



**Talking On The Phone Is A Good Call:
Full BIOMETRIC STUDY Report Findings**

April 23, 2020

Study Methodology

weBoost conducted a biometric study among dyads of Gen Z respondents and their moms by collecting EEG data to evaluate implicit response to communication channels.



Audience

Gen Z
(ages 18-23)



Sample Size

Experiment Group
N = 18 Participants in dyads
N = 9 Experimental subjects



Method

Online experimental design
with EEG hardware



Timing

Data collected April 15 –
April 19, 2020

Understanding the Study

What was the study?

A biometric study was commissioned to evaluate the potential benefits of talking on the phone as compared to texting or messaging.

Who were the study participants?

The study participants included dyads of Gen Z children (18-23) and their moms.

How was the data collected?

An EEG device was worn by the Gen Z participant while they communicated with their mom in two different scenarios:

- Scenario 1: Sending a text to mom
- Scenario 2: Talking on the phone with mom

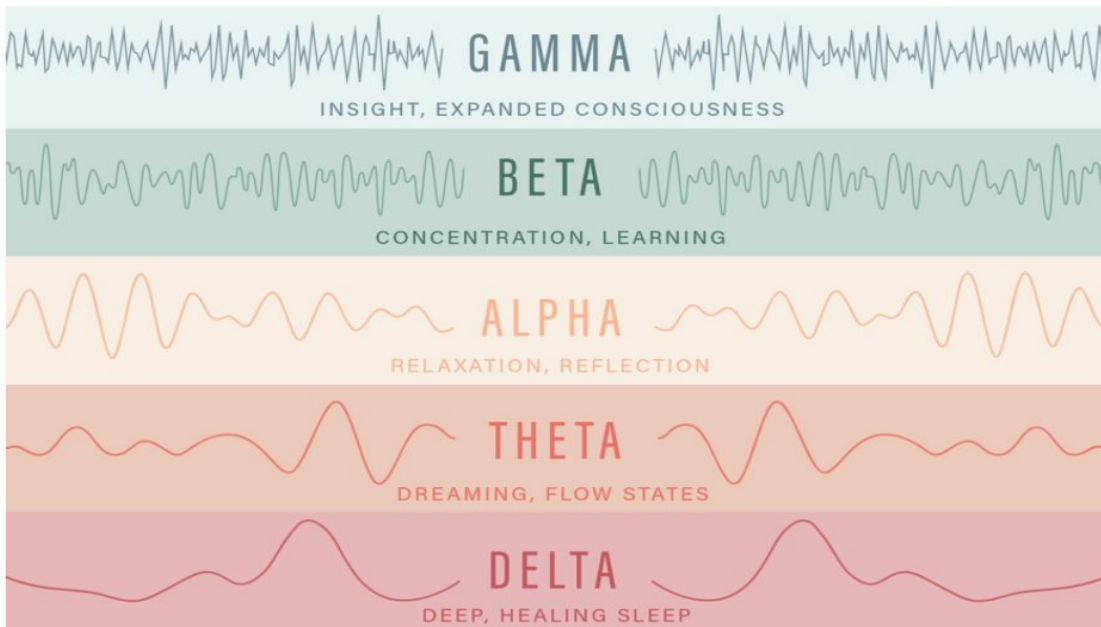
Messaging and other variables were standardized to prevent skewed data.

How was the data analyzed?

Alpha and Beta brain wave patterns were analyzed during both communication scenarios to determine the physiological factors happening in the body and conclude to what degree, if any, the participant benefited.

Understanding the Analysis

- The human mind naturally and constantly emits brainwaves that can be classified into five categories: Gamma, Beta, Alpha, Theta, Delta.
- This study examines just Alpha and Beta waves which represent relaxation, calm and concentration, respectively.



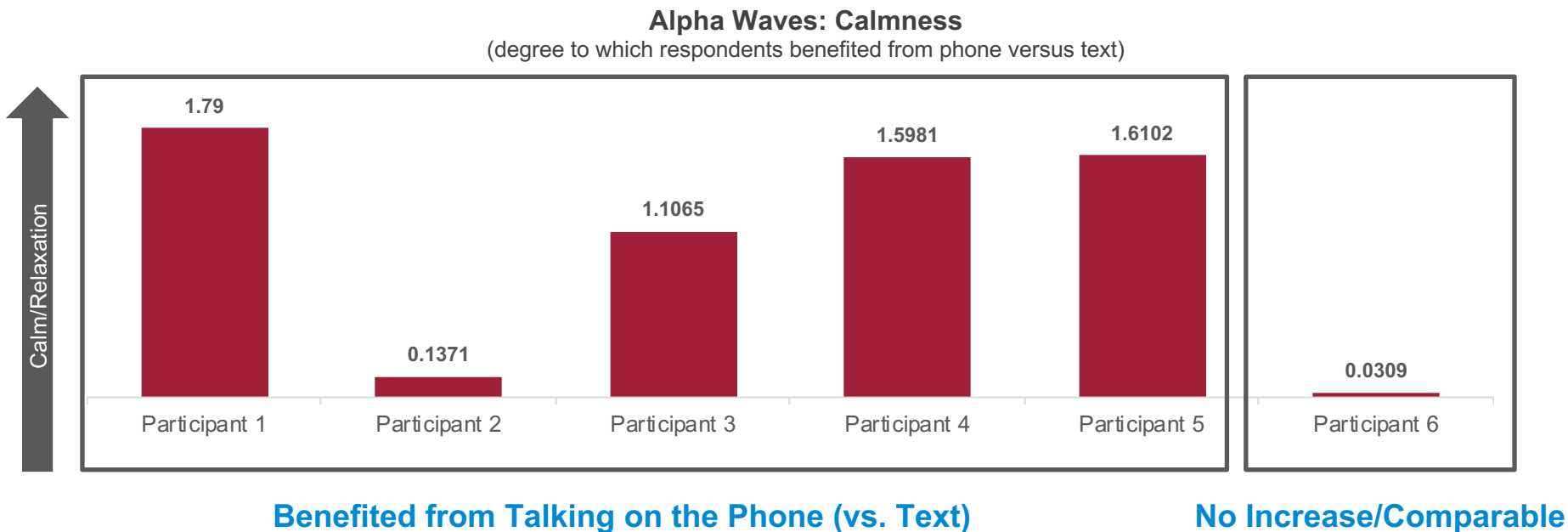
Key Findings

Neural activity among Gen Z respondents is distinctly different when talking to one's mom compared to texting, suggesting there are real, tangible benefits to speaking on the phone versus simply sending a message.

- Five out of six participants (**83%**) demonstrated increases in calm and peacefulness, as determined by recorded Alpha waves, when speaking to their mom on the phone vs. text.
- Additionally, stress indicators were also lowered for Gen Z respondents when talking to their moms. Stress indicators – as determined by evaluating the pattern difference between Alpha (calm, relaxation) and Beta (heightened concentration, focus) – demonstrate that five out of the six participants (**83%**) felt less anxiety or tension when speaking to their moms.
- The overall positive impact of the phone call is powerful – Gen Z respondents feel, on average, **64%** more relaxed or calm when talking to mom than when texting.
- Interestingly, there is no standard improvement in the state of one's serenity when it comes to the advantages of talking on the phone – the most beneficial Gen Z respondent experienced an **88%** improvement while the least experienced just a **15%** increase in calmness between a call and a text.
- The sense of calm generated by talking on the phone is tangible. When asked in post-experiment interviews, **eight of the nine** participants preferred the experience of talking to their mom over simply texting her.

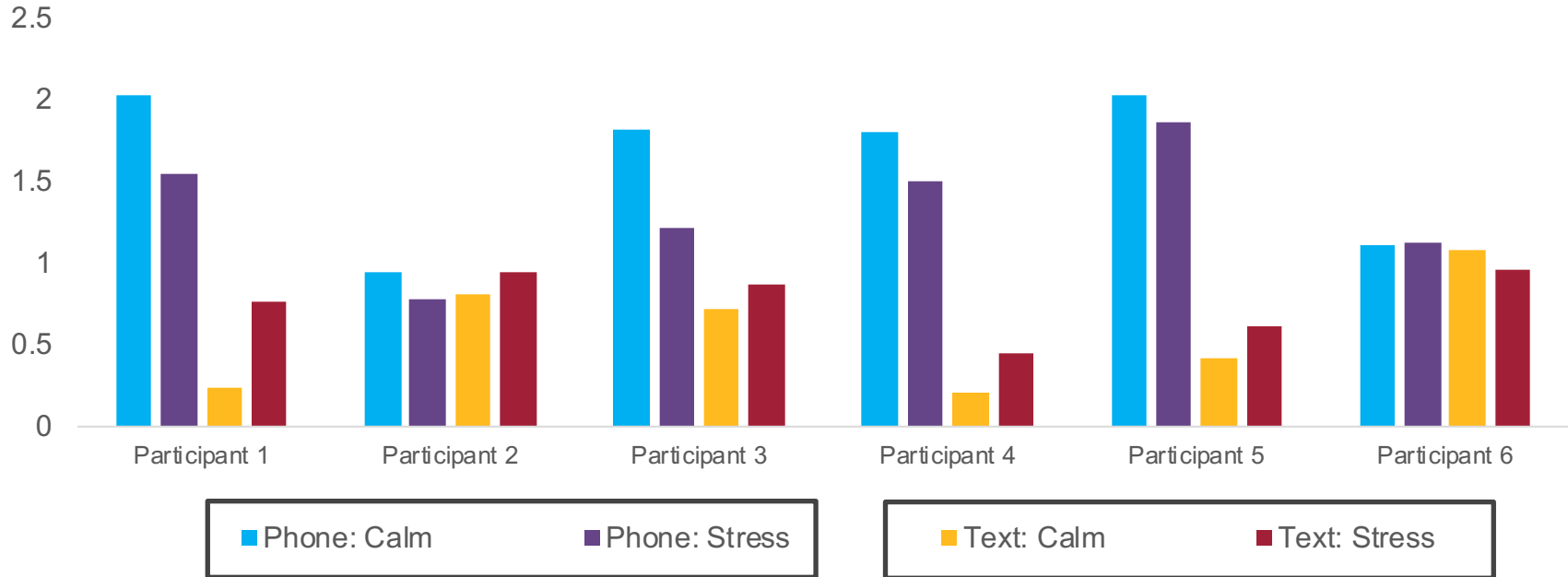
There is almost always a benefit to one's sense of serenity when choosing to talk on the phone versus texting

Make the call: whether realized or not, almost everyone benefits from talking on the phone when compared to simply sending a text, as evidenced by the increased Alpha waves when study participants spoke with their moms.



The results are in and they clearly show that phone calls trump texting when it comes to managing stress

When evaluating the patterns of the Alpha (calm) and Beta (stress) waves, it's clear that participants feel a much higher degree of relaxation and tranquility, whereas when texting, stress is the dominant emotion.



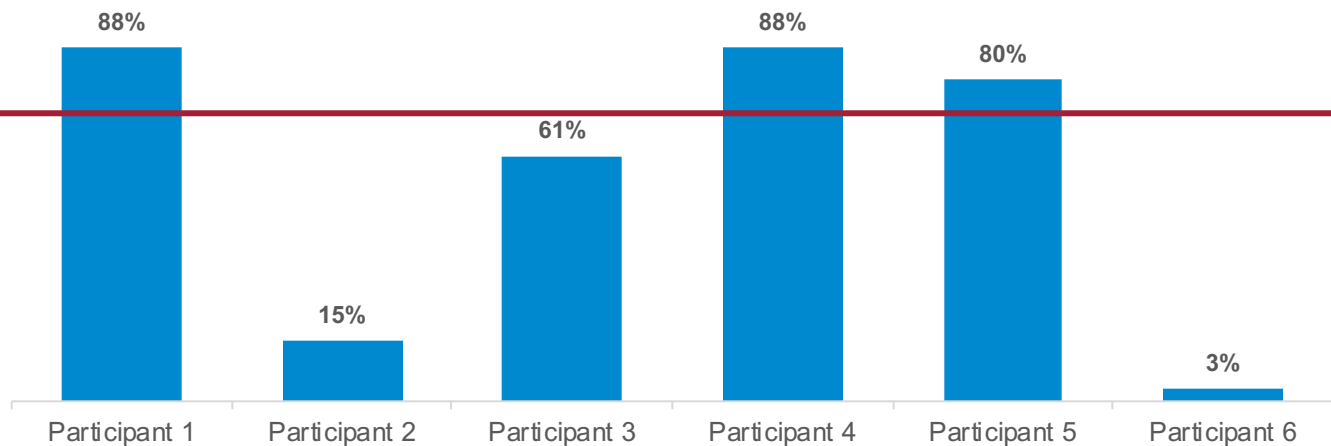
The positive impact is powerful – for many the benefit is more than just a nice to have, but rather a source of real relaxation

The relaxation effect is different for each individual but on average, talking on the phone provided a 64% increase in feelings of calmness compared to texting.

Alpha Waves: % Increased

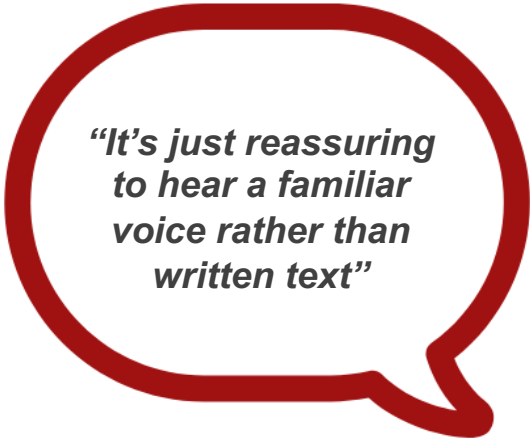
(difference in benefit between talking on the phone and texting)

On average, there is a **64%** change in indicators of calm between talking on the phone and texting.



Respondents' self-reported sense of serenity aligns with the biometric analysis of their brain waves


When asked, eight of the nine respondents preferred talking on the phone compared to texting, citing feelings of relaxation and decreased tension.



“It’s just reassuring to hear a familiar voice rather than written text”



“The voice is important”



“It shows more that you care when you call instead of texting”