

BRIEF REPORT

Who is looking at me? The cone of gaze widens in social phobia

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Gaze direction is an important cue that regulates social interactions and facilitates joint attention. Although humans are very accurate in determining gaze directions in general, they have a surprisingly liberal criterion for the presence of mutual gaze. Using an established psychophysical task that required observers to adjust the eyes of a virtual head to the margins of the area of mutual gaze, we examined whether the resulting cone of gaze is altered in people with social phobia. It turned out that during presence of a second virtual person, the gaze cone's width was specifically enlarged in patients with social phobia as compared to healthy controls. The size of this effect was correlated with the severity of social anxiety. As this effect was found for merely virtual lookers, it seems to be a fundamental mechanism rather than a specific effect related to the fear of being observed and evaluated by others.

Keywords: Social phobia; Gaze perception; Eye contact; Head orientation; Gaze cone.

INTRODUCTION

The gaze of others is an important signal that regulates social interactions (Kleinke, 1986). Depending on the direction of perceived gaze from the perspective of the observer or actor, two main aspects have to be distinguished. On the one hand, mutual gaze enhances the recognition of emotional facial expression (Bindemann, Burton,

& Langton, 2007) and it facilitates positive evaluations of the gazing person (Mason, Tatkov, & Macrae, 2005). Averted gaze, on the other hand, is able to trigger reflexive shifts of an observer's gaze and thereby facilitates joint attention (see Langton, Watt, & Bruce, 2000, for a review).

The structure of the human eye with its high contrast between the iris and the white sclera is

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This work was supported by a grant from Deutsche Forschungsgemeinschaft (Sachbeihilfe HI456/4-1).

We thankANGES MÜNCH for her programming assistance.