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Situated spatial cognition and social processing: body, emotions and interactions in space

Situational awareness and interpersonal spatial processing in martial artists

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Background: Studies have shown that a person's perception of space around the body changes as a function of their environmental awareness. It is important to understand the link between environmental awareness and interpersonal space as the number of attacks on people listening to music through headphones is on the increase (prompting some running clubs to even offer self-defence courses).

Aims: To investigate the link between environmental awareness and interpersonal space and whether this differs in people trained in self-defence.

Method: 24 martial artists and 24 controls will take part. Using a modified version of the stop-distance paradigm the participant approaches the experimenter from one of four directions: walking forwards, backwards and with their left/right side facing. The participant stops at the distance from the experimenter at which they feel most comfortable (D1) and then approaches again until they do not wish to get any closer (D2) and the distance recorded. This is repeated with the participant listening to music through headphones. The participant is then approached by the experimenter and tells them to stop at D1 and D2.

Expected results:¹ We expect differences in D1 and D2 between martial artists and controls. Preliminary results show participants get significantly closer when approaching the experimenter than they allow the experimenter to get for both measures. This research will provide empirical support for the dangers of listening to music through headphones and how training in self-defence increases situational awareness.

¹ **If you have not yet obtained results, you should state the expected results.**