
How monitoring other's actions influences one's own performance during social interactions

Elena Núñez-Castellar*†¹

¹Ghent University – Belgium

Abstract

Several ERP studies have recently shown that similar mechanisms for error processing are active in response to both self-generated errors and errors committed by others (Van Schie et al., 2005; Bates et al, 2005; Miltner et al., 2004). Nevertheless, how these mechanisms are associated with behavioral adjustments following error observation during social interactions has been seldom explored. In the talk I will present the results of a recent study in which by means of event-related potentials (ERPs) we investigated the link between the mechanisms involved in monitoring errors committed by others and the behavioral adaptations following them. The participants performed a social flanker task in cooperative and competitive contexts. Monetary reward was offered to the best couples in the cooperative interaction and to the best participants in the competitive situation. ERP analyses revealed that the error related negativity (oERN) and the error positivity (oPe) might reflect distinct aspects of error processing and consequently be differently associated to reaction times (post-error slowing) adaptations after error observation.

*Speaker

†Corresponding author: elenapatria.nunezcastellar@ugent.be