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Influence of relative position between two persons on heart rates

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Abstract

We interact with others while trying to maintain a comfortable distance for a specific person and purpose (personal space). Personal space is frequently quantified based on subjective pleasant/unpleasant feelings for the presence of others. Here, we investigated changes in heart rate caused by the presence of another person as a function of the relative position between two persons. The results revealed that the heart rate was significantly lower when the participant was facing another person, looking at the right face of another person, and being looked at by another person in the right face, compared to when the other person was in other positions. These results indicate that the parasympathetic nervous system response may become more active only when others are present in specific positions.