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Introduction

Neuroselling is a new field that applies knowledge of the brain to selling processes to optimize sellers' effectiveness and sales (Russo & Gabrielli, 2022).

Previous studies using EEG have shown that mimicking the other person can lead to better negotiation outcomes, and that different *sales techniques* can yield different attention pathways and neuronal activations depending on experience (Randolph et al., 2013; Cañizares Stay & Cañizares Stay, 2018 Sun et al., 2019; Muñoz et al., 2019).

This project aims to study *infomercials* as an effective sales technique that uses emotional communication to engage viewers and build trust, and to investigate how *seller's gender, communication style, and trust* are intertwined with the subjects' emotional reactions.

Emotional reactions in the seller/buyer relationship have been understudied due to a challenge in measuring emotions, but consumer neuroscience can fill this gap by examining conscious and unconscious decision-making processes that influence purchasing behavior (Hazeldine, 2014).

Method

Stimuli: two 1.31-min. infomercials promoting a mattress with the same script but different seller's gender.

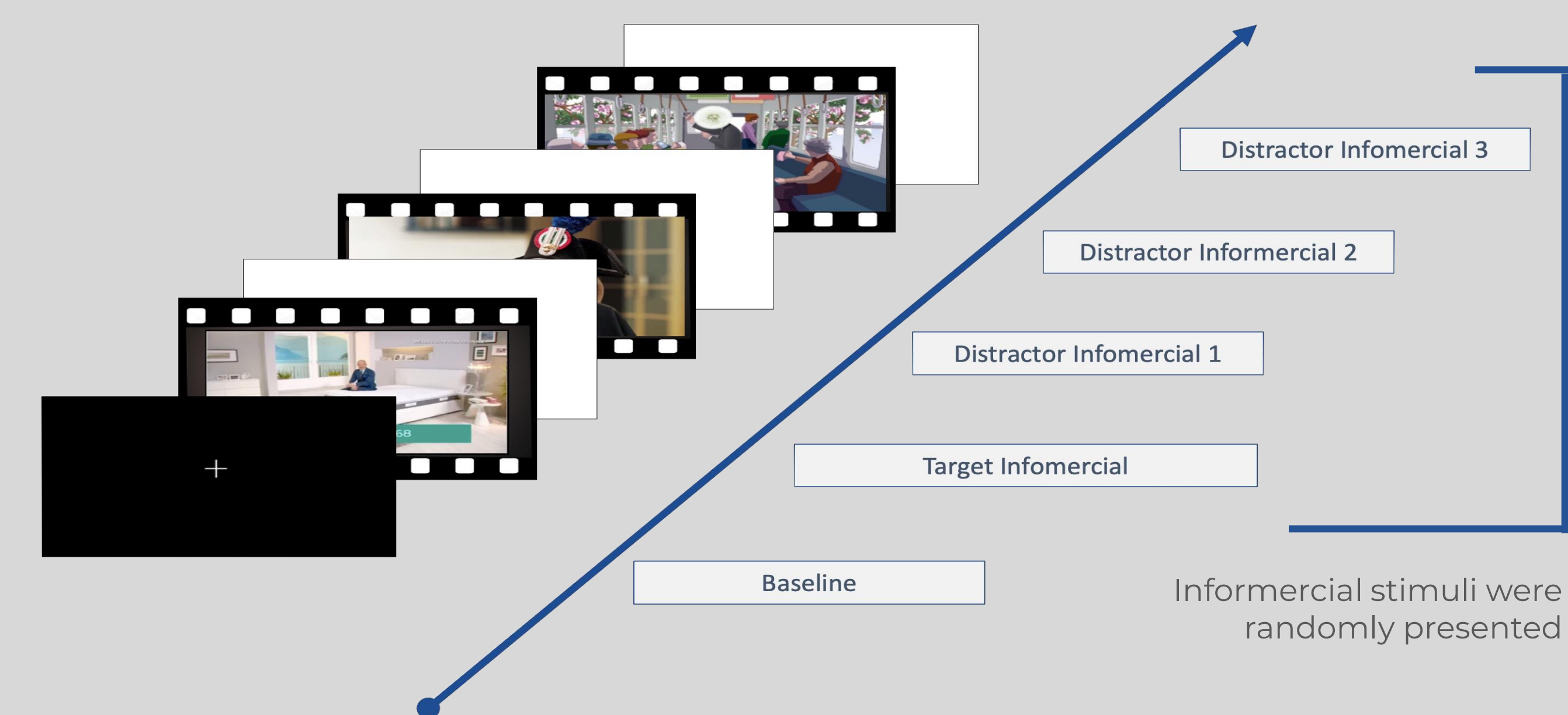


Sample: 40 participants (20 male), aged 20-55 years old.

Instruments:

- EEG: 40 channel NVX 52 (Medical Computer System, Ltd.)
- SC: SA9309M sensor (Thought Technology, Ltd.)
- Eye-tracker: Tobii pro nano (Tobii, AB)
- Questionnaire at the end of the study.

Protocol: between-subject design. Stimuli were presented in the following way:



Discussion: the study aimed at defining, through neuromarketing, emotional and rational dynamics in selling, exploring the specific area of *infomercials*.

- **Female sellers** increase Purchase Intention and Call-to-Action and stimulate different reactions according to age: approach (higher AWI) in adults and withdrawal (lower AWI) in the young.
- Higher perceived convenience, infomercial likeability, the use of a **Non-Animated Communication Style** as well as **higher WPI and AWI** have a positive impact on Purchase Intention and Call-to-Action (in line with Akrouf, 2016 and Sahai et al., 2020).
- Finally, the more **Time Spent** on particularly salient areas within an infomercial, the greater the Willingness-to-Pay recorded at the neurophysiological level.

Limitations: Small sample size and focus on specific infomercials. Future research could explore other infomercials and further examine communication styles and the age of the seller, to also assess identification effects.

Conclusion: This project is a noteworthy pilot study that highlights crucial emotional aspects of the seller/buyer relationship that can affect sales decisions and outcomes, and that holds importance in defining the Neuroselling discipline. Neuromarketing techniques give this project a novel and pioneering edge as they reveal unknown emotional reactions and improve understanding of factors affecting decision-making, leading to a reevaluation of communication dynamics for better business performance.

Results

1: Seller Gender

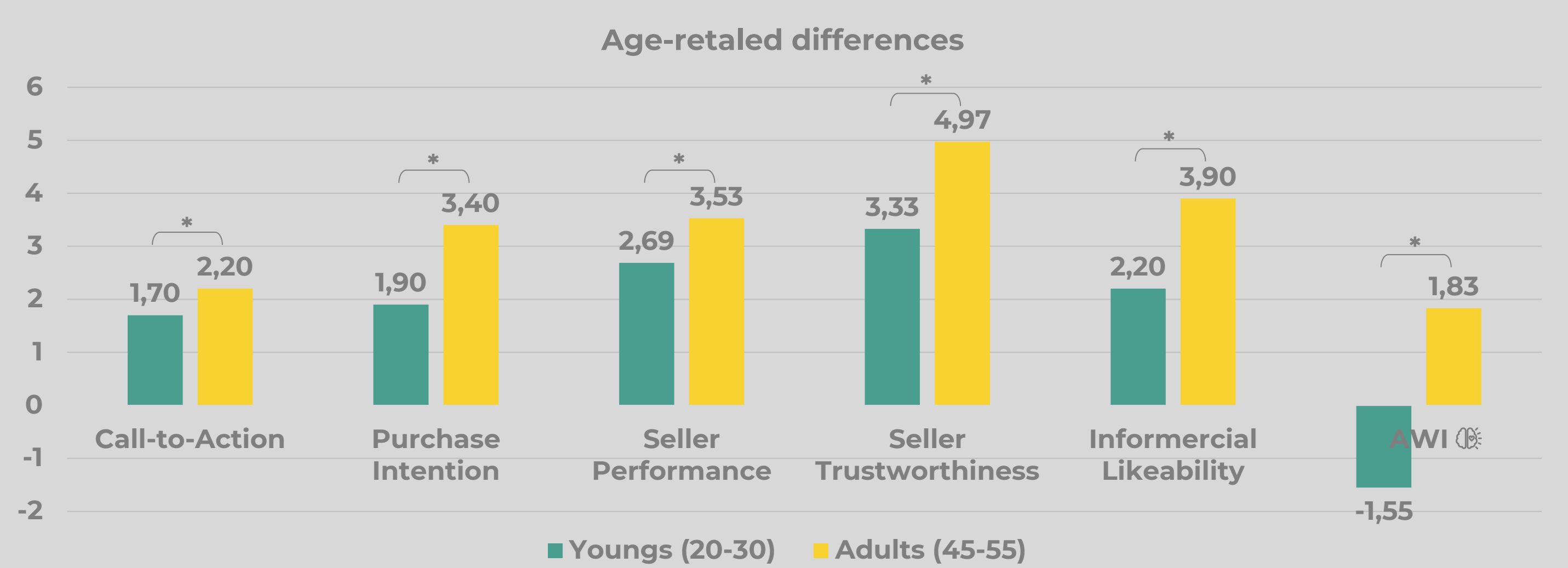
The **Female seller** registers significantly higher levels of Call to Action (M=3 vs M=1.9, t=2.67, p=.011) and Purchase Intention (M=2.7 vs M=1.9, t=1.98, p=.50) than the male seller.

2: Seller Communication Style

In condition B, sellers who were judged to have a **Non-Animated** Communication Style reported higher Call-to-Action (M=3.4 vs M=2.25, t=2.11, p=.049) and Perceived Convenience (M=4.42 vs M=2.88, t=2.94, p=.009) than the ones judged as more Animated.

Finally, the Animated communication style results in higher Arousal (M=0.10, vs M=-0.11, t=-3.144, p=.006), measured with SC.

3: Respondents Age



There are significant differences in favor of Adults for Call-to-Action (t=-3.06, p=.007), Purchase Intention (t=-3.083, p=.006), Seller Performance (t=-2.033, p=.047), Seller Trustworthiness (t=-2.625, p=.017), Spot Likeability (t=-2.474, p=.024) and the EEG AWI (t=-2.36, p=0.32).

4: Eye-tracking Analysis

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		Time Spent Phone Number AOI	TimeSpent Price AOI	Time Spent Discount AOI
Willingness to Pay Index (WPI)	Pearson's r	0,414*	0,341*	0,450**
	p value	0,015	0,049	0,009

Positive correlation (Pearson coefficient) between WPI and the Time Spent on these AOIs: Phone Number, Price, and proposed Discount. *p-value<.05; **p-value<.01

4: Regression Models

CONDITION: Male seller			
DEPENDENT VARIABLE: Purchase Intention			
	Beta coefficients	t	p value
Intercept		2,578	0,026
Animated Communication Style	-0,437	-2,339	0,039*
Perceived Convenience	0,666	3,499	0,005*
Infomercial Likeability	1,05	3,989	0,002*
Willingness to Pay Index (WPI)	0,347	2,159	0,050*

A, Male seller. The model explains 73% of the variance (R² = 0.727, SE= 0.625, F=5.872, p=.007). Factors impacting positively are Convenience, Likeability, and the WPI EEG indicator. The Animated style maintains its negative effect on Purchase Intention.

CONDITION: Female seller			
DEPENDENT VARIABLE: Purchase Intention			
	Beta coefficients	t	p value
Intercept		10,243	0,012
Animated Communication Style	-0,381	-2,045	0,05*
Willingness to Pay Index (WPI)	0,457	2,492	0,026*
Approach - Withdrawal Index (AWI)	0,391	2,082	0,046*

B, Female seller. The regression model explains 57% of the variance (R²=0.573, SE=0.981, F=6.272, p=0.006). Also in this condition, the Animated Communication Style is confirmed to have a negative impact, while WPI and AWI EEG indexes have a positive one.

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