

SUPPLEMENTAL DATA

Supplemental Table 1: Creating customized algorithms for caregivers from ANS signals.

ANS signal	Feature extracted	Thresholds	Scaling factor
A.			
Electrodermal activity	First derivative of signal over 10 s sliding window, incremented in 0.5 s intervals	Positive EDA change of 0.2 μ s	5
Heart rate	Peak and valley prominence	Positive or negative peaks at 12 bpm	0.15
Skin temperature	First derivative of signal over 10 s sliding window, incremented in 0.5 s intervals	Positive or negative temperature change of 0.05 $^{\circ}$ C	10
B.			
Electrodermal activity	First derivative of signal over 10 s sliding window, incremented in 0.5 s intervals	Positive EDA change of 0.45 μ s	1.2
Heart rate	Peak and valley prominence	Positive or negative peaks at 25 bpm	0.1
Skin temperature	First derivative of signal over 20 s sliding window, incremented in 0.5 s intervals	Positive or negative temperature change of 0.12 $^{\circ}$ C	10
C.			
Electrodermal activity	First derivative of signal over 10 s sliding window, incremented in 0.5 s intervals	Positive EDA change of 0.25 μ s	16
Heart rate	Peak and valley prominence	Positive or negative peaks at 20 bpm	0.06
Skin temperature	First derivative of signal over 20 s sliding window, incremented in 0.5 s intervals	Positive or negative temperature change of 0.037 $^{\circ}$ C	15

A. Dyad 1 caregiver, Liam. B. Dyad 2 caregiver, Giselle. C. Dyad 3 caregiver, Sophie.