Supplementary Materials: Neurofeedback Training Based on Motor Imagery Strategies Increases EEG Complexity in Elderly Population

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For the sake of completeness, MSE curves obtained for the different parameter values are shown below. The values considered were: embedding dimension $m = \{1, 2\}$; tolerance parameter $r = \{0.1, 0.15, 0.2, 0.25, 0.3\}$.

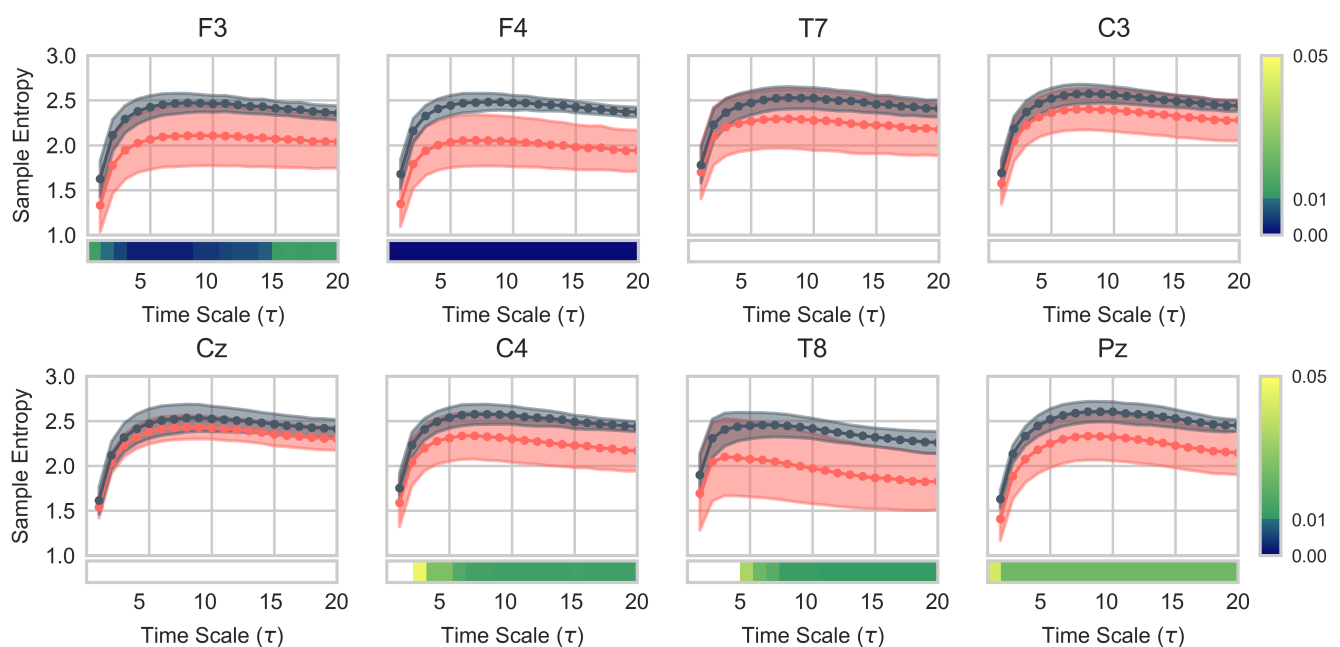## 1. Embedding Dimmension $m = 1$

Figure S1. MSE values across channels ($m = 1$; $r = 0.1$). Lines with circle markers indicate pre- (red) and post-training (grey) averaged sample entropy values. Significant differences ($p < 0.05$) for each time scale are shown in the bottom bars. *P*-values were corrected with FDR-BH correction.
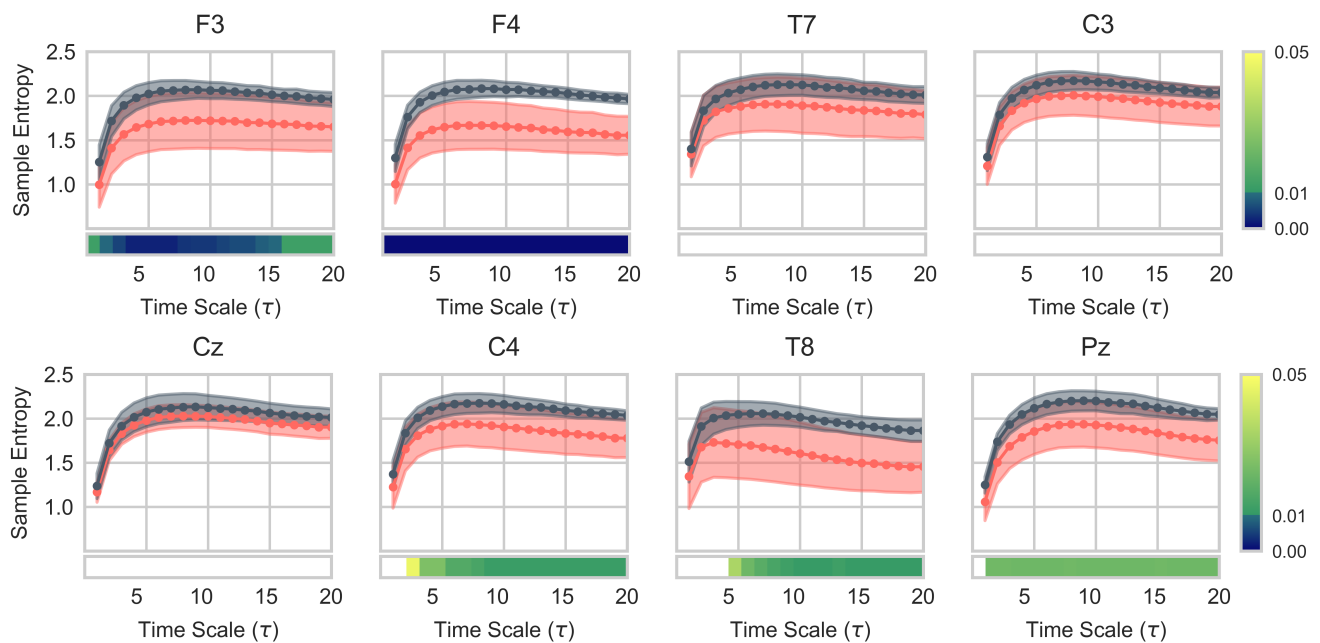
Figure S2. MSE values across channels ($m = 1$; $r = 0.15$). Lines with circle markers indicate pre- (red) and post-training (grey) averaged sample entropy values. Significant differences ($p < 0.05$) for each time scale are shown in the bottom bars. *P*-values were corrected with FDR-BH correction.
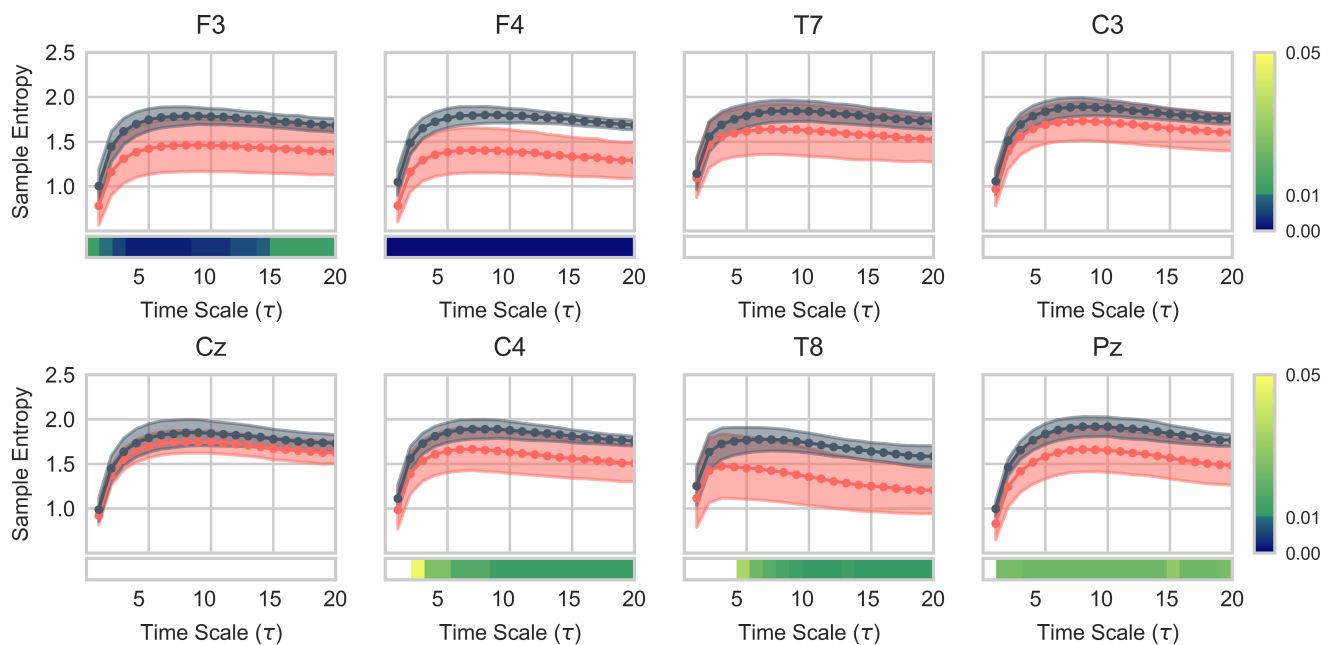

Figure S3. MSE values across channels ($m = 1$; $r = 0.2$). Lines with circle markers indicate pre- (red) and post-training (grey) averaged sample entropy values. Significant differences ($p < 0.05$) for each time scale are shown in the bottom bars. *P*-values were corrected with FDR-BH correction.
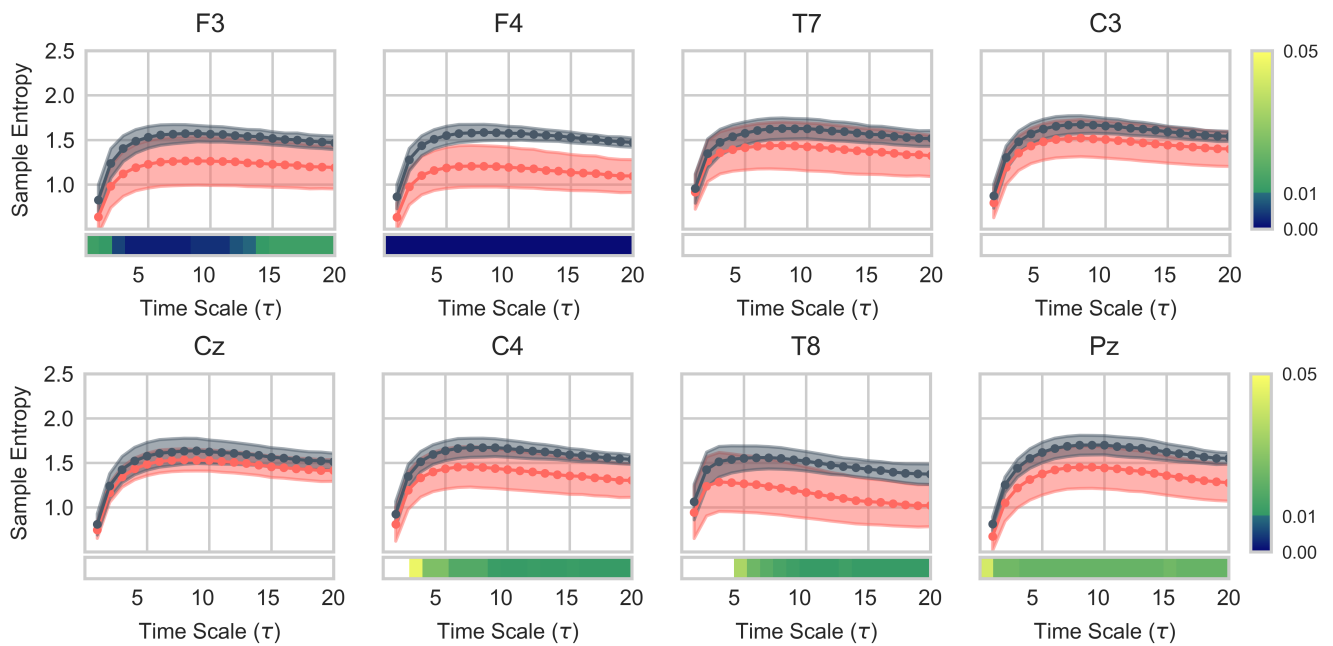
Figure S4. MSE values across channels ($m = 1$; $r = 0.25$). Lines with circle markers indicate pre- (red) and post-training (grey) averaged sample entropy values. Significant differences ($p < 0.05$) for each time scale are shown in the bottom bars. *P*-values were corrected with FDR-BH correction.
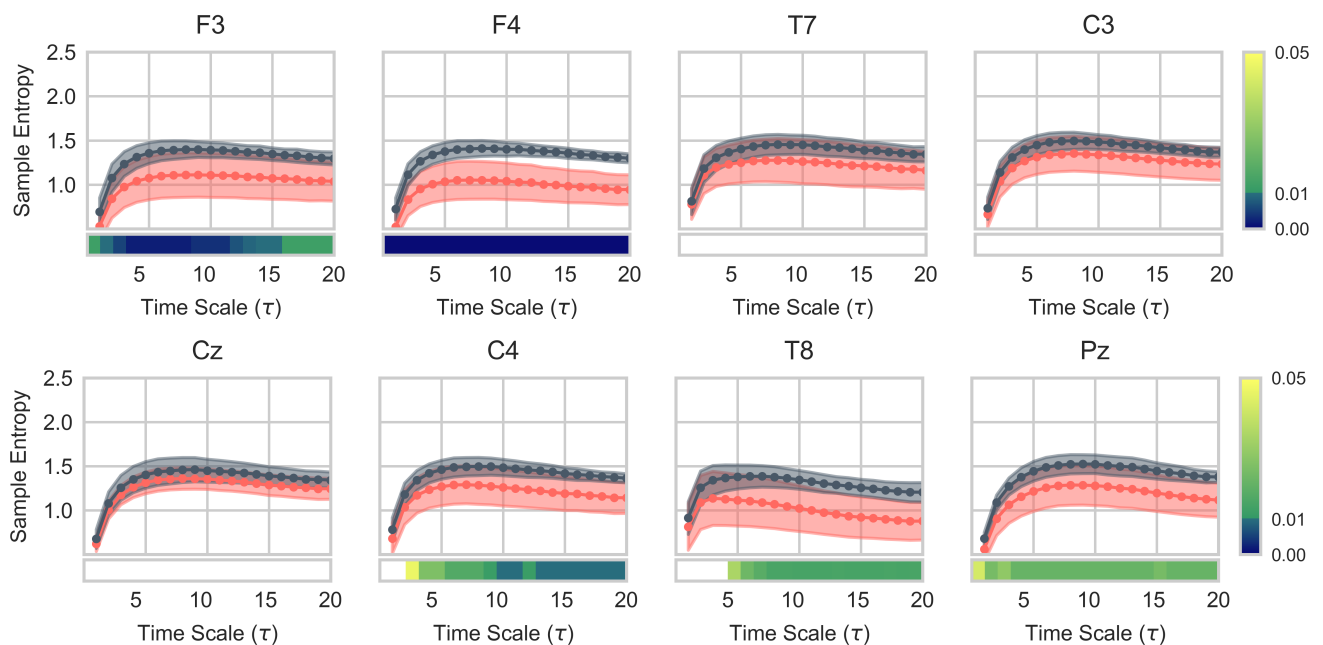

Figure S5. MSE values across channels ($m = 1$; $r = 0.3$). Lines with circle markers indicate pre- (red) and post-training (grey) averaged sample entropy values. Significant differences ($p < 0.05$) for each time scale are shown in the bottom bars. *P*-values were corrected with FDR-BH correction.

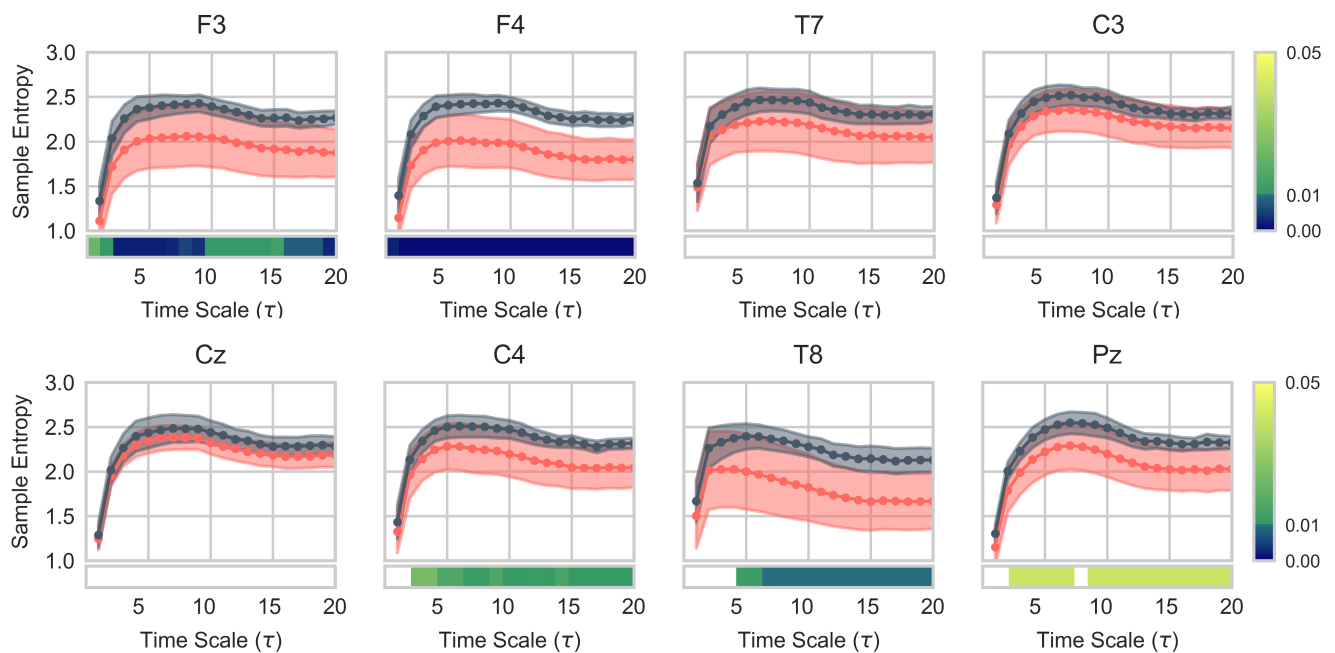## 2. Embedding Dimmension $m = 2$

Figure S6. MSE values across channels ($m = 2$; $r = 0.1$). Lines with circle markers indicate pre- (red) and post-training (grey) averaged sample entropy values. Significant differences ($p < 0.05$) for each time scale are shown in the bottom bars. *P*-values were corrected with FDR-BH correction.
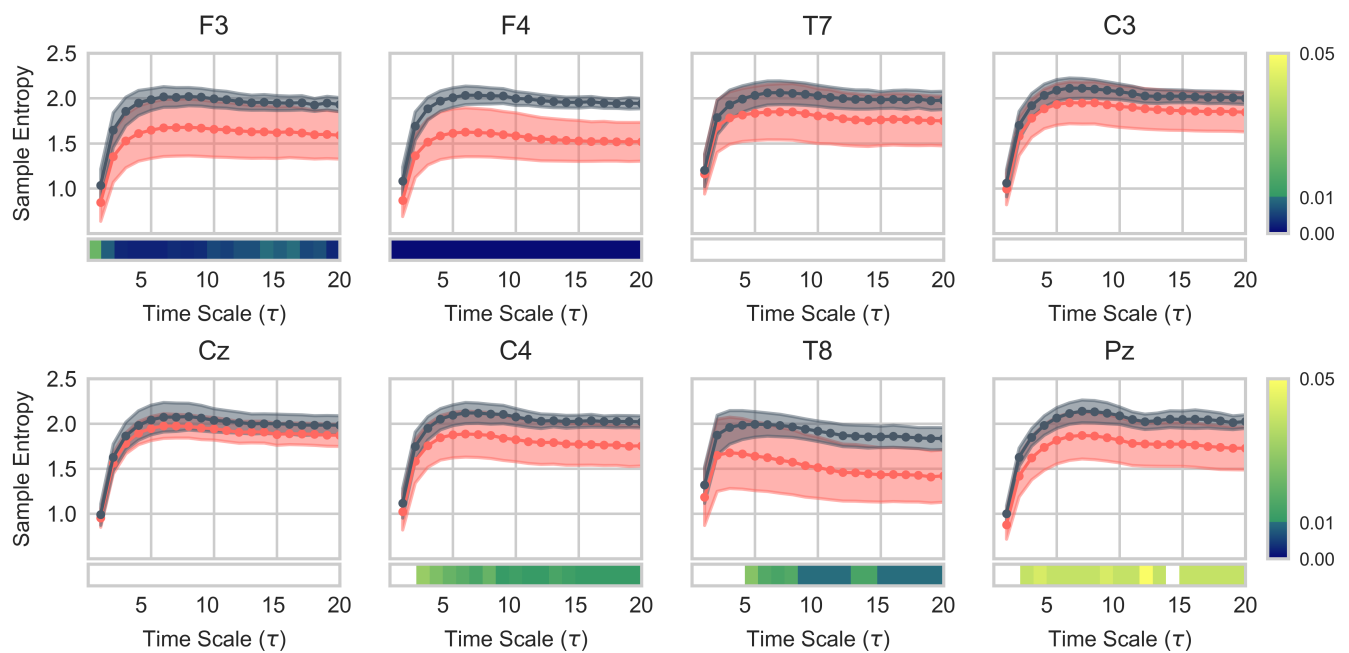

Figure S7. MSE values across channels ($m = 2$; $r = 0.15$). Lines with circle markers indicate pre- (red) and post-training (grey) averaged sample entropy values. Significant differences ($p < 0.05$) for each time scale are shown in the bottom bars. *P*-values were corrected with FDR-BH correction.
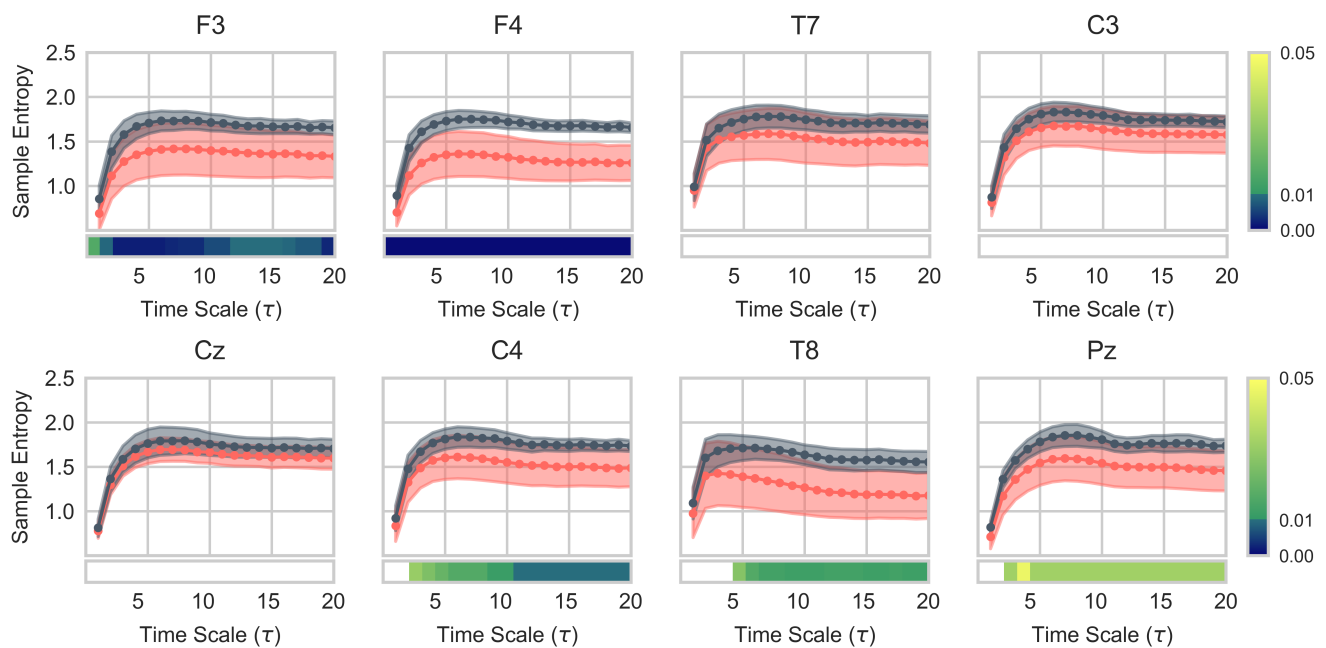
Figure S8. MSE values across channels ($m = 2$; $r = 0.2$). Lines with circle markers indicate pre- (red) and post-training (grey) averaged sample entropy values. Significant differences ($p < 0.05$) for each time scale are shown in the bottom bars. *P*-values were corrected with FDR-BH correction.
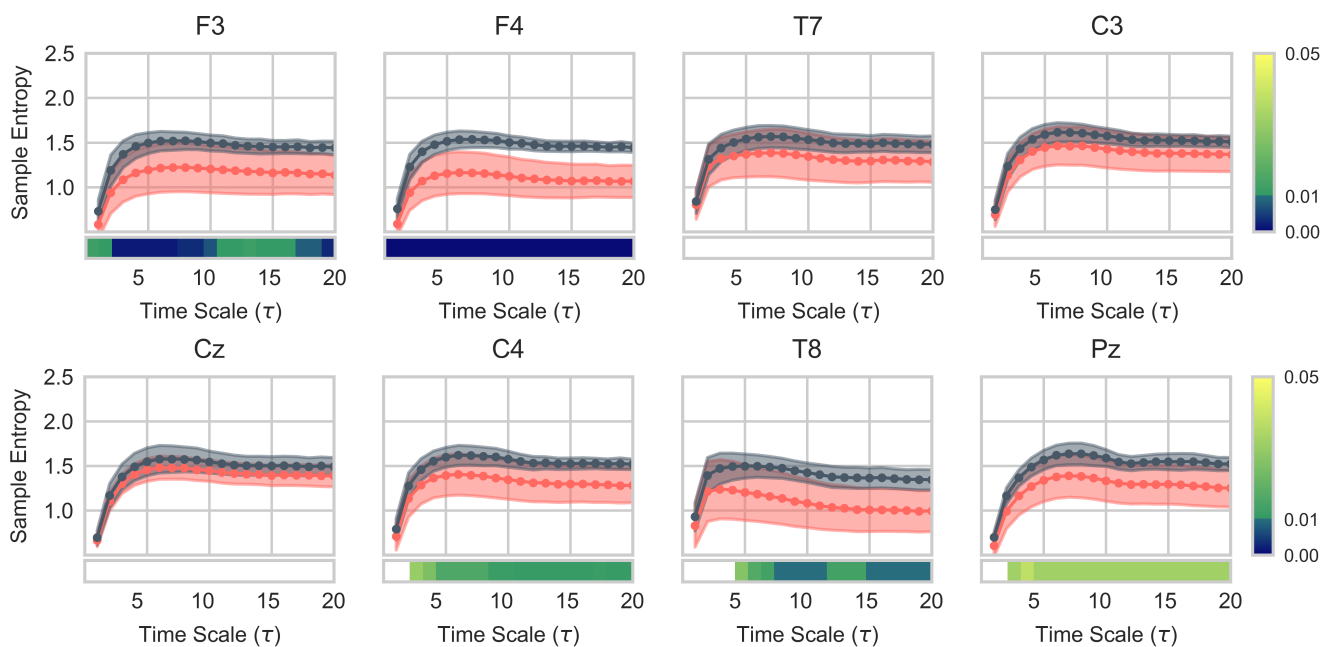

Figure S9. MSE values across channels ($m = 2$; $r = 0.25$). Lines with circle markers indicate pre- (red) and post-training (grey) averaged sample entropy values. Significant differences ($p < 0.05$) for each time scale are shown in the bottom bars. *P*-values were corrected with FDR-BH correction.
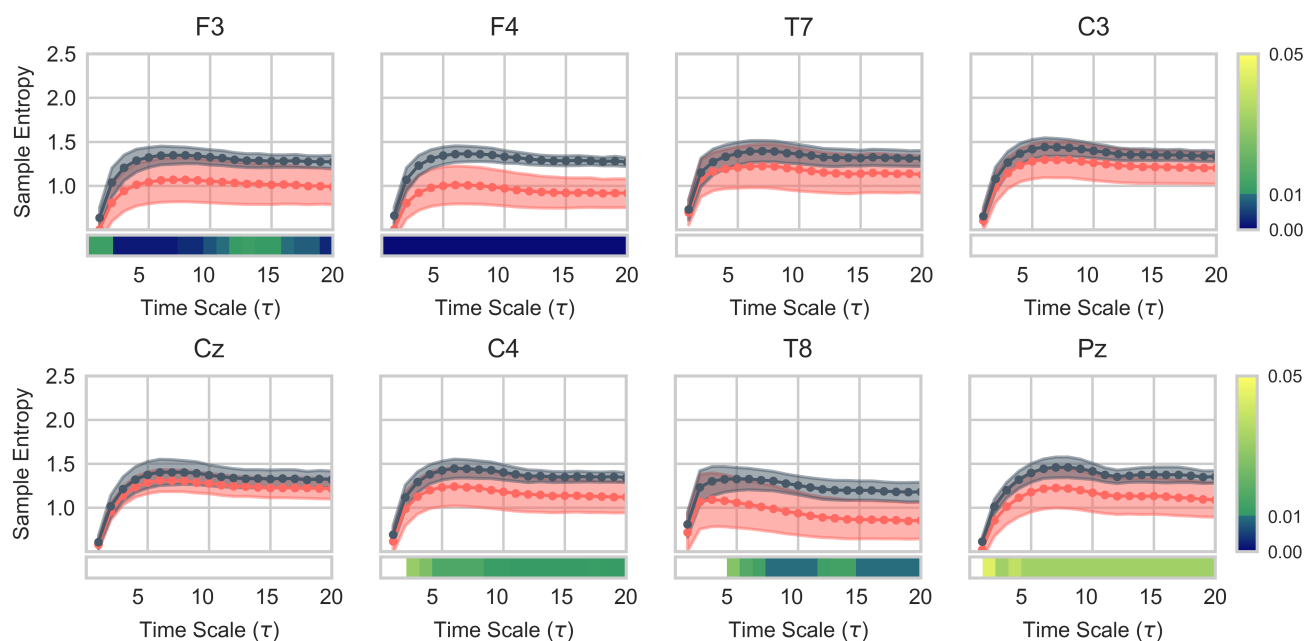
Figure S10. MSE values across channels ($m = 2$; $r = 0.3$). Lines with circle markers indicate pre- (red) and post-training (grey) averaged sample entropy values. Significant differences ($p < 0.05$) for each time scale are shown in the bottom bars. *P*-values were corrected with FDR-BH correction.