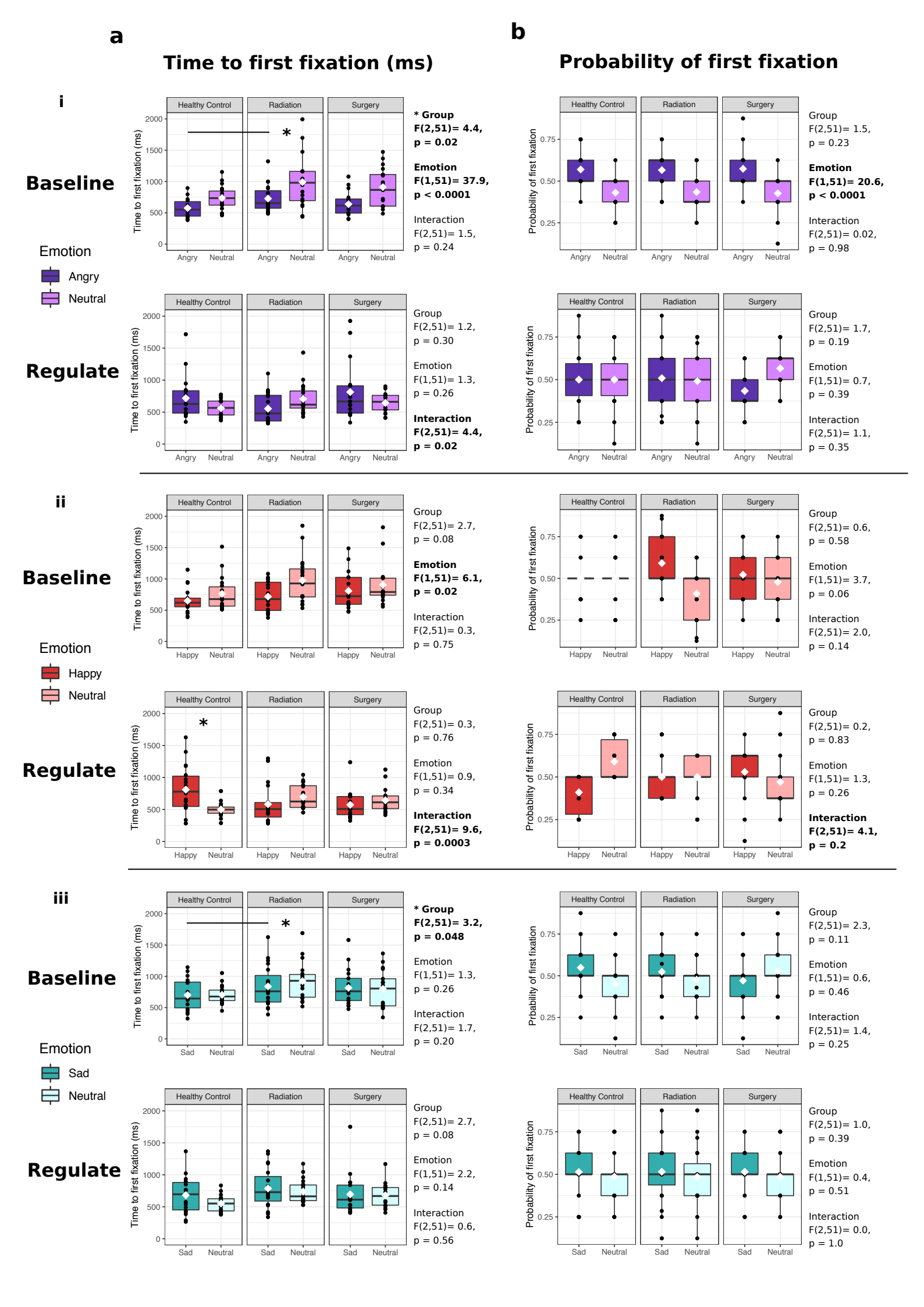
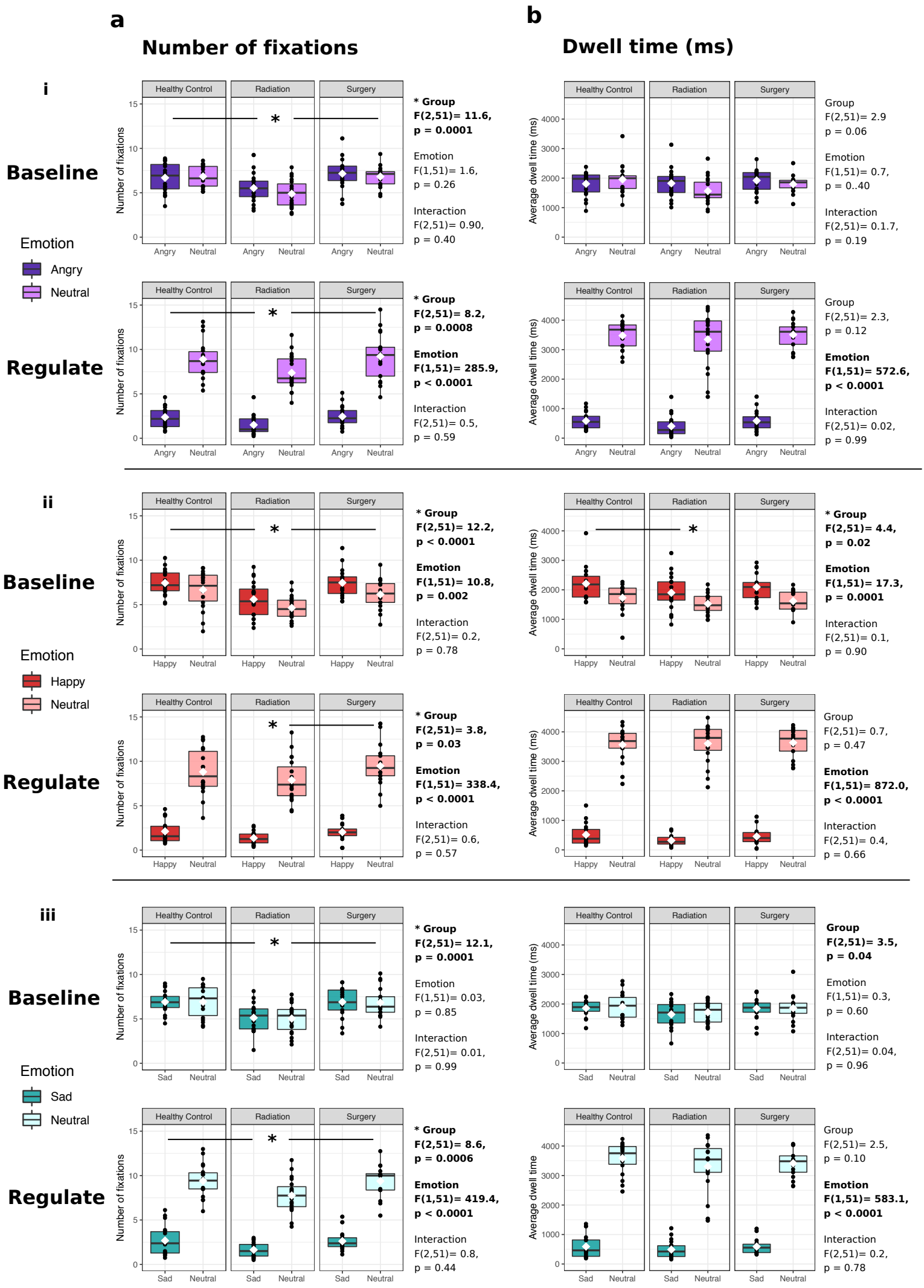

a
b
Time to first fixation (ms)
Probability of first fixation
i
Baseline
Regulate
Emotion
Angry
Neutral
ii
Happy
iii
Sad
Healthy Control
Radiation
Surgery
* Group F(2,51)= 4.4, p = 0.02
Emotion F(1,51)= 37.9, p < 0.0001
Interaction F(2,51)= 1.5, p = 0.24
Group F(2,51)= 1.5, p = 0.23
Emotion F(1,51)= 20.6, p < 0.0001
Interaction F(2,51)= 0.02, p = 0.98
Group F(2,51)= 1.2, p = 0.30
Emotion F(1,51)= 1.3, p = 0.26
Interaction F(2,51)= 4.4, p = 0.02
Group F(2,51)= 1.7, p = 0.19
Emotion F(1,51)= 0.7, p = 0.39
Interaction F(2,51)= 1.1, p = 0.35
Group F(2,51)= 2.7, p = 0.08
Emotion F(1,51)= 6.1, p = 0.02
Interaction F(2,51)= 0.3, p = 0.75
Group F(2,51)= 0.6, p = 0.58
Emotion F(1,51)= 3.7, p = 0.06
Interaction F(2,51)= 2.0, p = 0.14
Group F(2,51)= 0.3, p = 0.76
Emotion F(1,51)= 0.9, p = 0.34
Interaction F(2,51)= 9.6, p = 0.0003
Group F(2,51)= 0.2, p = 0.83
Emotion F(1,51)= 1.3, p = 0.26
Interaction F(2,51)= 4.1, p = 0.2
* Group F(2,51)= 3.2, p = 0.048
Emotion F(1,51)= 1.3, p = 0.26
Interaction F(2,51)= 1.7, p = 0.20
Group F(2,51)= 2.3, p = 0.11
Emotion F(1,51)= 0.6, p = 0.46
Interaction F(2,51)= 1.4, p = 0.25
Group F(2,51)= 2.7, p = 0.08
Emotion F(1,51)= 2.2, p = 0.14
Interaction F(2,51)= 0.6, p = 0.56
Group F(2,51)= 1.0, p = 0.39
Emotion F(1,51)= 0.4, p = 0.51
Interaction F(2,51)= 0.0, p = 1.0

Supplementary Figure 1. Attentional orienting to emotional faces. a-b. Boxplots showing all data points with the mean (white diamond) and median (black line) for the **(a)** time to first fixation, and **(b)** probability of first fixation to the i. angry vs. neutral face, the ii. happy vs. neutral face, and the iii. sad vs. neutral face in the baseline (top panel) and regulate (bottom panel) conditions.


a
Number of fixations
b
Dwell time (ms)
i
Baseline
Regulate
Emotion
Angry
Neutral
Healthy Control
Radiation
Surgery
Number of fixations
Average dwell time (ms)
Angry
Neutral
* Group
F(2,51)= 11.6,
p = 0.0001
Emotion
F(1,51)= 1.6,
p = 0.26
Interaction
F(2,51)= 0.90,
p = 0.40
Group
F(2,51)= 2.9
p = 0.06
Emotion
F(1,51)= 0.7,
p = 0..40
Interaction
F(2,51)= 0.1.7,
p = 0.19
* Group
F(2,51)= 8.2,
p = 0.0008
Emotion
F(1,51)= 285.9,
p < 0.0001
Interaction
F(2,51)= 0.5,
p = 0.59
Group
F(2,51)= 2.3,
p = 0.12
Emotion
F(1,51)= 572.6,
p < 0.0001
Interaction
F(2,51)= 0.02,
p = 0.99
ii
Baseline
Regulate
Emotion
Happy
Neutral
Happy
Neutral
* Group
F(2,51)= 12.2,
p < 0.0001
Emotion
F(1,51)= 10.8,
p = 0.002
Interaction
F(2,51)= 0.2,
p = 0.78
* Group
F(2,51)= 4.4,
p = 0.02
Emotion
F(1,51)= 17.3,
p = 0.0001
Interaction
F(2,51)= 0.1,
p = 0.90
* Group
F(2,51)= 3.8,
p = 0.03
Emotion
F(1,51)= 338.4,
p < 0.0001
Interaction
F(2,51)= 0.6,
p = 0.57
Group
F(2,51)= 0.7,
p = 0.47
Emotion
F(1,51)= 872.0,
p < 0.0001
Interaction
F(2,51)= 0.4,
p = 0.66
iii
Baseline
Regulate
Emotion
Sad
Neutral
Sad
Neutral
* Group
F(2,51)= 12.1,
p = 0.0001
Emotion
F(1,51)= 0.03,
p = 0.85
Interaction
F(2,51)= 0.01,
p = 0.99
Group
F(2,51)= 3.5,
p = 0.04
Emotion
F(1,51)= 0.3,
p = 0.60
Interaction
F(2,51)= 0.04,
p = 0.96
* Group
F(2,51)= 8.6,
p = 0.0006
Emotion
F(1,51)= 419.4,
p < 0.0001
Interaction
F(2,51)= 0.8,
p = 0.44
Group
F(2,51)= 2.5,
p = 0.10
Emotion
F(1,51)= 583.1,
p < 0.0001
Interaction
F(2,51)= 0.2,
p = 0.78

Supplementary Figure 2. Attentional engagement of emotional faces. a-b. Boxplots showing all data points with the mean (white diamond) and median (black line) for the **(a)** number of fixations, and **(b)** dwell time to the i. angry vs. neutral face, the ii. happy vs. neutral face, and the iii. sad vs. neutral face in the baseline (top panel) and regulate (bottom panel) conditions, over the course of the full trial (5 seconds). Note: although patients in the radiation group made fewer fixations than healthy controls and patients in the surgery groups, during both the baseline and regulate conditions, they did not differ in their dwell times, indicating they spent equivalent time viewing the faces despite making fewer fixations.