**SUC**

1. **Abandoned** – shows SLIGHT negative relationship

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiononeSUC1

REML criterion at convergence: 1738.8

Scaled residuals:

Min 1Q Median 3Q Max

-3.3799 -0.4446 -0.0759 0.3788 4.5682

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 62.76 7.922

grid (Intercept) 17.01 4.124

Residual 18.24 4.271

Number of obs: 256, groups: cell:grid, 129; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 14.9532 2.0195 4.1286 7.405 0.00157 \*\*

before\_aftersecond -1.6378 0.5355 125.7381 -3.058 0.00272 \*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.134

1. **Extensive**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiononeSUC2

REML criterion at convergence: 543.4

Scaled residuals:

Min 1Q Median 3Q Max

-2.6086 -0.4795 -0.0080 0.4257 3.6521

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 0.59038 0.7684

grid (Intercept) 0.01091 0.1044

Residual 0.18391 0.4289

Number of obs: 249, groups: cell:grid, 127; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 1.64067 0.09225 3.68378 17.78 0.000105 \*\*\*

before\_aftersecond -0.55649 0.05478 121.95456 -10.16 < 2e-16 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.307

1. **Intensive**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiononeSUC3

REML criterion at convergence: 5337.5

Scaled residuals:

Min 1Q Median 3Q Max

-1.49409 -0.52787 0.00389 0.57578 1.65063

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 352707799 18781

grid (Intercept) 27098799 5206

Residual 5568300 2360

Number of obs: 258, groups: cell:grid, 129; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 33735.161 2891.846 3.559 11.67 0.00058 \*\*\*

before\_aftersecond -5317.097 293.820 128.000 -18.10 < 2e-16 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.051

**EUA**

1. **Abandoned**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: log(average) ~ before\_after + (1 | grid/cell)

Data: questiononeEUA1

REML criterion at convergence: 702.1

Scaled residuals:

Min 1Q Median 3Q Max

-3.10389 -0.48874 0.04705 0.50680 2.11173

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 1.4996 1.2246

grid (Intercept) 0.1072 0.3275

Residual 0.2406 0.4905

Number of obs: 255, groups: cell:grid, 129; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 2.16605 0.18903 3.67463 11.458 0.000523 \*\*\*

before\_aftersecond -0.03249 0.06175 120.37163 -0.526 0.599757

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.167

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiononeEUA1

REML criterion at convergence: 1895.3

Scaled residuals:

Min 1Q Median 3Q Max

-1.5937 -0.6437 -0.1495 0.4502 3.4389

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 47.451 6.888

grid (Intercept) 9.539 3.089

Residual 62.065 7.878

Number of obs: 255, groups: cell:grid, 129; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 14.9983 1.6780 4.4242 8.938 0.000538 \*\*\*

before\_aftersecond -1.5592 0.9893 125.6047 -1.576 0.117518

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.300

1. **Extensive**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiononeEUA2

REML criterion at convergence: 424.2

Scaled residuals:

Min 1Q Median 3Q Max

-2.3746 -0.5104 -0.0641 0.3853 3.3660

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 0.45351 0.6734

grid (Intercept) 0.02308 0.1519

Residual 0.09446 0.3073

Number of obs: 248, groups: cell:grid, 127; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 0.93888 0.09578 4.12248 9.802 0.000522 \*\*\*

before\_aftersecond 0.21292 0.03943 119.84706 5.399 3.43e-07 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.215

1. **Intensive**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiononeEUA3

REML criterion at convergence: 5575.3

Scaled residuals:

Min 1Q Median 3Q Max

-1.9875 -0.6306 0.1171 0.4492 2.4902

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 205288945 14328

grid (Intercept) 6615519 2572

Residual 55354532 7440

Number of obs: 258, groups: cell:grid, 129; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 19597.183 1846.842 3.356 10.61 0.00107 \*\*

before\_aftersecond 10379.094 926.396 128.000 11.20 < 2e-16 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.251

**Q2**  **1. A to I SUC**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiontwoSUC1

REML criterion at convergence: 1399.5

Scaled residuals:

Min 1Q Median 3Q Max

-2.1159 -0.4602 -0.1081 0.3684 4.1445

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 21.970 4.687

grid (Intercept) 8.243 2.871

Residual 10.847 3.293

Number of obs: 230, groups: cell:grid, 126; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 8.0918 1.3884 4.1503 5.828 0.00385 \*\*

before\_aftersecond -0.1140 0.4503 99.7586 -0.253 0.80061

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.136

**2. A to I EUA**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiontwoEUA1

REML criterion at convergence: 1383.1

Scaled residuals:

Min 1Q Median 3Q Max

-1.4894 -0.7133 -0.1660 0.5442 2.5613

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 6.607 2.570

grid (Intercept) 1.102 1.050

Residual 21.408 4.627

Number of obs: 225, groups: cell:grid, 121; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 6.1601 0.6989 5.4539 8.814 0.000199 \*\*\*

before\_aftersecond 2.5496 0.6236 108.3786 4.088 8.36e-05 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.468

**3. E to I SUC**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiontwoSUC4

REML criterion at convergence: 128.6

Scaled residuals:

Min 1Q Median 3Q Max

-1.4432 -0.4661 -0.1042 0.2803 3.6084

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 0.088992 0.29831

grid (Intercept) 0.007135 0.08447

Residual 0.051733 0.22745

Number of obs: 162, groups: cell:grid, 115; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 0.54914 0.05212 3.41835 10.535 0.001004 \*\*

before\_aftersecond -0.16135 0.04450 50.80805 -3.626 0.000666 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.202

1. **E to I EUA**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiontwoEUA4

REML criterion at convergence: -38.3

Scaled residuals:

Min 1Q Median 3Q Max

-1.81334 -0.43178 -0.09615 0.32166 2.47755

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 0.029974 0.17313

grid (Intercept) 0.004697 0.06854

Residual 0.017817 0.13348

Number of obs: 140, groups: cell:grid, 93; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 0.33250 0.04089 5.09211 8.131 0.000419 \*\*\*

before\_aftersecond 0.13327 0.02569 67.66150 5.188 2.1e-06 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.364

1. **I to E SUC**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiontwoSUC6

REML criterion at convergence: 122.2

Scaled residuals:

Min 1Q Median 3Q Max

-1.2769 -0.5292 -0.0569 0.3683 3.3425

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 0.052299 0.22869

grid (Intercept) 0.001567 0.03958

Residual 0.072843 0.26989

Number of obs: 161, groups: cell:grid, 117; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 0.58881 0.03747 3.74385 15.715 0.000148 \*\*\*

before\_aftersecond -0.13017 0.05225 52.17322 -2.491 0.015950 \*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.324

1. **I to E EUA**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiontwoEUA6

REML criterion at convergence: -17.2

Scaled residuals:

Min 1Q Median 3Q Max

-1.3924 -0.4579 -0.1747 0.3849 3.1738

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 0.030242 0.17390

grid (Intercept) 0.003711 0.06092

Residual 0.023181 0.15225

Number of obs: 138, groups: cell:grid, 94; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 0.34930 0.03905 5.07062 8.944 0.000271 \*\*\*

before\_aftersecond 0.12177 0.02950 69.34146 4.127 0.000101 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.407

1. **I to A SUC**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiontwoSUC5

REML criterion at convergence: 1656.3

Scaled residuals:

Min 1Q Median 3Q Max

-1.9025 -0.4639 -0.0842 0.2576 6.3003

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 28.874 5.373

grid (Intercept) 9.493 3.081

Residual 64.177 8.011

Number of obs: 226, groups: cell:grid, 124; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 12.609 1.640 4.658 7.689 0.000811 \*\*\*

before\_aftersecond -4.910 1.089 107.951 -4.511 1.65e-05 \*\*\*

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.290

1. **I to A EUA**

Linear mixed model fit by REML. t-tests use Satterthwaite's method ['lmerModLmerTest']

Formula: average ~ before\_after + (1 | grid/cell)

Data: questiontwoEUA5

REML criterion at convergence: 1466.7

Scaled residuals:

Min 1Q Median 3Q Max

-1.4203 -0.7041 -0.1687 0.4382 3.9123

Random effects:

Groups Name Variance Std.Dev.

cell:grid (Intercept) 7.082 2.661

grid (Intercept) 3.115 1.765

Residual 34.017 5.832

Number of obs: 224, groups: cell:grid, 122; grid, 5

Fixed effects:

Estimate Std. Error df t value Pr(>|t|)

(Intercept) 7.4711 1.0171 5.3346 7.346 0.000554 \*\*\*

before\_aftersecond 0.9960 0.7887 111.5328 1.263 0.209315

---

Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation of Fixed Effects:

(Intr)

bfr\_ftrscnd -0.421