



The Heartbeat of Creativity in Audio Description.

A Pilot Heart Rate Study on Multimodal Objectivity and Subjectivity



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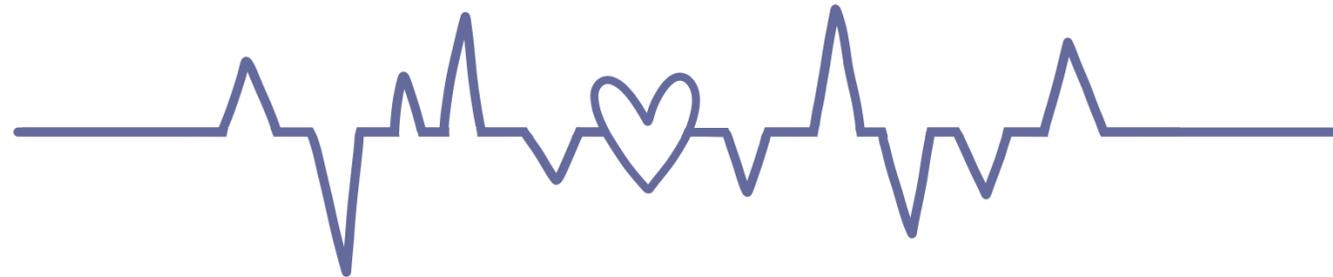


OVERVIEW

-  **Objectivity in AD**
-  **Methodology**
-  **Analysis**
-  **Preliminary results**
-  **Discussion**
-  **Conclusion**



OBJECTIVITY IN AD: PROFESSION

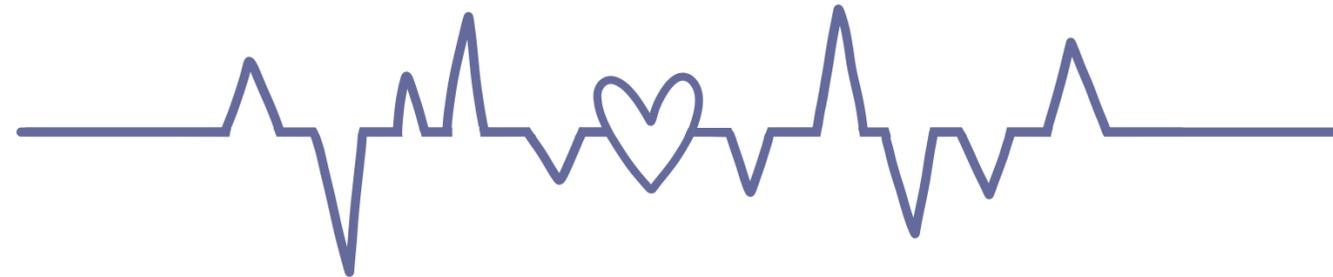


AD documents of different nature: guidelines, quality standards, or norms. Different scopes and origins: national, international, companies, institutions, academic, etc.

Experience-based, descriptive, and experimental norms (Pedersen, 2020).



OBJECTIVITY IN AD: PROFESSION

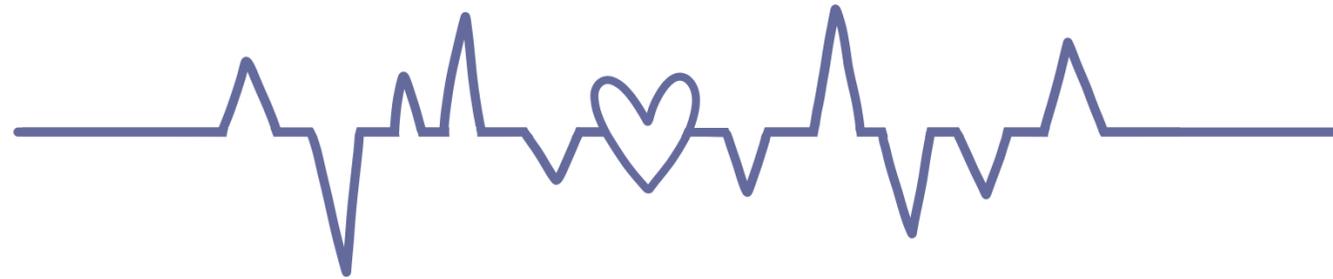


Objectivity is a constant recommendation:

 **UNE 153020 norm, *La Charte de l'Audiodescription*, ITC Guidance, Ofcom's Guidelines on the Provision of Television Access Services, Audio Description Standards, The Visual Made Verbal, Netflix, etc.**



OBJECTIVITY IN AD: RESEARCH

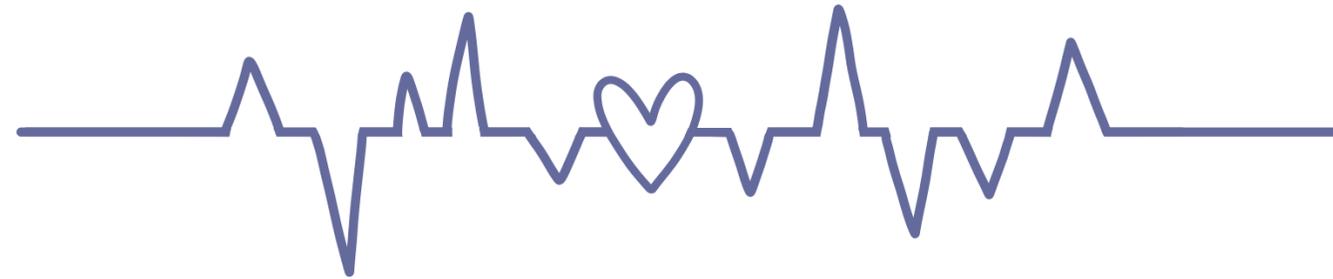


Creative alternatives that deviate from objectivity, “creative media accessibility” (Romero-Fresco & Chaume, 2022):

-  **Practices that provide access for the users**
-  **They seek to become an artistic contribution**
-  **They seek to enhance users’ experience in a creative or imaginative way**



OBJECTIVITY IN AD: RESEARCH

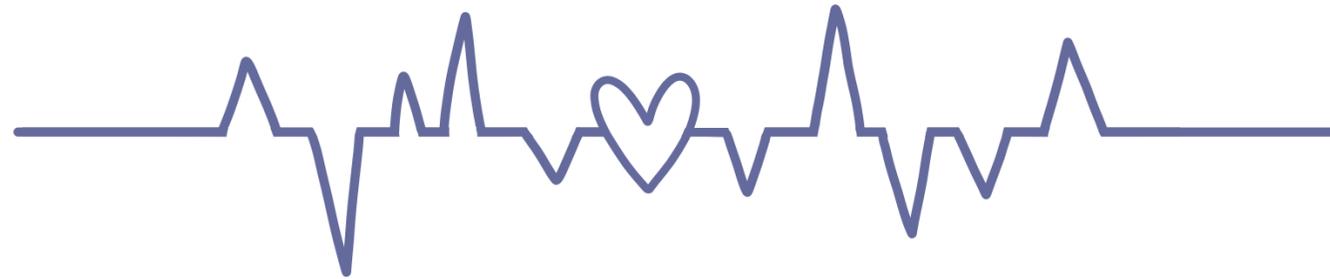


AD cannot be purely objective (Jankowska, 2015; Mazur, 2020). Personal interpretation and text-based interpretation (ADLAB).

In AD scripts objectivity and subjectivity interact (Romero-Muñoz, 2023).



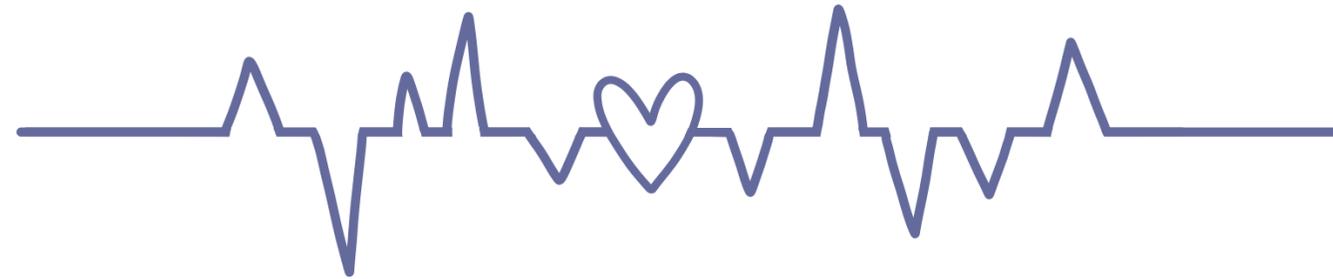
OBJECTIVITY IN AD: RESEARCH



- ♥ Szarkowska (2013): auteur description
- ♥ Jankowska (2015): creative AD
- ♥ Walczak (2013): creative AD
- ♥ The “style” metaphor: Fryer & Freeman (2012), Holsanova (2016), Bardini (2020), Soler Gallego & Luque Colmenero (2023), Rizzo & Spinzi (2023), etc.



METHODOLOGY

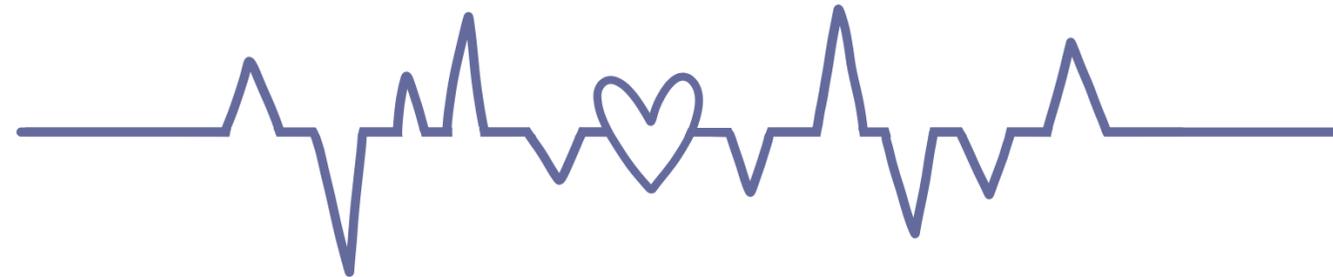


Objectivity and subjectivity in AD multimodal configuration: movement, iconography, graphic elements and spatial/temporal changes.

Experimental reception study on partially sighted users.



METHODOLOGY



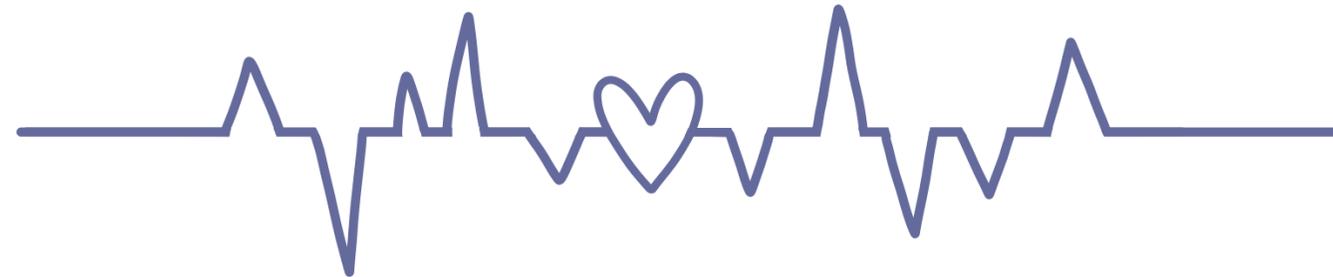
What is the most immersive combination of objective and subjective multimodal elements?

Higher levels of presence, comprehension, and heart rate measures.

AD as a source of information and entertainment or enjoyment.



METHODOLOGY

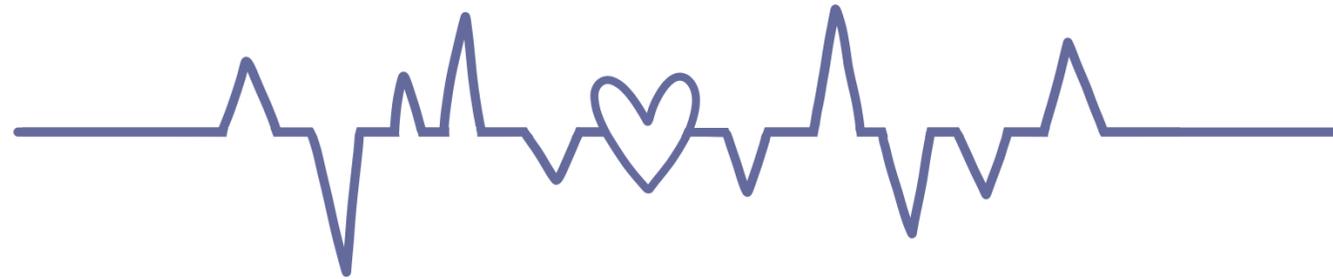


Why heart rate and immersion?

AD research towards experimentation. Cognitive turn and psychological measurements, such as heart rate (Jankowska & González Fernández, 2024).



METHODOLOGY

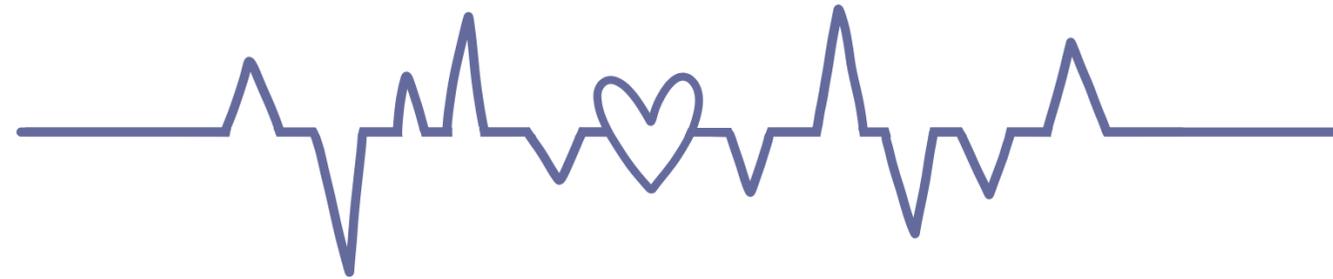


Immersion, an elusive notion with no clear consensus.

“Immersion is a term used to describe the sensation of the audience being plunged into the story world, experiencing the mediated environment as if it was unmediated” (Walzack, 2017, p. 26).



METHODOLOGY

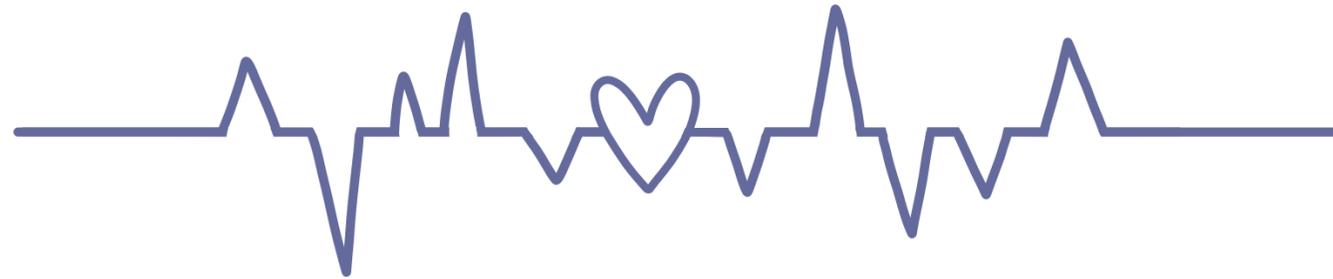


Immersion vs presence

“Presence encapsulates the extent to which any medium induces feelings of engagement, immersion, and transportation into the virtual world. It occurs when the user is unaware of their experience as being mediated” (Cavallo & Fryer, 2022, p. 60-61).



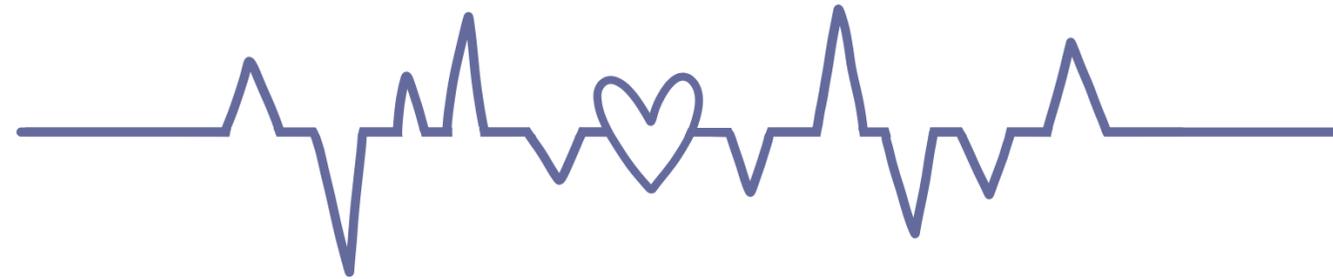
METHODOLOGY



Immersion would be the objective description of the technology, whereas presence would be the user's subjective experience (Baños et al., 2004), which means that if something is immersive someone would feel presence.



METHODOLOGY

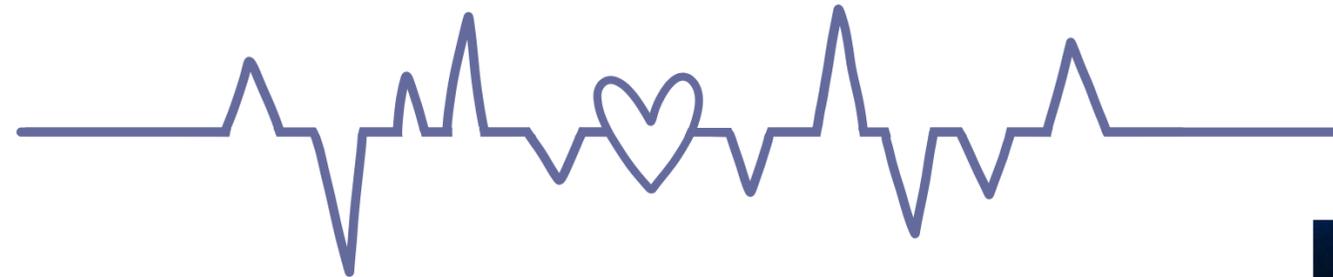


An immersive product induces the feelings of flow and presence, among others (Fresno, 2017), so if AD scripts attract and hold users' attention, then they can improve their filmic experience.

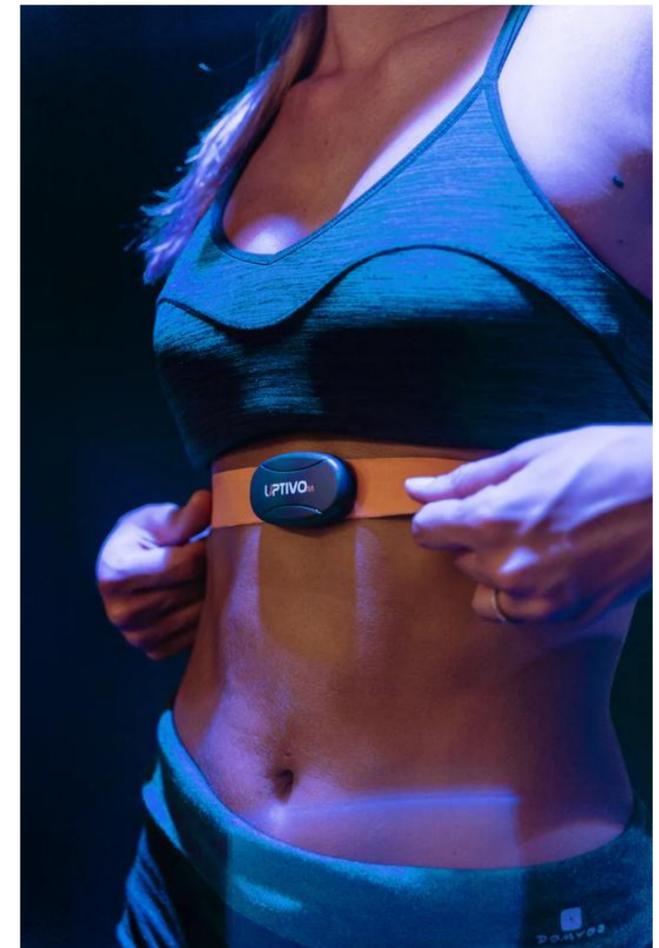
Knowing the key to increasing presence can be a useful way to increase AD effectiveness (Di Giovanni, 2020).



METHODOLOGY

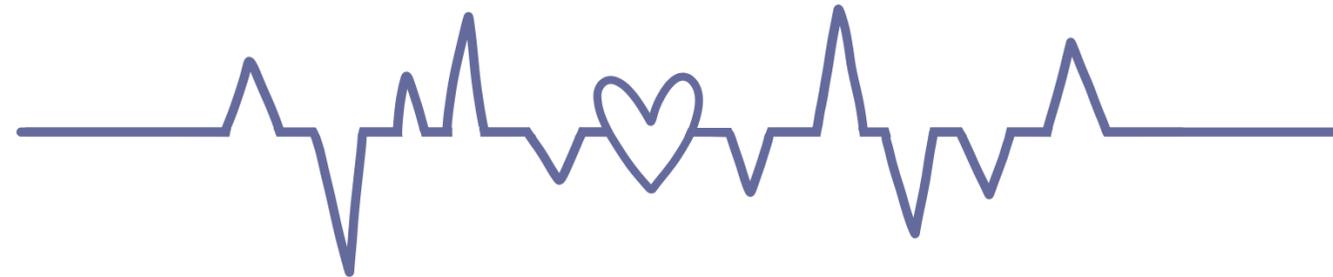


Device used: UPTIVO Belt-D.





METHODOLOGY



***Guillermo del Toro's Cabinet of Curiosities* (experiment simulation).**

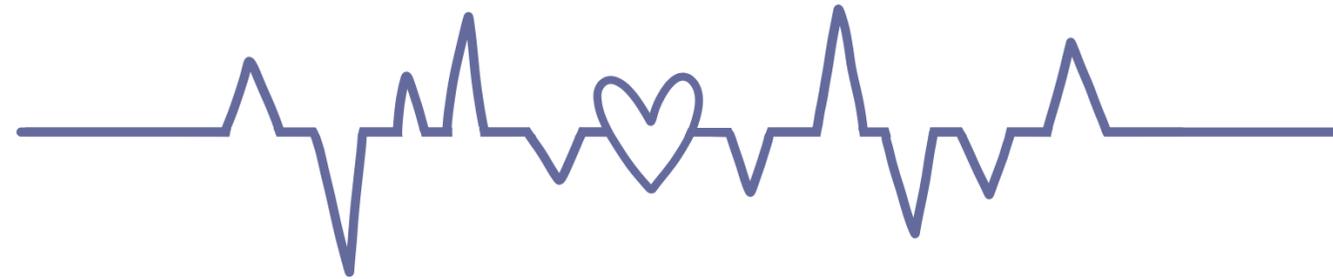
***Money Heist* (actual experiment).**

Variables: gender and creativity.





METHODOLOGY

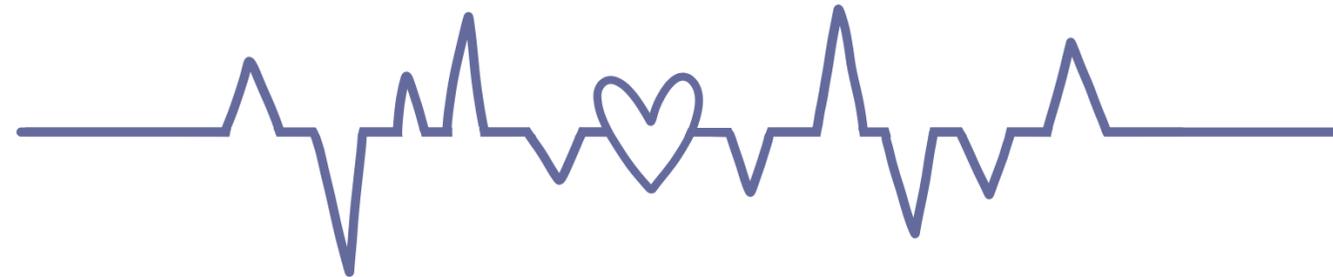


Gender: AD recorded by a man and by a woman.

Creativity: original AD and manipulated AD.



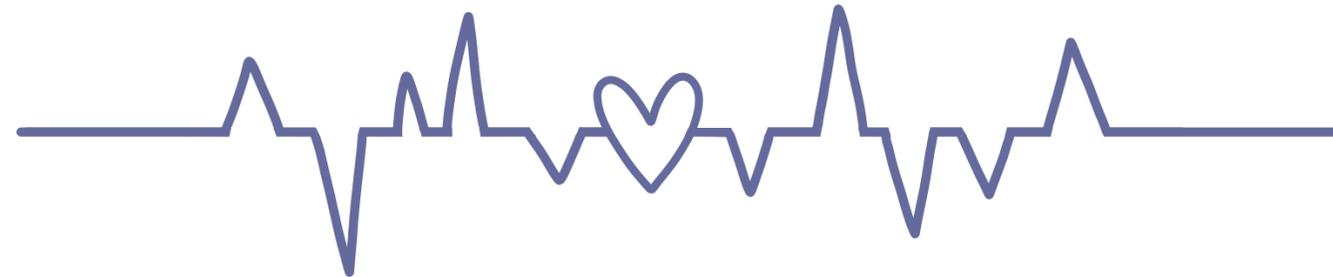
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Tests	Video fragment	AD	Voice
test 1	<i>Money Heist</i>	original	man
test 2	<i>Money Heist</i>	original	woman
test 3	<i>Money Heist</i>	manipulated	man
test 4	<i>Money Heist</i>	manipulated	woman



METHODOLOGY



Two partially sighted participants (pilot study).

According to the Spanish association for blind and partially sighted people ONCE, in 2022 81.7 % of their members were partially sighted, whereas 13,7 % were blind.

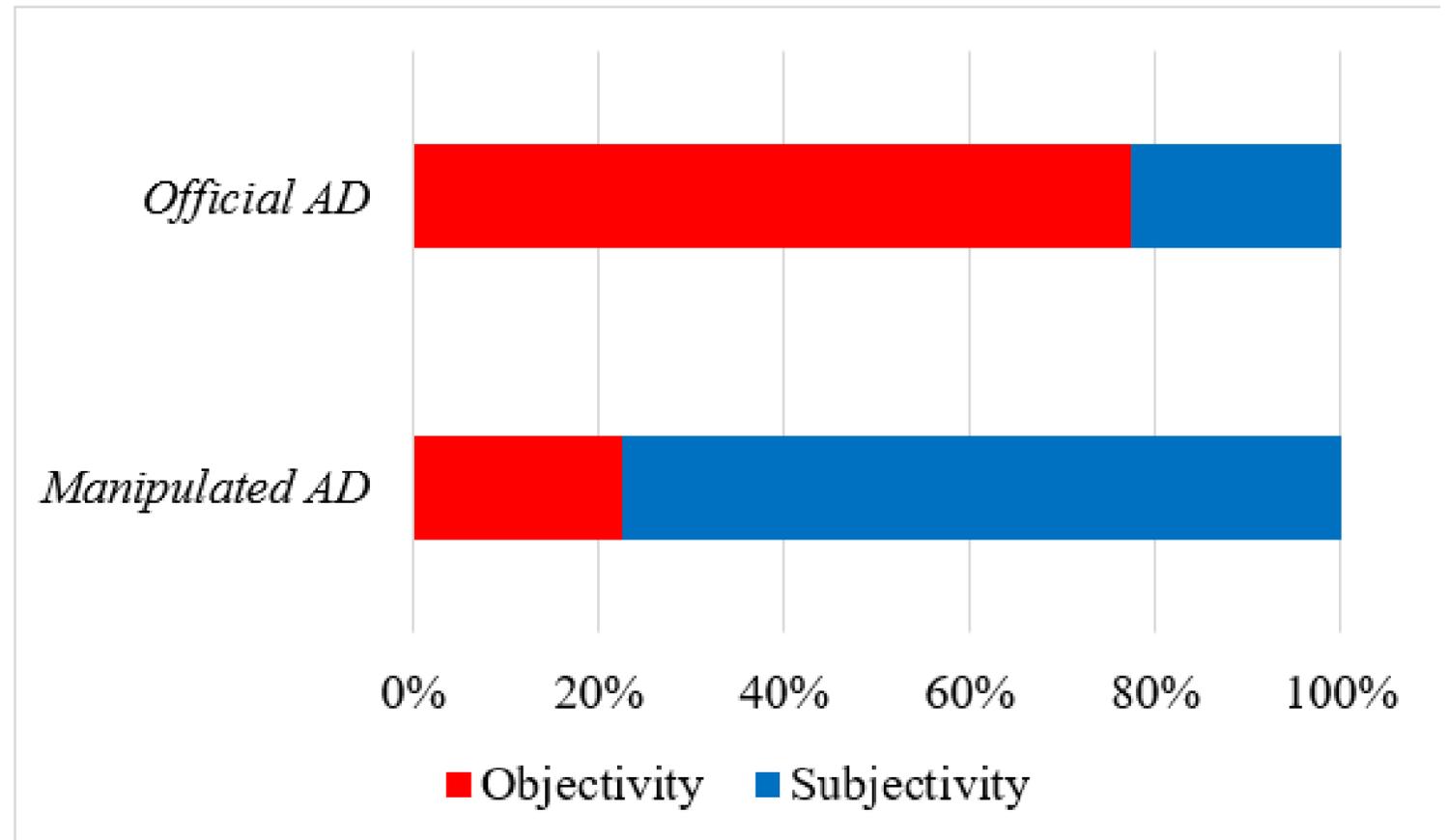
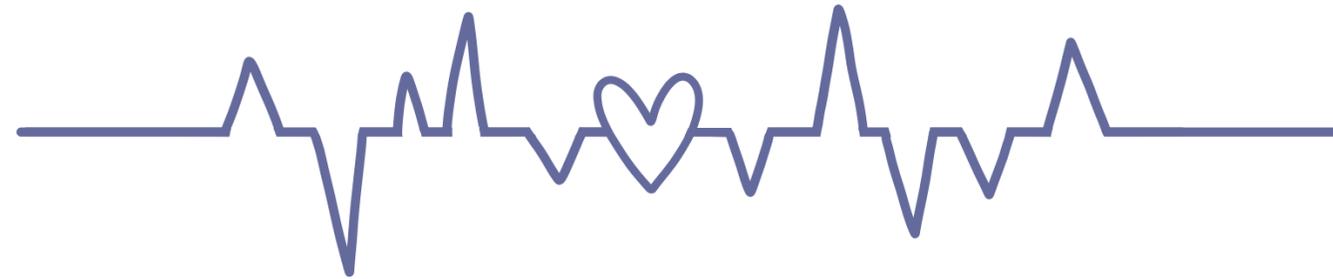


METHODOLOGY

1. Informed consent
2. Informational document
3. Demographic questionnaire
4. Experiment simulation:
 - Heart rate sensor placement
 - Short clip from *Guillermo del Toro's Cabinet of Curiosities*
 - Short presence questionnaire
 - Short comprehension questionnaire
5. Heart rate experiment:
 - Heart rate activation
 - Three minutes of relaxation (basal heart rate)
 - Heart rate data compiling
 - Full clip from *Money Heist* with:
 - Official AD voiced by a man (Test 1)
 - Official AD voiced by a woman (Test 2)
 - Alternative AD voiced by a man (Test 3)
 - Alternative AD voiced by a woman (Test 4)
 - Heart rate sensor stops recording
 - Three minutes of relaxation (heart rate after relaxation)
 - Heart rate sensor deactivation
 - Full presence questionnaire
 - Full comprehension questionnaire
6. Semi-structured interview

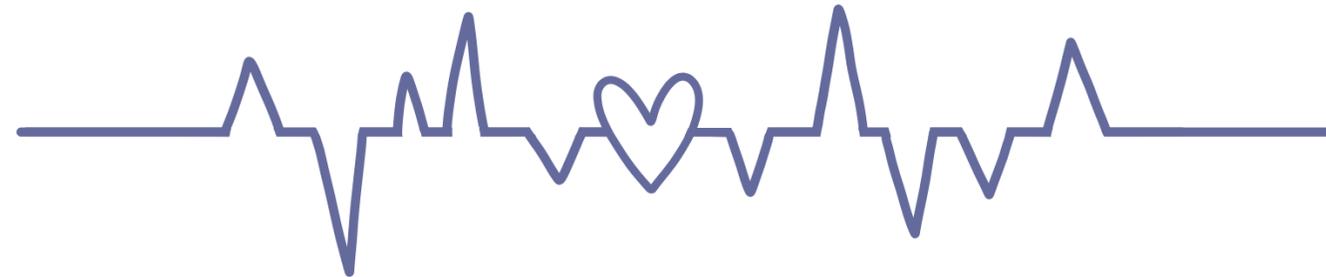


ANALYSIS





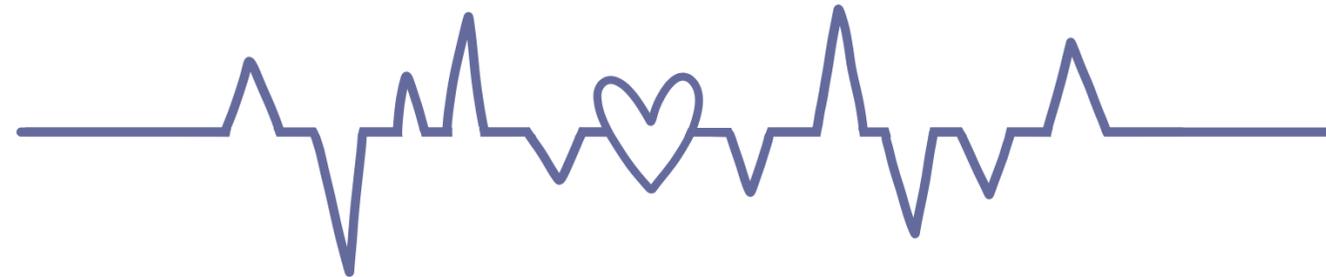
ANALYSIS



Original AD	Manipulated AD
[52:05] Una serie Netflix (G_O). Una producción Vancouver Media (G_O). En el vestíbulo del Banco de España (S_S), Lisboa, Estocolmo y Tokio empuñan sus fusiles (I_O). Caminan serenas entre los rehenes (MV_S). Van vestidas con mono rojo y chaleco antibalas (I_O). Río exhala (P_O) y relaja los hombros (MV_S). Las mujeres comienzan a desvestirse (MV_O). Denver aprieta los labios	[52:05] Título: “Una serie Netflix” (G_S). Texto en pantalla: “Una producción Vancouver Media” (G_S). En un vestíbulo (S_O), Lisboa, Estocolmo y Tokio empuñan sus fusiles de asalto (I_S). Caminan entre los rehenes (MV_O). Van vestidas con mono rojo y chaleco antibalas para protegerse (I_S). Río exhala tranquilo (P_S) y baja los hombros (MV_O). Las mujeres se desvisten con cuidado



PRELIMINARY RESULTS



Participant	Gender	Test	Basal bpm	Average bpm	Maximum bpm	Minimum bpm	After relaxation bpm
P007	man	1	71	67	72	64	67
P010	woman	4	87	91	99	82	85

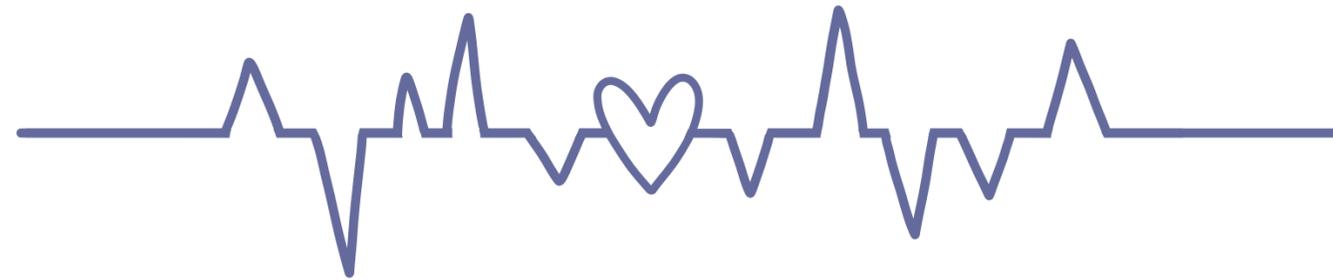


PRELIMINARY RESULTS

Participant	Code	Creativity	Section	Time	Bpm
P007	Mobility	Objective	1	40"- 45"	67-67
		Subjective	2	25"- 30"	68-68
	Iconography	Objective	1	5"- 10"	67-67
		Subjective	2	1' 20"- 1' 25"	68-68
	Editing	Objective	1	3' 45"- 3' 50"	68-67
		Subjective	2	0"-5"	69-67
	Graphic	Objective	1	2' 50"- 2' 55"	67-67
		Objective	2	3' 40"- 3' 45"	67-68
P010	Mobility	Subjective	1	40"- 45"	92-93
		Objective	2	25"- 30"	93-92
	Iconography	Subjective	1	5"- 10"	95-98
		Objective	2	1' 20"- 1' 25"	94-94
	Editing	Subjective	1	3' 45"- 3' 50"	93-97
		Objective	2	0"-5"	91-95
	Graphic	Subjective	1	2' 50"- 2' 55"	89-90
		Subjective	2	3' 40"- 3' 45"	91-93



DISCUSSION

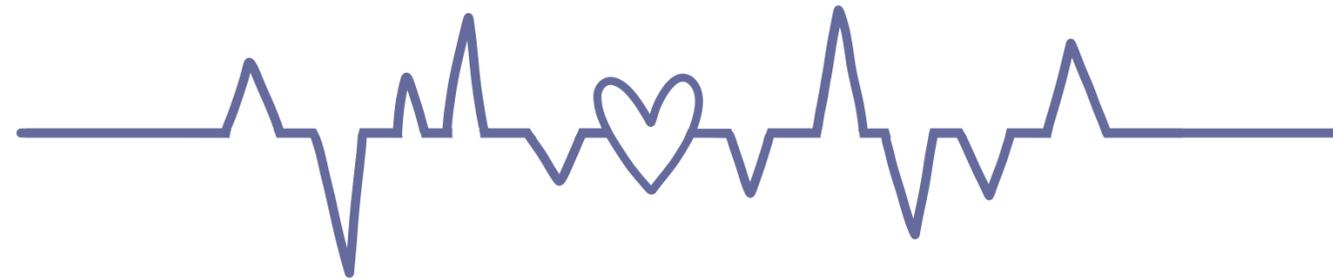


P010 shows higher bpm levels than P007. P007 seems to be flatter, with very small differences in every section.

Subjective sections usually prove higher bpm than the objective sections within the same code. This tendency is supported by the questionnaires, since P010 proved higher levels of presence and comprehension.



DISCUSSION

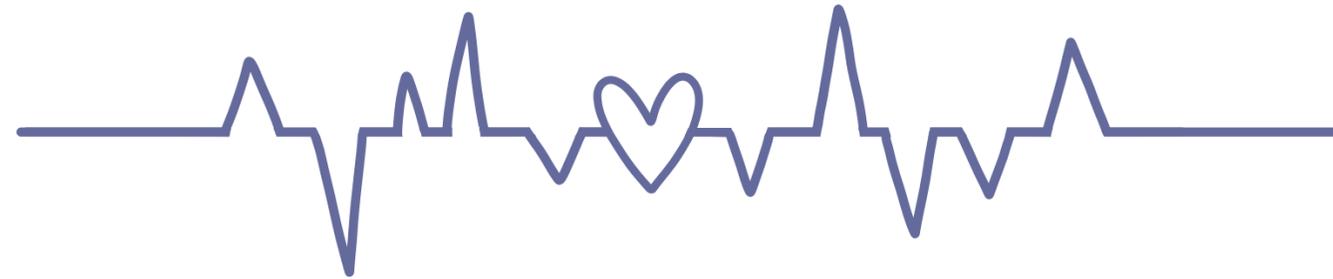


Quantitative and qualitative data collide.

In the interviews, participants were not aware of any differences: they both felt that the fragment most immersive, they both thought that AD was objective enough and would not change anything, and none of them considered that AD should be more objective or subjective.



CONCLUSION

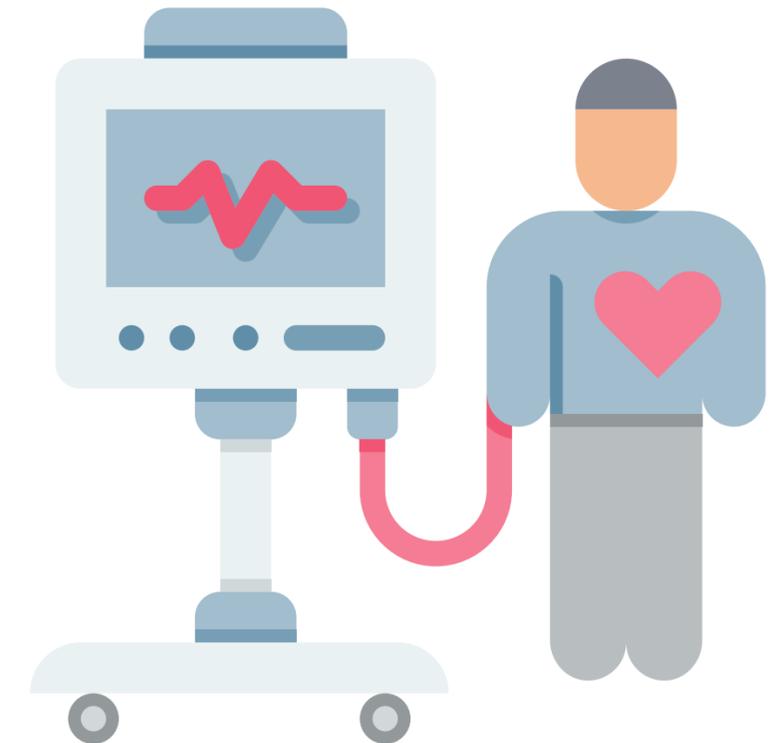


Preliminary data point at differences between participants probably due to creativity, even if users do not have a clear idea of what creativity in AD means.

Further experimental reception studies with a considerable number of participants and statistical data need to be implemented. Future research following this path could provide empirical evidence about the immersive combination of objective and subjective multimodal components in AD to be considered by quality standards.



THANK YOU!



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