**Shifting attention in movement perception - Debrief**

The purpose of this study was to measure the effect of synchronous tapping on visual attention.

**How was this tested?**

You may have noticed that the two people in the background video were tapping in time with each other for some trials, but not in others. While tapping along with the target person on your left, you were also presented with a standard visual search task. This is what is known as a dual-task paradigm, in which you perform two tasks concurrently, and the effect of one task is measured with the other task. It assumes that we have limited cognitive resources, and that the two tasks must compete for those resources. In this case, we were looking at the effect of trying to keep tapping in time with the target person in the video would have on the visual search task. In addition, you were having your eye-movements tracked. This allows us to see where your visual attention is directed, but also how hard you were concentrating on the task, as our pupils change size when we are more focused.

**Hypotheses**

There were three conditions in this study: one hand tapping, both hands tapping in synchrony, both hands tapping out of synchrony. We expect that performance on the visual search task would be worsened in the non-synchrony condition, as the movement of the non-synchronous target would be a distraction, making the tapping task more difficult. We expect no difference between the other two conditions, since in the synchronous tapping condition both hands are moving together and should provide no distraction. With the eye-tracking, we expect that your pupils would be changing size more rapidly during the non-synchronous condition than in the other two, reflecting the greater degree of concentration required.

**Why is this important to study?**

Synchronised movement is an important feature of human social interaction and of human cultures throughout history. All cultures engage in sustained, synchronised action in the form of singing, dancing and drumming together. It is thought that these activities help to create and sustain social bonds within a group, but the mechanisms are poorly understood. This research aims to test a theory that we like to be in synchrony with others because it is easier to process their actions. This is important, as it may help us to understand a fundamental aspect of human social activity, and could have applications in how we design music therapy interventions or community-based music projects.

**What if I want to know more?**

If you are interested in learning more about this research, or would like to see a summary of our findings when it is complete, please contact Joshua Bamford ([joshua.bamford@anthro.ox.ac.uk](mailto:joshua.bamford@anthro.ox.ac.uk)).

If you feel discomfort regarding any of the material or would like to talk to someone regarding personal issues raised by participating in this study, you can contact the student welfare team at 6488 2424. Alternative support can be reached at HeadSpace (1800 650 890) which provides support for individuals between 12-25 years old.

Finally, please remember that your participation in this study is entirely voluntary and you can withdraw from the study at any time without giving a reason and without loss of course credit or reimbursement. If you wish to withdraw your data following this debrief, please let one of the research team know.

Approval to conduct this research has been provided by the University of Western Australia, in accordance with its ethics review and approval procedures. Any person considering participation in this research project, or agreeing to participate, may raise any questions or issues with the researchers at any time. In addition, any person not satisfied with the response of researchers may raise ethics issues or concerns, and may make any complaints about this research project by contacting the Human Ethics office at UWA on (08) 6488 4703 or by emailing to humanethics[@uwa.edu.au](mailto:hreo-research@uwa.edu.au). All research participants are entitled to retain a copy of any Participant Information Form and/or Participant Consent Form relating to this research project.

This study has also been approved by the University of Oxford. If you have a concern about any aspect of this study, please speak to either Joshua Bamford ([joshua.bamford@anthro.ox.ac.uk](mailto:joshua.bamford@anthro.ox.ac.uk)) or his supervisor ([emma.cohen@anthro.ox.ac.uk](mailto:emma.cohen@anthro.ox.ac.uk)), who will do their best to answer your query. The researcher should acknowledge your concern within 10 working days and give you an indication of how they intend to deal with it. If you remain unhappy or wish to make a formal complaint, please contact the relevant chair of the Research Ethics Committee at the University of Oxford who will seek to resolve the matter in a reasonably expeditious manner:  
Chair, School of Anthropology and Museum Ethnography Departmental Research Ethics Committee; Email: [hod@anthro.ox.ac.uk](mailto:hod@anthro.ox.ac.uk); Address: SAME DREC, University of Oxford, 51-53 Banbury Road, Oxford OX2 6PE