

# Automatic attention to sexual stimuli: Exploring the role of neuroticism and sexual excitation/inhibition through event-related potentials

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Neuroticism, a personality trait highly related to the lack of psychological adjustment, is considered a critical etiology and/or maintenance factor for male and female sexual dysfunction (e.g., psychogenic erectile dysfunction, sexual arousal, or sexual desire disorders) and is expected to play a role in the attentional processing of sexual stimuli. Yet, the neuroticism-attention chain underpinning human sexual functioning still lacks empirical support. The current study<sup>1</sup> aimed to test the mediating role of sexual excitation and sexual inhibition propensities in the neuroticism-automatic attention toward visual erotica relationship. It further aimed to unveil the neuroelectric correlates of that process. Fifty-eight participants (30 women and 28 men) were enrolled in a modified oddball paradigm containing romantic (focus on non-sexual intimacy) and sexually explicit pictures (focus on genital interaction), while event-related potentials (ERPs) were recorded.

The experiment took place at the NeuroLab (DEP-UAveiro). Findings from parallel mediation analyses supported sexual inhibition due to the fear of sexual performance failure as a mediator of the neuroticism-automatic attention (ERP component N2) to visual erotica relationship (both regarding romantic and sexually explicit pictures). From a clinical perspective, findings suggest that visual erotica is perceived as threatening by high-level neuroticism individuals. Accordingly, therapeutic strategies aimed at decreasing hyperarousal and demands of sexual performance are recommended in the context of sex therapy.

## References

<sup>1</sup>Aguiar, S., Carvalho, J., Carrito, M.L., & Santos, I.M. (2023). Automatic attention to sexual stimuli: exploring the role of neuroticism and sexual excitation/inhibition through event-related potentials. *The journal of sexual medicine*, 20(3), 367–376. <https://doi.org/10.1093/jsxmed/qdac048>

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## FIGURE 1

Illustration of the experimental setup during the laboratory task.

