

Attitudes sensitivity to context: Presence of others and physiological evidences

ABSTRACT:

In this research project, we developed a set of studies framed in a biopsychosocial perspective in order to investigate the role of social context (e.g., co-action and mere-presence of others) in how we process information. We hypothesized, according to previous data obtained, that the presence of others increases task engagement and context-sensitivity reactions, producing social facilitation at the same time that it increases executive control function. This project grounds its biopsychosocial approach on the development of experimental studies that use measures of processes and physiologic indexes, such as *heart rate, ventricular contractility, cardiac output, total peripheral resistance, skin conductance, and facial electromyography activity (EMG)*.

Across a set of empirical studies we found support for the general idea that cognition is situated, in that social presence increases task engagement influencing how we process information, increases our sensitivity to features of the current environment, and at the same time tunes our mind to control undesirable influences of such context. In contrast, individuals in isolation were less sensitive to the influence of the context and, if that influence occurred, they did not seem to have the capacity to monitor undesirable influences.

The specific studies developed in this project were framed in different papers, which add the following information to the literature, beyond the above detailed aspects: a) social presence impacts the composite face effect by increasing holistic processing; b) social presence impacts performance on an emotional Stroop task, c) social presence increases Ebbinghaus visual illusions and d) social presence leads individuals to report higher levels of general well-being.

Additional contributions of this research to the literature are: a) individuals exhibiting cardiovascular responses associated with an experience of challenge (in opposition to threat) process information more superficially; b) experiences of familiarity, which have physiological responses similar to challenge states, do not overlap with challenge states in terms of processing features; c) Stroop interference effects can be detected at a physiological level, namely through EMG contraction patterns.

Keywords

Social presence, Control executive functions, Context sensitivity

Published Work:

Garcia-Marques, T., Fernandes, A., Fonseca, R., & Prada, M. (2015). Social presence and the composite face effect. *Acta Psychologica*, 158, 61-66. doi:10.1016/j.actpsy.2015.04.001

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Garcia-Marques, T., Fonseca, R., & Blascovich, J., (in press). Familiarity challenge and processing of persuasive messages. *Social Cognition*

Fonseca, R., Blascovich, J., & Garcia-Marques, T. (2014). Challenge and threat motivation: Effects on superficial and elaborative information processing. *Frontiers in Psychology*, 5, 1170. doi: 10.3389/fpsyg.2014.01170

Prada, M., Fonseca, R., Garcia-Marques, T., & Fernandes, A. (2014). Se correr o bicho pega. Normas de avaliação de imagens de animais negativos. *Laboratório de Psicologia*, 12, 41-56. doi: 10.14417/lp.851

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