**Supplementary Material for**

*Assessing sensorimotor synchronisation in toddlers using the LookIt online experiment platform and automated movement extraction*

Sinead Rocha and Caspar Addyman

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**Tutorial and Case Studies**

**Drumming tutorial - A demo of how to extract rhythmic movement data from videos.**

This page and contents of this folder helps you walk through using the VASC toolkit with a small subset of the dataset from our [Little Drummers](https://github.com/InfantLab/little-drummers) experiment. It uses the VASC toolkit scripts in the folder above to extract rate of drumming from a videos of infants banging on a table. For comparison, two videos of adults performing the same tasks are also included. More details of the experiment can be found in [link to follow]

This folder contains

* Little Drummers Supplmentary Materials.docx - A more detailed narrative account of the
* LD.settings.json - a structured file telling the scripts where to find videos and save outputs.
* LittleDrummers\_TutorialManualCoding.xlsx - A spreadsheet of supporting information and manual coding of drumming videos. (Used by Step 3)
* videos - a folder of 6 videos per participant (3 child, 2 adult, used with permission).
* timeseries - a folder where we store data arrays containing the generated movement data.

**Step 0 - Installation**

In order to run the tutorial, download or clone a local copy of the VASC project including this tutorial. And follow the install instructions on the [main page](https://github.com/InfantLab/VASC).

**Step 1 - Processing the videos**

Open your local copy of the file [Step1.ProcessVideo.ipynb](https://github.com/InfantLab/VASC/blob/master/Step1.ProcessVideo.ipynb) from an instance of Jupyter or JupyterLab running on your local system.

This should then guide you through the process of getting OpenPose to convert each video into a set of frame by frame pose estimates.

**Step 2 - Cleaning the data**

Open your copy of [Step2.OrganiseData.ipynb](https://github.com/InfantLab/VASC/blob/master/Step2.OrganiseData.ipynb) in Jupyter.

**Step 3 - Extracting Movement**

Open your copy of [Step3.ExtractMovement.ipynb](https://github.com/InfantLab/VASC/blob/master/Step3.ExtractMovement.ipynb) in Jupyter.

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If you have any comments or questions, either contact [Caspar Addyman <c.addyman@gold.ac.uk](mailto:c.addyman@gold.ac.uk)