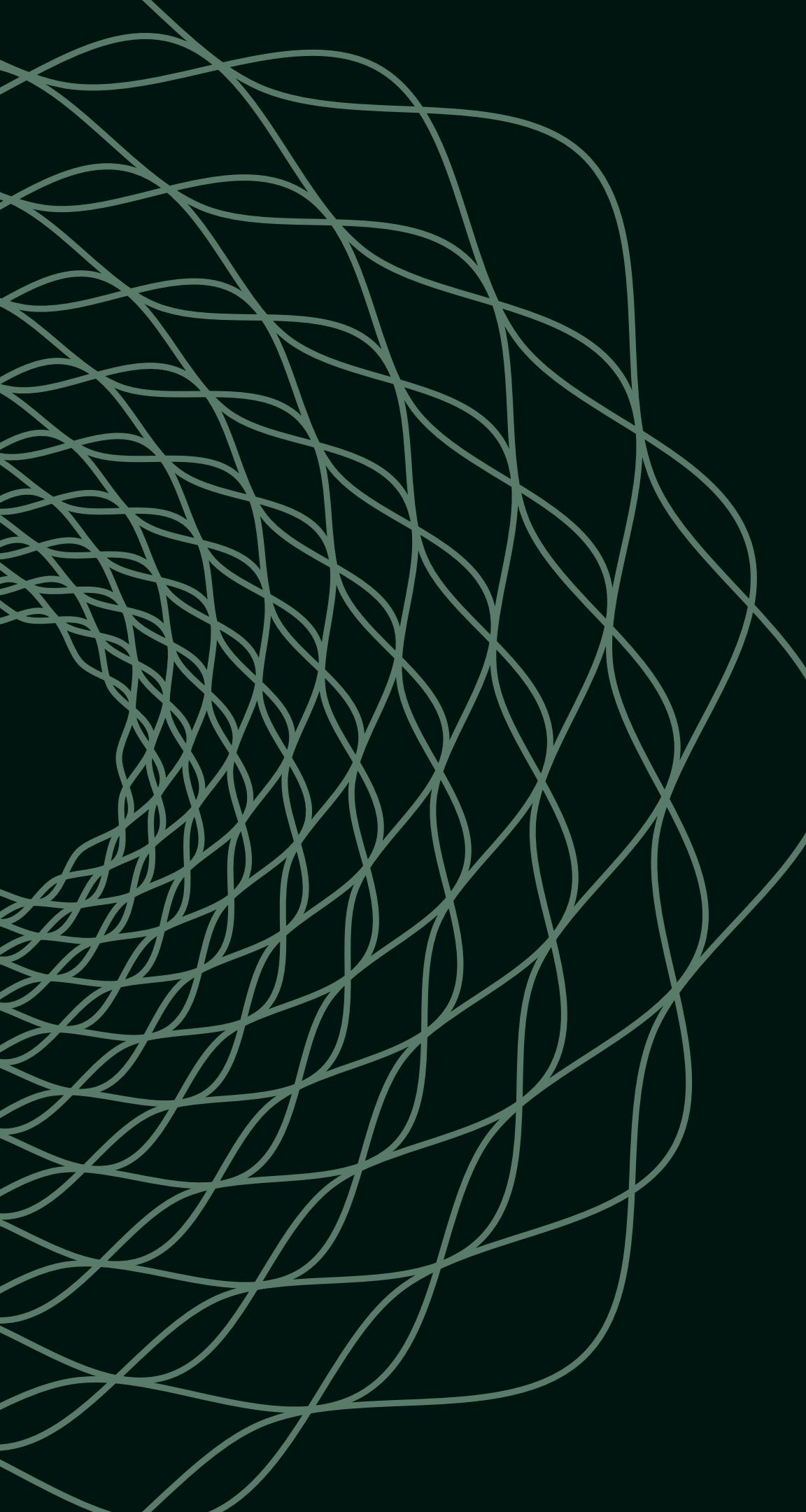


# Theta Waves

Higher theta activity can suggest better memory encoding and relaxation conducive to internal focus.

- Designs C and D: High Theta power suggests these designs facilitate better memory encoding and creative processing, which is beneficial for strong brand recall and consumer preference.
- Design A: Moderate Theta power indicates some level of memory encoding, but less so than the more effective designs.
- Design B: Lower Theta power values reflect reduced memory encoding and creative engagement, making the design less likely to be remembered or favored by consumers.





# Research Module 2 - Rebranding

# Details of the Study



## Hypothesis

The rebranding of a major mattress brand in India isn't a joke.

This study is done retrospectively to show that a neuromarketing approach could've prevented the public outcry cause from the botched rebranding campaign of Kurl-on.



## Demographics

The study included a diverse group of 30 participants, age range: 21–50 years

- Gender distribution: 50% male, 50% female
- Varied ethnic backgrounds and socioeconomic statuses

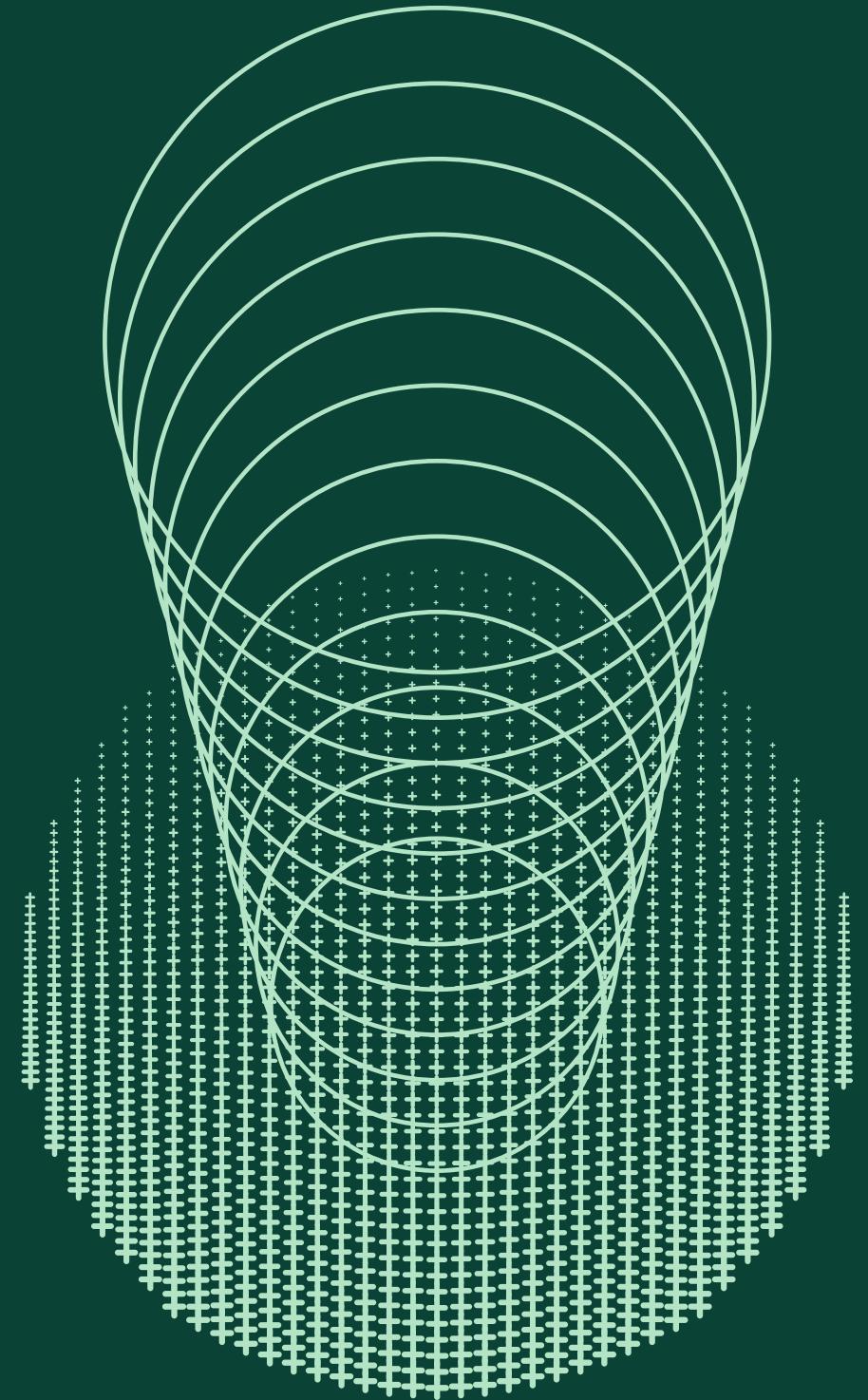


## Experiment Design

- 10-second baseline measurement (fixation cross) ; 2 poster images (10 seconds each) and 5-second resting period between images
- EEG data collection on a Muse EEG headband throughout the process

# Insights Summary

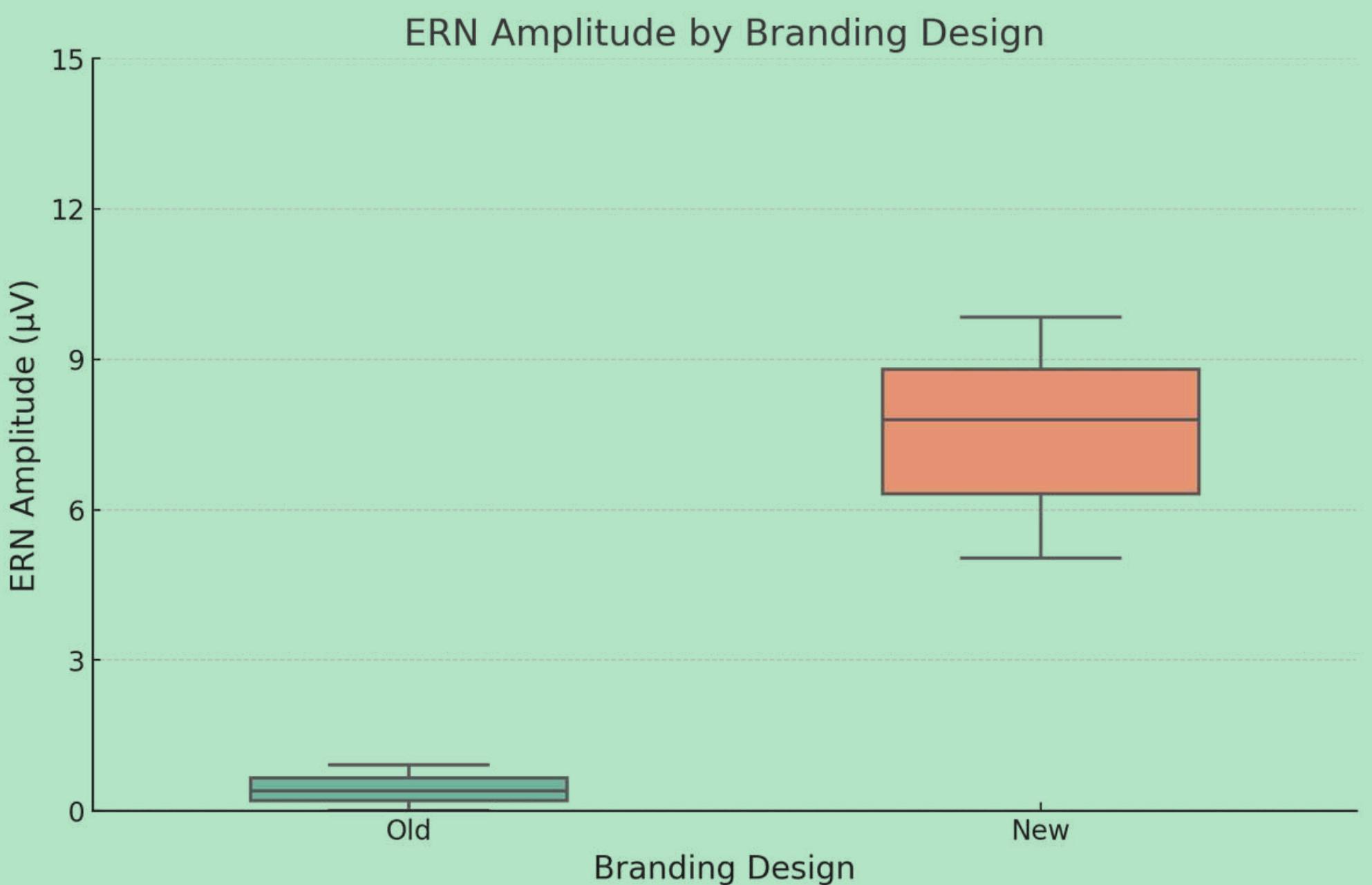
- With Alpha power being too high and Beta and Theta powers being too low, the new branding results in less cognitive engagement, poorer memory encoding, and an overall lack of audience stimulation. These insights confirm the negative reception and public outcry regarding the rebranding.
- The insights confirm that the new branding is significantly less effective than the old branding across all key EEG metrics. The new branding shows a much higher ERN (suggesting perceived errors), a much lower N200 (indicating poor attention capture), and a lower P300 (indicating weaker memory retention and decision-making impact). These findings strongly align with the negative reception and critique of the new branding by the public.



# ERN

A lower ERN value typically suggests a more acceptable or fitting design, while higher values indicate potential negative reactions.

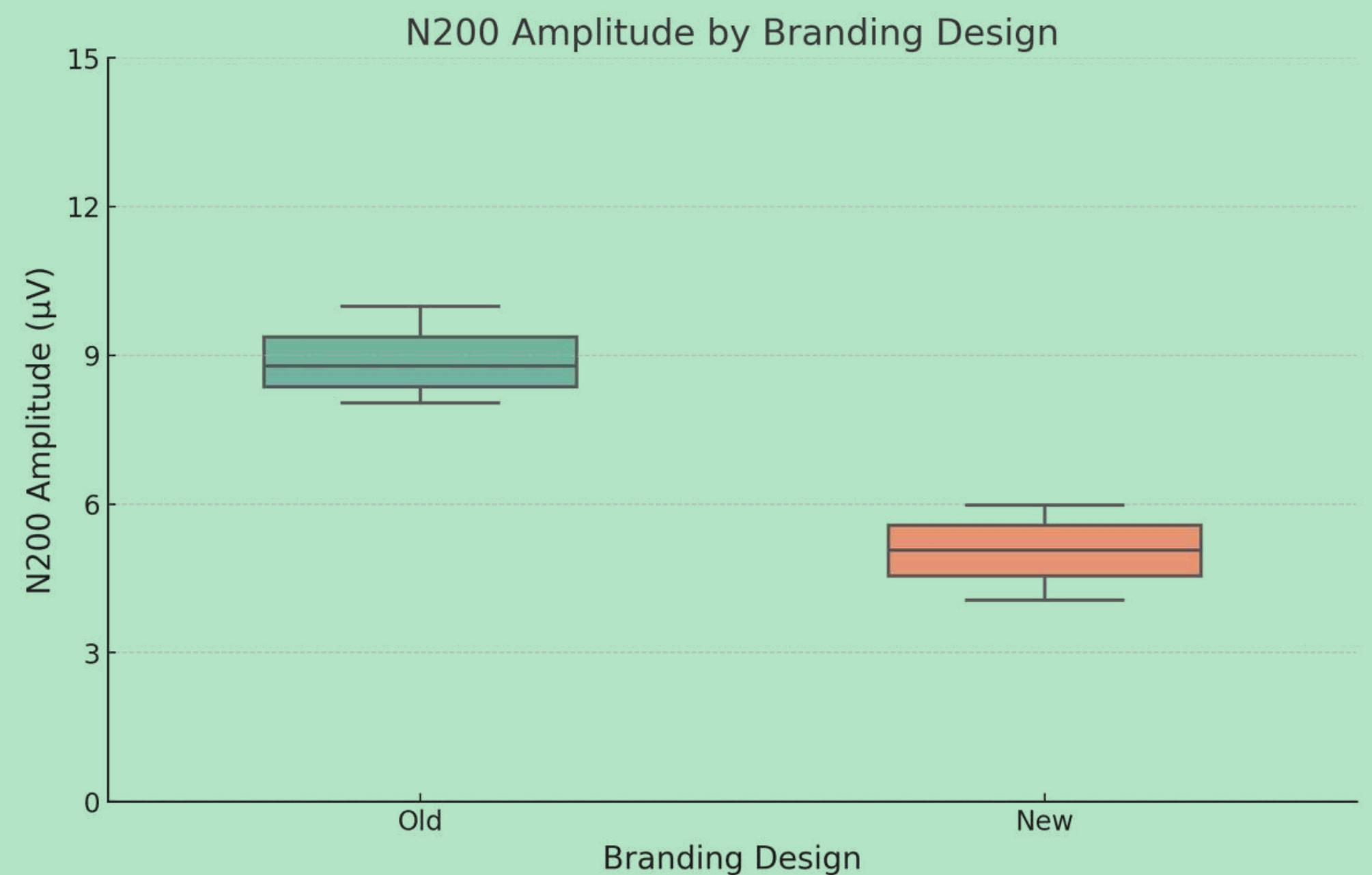
- Old Branding: Low ERN amplitudes (close to 0 µV) indicate minimal conflict or error detection, suggesting strong alignment with participant expectations.
- New Branding: Higher ERN amplitudes (5-10 µV) reflect significant conflict or perceived errors, indicating a negative reaction to the rebranding.



# N200

Higher N200 values indicate effective capture of participants' attention.

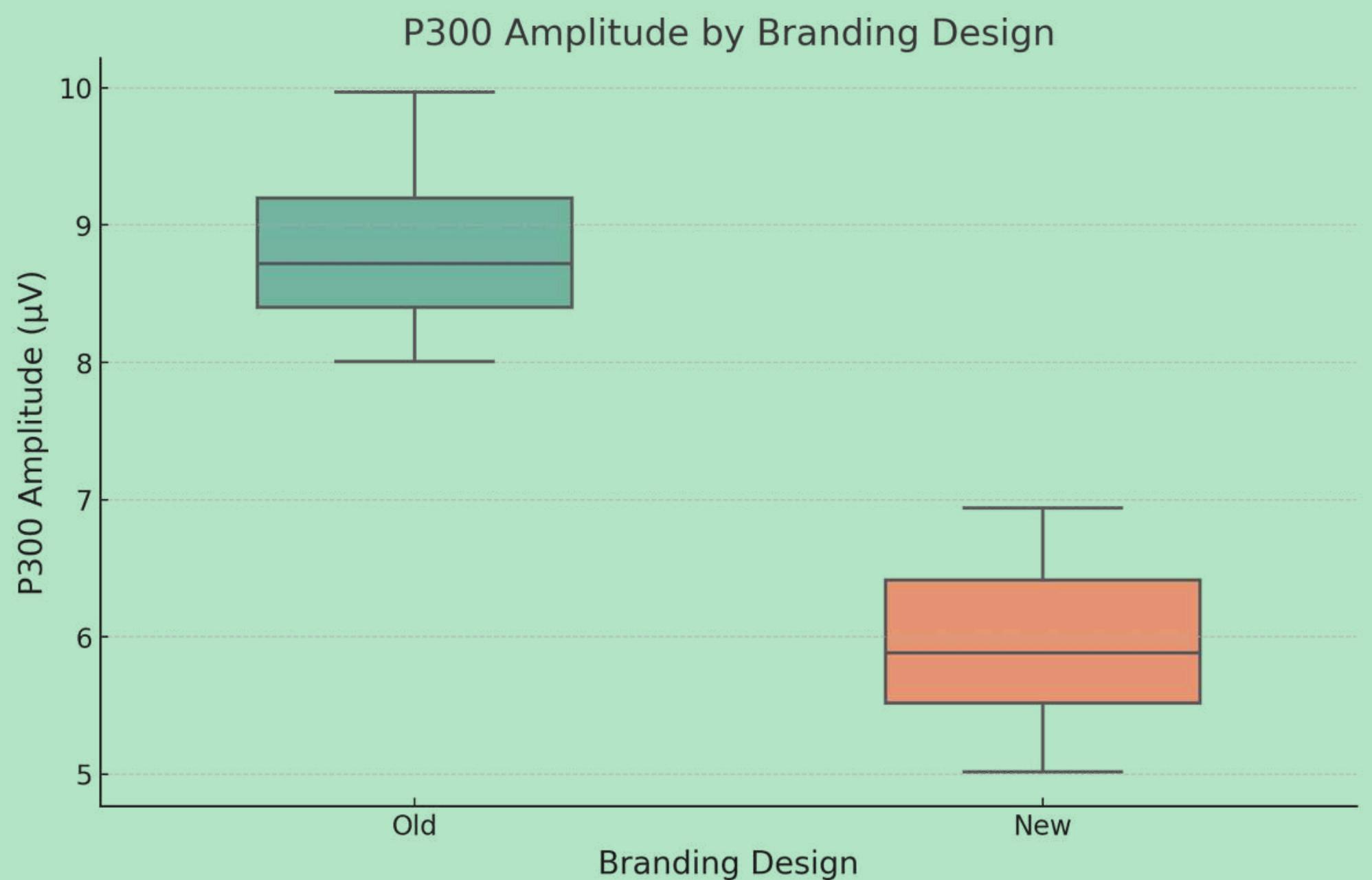
- Old Branding: High N200 amplitudes (8-10  $\mu$ V) suggest strong attention capture, essential for consumer engagement.
- New Branding: Lower N200 amplitudes (4-6  $\mu$ V) indicate weak attention capture, suggesting less visual appeal.



# P300

Higher P300 values suggest that a design is more memorable and could positively influence consumer purchase decisions.

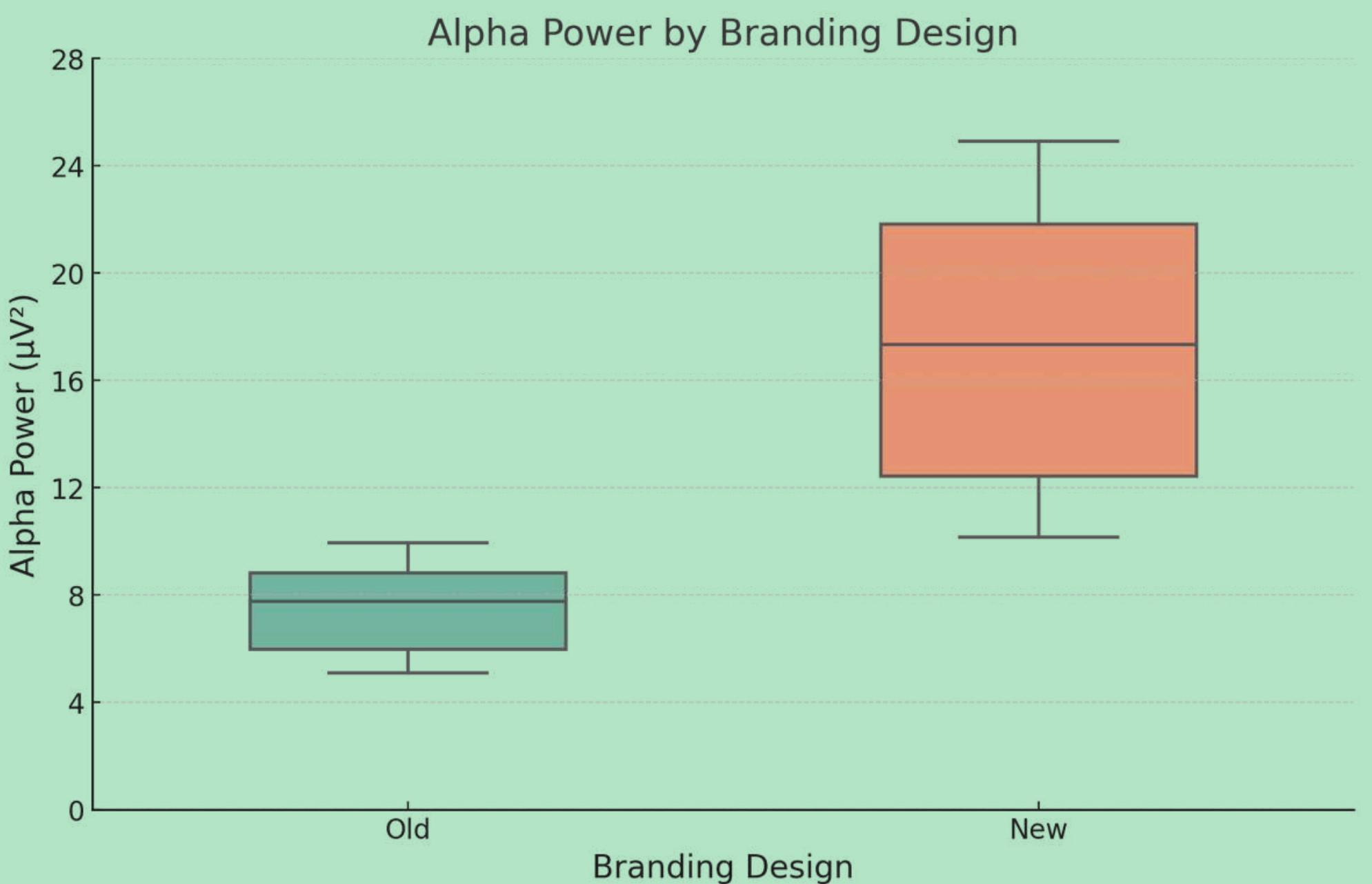
- Old Branding: Higher P300 amplitudes (8-10 µV) suggest better memory retention and potential influence on decision-making.
- New Branding: Lower P300 amplitudes (5-7 µV) reflect reduced memorability and weaker decision-making influence.



# Alpha Waves

Lower alpha wave activity often indicates higher cognitive engagement or focus, while higher activity suggests relaxation or a less engaging stimulus.

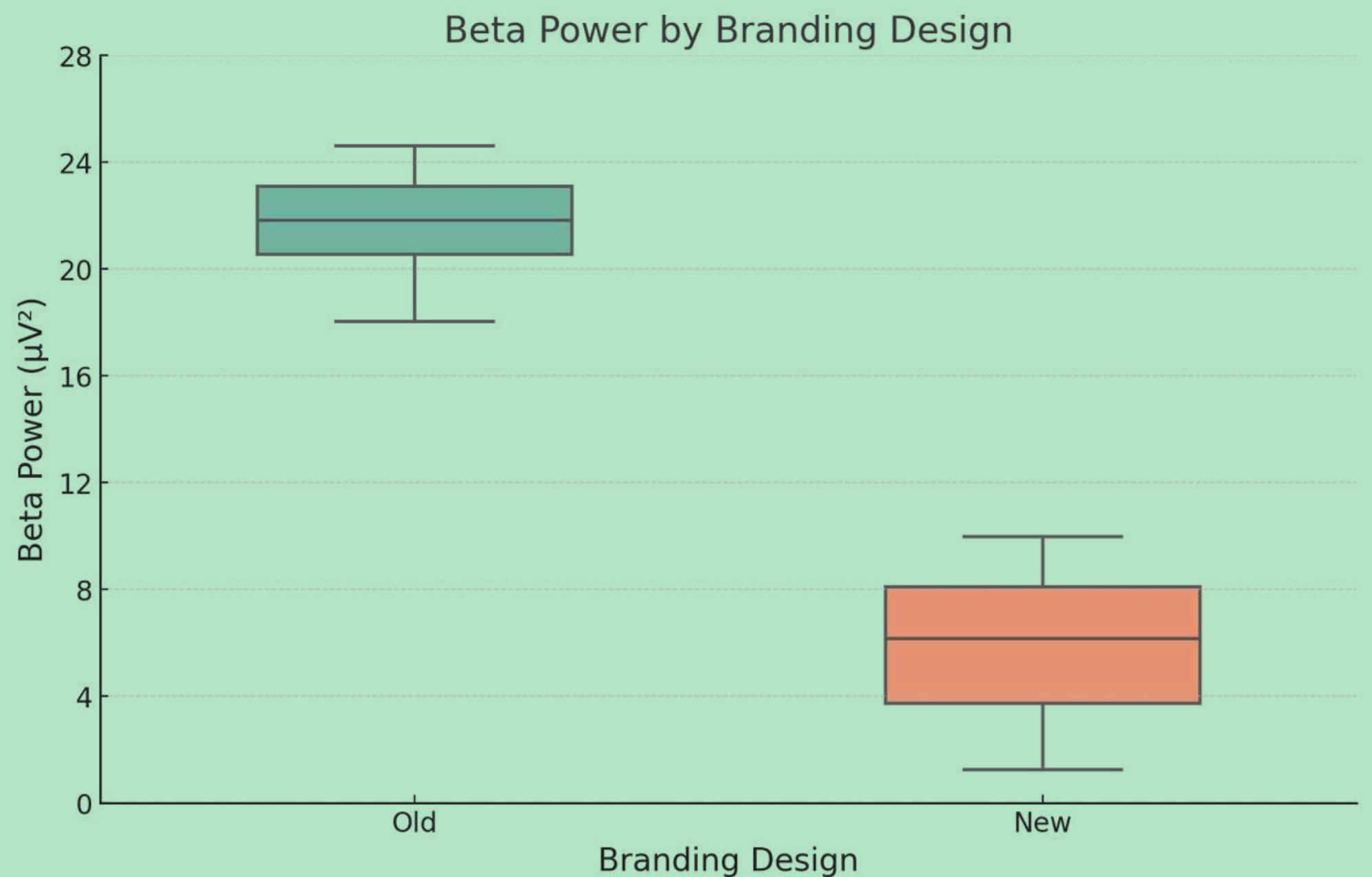
- Old Branding: Lower Alpha power ( $5\text{-}10 \mu\text{V}^2$ ) suggests engaged states with less relaxation, which is optimal for brand recall.
- New Branding: Higher Alpha power ( $10\text{-}25 \mu\text{V}^2$ ) indicates more relaxation and disengagement, reflecting a lack of interest.



# Beta Waves

Higher beta wave activity can indicate increased cognitive load or active engagement.

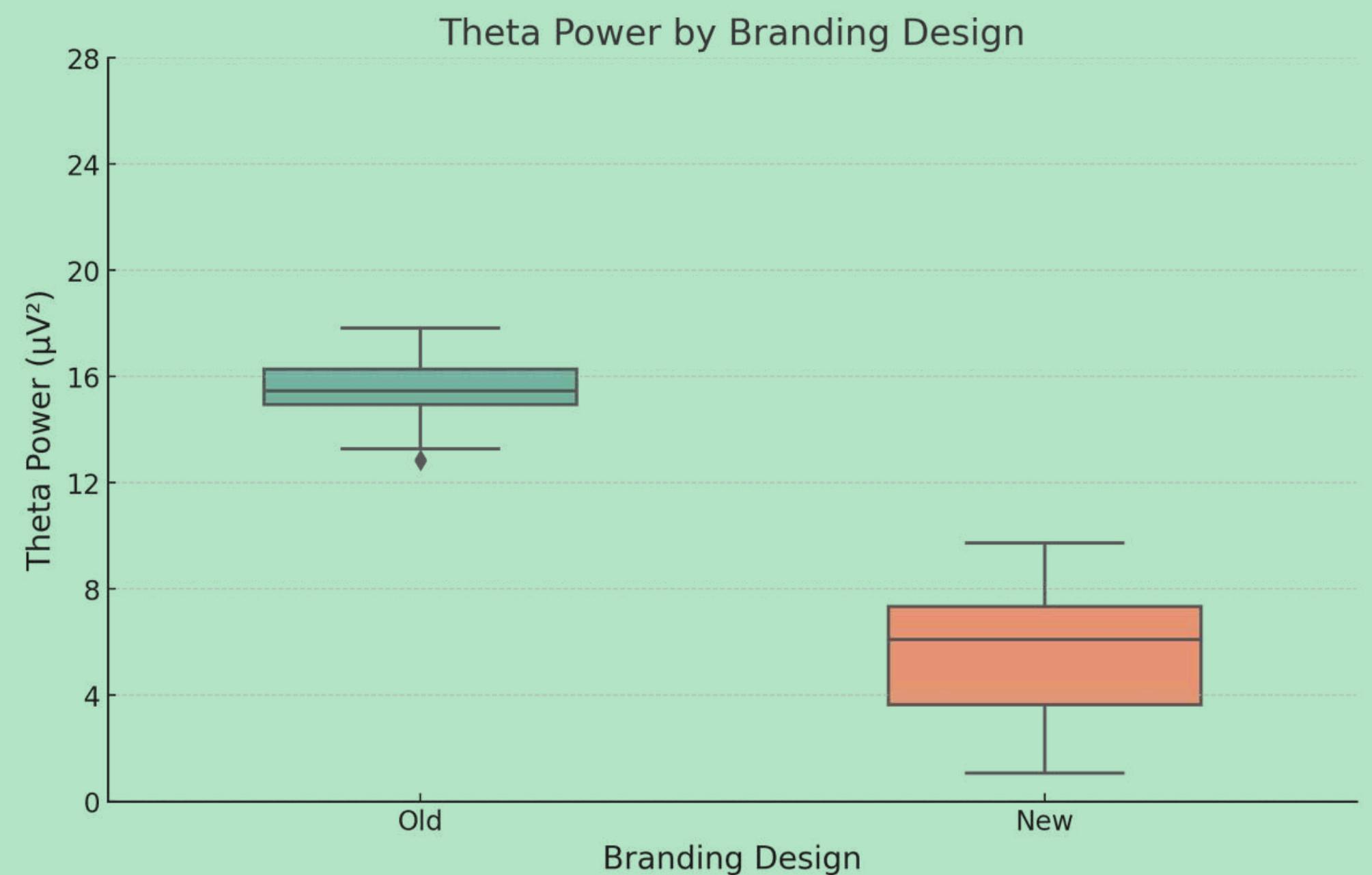
- Old Branding: High Beta power ( $18-25 \mu\text{V}^2$ ) indicates strong cognitive engagement and active processing, beneficial for brand impact.
- New Branding: Lower Beta power ( $1-10 \mu\text{V}^2$ ) suggests a lack of cognitive engagement, resulting in poor recall and interest.



# Theta Waves

Higher theta activity can suggest better memory encoding and relaxation conducive to internal focus.

- Old Branding: High Theta power ( $12\text{-}18 \mu\text{V}^2$ ) indicates better memory encoding and creative thinking, advantageous for consumer retention.
- New Branding: Lower Theta power ( $1\text{-}10 \mu\text{V}^2$ ) suggests weak memory encoding and less creative processing, making it less likely to be remembered.



# Contact

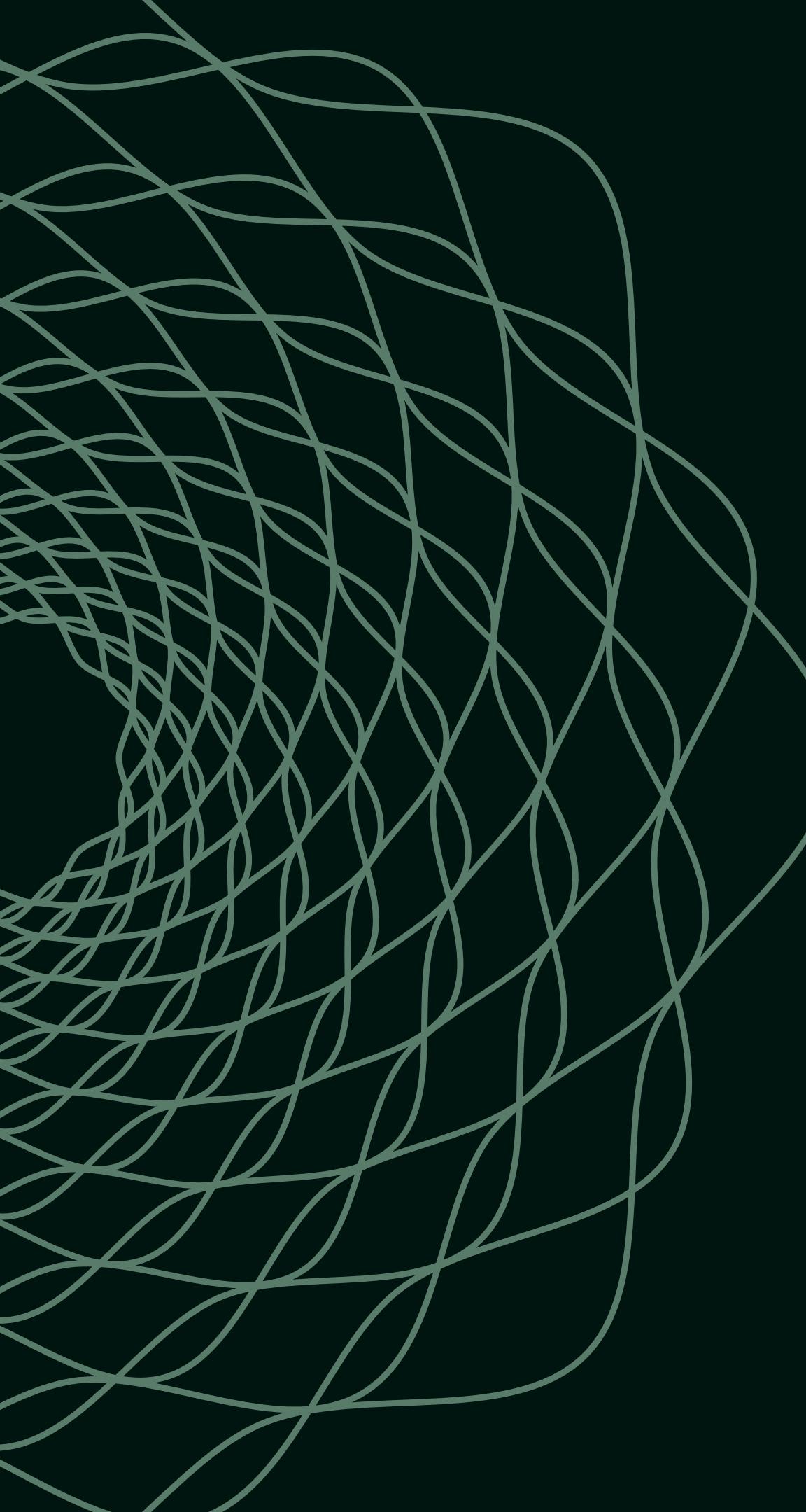
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**Website:** <https://causality.network>





Ciao!