**Supplementary Tables**

**Supplementary Table S1.**

*Change in Impulsivity Over Time (Models 1A & 1B).*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *LSM* | *SE* | *t-value* | *p-value* |
| Baseline | 21.93 | 0.43 | -- | -- |
| Month 1 | 20.50 | 0.45 | 3.29 | 0.01 |
| Month 2 | 20.00 | 0.48 | 4.82 | <.001 |
| Month 3 | 19.59 | 0.43 | 5.64 | <.001 |
| Post Treatment | 19.61 | 0.42 | 5.3 | <.001 |
| 12 Month Follow-Up | 19.89 | 0.60 | 3.57 | 0.002 |

*Note*. *t*-value represents difference compared to baseline. *p*-value with Tukey-Kramer adjustments. All other comparisons between timepoints were non-significant (*p*s > .05). *LSM*= least squares mean; *SE* = standard error. LSMs from baseline to post treatment were derived from *Model 1A*; LSM from 12-month follow-up was derived from *Model 1B.*

**Supplementary Table S2.**

*Rapid Change in Impulsivity and Outcomes.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Month 1 | | | Month 2 | | | Month 3 | | | Post Treatment | | | 12 Month Follow-Up | | |
|  | *b* | *SE* | *p* | *b* | *SE* | *p* | *b* | *SE* | *p* | *b* | *SE* | *p* | *b* | *SE* | *p* |
| Binge Eating | 0.43 | 0.31 | 0.17 | 0.27 | 0.36 | 0.46 | -0.22 | 0.32 | 0.50 | 0.12 | 0.29 | 0.69 | -0.33 | 0.32 | 0.31 |
| ED Psychopathology | **1.01** | **0.50** | **0.05** | **1.22** | **0.60** | **0.04** | **1.74** | **0.64** | **0.008** | 0.97 | 0.61 | 0.12 | -1.26 | 0.73 | 0.09 |
| Depression | **0.63** | **0.20** | **0.002** | **0.52** | **0.21** | **0.01** | **0.78** | **0.21** | **0.00** | **0.64** | **0.22** | **0.004** | 0.36 | 0.21 | 0.09 |
| BMI | 0.02 | 0.04 | 0.58 | **0.09** | **0.03** | **0.01** | **0.12** | **0.04** | **0.007** | **0.14** | **0.05** | **0.004** | -0.03 | 0.10 | 0.77 |

*Note*. Significance of slopes for rapid change in impulsivity and outcomes (depicted in Figure 2). *b*-value represents slope of the effect of rapid change in impulsivity on change in outcomes; *SE =* standard error; *p*-value represents significance of slope. Main effects of ICS during treatment were significant; significant slopes by timepoint are indicated in **bold**. ED Psychopathology = Eating Disorder Psychopathology; BMI = Body Mass Index.

**Supplementary Table S3.**

*Rapid Change in Impulsivity and Depressive Symptoms by Group and Time (Models 2A & 2B).*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Month 1 | | | Month 2 | | | Month 3 | | | Post Treatment | | | 12 Month Follow-Up | | |
|  | *b* | *SE* | *p* | *b* | *SE* | *p* | *b* | *SE* | *p* | *b* | *SE* | *p* | *b* | *SE* | *p* |
| Placebo | 0.51 | 0.48 | 0.29 | 0.64 | 0.50 | 0.20 | 0.79 | 0.51 | 0.13 | 1.17 | 0.52 | 0.03 | -- | -- | -- |
| Fluoxetine | **0.70** | **0.29** | **0.02** | **0.72** | **0.30** | **0.02** | **0.67** | **0.31** | **0.04** | **0.82** | **0.31** | **0.01** | 0.13 | 0.31 | 0.68 |
| Placebo + CBT | 0.39 | 0.41 | 0.35 | 0.52 | 0.45 | 0.24 | 0.60 | 0.45 | 0.19 | 0.22 | 0.46 | 0.64 | 0.19 | 0.40 | 0.65 |
| Fluoxetine + CBT | **0.92** | **0.38** | **0.02** | 0.20 | 0.40 | 0.62 | **1.05** | **0.41** | **0.01** | 0.34 | 0.41 | 0.41 | **0.77** | **0.37** | **0.04** |

*Note*. *b*-value represents slope of the effect of rapid change in impulsivity on change in depressive symptoms; *SE =* standard error; *p*-value represents significance of slope. No comparisons in slope between groups were significant (*p*s > .05).

**Supplementary Table S4**.

*Change in Impulsivity During Treatment and Outcomes.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Post Treatment | | | 12 Month Follow-Up | | |
|  | *b* | *SE* | *p* | *b* | *SE* | *P* |
| Binge Eating | 0.39 | 0.29 | 0.17 | -0.04 | 0.29 | 0.89 |
| ED Psychopathology | **2.51** | **0.61** | **<.001** | 0.20 | 0.73 | 0.79 |
| Depression | **0.83** | **0.20** | **<.001** | **0.52** | **0.20** | **0.01** |
| BMI | **0.17** | **0.06** | **0.003** | -0.05 | 0.09 | 0.61 |

*Note*. Significance of slopes for change in impulsivity during treatment and outcomes (depicted in Figure 3). *b*-value represents slope of the effect of change in impulsivity during treatment on change in outcomes; *SE =* standard error; *p*-value represents significance of slope. Significant slopes by timepoint are indicated in **bold**. ED Psychopathology = Eating Disorder Psychopathology; BMI = Body Mass Index.

**Supplementary Table S5.** Effects of Time and Group

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Models 2A* | | | | |
|  | Binge Eating | ED Psychopathology | Depression | BMI |
| Group | *F*(3,94.4)=2.53, *p*=.06 | *F*(3,91.6)=3.80, *p*=.01 | *F*(3,90.2)=1.67, *p*=.18 | *F*(3,88.1)=1.09, *p*=.36 |
| Time | *F*(9,213)=8.92, *p*<.001 | *F*(3,73.4)=7.46, *p*<.001 | *F*(3,78.1)=6.92, *p*<.001 | *F*(3,84.2)=1.95, *p*=.13 |
| Group x Time | *F*(9,214)=1.38, *p*=.20 | *F*(9,73.6)=2.88, *p*=.006 | *F*(9,78.2)=2.39, *p*=.02 | *F*(9,86.6)=1.43, *p*=.19 |
| ICS x Group | *F*(3,94.8)=.64, *p*=.59 | *F*(3,92.3)=.47, *p*=.70 | *F*(3,90.7)=.15, *p*=.93 | *F*(3,88)=.34, *p*=.80 |
| *Models 2B* | | | | |
|  | Binge Eating | ED Psychopathology | Depression | BMI |
| Group | *F*(2,66.5)=2.36, *p*=.10 | *F*(2,65)=9.39, *p*<.001 | *F*(2,66.3)=2.87, *p*=.06 | *F*(2,59.7)=1.30, *p*=.28 |
| Time | *F*(1,52.1)=7.06, *p*=.01 | *F*(1,53.4)=7.57, *p*=.008 | *F*(1,53.2)=10.94, *p*=.002 | *F*(1,44.2)=.16, *p*=.50 |
| Group x Time | *F*(2,52)=.53, *p*=.59 | *F*(2,53.2)=1.18, *p*=.32 | *F*(2,53.1)=1.27, *p*=.29 | *F*(2,44.1)=1.04, *p*=.36 |
| ICS x Group | *F*(2,64.7)=.04, *p*=.96 | *F*(2,62.9)=1.09, *p*=.34 | *F*(2,64.5)=.44, *p*=.64 | *F*(2,59.6)=.80, *p*=.50 |
| *Models 3B* | | | | |
|  | Binge Eating | ED Psychopathology | Depression | BMI |
| Group | *F*(2,66.7)=2.37, *p*=.10 | *F*(2,65.3)=8.60, *p*<.001 | *F*(2,66.8)=2.56, *p*=.09 | *F*(2,61.3)=.76, *p*=.47 |
| Time | *F*(1,51.5)=8.27, *p*=.006 | *F*(1,50)=7.01, *p*=.01 | *F*(1,53.4)=10.35, *p*=.002 | *F*(1,44.3)=.28, *p*=.60 |
| Group x Time | *F*(2,51.4)=.63, *p*=.54 | *F*(2,49.8)=.91, *p*=.41 | *F*(2,53.3)=1.19, *p*=.31 | *F*(2,44.3)=1.06, *p*=.35 |
| ICS x Group | *F*(2,64.3)=.28, *p*=.76 | *F*(2,63.9)=.04, *p*=.96 | *F*(2,65.4)=.95, *p*=.39 | *F*(2,61.4)=.21, *p*=.81 |
| *Models 4A* | | | | |
|  | Binge Eating | ED Psychopathology | Depression | BMI |
| Group | *F*(3,101)=2.24, *p*=.09 | *F*(3,94.2)=3.53, *p*=.02 | *F*(3,92.8)=2.07, *p*=.11 | *F*(3,89.1)=1.61, *p*=.19 |
| Time | *F*(3,222)=7.43, *p*<.001 | *F*(3,74.3)=7.24, *p*<.001 | *F*(3,78.8)=7.88, *p*<.001 | *F*(3,84.7)=1.84, *p*=.15 |
| Group x Time | *F*(9,219)=1.42, *p*=.18 | *F*(9,74.5)=2.73, *p*=.008 | *F*(9,79.2)=2.76, *p*=.007 | *F*(9,84.9)=1.38, *p*=.21 |
| *Models 4B* | | | | |
|  | Binge Eating | ED Psychopathology | Depression | BMI |
| Group | *F*(2,68.8)=2.27, *p*=.11 | *F*(2,64.6)=5.74, *p*=.005 | *F*(2,64.6)=2.30, *p*=.11 | *F*(2,64.3)=1.15, *p*=.32 |
| Time | *F*(3,54.8)=7.81, *p*=.007 | *F*(1,50.5)=7.55, *p*=.008 | *F*(1,50.8)=12.73, *p*<.001 | *F*(1,50)=.05, *p*=.82 |
| Group x Time | *F*(2,54.7)=.38, *p*=.69 | *F*(2,50.2)=.29, *p*=.75 | *F*(2,50.7)=.95, *p*=.39 | *F*(2,49.9)=1.74, *p*=.19 |

*Note*. Effects of group, time, group x time, impulsivity x group from Models 2A, 2B, 3B, 4A, 4B presented here.

**Supplementary Table S6.** Baseline Impulsivity and Depression Scores by Group and Time

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Month 1 | | | Month 2 | | | Month 3 | | | Post Treatment | | | 12 Month Follow-Up | | |
|  | *b* | *SE* | *p* | *b* | *SE* | *p* | *b* | *SE* | *p* | *b* | *SE* | *p* | *b* | *SE* | *p* |
| Placebo | -0.34 | 0.39 | 0.38 | -0.48 | 0.46 | 0.29 | -0.30 | 0.40 | 0.46 | 0.11 | 0.42 | 0.79 | -- | -- | -- |
| Fluoxetine | 0.06 | 0.40 | 0.89 | 0.11 | 0.41 | 0.79 | 0.16 | 0.40 | 0.70 | 0.16 | 0.42 | 0.71 | 0.41 | 0.48 | 0.39 |
| Placebo + CBT | 0.11 | 0.33 | 0.73 | 0.19 | 0.33 | 0.56 | 0.27 | 0.32 | 0.39 | 0.19 | 0.33 | 0.57 | -0.06 | 0.32 | 0.84 |
| Fluoxetine + CBT | **0.82** | **0.38** | **0.03** | **1.07** | **0.37** | **0.01** | **2.06** | **0.41** | **<.001** | **1.65** | **0.43** | **<.001** | **0.74** | **0.37** | **0.05** |

*Note*. Significance of slopes for effects of baseline impulsivity on change in depressive symptoms by treatment group. *b*-value represents slope of the effect of change in impulsivity during treatment on change in outcomes; *SE =* standard error; *p*-value represents significance of slope. Significant slopes by timepoint are indicated in **bold**.