

EXPERIENCE PROJECT

Marketing Report

Testing new offer and services in a digital lab

T4.2.3

Contents

Digital lab testing & reports.....	2
Participant Demographics	3
Eye Tracking: Explanation & Results	5
Facial Expressions: Explanation & Results	31
Galvanic Skin Response: Explanation & Results.....	42
Summary of individual results & feedback	53
Black Shuck.....	54
Brancaster Stays.....	57
Dilham Hall – Canoe Hire	60
Duration Brewery.....	63
Head East Campaign	66
Paul Dickson Tours	69
The Broads Authority - Kayaking.....	72
The Broads Authority - Sailing.....	75
The Broads Authority - Walking.....	78

Digital lab testing & reports

The digital lab testing undertaken by University of Surrey (PP9) took place in May 2022. A selection of promotional material such as videos and leaflets were provided by tourism players in Norfolk and were thoroughly tested in the digital lab which used state of the art eye tracking, facial expression and galvanic skin response testing methods.

The businesses and organisations from Norfolk involved in the testing were:

- Black Shuck Gin Distillery
- Brancaster Stays
- Dilham Hall – Canoe Hire
- Duration Brewery
- Head East campaign
- Paul Dickson Tours
- The Broads Authority

The findings from this testing were presented as individual detailed reports which were then shared with participating local organisations and businesses. This testing gave valuable insights into how target groups responded and interacted with the marketing materials tested and gave those businesses taking part the opportunity to better understand the strengths and weaknesses of their offer. This insight will help them improve the way they communicate and promote their offer to potential customers.

The digital testing findings were also used by the Norfolk EXPERIENCE team to review existing marketing materials and inform development of new materials to be used as part of the Be Norfolk marketing campaign. This helped to ensure our EXPERIENCE marketing material are high quality and have broad appeal to increase engagement with visitors.

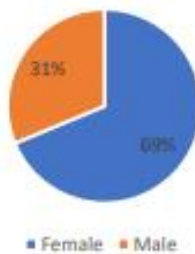
The impact of this exercise goes beyond the EXPERIENCE project as its findings and lessons learnt can be used in future projects and marketing campaigns run by the Norfolk County Council and external stakeholders.

Participant Demographics

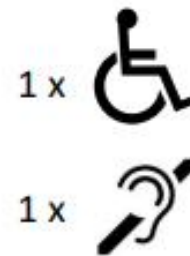
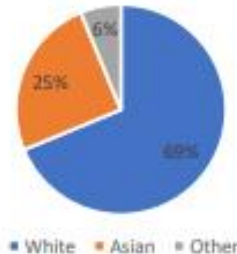
Participant demographics

Marketing tests were conducted with 32 participants. All the participants tested the English content and 14 tested the French content. Participants ranged from 18 to 78 years old and the majority were female with a white ethnic background.

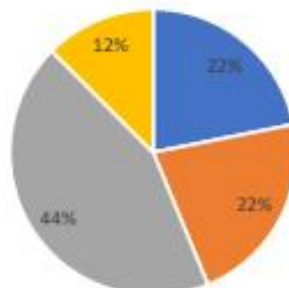
Gender



Ethnicity



Age group



	Born	Ages
Gen Z	1997 – 2012	10 – 25
Millennials	1981 – 1996	26 – 41
Gen X	1965 – 1980	42 – 57
Boomers II	1955 – 1964	58 – 67
Boomers I	1946 – 1954	68 – 76
Post War	1928 – 1945	77 – 94

Source: www.beresfordresearch.com

Eye Tracking: Explanation & Results

Eye-tracking - An explanation of visual attention

Eye tracking measures viewers' eye movements to understand the distribution of visual attention.

Quantification:

The process involves the camera tracking the pupil center and where the light reflects from the cornea, informing the eye tracker about the movement and direction of the eye.

Eye tracking is quantified in various different ways:

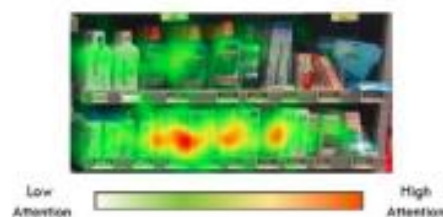
- **Gaze points** constitute the most basic unit of measure. One gaze point equals one raw sample captured by the eye tracker.
- Eye movements between fixations are known as **saccades**.
- A **fixation**, a period in which our eyes are locked toward a specific object. Typically, the fixation duration is 100-300 milliseconds.



Data Visualizations:

- **Heatmaps** are static or dynamic aggregations of gaze points or fixations revealing the distribution of visual attention.
- **Visual attention** is aggregated across the entire audience, and displayed as "heat" overlaid on a stimulus. This heat can help identify what areas of the content draw the most visual attention, and what areas or elements may go missed entirely.

While **red areas** suggest a high number of gaze points, and therefore an increased level of interest, **yellow and green areas** show fewer gaze points, indicating a less engaged visual system.



Areas of Interest



- **Areas of Interest (AOIs)** are user-defined subregions of a displayed stimulus. AOIs are an essential tool to incorporate into analysis for quantification and a more objective approach to interpreting eye tracking data. These metrics can reveal **how many respondents fixated in that area of interest, how long it took them to fixate in that area, and how long they spent looking**. These metrics can indicate if a stimulus is capturing visual attention in the intended way, or if the stimulus can be optimized to better appeal to natural visual patterns.

While eye tracking provides a wealth of information on where and when an individual looked, lengths of fixations, and the order in which elements are fixated upon, eye tracking does **not** reveal why an individual looked at a certain element, or **how they felt** while navigating a certain visual scene.



Eye-tracking - Results

Areas of Interest

Gaze based metrics analyse searching behaviour

Dwell count = how often participants looked at this AOI in average / revisit = how often they revisit this AOI

Hit time AOI (ms) = how long before people look at this AOI in average

Dwell time (ms) = how long people spent on this AOI in average / how long in (%)

Fixation based metrics analyse information processing

Fixation count = how often participants process information in this AOI in average

TTFF AOI (ms) = time to first fixation – how long before people process information in this AOI in average

Experiment settings

Number of participants: **31 participants**

Instructions:

"You will be now presented postcards and leaflets of small businesses.
Let us know how you liked the content afterwards.

Thanks!"



Exposure time: **15 seconds (recto)**

25 seconds (verso)

Surveys after exposure:

- Ad perception
- Intention to purchase

Eye-tracking - Results

Heatmaps



Whiskard BlackShark 1 - Engagement (User: D1)



Whiskard BlackShark 1 - Engagement (User: D1)

Eye-tracking - Results

Areas of Interest



BLACK SHUCK WHISKY GIN - 41% VOL.
Share the Whisker

Whisker Gin (that's an ancient Norfolk word for bilberry, if you didn't know) is a limited-edition gin with a natural essence to raise funds for the East Angles Air Ambulance.

The iconic red and white branding and imagery of Whisker Gin are returning to the traditional Norfolk roots and consider each glass served with the winning cause of raising funds and raising spirits.

Serving Suggestion:
Mix one part Whisker Gin with 3 parts Fever Tree Indian Tonic. Serve over plenty of ice in a Black Shuck Copper Drifter. Garnish with a slice of lime and a few blueberries.

With just 2020 bottles of Whisker Gin Collector's Edition being made and each bottle being uniquely numbered, Whisker Gin offers something extra special to all drinkers and collectors alike. With 14 from every bottle being donated to East Angles Air Ambulance the Black Shuck team aim to raise over £3000 in 2020.

Patrick & Sarah Saunders
Contact Information
www.whisker.co.uk info@whisker.co.uk T: +44(0) 1957 817 818

2 ACH metrics	Top	Middle	Bottom
Information			
Size (pxH)	34.9	26.8	14.4
Size (%)	2.2	1.7	0.9
Respondent base	31	31	31
Gaze based metrics			
Respondent count	31	31	29
Respondent ratio (%)	100	100	93.6
Dwell count	6.8	4.8	3.3
Revisit count	5.6	3.6	2.8
Hit time ACH (ms)	833.3	1960.7	3440.6
Dwell time (ms)	4607.3	3493.7	3661
Dwell time (%)	35.1	36.8	24.4
Fixation based metrics			
Respondent count	31	31	29
Respondent ratio (%)	100	100	93.6
Dwells with fixations	5.1	3.7	2.5
Revisit count	4.1	2.7	1.3
Fixation count	16.3	9.8	9.8
TPH ACH (ms)	713.3	2082.1	3591
Dwell time (ms)	4119.8	3380.3	3402.8
Dwell time (%)	27.5	16.4	22.9
First fixation duration (ms)	232.3	246.8	271.8

2 ACH metrics	Title	1st test	2nd test	3rd test	4th test	Constant Information
Information						
Size (pxH)	29.3	33.4	79.3	76.3	100.6	81.1
Size (%)	2.5	3.8	9	8.3	6.3	5.3
Respondent base	31	31	31	31	31	31
Size based metrics						
Respondent count	30	31	31	31	30	21
Respondent ratio (%)	96.8	100	100	100	96.8	67.7
Dwell count	2.9	3.8	3.8	3.2	2.9	2.2
Revisit count	1.9	2.8	2.8	2.2	1.9	1.2
Hit time ACH (ms)	794	3402.8	3903.3	3178.6	3177.1	15144.5
Dwell time (ms)	3389.3	4299.8	4110.8	3709.2	3082.1	36129
Dwell time (%)	8.6	17.2	17.3	14.8	11.2	6.5
Fixation based metrics						
Respondent count	30	31	31	31	29	18
Respondent ratio (%)	96.8	100	100	100	93.6	58.1
Dwells with fixations	2.1	2.4	2.4	1.9	1.7	1.4
Revisit count	1.1	1.4	1.4	0.9	0.7	0.4
Fixation count	18.3	18.8	18.3	15.4	21.3	8.9
TPH ACH (ms)	914.3	3675.4	3982.4	3188.6	3972	17275.3
Dwell time (ms)	3320.6	4275.4	3833.1	3388.6	3795.2	14821
Dwell time (%)	9.3	18.3	16.3	13.1	16.2	6.9
First fixation duration (ms)	181.4	235	176.8	174.3	244.2	201

Experiment settings

Number of participants: 31 participants

Instructions:

"You will be now presented postcards and leaflets of small businesses.
Let us know how you liked the content afterwards.
Thanks!"



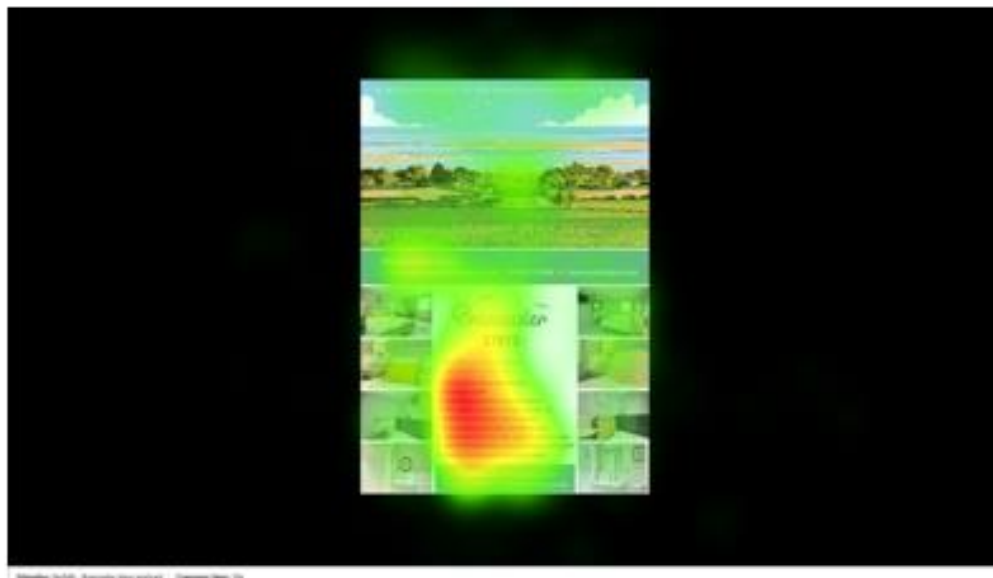
Exposure time: 30 seconds

Surveys after exposure:

- Ad perception
- Intention to purchase

Eye-tracking - Results

Heatmap



Eye-tracking - Results

Areas of Interest



Gaze based metrics analyse searching behaviour

Dwell count = how often participants looked at this AOI in average / revisit = how often they revisit this AOI

Hit time AOI (ms) = how long before people look at this AOI in average

Dwell time (ms) = how long people spent on this AOI in average / how long in (%)

Fixation based metrics analyse information processing

Fixation count = how often participants process information in this AOI in average

TTFF AOI (ms) = time to first fixation – how long before people process information in this AOI in average

Experiment settings

Number of participants: **31 participants**

Instructions:

"You will be now presented postcards and leaflets of small businesses.
Let us know how you liked the content afterwards.
Thanks!"



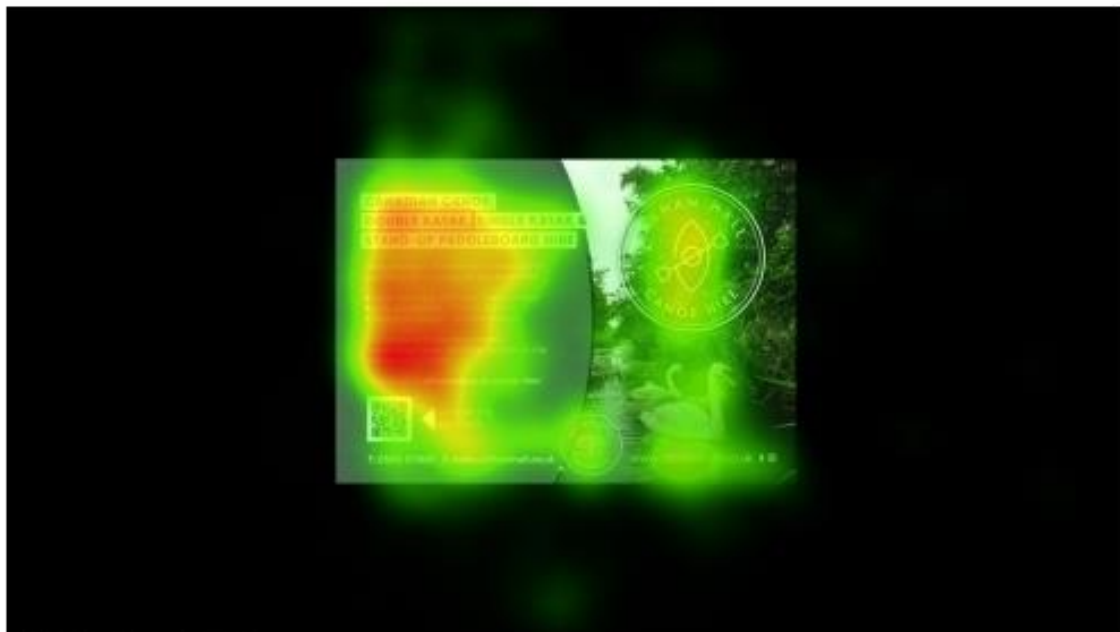
Exposure time: **30 seconds**

Surveys after exposure:

- Ad perception
- Intention to purchase

Eye-tracking - Results

Heatmap



Stimulus: Norfolk - (Silver Centre poster) / Experience: 0000-000

Eye-tracking - Results

Areas of Interest



ADI metrics	Title	Text	Logo	Information
Information				
Size (cm ²)	29.1	48.6	55.2	42
Size (%)	1.8	3.1	3.5	2.7
Respondent base	31	31	31	31
Gaze based metrics				
Respondent count	31	31	30	30
Respondent ratio (%)	100	100	96.8	96.8
Dwell count	5.7	7.6	5.2	4.8
Revisit count	4.7	6.6	4.2	3.8
Hit time AOI (ms)	1480.7	3897.9	3677.7	9789
Dwell time (ms)	4237	8790.6	1323.1	4138.4
Dwell time (%)	14.1	29.3	11.1	13.8
Fixation based metrics				
Respondent count	31	31	30	30
Respondent ratio (%)	100	100	96.8	96.8
Dwells with fixations	4.2	5.1	4.6	3.5
Revisit count	3.2	4.1	3.6	2.5
Fixation count	18.7	33.4	13.2	14.5
TTF AOI (ms)	1551.7	4296.2	3929.4	10532.3
Dwell time (ms)	4213.9	8583.2	2883.8	3889.3
Dwell time (%)	14.1	28.6	9.8	13.3
First fixation duration (ms)	197.7	207.8	191.1	248.6

Gaze based metrics analyse searching behaviour

Dwell count = how often participants looked at this AOI in average / revisit = how often they revisit this AOI

Hit time AOI (ms) = how long before people look at this AOI in average

Dwell time (ms) = how long people spent on this AOI in average / how long in (%)

Fixation based metrics analyse information processing

Fixation count = how often participants process information in this AOI in average

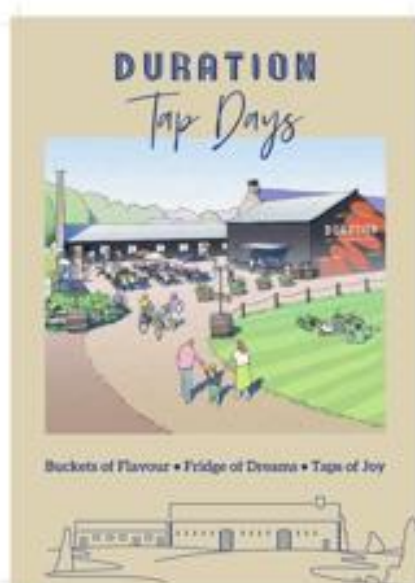
TTF AOI (ms) = time to first fixation – how long before people process information in this AOI in average

Experiment settings

Number of participants: 31 participants

Instructions:

"You will be now presented postcards and leaflets of small businesses.
Let us know how you liked the content afterwards.
Thanks!"



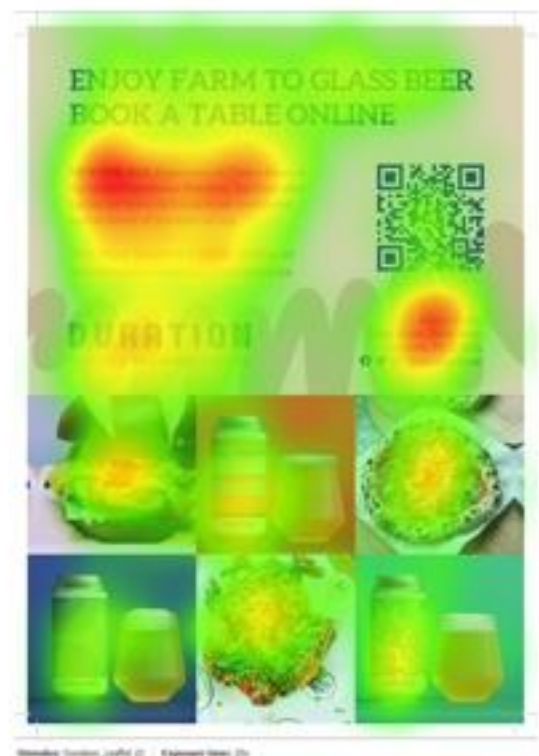
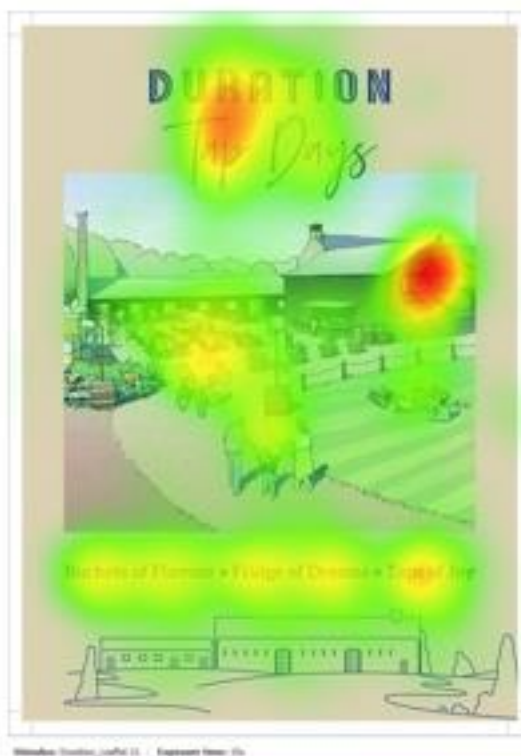
Exposure time: 15 seconds (recto) 25 seconds (verso)

Surveys after exposure:

- Ad perception
- Intention to purchase

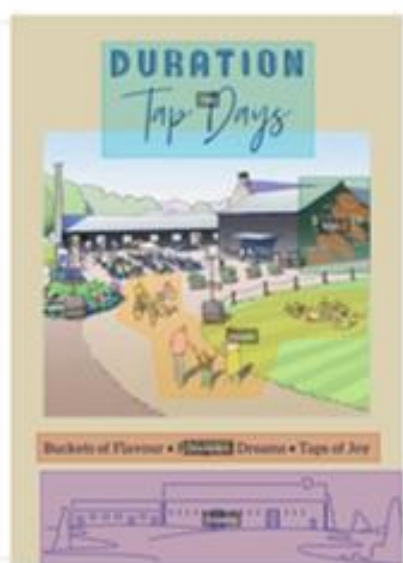
Eye-tracking - Results

Heatmaps



Eye-tracking - Results

Areas of Interest



Information	Title	Logo	People	Description	Growing
Size (px)	66.6	18.7	41.3	25.3	82.7
Size (%)	4.7	1.1	2.9	1.8	5.8
Response rate	31	31	31	31	31
Gain based metrics					
Response count	82	29	30	30	31
Response ratio (%)	96.8	80.8	96.8	96.8	100
Dwell count	3.9	3.3	3.9	3.1	2.8
Scroll count	2.5	1.5	2.3	2.1	1.8
Hot time ACP (ms)	571.8	600.1	549.2	432.7	617.8
Dwell time (ms)	1198.4	1822.5	1171.4	1420.1	1285.3
Dwell time (%)	31	10.8	6.2	16.1	8.4
Fixation based metrics					
Response count	39	38	39	38	39
Response ratio (%)	96.8	95.3	91.8	96.8	91.8
Scrolls with fixations	2.8	2.3	3.1	2.1	1.9
Scroll count	1.8	1.3	2.1	1.1	0.8
Fixation count	11.2	5	5.8	18.8	5.8
TTT ACP (ms)	896.6	4787.6	1712.3	4081.9	6615.3
Dwell time (ms)	2718.8	1858.6	1461.2	2413.4	1855.2
Dwell time (%)	18.1	10.4	9.4	16.1	7
First fixation duration (ms)	252.2	275.3	181.7	191.8	182.6



Information	Title	Text	Logo	Contact information	Beer	Food
Size (px)	81.3	22.4	18.3	10.3	138.8	117.7
Size (%)	3.2	0.9	1.2	1	8.8	8.7
Response rate	31	31	31	31	31	31
Gain based metrics						
Response count	31	30	31	30	31	31
Response ratio (%)	100	96.8	100	96.8	100	100
Dwell count	3.8	9	3.8	2.1	8.8	1.2
Scroll count	2.5	4	1.9	1.2	3.4	8.3
Hot time ACP (ms)	1385.2	1178.3	898.9	1398.4	4407.9	1039.3
Dwell time (ms)	2104.5	1881	1105.7	1287.5	3332.3	9155.3
Dwell time (%)	16.2	23.6	5.7	6.8	18.2	71
Fixation based metrics						
Response count	39	38	31	39	31	31
Response ratio (%)	96.8	96.8	100	96.8	100	100
Scrolls with fixations	2.7	3.4	2.3	2	3.2	6
Scroll count	1.7	2.4	1.3	1	4.2	9
Fixation count	12.8	21.5	9	5.5	11.8	18.1
TTT ACP (ms)	1408.1	2184.5	1480.3	1510.8	4785.1	4037.3
Dwell time (ms)	2104.5	1881	1105.7	1287.5	3332.3	9155.3
Dwell time (%)	16.1	22	5.4	5.8	11.7	18.6
First fixation duration (ms)	140	191.1	117.2	218.1	231.1	231.1



Experiment settings

Number of participants: 30 participants

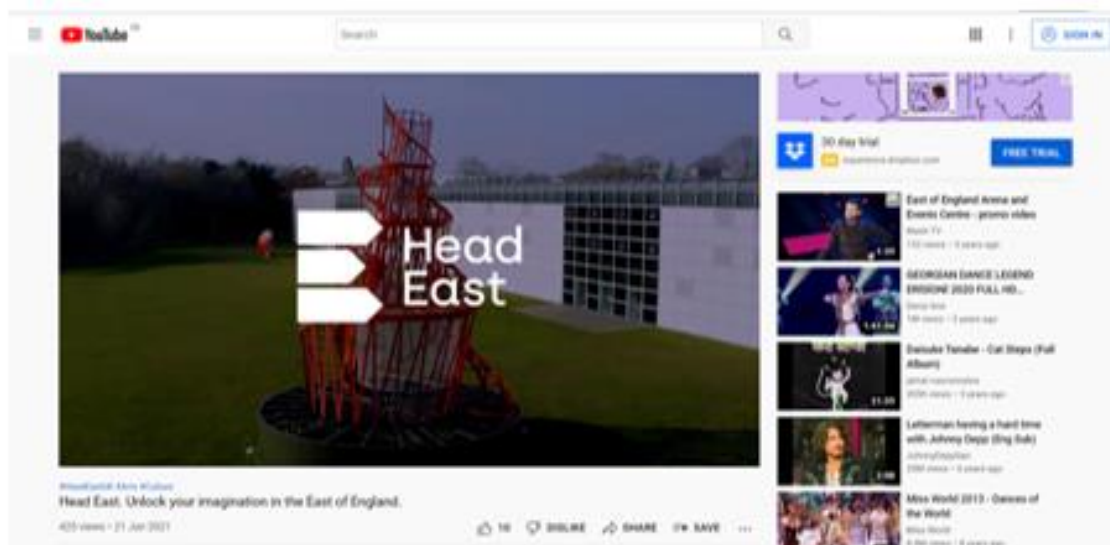
Instructions:

"Now, you will watch a video on YouTube promoting the destination Norfolk.

Make sure the **sound is activated**

Please **DO NOT** display in **full screen**

Let us know how you liked the content and whether or not you would consider to visit. Thanks!"



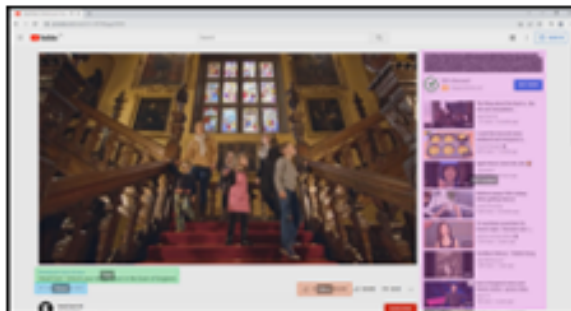
Exposure time: 02:40 min

Surveys after exposure:

- Ad perception
- Trust in destination
- Intention to visit

Eye-tracking - Results

Areas of Interest



AOI metrics	Distraction	Likes	Title	Views
Information				
Respondent base	30	30	30	30
Gaze based metrics				
Respondent count	23	4	23	19
Respondent ratio (%)	76.7	13.3	76.7	43.3
Dwell count	3.3	1.5	2.8	2.5
Revisit count	2.3	0.5	1.8	1.5
Hit time AOI (ms)	67521.7	79135.7	27356.4	65580.1
Dwell time (ms)	2564.9	285.4	1516	776.9
Dwell time (%)	2.1	0.2	1.2	0.6
Fixation based metrics				
Respondent count	23	4	23	12
Respondent ratio (%)	76.7	13.3	76.7	40
Revisit count	2	0.5	1.6	1.3
Fixation count	10.2	2.3	7.3	4.2
TTFF AOI (ms)	67549.8	79172.4	27353.1	62561.4
Dwell time (ms)	2139.5	370.8	1540.8	1091.7
Dwell time (%)	1.7	0.3	1.3	0.9
First fixation duration (ms)	217.6	195.8	199.1	189.6

Gaze based metrics analyse searching behaviour

Dwell count = how often participants looked at this AOI in average / revisit = how often they revisit this AOI

Hit time AOI (ms) = how long before people look at this AOI in average

Dwell time (ms) = how long people spent on this AOI in average / how long in (%)

Fixation based metrics analyse information processing

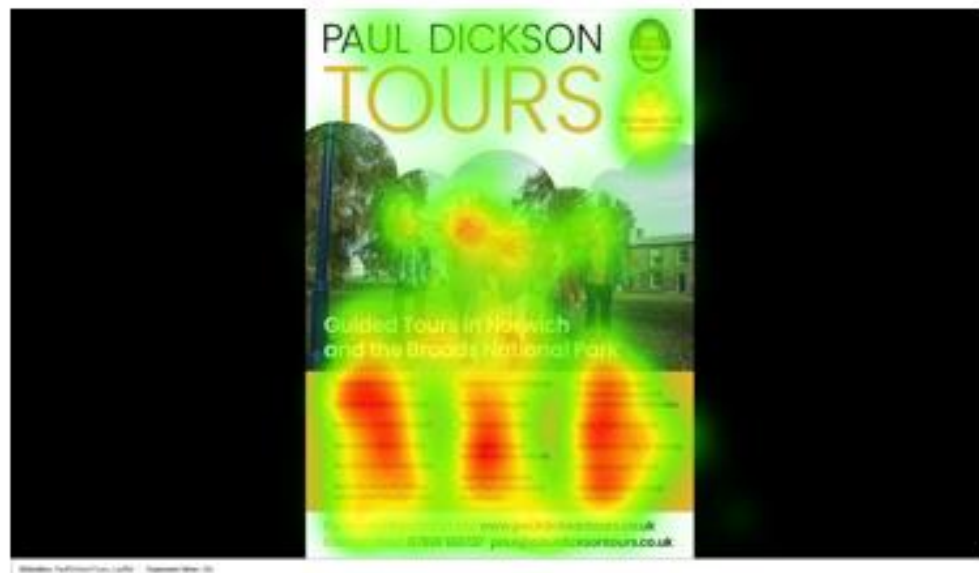
Fixation count = how often participants process information in this AOI in average

TTFF AOI (ms) = time to first fixation – how long before people process information in this AOI in average



Eye-tracking - Results

Heatmap



Eye-tracking - Results

Areas of Interest



8 AOI metrics	Title	Logos	Highlights	Locations	Contact info
Information					
Size (cm2)	114.7	26	50.6	141.4	38.5
Size (%)	7.2	1.6	3.2	8.9	2.4
Respondent base	31	31	31	31	31
Gaze based metrics					
Respondent count	31	27	31	31	29
Respondent ratio (%)	100	87.1	100	100	93.6
Dwell count	2.6	2.3	4.8	9	3.9
Revisit count	1.6	1.3	3.8	8	2.9
Hit time AOI (ms)	1240.2	6022.8	3304.2	4453.7	12756.4
Dwell time (ms)	1673.1	1427.2	3131.8	13127.1	2065.3
Dwell time (%)	5.6	4.8	10.4	43.8	6.9
Fixation based metrics					
Respondent count	31	26	30	31	26
Respondent ratio (%)	100	83.9	96.8	100	83.9
Dwells with fixations	2.3	2.1	3.9	5.3	2.4
Revisit count	1.3	1.1	2.9	4.3	1.4
Fixation count	7.4	5.4	14	45.2	9.1
TTFF AOI (ms)	1267.7	6137.4	3056.0	5976.7	14124.7
Dwell time (ms)	1272.1	1311	3041.4	10683.4	1952.8
Dwell time (%)	4.2	4.4	10.1	35.6	6.5
First fixation duration (ms)	143.9	193.7	189.5	192.8	232.1

Gaze based metrics analyse searching behaviour

Dwell count = how often participants looked at this AOI in average / revisit = how often they revisit this AOI

Hit time AOI (ms) = how long before people look at this AOI in average

Dwell time (ms) = how long people spent on this AOI in average / how long in (%)

Fixation based metrics analyse information processing

Fixation count = how often participants process information in this AOI in average

TTFF AOI (ms) = time to first fixation – how long before people process information in this AOI in average

Experiment settings

Number of participants: 31 participants

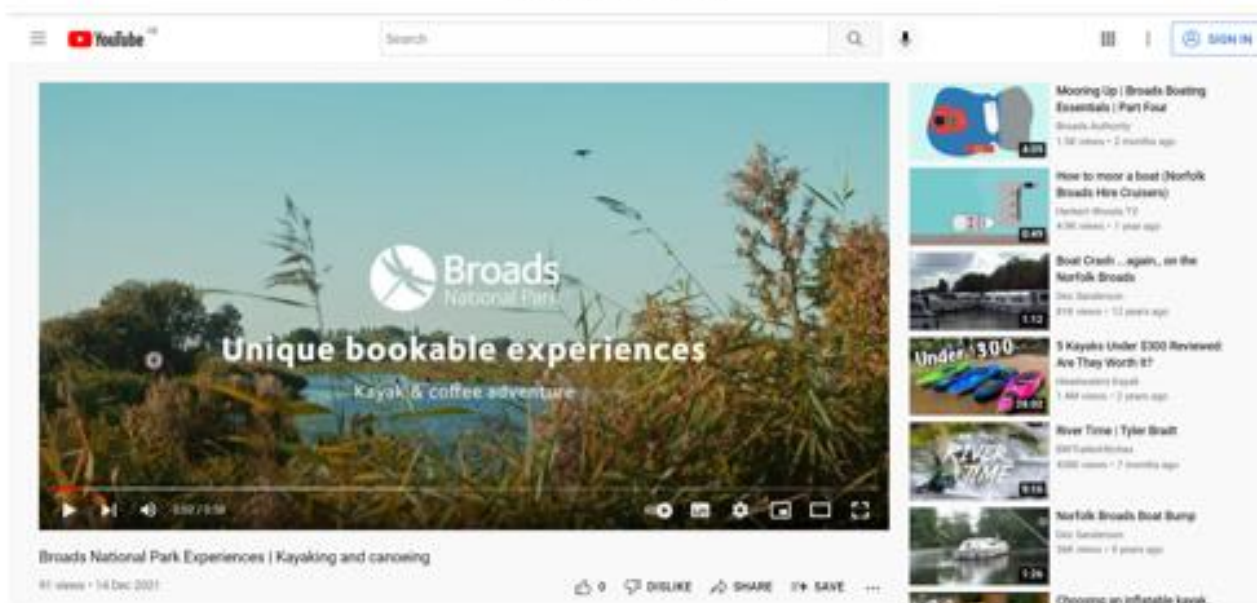
Instructions:

"Now, you will watch more videos on Youtube promoting Norfolk.
In these videos, Broads Authority hired a celebrity to promote the National Park in Norfolk. She is a television presenter and appeared as a reporter on the BBC series Animal Hospital.

Make sure the sound is activated

Please **DO NOT** display in full screen

Let us know how you liked the content and whether or not you want to visit the destination. Enjoy!"



Exposure time: 01:00 min

Surveys after exposure:

- Ad perception
- Trust in celebrity
- Intention to visit

Eye-tracking - Results

Areas of Interest



1 AOI metrics	Distraction	Likes	Title	Views
Information				
Respondent base	23	23	23	23
Gaze based metrics				
Respondent count	17	5	11	8
Respondent ratio (%)	73.9	21.7	47.8	34.8
Dwell count	2.7	1.4	2.8	1.6
Revisit count	1.7	0.4	1.8	0.6
Hit time AOI (ms)	24036.9	28006.2	11647	20264.4
Dwell time (ms)	2418.7	410	562.9	282.3
Dwell time (%)	6.1	0.7	1	0.5
Fixation based metrics				
Respondent count	17	5	11	8
Respondent ratio (%)	73.9	21.7	47.8	34.8
Revisit count	1.7	0.2	1.3	0.6
Fixation count	8.4	1.6	4.1	2.4
TTFF AOI (ms)	25236.5	28043.7	11646.3	20271.7
Dwell time (ms)	1807.2	390	805.8	541.7
Dwell time (%)	3.2	0.6	1.4	0.9
First fixation duration (ms)	199.5	166.7	165.2	199

Gaze based metrics analyse searching behaviour

Dwell count = how often participants looked at this AOI in average / revisit = how often they revisit this AOI

Hit time AOI (ms) = how long before people look at this AOI in average

Dwell time (ms) = how long people spent on this AOI in average / how long in (%)

Fixation based metrics analyse information processing

Fixation count = how often participants process information in this AOI in average

TTFF AOI (ms) = time to first fixation – how long before people process information in this AOI in average

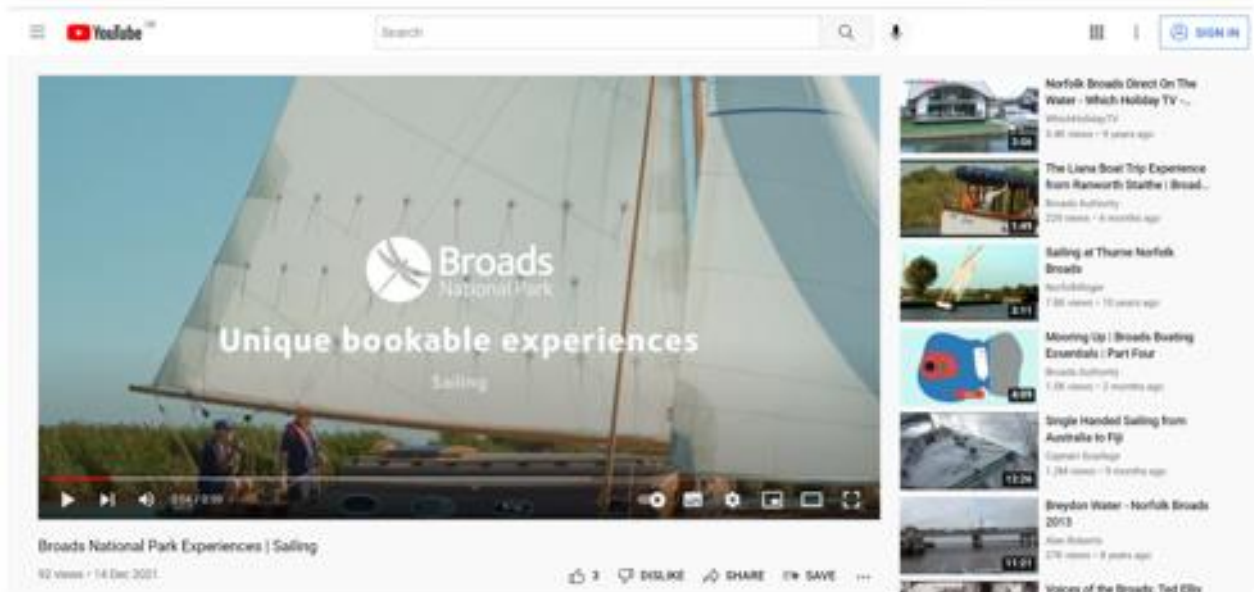


Experiment settings

Number of participants: 31 participants

Instructions:

"Now, you will watch more videos on Youtube promoting Norfolk.
In these videos, Broads Authority hired a celebrity to promote the National Park in Norfolk. She is a television presenter and appeared as a reporter on the BBC series
Animal Hospital.
Make sure the **sound is activated**
Please **DO NOT** display in **full screen**
Let us know how you liked the content and whether or not you want to visit the
destination. Enjoy!"



Exposure time: 01:00 min

Surveys after exposure:

- Ad perception
- Trust in celebrity
- Intention to visit

Eye-tracking - Results

Areas of Interest



8 AOI metrics →	Distraction	Likes	Title	Views
Information				
Respondent base	31	31	31	31
Gaze based metrics				
Respondent count	19	7	18	12
Respondent ratio (%)	61.3	22.6	58.1	38.7
Dwell count	2.9	1.6	2.7	2.8
Revisit count	1.9	0.6	1.7	1.8
Hit time AOI (ms)	23841.5	24165.2	9565.1	12077.6
Dwell time (ms)	2948.7	442.9	1029.2	686.8
Dwell time (%)	5.1	0.8	1.8	1.2
Fixation based metrics				
Respondent count	19	6	18	12
Respondent ratio (%)	61.3	19.4	58.1	38.7
Revisit count	1.7	0.3	1.6	1.4
Fixation count	11	2.3	5.3	3.8
TTFF AOI (ms)	24063.7	22414	9579	12049.2
Dwell time (ms)	2543	494.5	1389.1	1184.1
Dwell time (%)	4.4	0.9	2.4	2
First fixation duration (ms)	196.1	204.2	173.6	245.8

Gaze based metrics analyse searching behaviour

Dwell count = how often participants looked at this AOI in average / revisit = how often they revisit this AOI

Hit time AOI (ms) = how long before people look at this AOI in average

Dwell time (ms) = how long people spent on this AOI in average / how long in (%)

Fixation based metrics analyse information processing

Fixation count = how often participants process information in this AOI in average

TTFF AOI (ms) = time to first fixation – how long before people process information in this AOI in average

Experiment settings

Number of participants: 26 participants

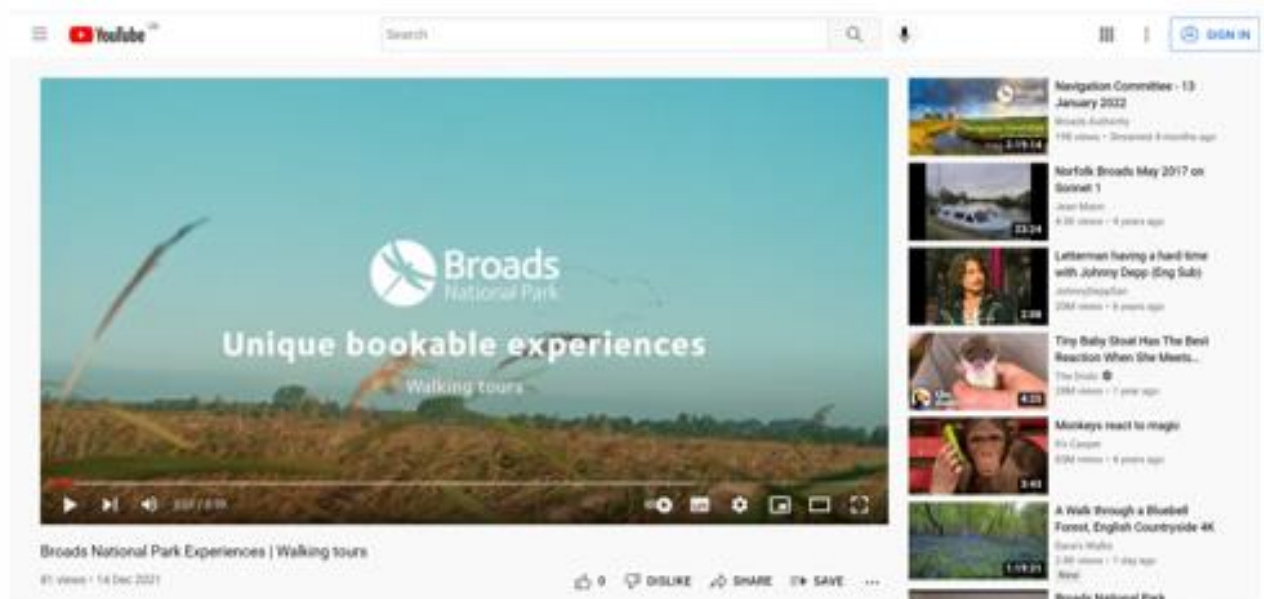
Instructions:

"Now, you will watch more videos on Youtube promoting Norfolk.
In these videos, Broads Authority hired a celebrity to promote the National Park in Norfolk. She is a television presenter and appeared as a reporter on the BBC series Animal Hospital.

Make sure the sound is activated

Please **DO NOT** display in full screen

Let us know how you liked the content and whether or not you want to visit the destination. Enjoy!"



Exposure time: 01:00 min

Surveys after exposure:

- Ad perception
- Trust in celebrity
- Intention to visit

Eye-tracking - Results

Areas of Interest



AOI metrics	Distraction	Likes	Title	Views
Information				
Respondent base	26	26	26	26
Gaze based metrics				
Respondent count	14	3	16	12
Respondent ratio (%)	53.8	11.5	61.5	46.2
Dwell count	3.6	1.3	3.3	2
Revisit count	2.6	0.3	2.3	1
Hit time AOI (ms)	24830.7	13692.8	19137	25215.9
Dwell time (ms)	2425	400	827.7	441.7
Dwell time (%)	4.2	0.7	1.4	0.8
Fixation based metrics				
Respondent count	13	3	16	12
Respondent ratio (%)	50	11.5	61.5	46.2
Revisit count	2.5	0	1.8	0.7
Fixation count	9.3	1.7	5.5	3.3
TTFF AOI (ms)	26934.6	13724.7	19140.7	25224.9
Dwell time (ms)	2182.8	352.8	1072.4	582.7
Dwell time (%)	3.7	0.6	1.8	1.2
First fixation duration (ms)	194.2	191.7	192.2	217.4

Gaze based metrics analyse searching behaviour

Dwell count = how often participants looked at this AOI in average / revisit = how often they revisit this AOI

Hit time AOI (ms) = how long before people look at this AOI in average

Dwell time (ms) = how long people spent on this AOI in average / how long in (%)

Fixation based metrics analyse information processing

Fixation count = how often participants process information in this AOI in average

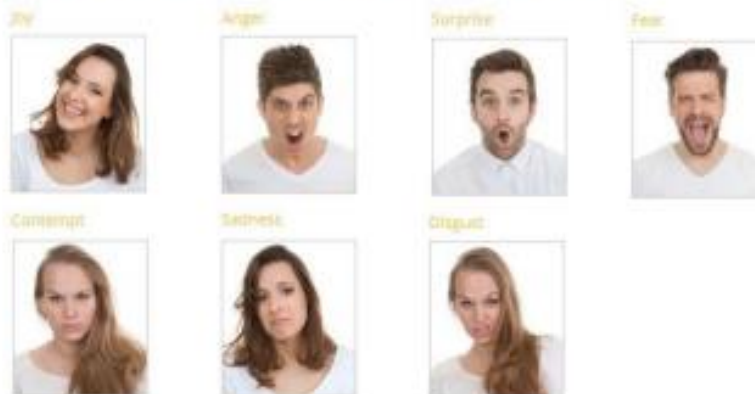
TTFF AOI (ms) = time to first fixation – how long before people process information in this AOI in average

Facial Expressions: Explanation & Results

Facial Expression Analysis - An explanation of expressed emotions

Facial expression analysis (FEA) measures movements of facial muscles to capture expressed emotions like joy, sadness, disgust, and overall valence in response to stimuli.

iMotions generates the following 7 emotions, created using Friesen & Ekman's EMFACS mappings. (Friesen, W. V., & Ekman, P. (1984). EMFACS7. Unpublished manuscript. Human Interaction Laboratory)



In addition to the expressions and emotions above, Affective AFFDEX computes Valence, Engagement, and Attention.

- **Valence** (-100 - 100): A measure of how positive or negative the expression is.

Factors that increase the likelihood of positive valence include: Smile, Cheek Raise.

Factors that increase the likelihood of negative valence include: Inner Brow Raise, Brow Furrow, Nose Wrinkle, Upper Lip Raise, Lip Corner Depressor, Chin Raise, Lip Press, Lip Suck.

- **Engagement** (0 - 100): A measure of emotional responsiveness triggered by the content, whether positive or negative.

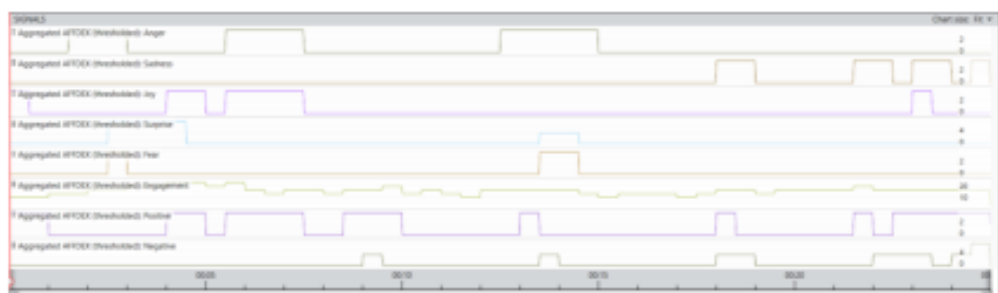
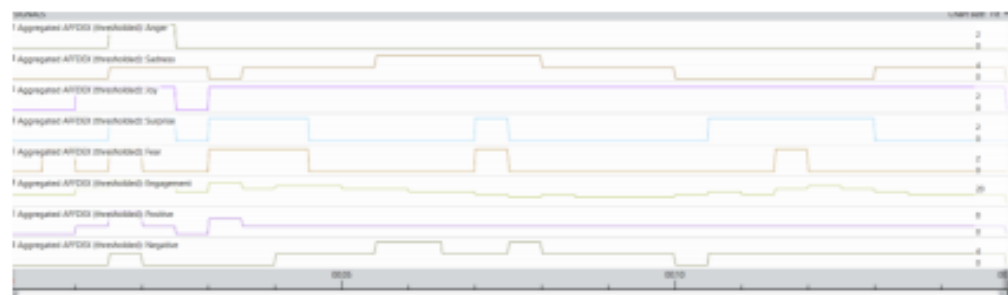
Calculated as the mean of the highest evidence scores from the upper (Brow raise, Brow furrow, Nose wrinkle) and lower face region (Lip corner depressor, Chin raise, Lip pucker, Lip press, Mouth open, Lip suck, Smile), respectively.

- **Attention** (0-100): A measure of point of focus of the user based on the head position.



Facial expressions provide information on what is expressed. One of the core limitations of facial expression analysis is its inability to assess someone's emotional arousal, that is, the intensity of an emotion.

Facial Expression Analysis - Results



Threshold was set to 50% likelihood representing a moderately strong display of facial response

Very low emotional response for a flyer

Joy: At the highest 3% of participants felt joy

Anger, sadness: Peaks for 3% participants

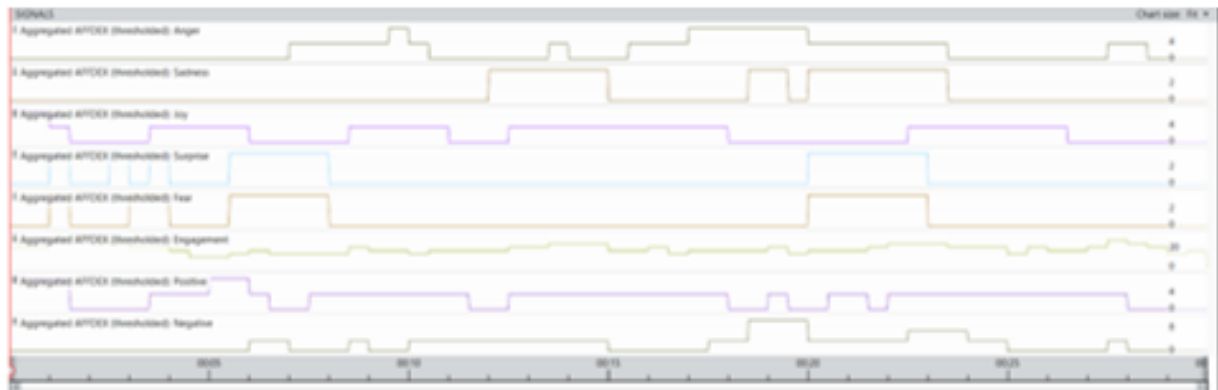
Surprise and fear: Peaks for 3% participants

Engagement was set between 9 and 22% of participants

Positive emotions felt by 3-6% of participants at the peak

Negative emotions felt by 3-6% of participants

Facial Expression Analysis - Results



Threshold was set to 50% likelihood representing a moderately strong display of facial response

Low emotional response for a flyer

Joy: At the highest 3% of participants felt joy

Anger, sadness: Peaks for 6% participants

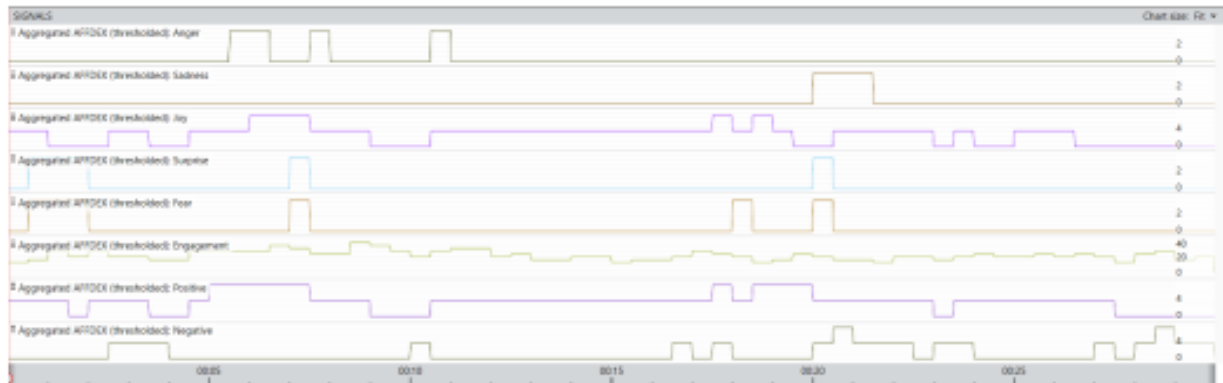
Surprise and fear: Peaks for 3% participants

Engagement was set between 9 and 26% of participants

Positive emotions felt by 6% of participants at the peak

Negative emotions felt by 10% of participants

Facial Expression Analysis - Results



Threshold was set to 50% likelihood representing a moderately strong display of facial response

Low emotional response for a flyer

Joy: At the highest 6% of participants felt joy

Anger, sadness: Peaks for 3% participants

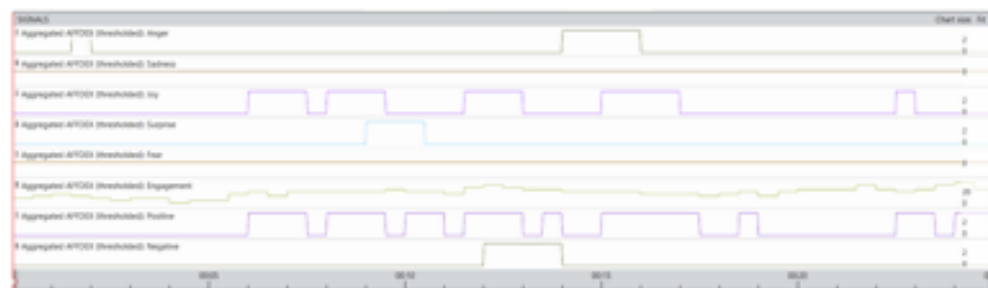
Surprise and fear: Peaks for 3% participants

Engagement was set between 12 and 35% of participants

Positive emotions felt by 6% of participants at the peak

Negative emotions felt by 6% of participants

Facial Expression Analysis - Results



Threshold was set to 50% likelihood representing a moderately strong display of facial response

Low emotional response for a flyer

Joy: At the highest 3% of participants felt joy

Anger, sadness: Peaks for 12% participants

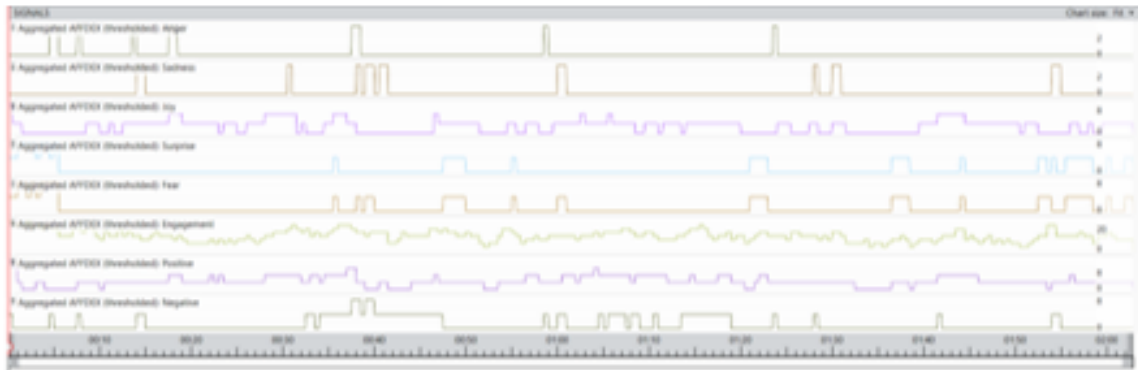
Surprise and fear: Peaks for 6% participants

Engagement was set between 3 and 32% of participants

Positive emotions felt by 3% of participants at the peak

Negative emotions felt by 10% of participants

Facial Expression Analysis - Results



Threshold was set to 50% likelihood representing a moderately strong display of facial response

Average emotional response for a video

Joy: At the highest 13% of participants felt joy

Anger, sadness: Peaks of anger for 3% of participants

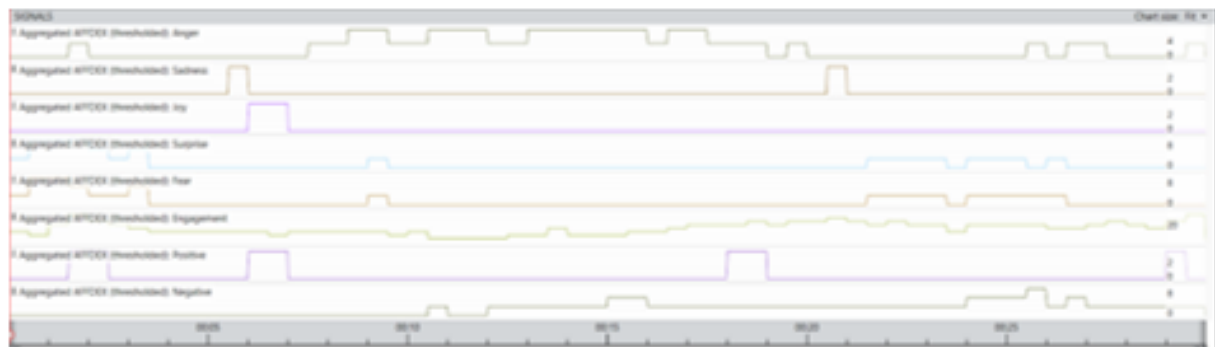
Surprise and fear: Peaks for 6-10% participants

Engagement was up to 33% of participants.

Positive emotions felt by 13% of participants at the peak

Negative emotions felt by 3% of participants

Facial Expression Analysis - Results



Threshold was set to 50% likelihood representing a moderately strong display of facial response

Low emotional response for a flyer

Joy: At the highest 3% of participants felt joy

Anger, sadness: Peaks for 6% participants

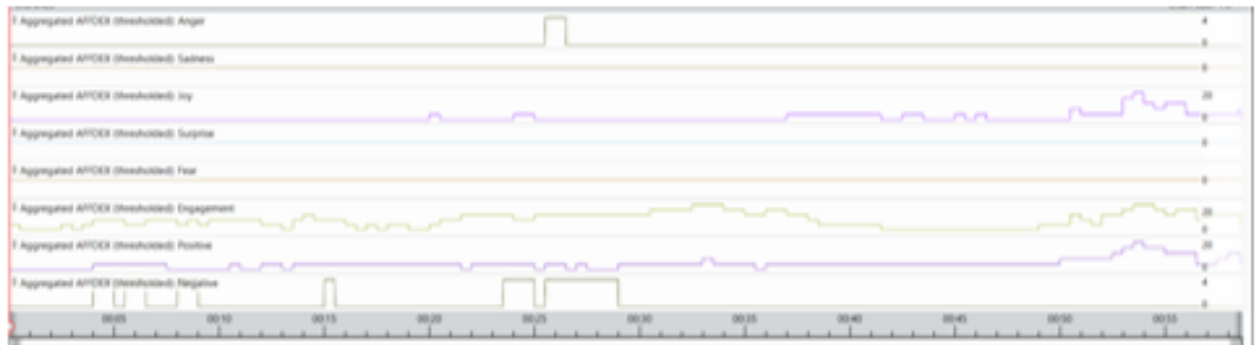
Surprise and fear: Peaks for 3% participants

Engagement was set between 9 and 26% of participants

Positive emotions felt by 3% of participants at the peak

Negative emotions felt by 6% of participants

Facial Expression Analysis - Results



Threshold was set to 50% likelihood representing a moderately strong display of facial response

Low emotional response for a video

Joy: At the highest 21% of participants felt joy but only at the end.

Anger, sadness: Peaks of anger for 4% of participants

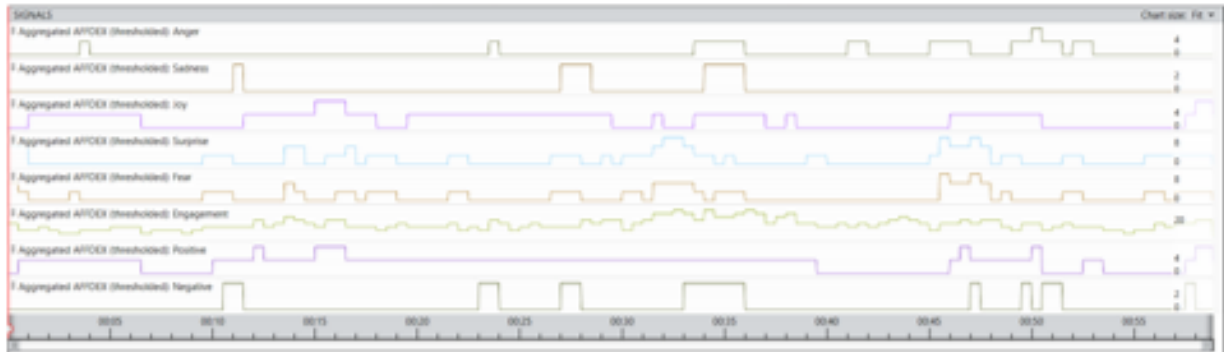
Surprise and fear: None

Engagement was up to 26% of participants.

Positive emotions felt by 21% of participants at the end

Negative emotions felt by 4% of participants

Facial Expression Analysis - Results



Threshold was set to 50% likelihood representing a moderately strong display of facial response

Low emotional response for a video

Joy: At the highest 6% of participants felt joy

Anger, sadness: Peaks for 3-6% of participants

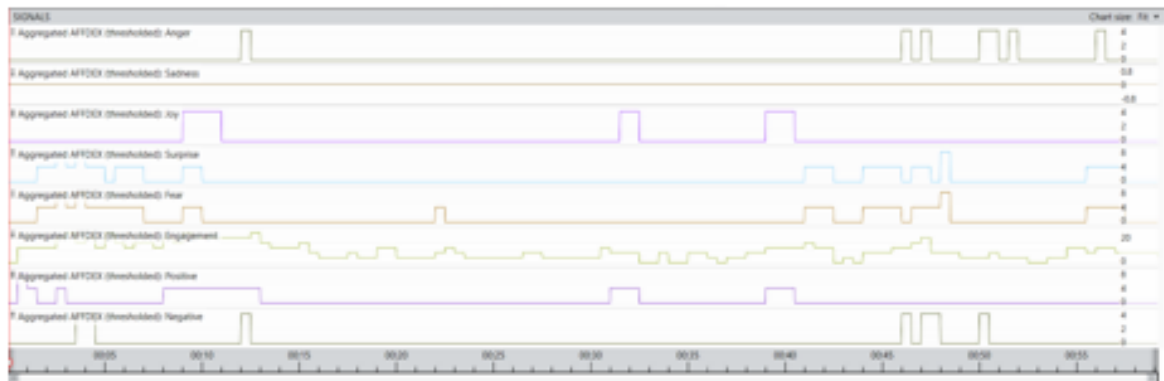
Surprise and fear: Peaks for 6-10% participants

Engagement was up to 29% of participants.

Positive emotions felt by 6% of participants at the peak

Negative emotions felt by 3% of participants

Facial Expression Analysis - Results



Threshold was set to 50% likelihood representing a moderately strong display of facial response

Low emotional response for a video

Joy: At the highest 4% of participants felt joy

Anger, sadness: Peaks of anger for 3% of participants

Surprise and fear: Peaks for 7% participants

Engagement was up to 23% of participants.

Positive emotions felt by 4% of participants at the peak

Negative emotions felt by 4% of participants

Galvanic Skin Response: Explanation & Results

Galvanic Skin Response - An explanation of emotional arousal

Galvanic Skin Response (GSR) measures emotional arousal via levels of perspiration on the surface of the skin, indicating the intensity of emotional response to stimuli.

Quantification:

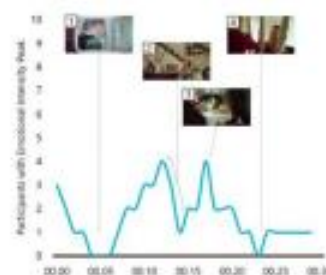
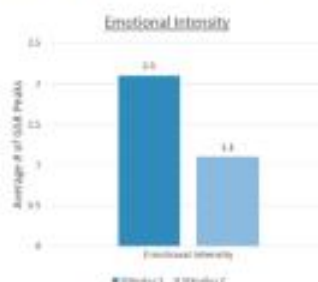
When sweat glands are triggered, they secrete moisture through pores towards the skin surface. By changing the balance of positive and negative ions in the secreted fluid, electrical current flows more readily, resulting in measurable changes in skin conductance. Skin conductivity is controlled on an entirely **subconscious level**.

- A **GSR peak** is a biological indicator that something relevant happened at that moment – an emotional connection was made. GSR peaks per minute indicates, on average, how many emotional events occurred every 60 seconds. The higher the number, the more of an emotional response the viewers were having during the content or experience.



Data Visualizations:

- **Overall scores** can be compared between two stimuli
- **Emotional intensity** can be measured on a moment to moment basis to better understand the participants' emotional journey while being exposed to video media content

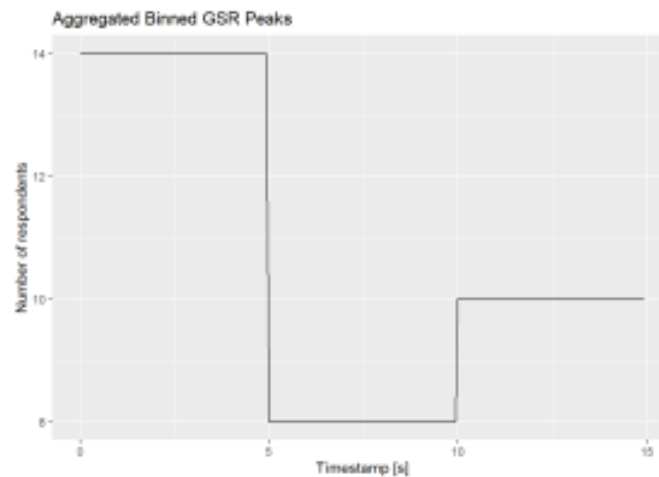


It is important to note that while GSR can measure if there is an emotional response and the intensity of an emotional response, it does **not** measure the valence, i.e. whether that emotional response is positive or negative.

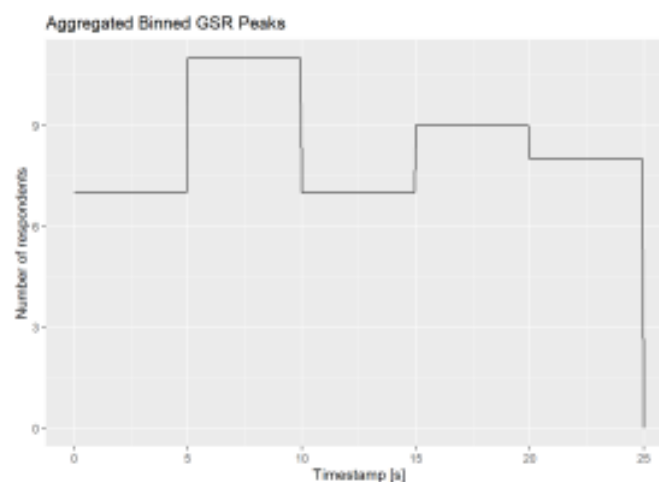
Galvanic Skin Response - Results

Methods

GSR aggregation is accomplished based on binarization of the signal. iMotions can count the number of respondents that had "a response" (at least one GSR peak) in a time window: 5000 [ms]. The aggregated result therefore relates directly to the audience and the time window, e.g., 10 out of 29 respondents had a response in the time interval 02:00 - 02:09.



The segment contains 31 respondents. Of these, 31 have GSR data. During this stimulus, 19 respondents had at least one peak.

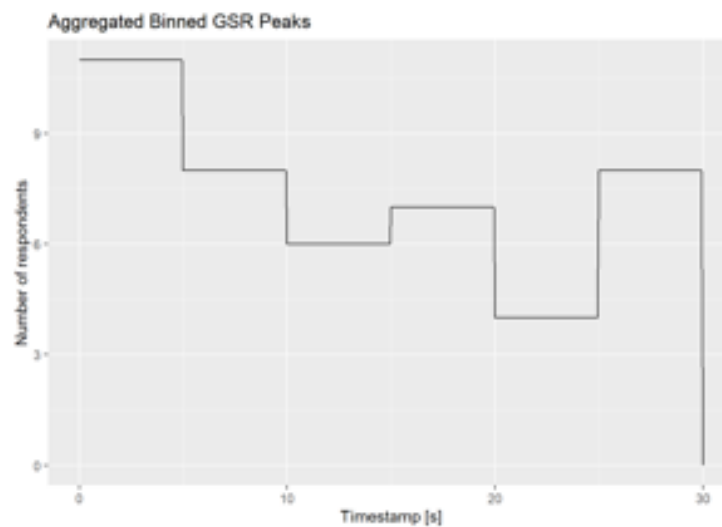


The segment contains 31 respondents. Of these, 31 have GSR data. During this stimulus, 17 respondents had at least one peak.

Galvanic Skin Response - Results

Methods

GSR aggregation is accomplished based on binarization of the signal. iMotions can count the number of respondents that had "a response" (at least one GSR peak) in a time window: 5000 [ms]. The aggregated result therefore relates directly to the audience and the time window, e.g., 10 out of 29 respondents had a response in the time interval 02:00 - 02:09.

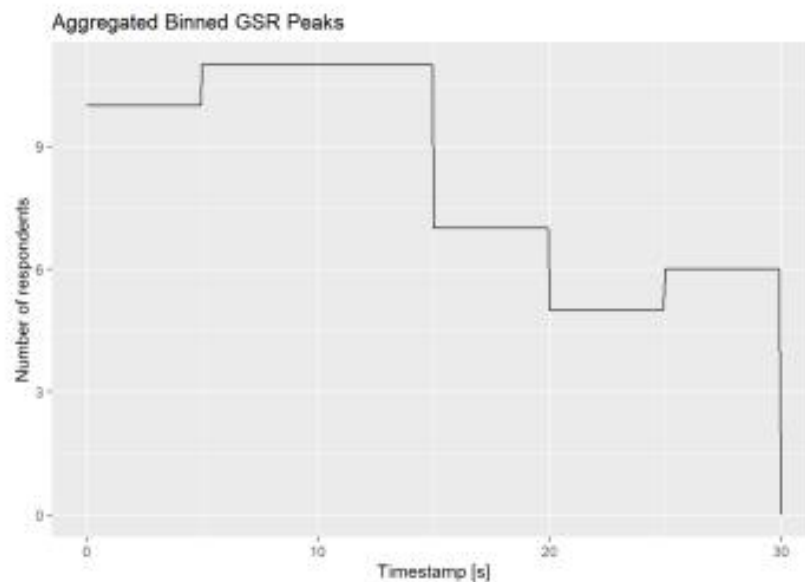


The segment contains 31 respondents. Of these, 31 have GSR data.
During this stimulus, 19 respondents had at least one peak.

Galvanic Skin Response - Results

Methods

GSR aggregation is accomplished based on binarization of the signal. iMotions can count the number of respondents that had "a response" (at least one GSR peak) in a time window: 5000 [ms]. The aggregated result therefore relates directly to the audience and the time window, e.g., 10 out of 29 respondents had a response in the time interval 02:00 - 02:09.

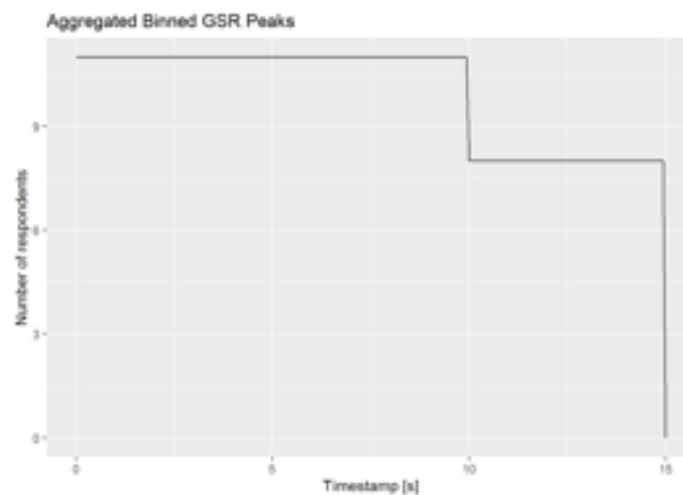


The segment contains 31 respondents. Of these, 31 have GSR data.
During this stimulus, 19 respondents had at least one peak.

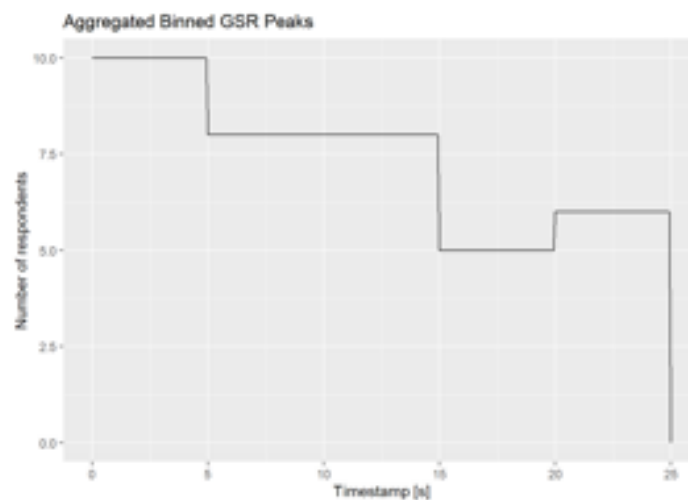
Galvanic Skin Response - Results

Methods

GSR aggregation is accomplished based on binarization of the signal. iMotions can count the number of respondents that had "a response" (at least one GSR peak) in a time window: 5000 [ms]. The aggregated result therefore relates directly to the audience and the time window, e.g., 10 out of 29 respondents had a response in the time interval 02:00 - 02:09.



The segment contains 31 respondents. Of these, 31 have GSR data. During this stimulus, 15 respondents had at least one peak.

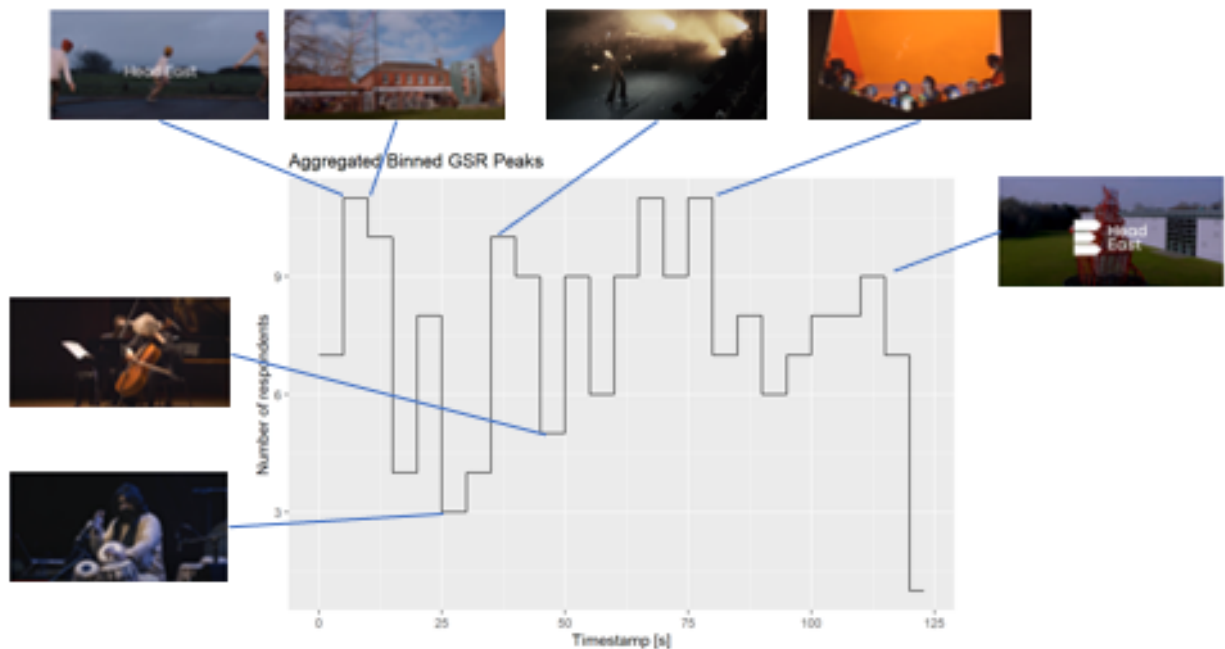


The segment contains 31 respondents. Of these, 31 have GSR data. During this stimulus, 14 respondents had at least one peak.

Galvanic Skin Response - Results

Methods

GSR aggregation is accomplished based on binarization of the signal. iMotions can count the number of respondents that had "a response" (at least one GSR peak) in a time window: 5000 [ms]. The aggregated result therefore relates directly to the audience and the time window, e.g., 10 out of 29 respondents had a response in the time interval 02:00 - 02:09.

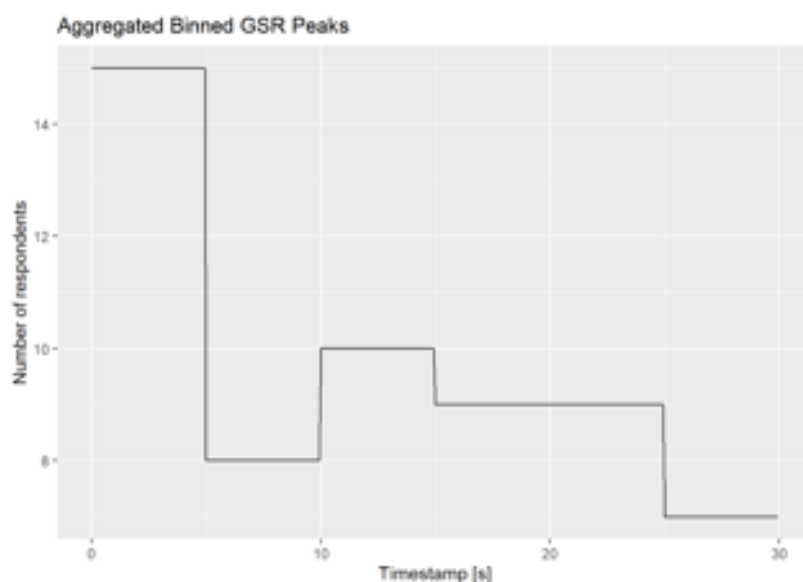


The segment contains 31 respondents. Of these, 30 have GSR data. During this stimulus, 19 respondents had at least one peak.

Galvanic Skin Response - Results

Methods

GSR aggregation is accomplished based on binarization of the signal. iMotions can count the number of respondents that had "a response" (at least one GSR peak) in a time window: 5000 [ms]. The aggregated result therefore relates directly to the audience and the time window, e.g., 10 out of 29 respondents had a response in the time interval 02:00 - 02:09.

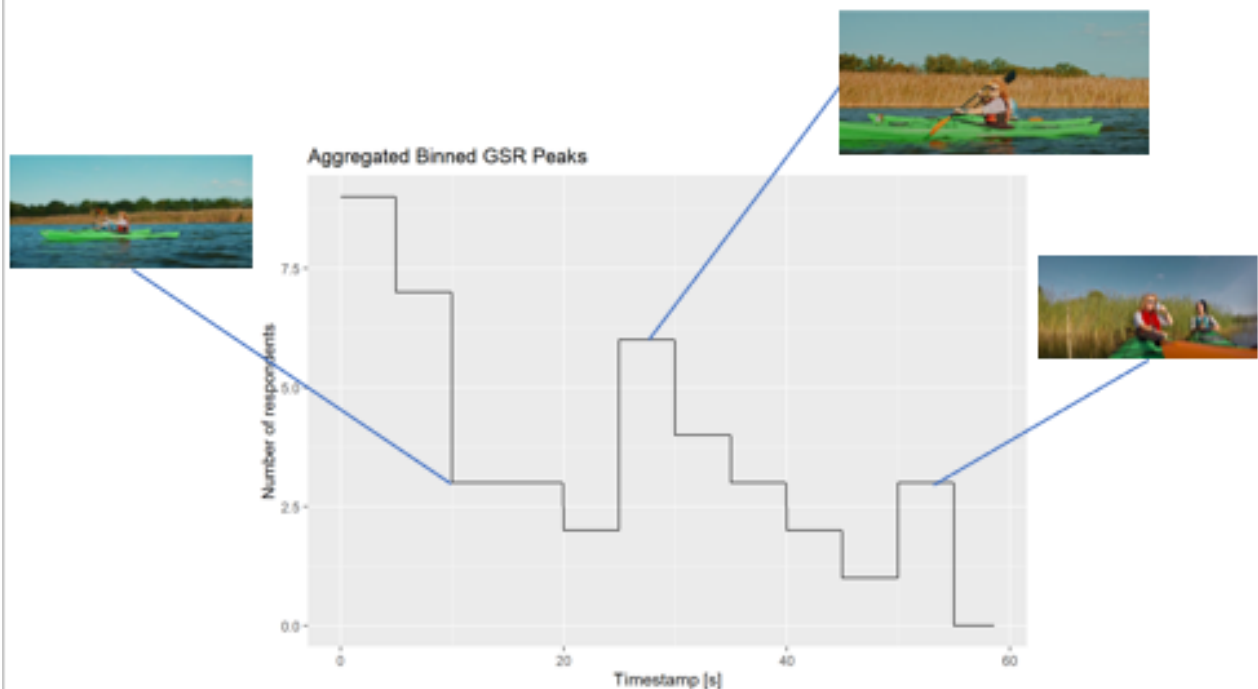


The segment contains 31 respondents. Of these, 31 have GSR data.
During this stimulus, 19 respondents had at least one peak.

Galvanic Skin Response - Results

Methods

GSR aggregation is accomplished based on binarization of the signal. iMotions can count the number of respondents that had "a response" (at least one GSR peak) in a time window: 5000 [ms]. The aggregated result therefore relates directly to the audience and the time window, e.g., 10 out of 29 respondents had a response in the time interval 02:00 - 02:09.

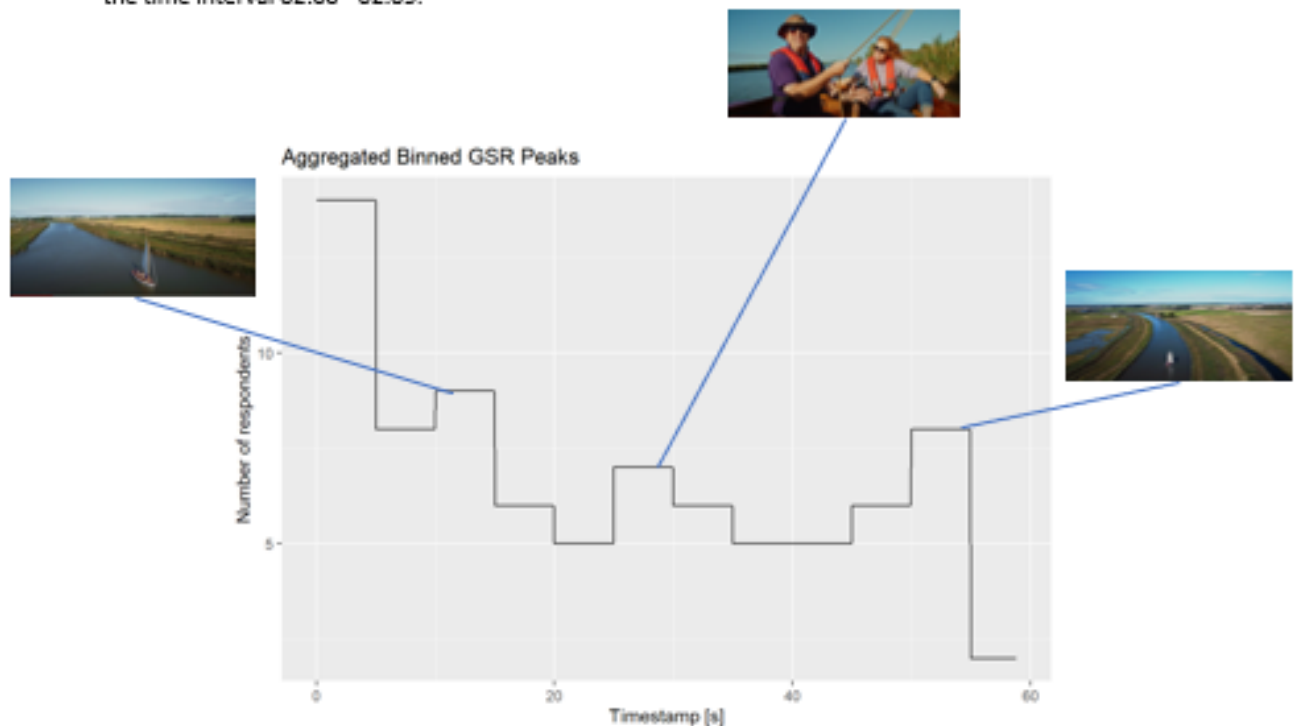


The segment contains 31 respondents. Of these, 23 have GSR data.
During this stimulus, 14 respondents had at least one peak.

Galvanic Skin Response - Results

Methods

GSR aggregation is accomplished based on binarization of the signal. iMotions can count the number of respondents that had "a response" (at least one GSR peak) in a time window: 5000 [ms]. The aggregated result therefore relates directly to the audience and the time window, e.g., 10 out of 29 respondents had a response in the time interval 02:00 - 02:09.

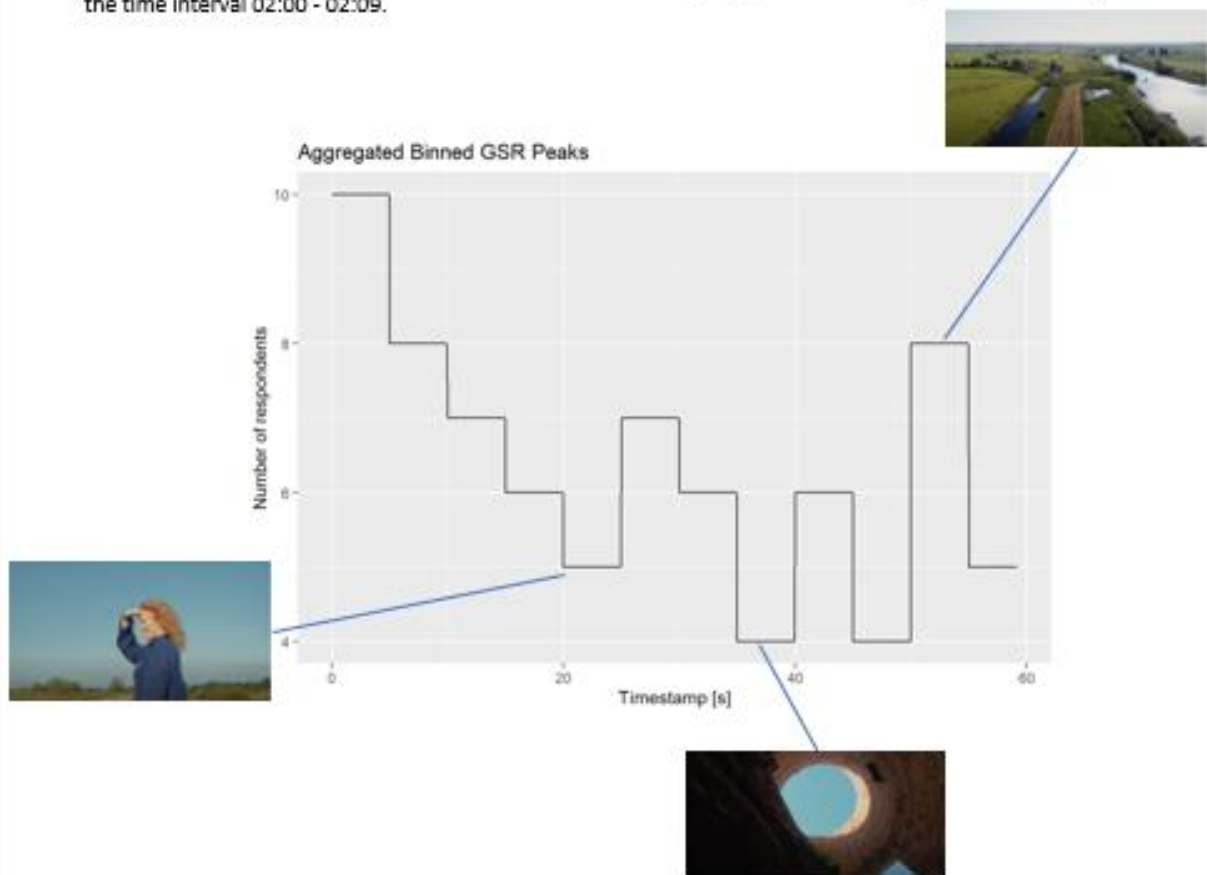


The segment contains 31 respondents. Of these, 31 have GSR data.
During this stimulus, 19 respondents had at least one peak.

Galvanic Skin Response - Results

Methods

GSR aggregation is accomplished based on binarization of the signal. iMotions can count the number of respondents that had "a response" (at least one GSR peak) in a time window: 5000 [ms]. The aggregated result therefore relates directly to the audience and the time window, e.g., 10 out of 29 respondents had a response in the time interval 02:00 - 02:09.



The segment contains 31 respondents. Of these, 26 have GSR data. During this stimulus, 18 respondents had at least one peak.

Summary of individual results & feedback

Black Shuck



Digital Lab Testing - NCC - Black Shuck



Ad perception



Intention to purchase



Visual attention

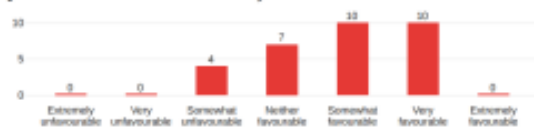


Emotional response

Survey - Results

Ad perception = 4.73/7

Q1 - Aad - Please rate from 1 to 7 your overall reaction to the ad



Q2 - Aad - Please rate from 1 to 7 your overall reaction to the ad



Intention to purchase = 3.44/7

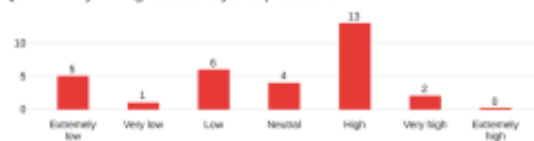
Q3 - IP - The likelihood of purchasing this product is



Q7 - Have you ever purchase this or a similar product before?



Q5 - IP - My willingness to buy this product is



Q6 - IP - I would recommend to others to purchase this product





Recommendations

Not so good flyer provoking sometimes more negative than positive emotions (FEA) but with good intensity (GSR).

Less text on the verso, consider re-organising the paragraphs depending on the message you want to push.
For example, serving suggestions after contact information.

The bad scores are also due to the fact that some respondent do not consume alcohol.



Digital Lab Testing - NCC - Brancaster Stays



Ad perception



Intention to purchase



Visual attention



Emotional response

Survey - Results

Ad perception = 4.67/7

Q1 - Aad - Please rate from 1 to 7 your overall reaction to the ad



Q2 - Aad - Please rate from 1 to 7 your overall reaction to the ad



Intention to purchase = 3.9/7

Q3 - IP - The likelihood of purchasing this experience is



Q7 - Have you ever done this or a similar experience before?



Q5 - IP - My willingness to buy this experience is



Q6 - IP - I would recommend to others to purchase this experience





Recommendations

Good flyer but provoking more negative than positive emotions (FEA) but with good intensity (GSR).

Consider including outdoor photos.

Looks a bit old style. Who is going to choose the place because there's wifi and a television?

I would not emphasise on the facilities but rather on the experience the clients are going to live, the quietness, the great outdoors, etc. Show the birds, show the harbour.

Dilham Hall – Canoe Hire



Digital Lab Testing - NCC - Dilham Canoe

**CANADIAN CANOE,
DOUBLE KAYAK, SINGLE KAYAK &
STAND-UP PADDLEBOARD HIRE**

Along the North Wokham and Dilham Canal,
launching from Tonnage Bridge (NR28 9PW)

- Open from April - October, 7 days a week
- Early Bird Session - 9:30am-11:30am
- Afternoon Session - 12:00pm-6:00pm

Life jackets and paddles provided.
Free parking, water and toilet facilities on site.
Self-launch ES/boat.

To book go to dilhamhall.co.uk/canoe-hire/

or scan the
QR Code

T: 01692 513889 E: hello@dilhamhall.co.uk

www.dilhamhall.co.uk f @



Ad perception



Intention to purchase



Visual attention

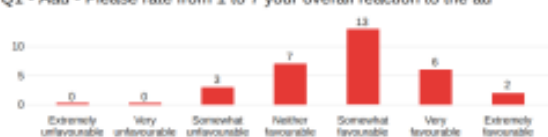


Emotional response

Survey - Results

Ad perception = 4.71/7

Q1 - Aad - Please rate from 1 to 7 your overall reaction to the ad



Q2 - Aad - Please rate from 1 to 7 your overall reaction to the ad

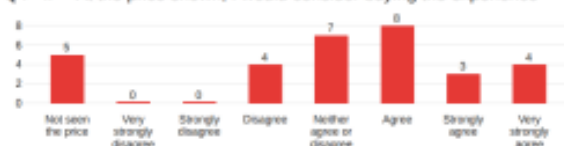


Intention to purchase = 4.11/7

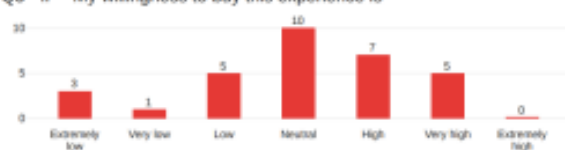
Q3 - IP - The likelihood of purchasing this experience is



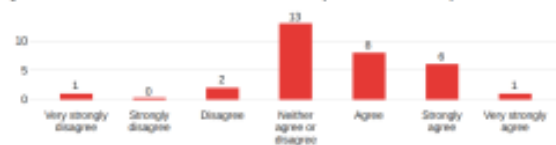
Q4 - IP - At the price shown, I would consider buying the experience



Q5 - IP - My willingness to buy this experience is



Q6 - IP - I would recommend to others to purchase this experience





Recommendations

Somewhat good flyer provoking low emotions (FEA) but with good intensity (GSR).

Consider making the price bigger.

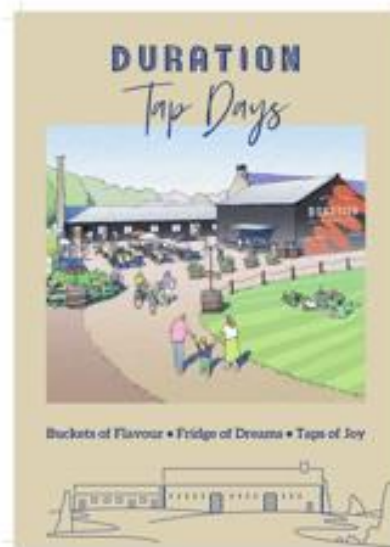
We don't necessarily understand the meaning of the second logo Dilham Hall Retreats.

Maybe add more photos of the areas.

Duration Brewery



Digital Lab Testing - NCC - Duration



Ad perception



Intention to purchase



Visual attention

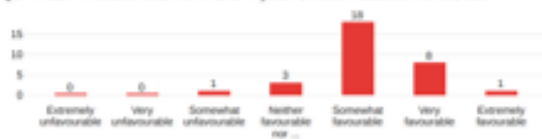


Emotional response

Survey - Results

Ad perception = 5.04/7

Q1 - Aad - Please rate from 1 to 7 your overall reaction to the ad



Q2 - Aad - Please rate from 1 to 7 your overall reaction to the ad



Intention to purchase = 4.28/7

Q3 - IP - The likelihood of purchasing this experience is



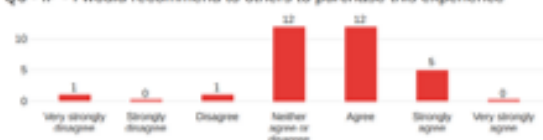
Q7 - Have you ever done this or a similar experience before?



Q5 - IP - My willingness to buy this experience is



Q6 - IP - I would recommend to others to purchase this experience



Recommendations

Great flyer, nice design and colourful but provoking more negative than positive emotions (FEA) but with good intensity (GSR).

Some respondents were either vegetarians or did not consume alcohol explaining potentially some of the negative peaks.

Include in the verso that you have vegetarian/vegan menus and that even if a customer don't drink alcohol it can still enjoy a mocktail and a good experience.

Head East Campaign



Digital Lab Testing - NCC - Head East YT video



<https://www.youtube.com/watch?v=W7MSggyVXXM>



Ad perception



Trust in destination



Intention to visit



Visual attention

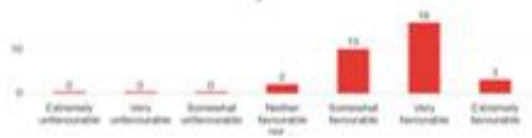


Emotional response

Survey - Results

Ad perception = 5.70/7

Q1 - Aad - Please rate from 1 to 7 your overall reaction to the ad



Q2 - Aad - Please rate from 1 to 7 your overall reaction to the ad



Trust = 5.24/7

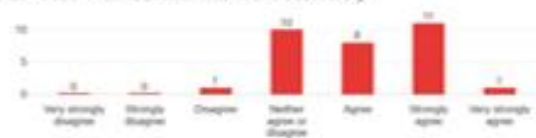
Q7 - trust - The destination Norfolk has integrity (completeness, moral or artistic values)



Q8 - trust - The destination Norfolk is reliable (good in quality, able to be trusted)

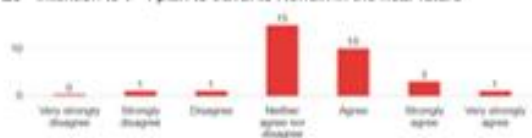


Q9 - trust - The destination Norfolk is trustworthy

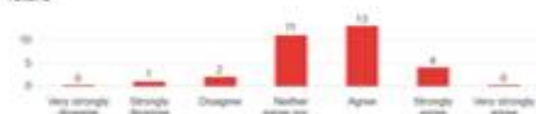


Intention to visit = 4.48/7

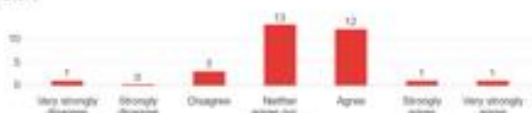
Q3 - intention to v - I plan to travel to Norfolk in the near future



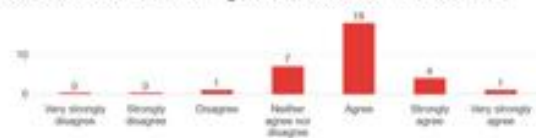
Q4 - intention to v - I will make an effort to travel to Norfolk in the near future



Q5 - intention to v - I have an intention to travel to Norfolk in the near future



Q6 - intention to v - I am willing to travel to Norfolk in the near future



Recommendations

Video provoking low emotional response (FEA) but with good intensity (GSR).

The video works pretty well. Some participants liked the dynamic and some others felt it was confusing with too much information.

There was content for families, for outdoor adventurers, city breakers, etc. The advice would be to create clips that fit a segment instead of a one video for all.

You displayed “Head East” at the good moments at the beginning and at the end because it correspond to spikes in emotions. However, we suggest to attach your brand with a logo such as Visit Norfolk, Visit East England or NCC to create attachment with the brand.

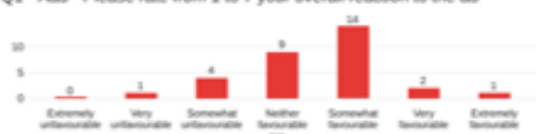
-> Create shorter clips for targeted audiences so you can decline your marketing campaign with the same original content.



Survey - Results

Ad perception = 4.19/7

Q1 - Aad - Please rate from 1 to 7 your overall reaction to the ad

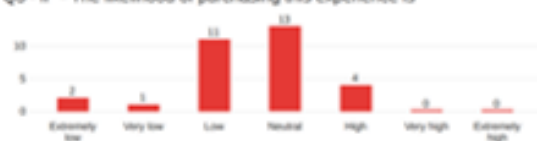


Q2 - Aad - Please rate from 1 to 7 your overall reaction to the ad



Intention to purchase = 3.47/7

Q3 - IP - The likelihood of purchasing this experience is



Q7 - Have you ever done this or a similar experience before?



Q5 - IP - My willingness to buy this experience is



Q6 - IP - I would recommend to others to purchase this experience





EUROPEAN UNION
European Regional
Development Fund



Recommendations

Good flyer but provoking more negative than positive emotions (FEA) and with good intensity (GSR).

Consider presenting images of the landscapes and landmarks instead of all the names of the locations.

Fewer locations but with images

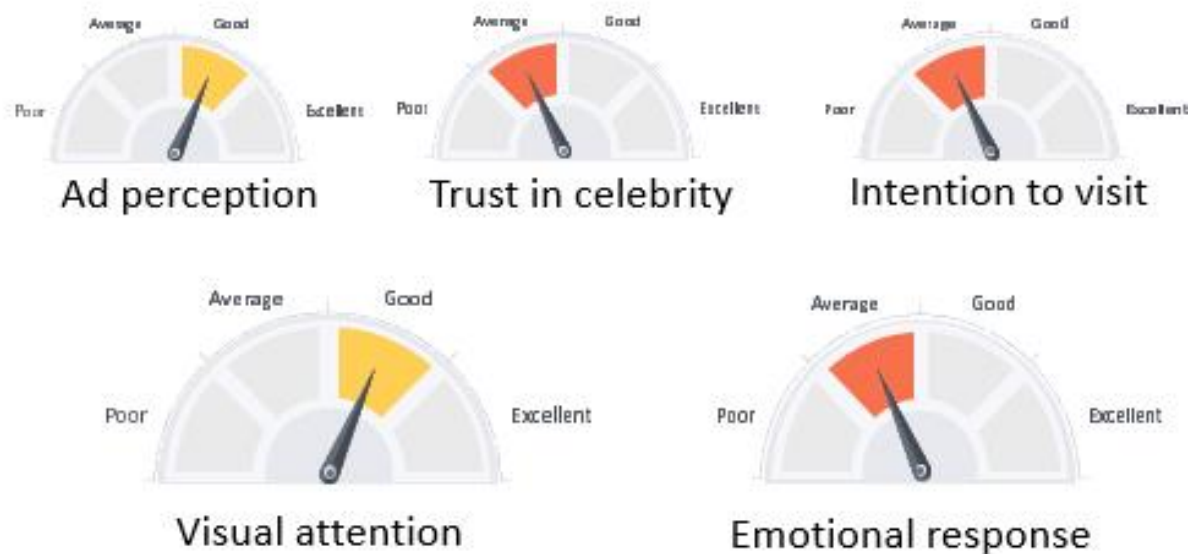
The Broads Authority - Kayaking



Digital Lab Testing - NCC - The Broads kayaking Yt video



<https://www.youtube.com/watch?v=ijxdZ4ZbdIQ>



Survey - Results

Ad perception = 5.61/7

Q1 - Aad - Please rate from 1 to 7 your overall reaction to the ad

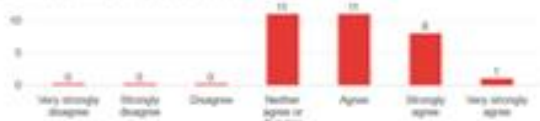


Q2 - Aad - Please rate from 1 to 7 your overall reaction to the ad

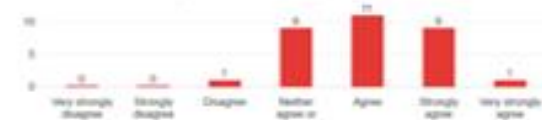


Trust = 4.90/7

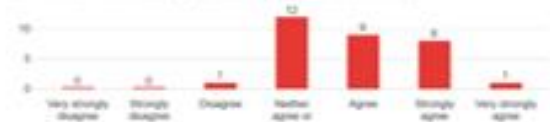
Q7 - trust - The celebrity is trustworthy



Q8 - trust - The celebrity is credible (likely to be believed)

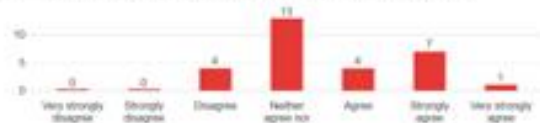


Q9 - trust - The celebrity is reliable (able to be trusted)

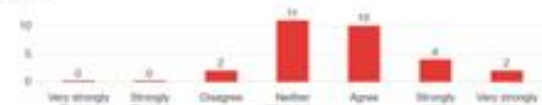


Intention to visit = 4.65/7

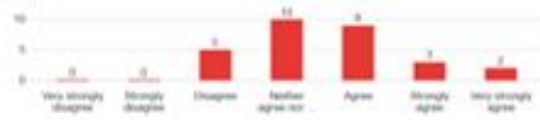
Q3 - intention to v - I plan to travel to Norfolk in the near future



Q4 - intention to v - I will make an effort to travel to Norfolk in the near future



Q5 - intention to v - I have an intention to travel to Norfolk in the near future



Q6 - intention to v - I am willing to travel to Norfolk in the near future



Recommendations

Video provoking low emotional response (FEA) but with good intensity (GSR).

Overall a good video but mild emotional response.

The audience did not seem to engage emotionally with the video yet this was the most appreciated out of the 3.

The last sentence “You won’t get cold because we don’t get wet” works very well.

Participants said that they feel the celebrity more genuine when she interacts and participates in the experience rather than when she talks about it.

The Broads Authority - Sailing



Digital Lab Testing - NCC - The Broads sailing Yt video



<https://www.youtube.com/watch?v=XxdndFwTp8k>



Survey - Results

Ad perception = 5.43/7

Q1 - Aad - Please rate from 1 to 7 your overall reaction to the ad

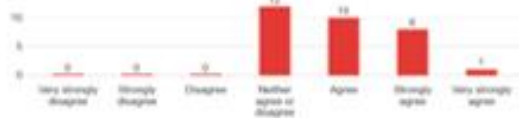


Q2 - Aad - Please rate from 1 to 7 your overall reaction to the ad

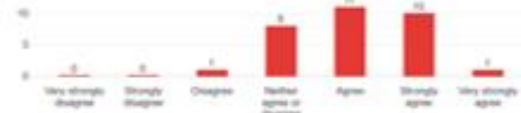


Trust = 4.91/7

Q7 - trust - The celebrity is trustworthy



Q8 - trust - The celebrity is credible (likely to be believed)

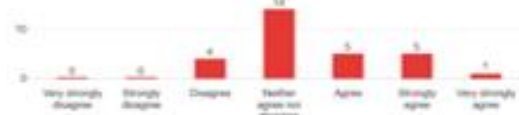


Q9 - trust - The celebrity is reliable (able to be trusted)

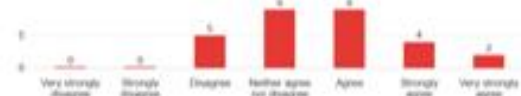


Intention to visit = 4.54/7

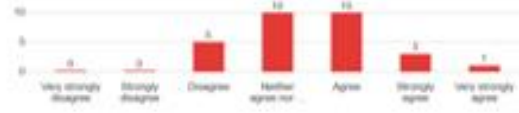
Q3 - intention to v - I plan to travel to Norfolk in the near future



Q4 - intention to v - I will make an effort to travel to Norfolk in the near future



Q5 - intention to v - I have an intention to travel to Norfolk in the near future



Q6 - intention to v - I am willing to travel to Norfolk in the near future



Recommendations

Video provoking low emotional response (FEA) but with good intensity (GSR).

Overall a good video but mild emotional response.

Participants seem to have a better positive response when there are images of wide landscapes, the sight of the boat in the middle of the broads worked well 2 times at the beginning and at the end.

The most engaging moment is between 00:30 and 00:40 with surprise rising. The talk of the man works.

Surprisingly the celebrity seems more genuine when she's not talking directly to the camera but engaging in the experience.

The Broads Authority - Walking



Digital Lab Testing - NCC - The Broads walking Yt video



https://www.youtube.com/watch?v=s_6cFTfkDGw



Survey - Results

Ad perception = 5.03/7

Q1 - Aad - Please rate from 1 to 7 your overall reaction to the ad

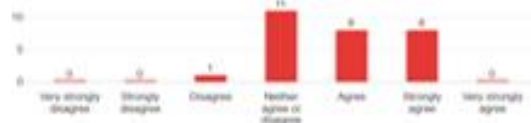


Q2 - Aad - Please rate from 1 to 7 your overall reaction to the ad

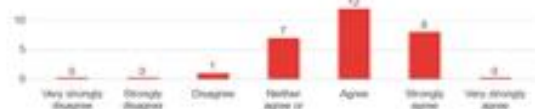


Trust = 4.77/7

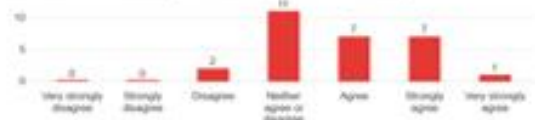
Q7 - trust - The celebrity is trustworthy



Q8 - trust - The celebrity is credible (likely to be believed)

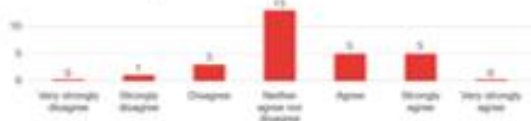


Q9 - trust - The celebrity is reliable (able to be trusted)



Intention to visit = 4.34/7

Q3 - intention to v - I plan to travel to Norfolk in the near future



Q4 - intention to v - I will make an effort to travel to Norfolk in the near future



Q5 - intention to v - I have an intention to travel to Norfolk in the near future



Q6 - intention to v - I am willing to travel to Norfolk in the near future



Recommendations

Video provoking low emotional response (FEA) but with good intensity (GSR).

Overall a good video but it does not work as expected.

Participants seem to have a better positive response when there are images of wide landscapes and especially the moment when there is the images of the shoes at 00:08-00:10

The story of the isolated abbey did not seem to provoke any emotional response.

We would suggest to emphasis the fauna and flora in another set of video and see the impact in term of engagement compared to this one focusing more on heritage.