Data Collected

RQ1, RQ2: Daily Valence & Arousal Reports

Father

Mother

7 days, 6 reports/day
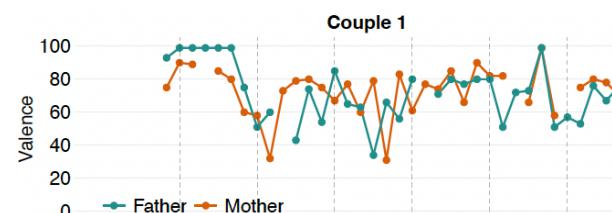
Maternity Leave

Paternity Leave

RQ3: Couples within 50m
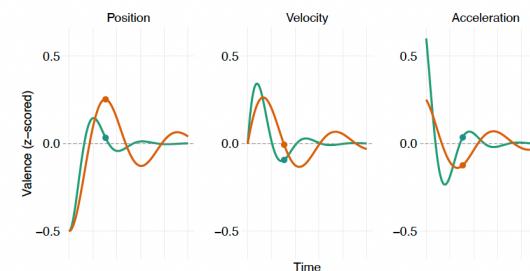
Data Processing & Models
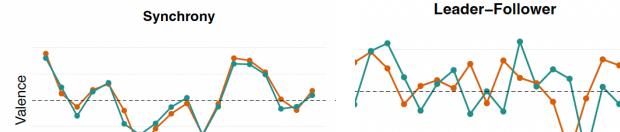
Within-person standardization

Couple 1

Valence

Father Mother

Estimation of position, velocity & acceleration of individual emotional states

Position Velocity Acceleration

Valence (z-scored)

Time

Modelling of parents' mutual influence

Synchrony Leader–Follower

Valence

Interpretation

Bayesian Coupled-Oscillator Model to compare:
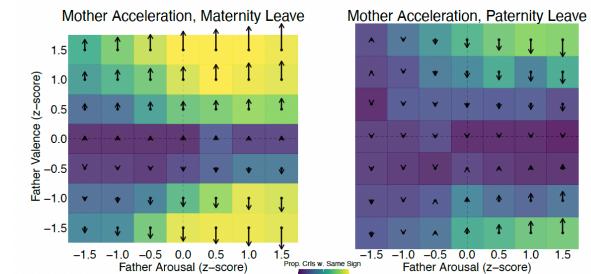
Fathers vs Mothers

Maternity Leave vs Paternity leave

Individual Regulation, Co-Influence Patterns

Mother Acceleration, Maternity Leave Mother Acceleration, Paternity Leave

Father Valence (z-score)

Father Arousal (z-score)

Prop. Cells w. Same Sign

Testing of control models (e.g., surrogate)