Supplemental Material

Because attrition and missing data meant that the final sample in Study 1 and Study 2 was quite small, additional multilevel analyses were conducted. In this regard, longitudinal data can be seen as multilevel data, with repeated measures nested within individuals. An advantage of multilevel analysis of longitudinal data is the ability to handle missing data, as multilevel regression models do not assume equal numbers of observations (unlike ANOVA).

**Study 1**

*Multilevel analysis*

 *Analytic strategy.* Predictors where entered in the multilevel regression analysis as mean-centered contrasts (see Table 1).

*Workplace satisfaction.* Analysis of responses on this measure revealed a main effect for study phase (T1 vs. T2), *t*(150) = 6.62, *p* > .001, suggesting that participants become more satisfied with their work environment after the introduction of the plants. In line with the univariate analysis, this effect was *not* qualified by office design, *t*(150) = .93, *p* = .354.

*Concentration.* Analysis of responses on this measure revealed a main effect for study phase (T1 vs. T2), *t*(150) = 3.00, *p* = .003, suggesting that participants felt better able to concentrate after the introduction of the plants. However, this effect is qualified by office design, *t*(150) = 3.07, *p* = .003, which shows that only in the green condition participants felt better able to concentrate after the introduction of the plants. Overall, these results support the univariate analyses.

*Perceived air quality.* Analysis of responses on this measure revealed a main effect for study phase (T1 vs. T2), *t*(150) = 2.84, *p* = .005, suggesting that participants perceived the air quality to be improved after the introduction of the plants. However, this effect is marginally significantly qualified by office design, *t*(150) = 1.73, *p* = .090, which shows that only in the green condition participants felt the air quality had improved after the introduction of the plants. Overall, these results support the univariate analyses.

**Study 2**

*Multilevel analysis*

 *Analytic strategy.* Predictors where entered in the multilevel regression analysis as mean-centered contrasts (see Table 2).

*Workplace satisfaction.* Analysis of responses on this measure revealed a main effect for study phase (T1 vs. T2 T3), *t*(167) = 2.46, *p* = .015, suggesting that participants become more satisfied with their work environment after the introduction of the plants. However, this effect is qualified by office design, *t*(167) = 3.68, *p* < .001, which shows that only in the green condition participants become more satisfied with their work environment after the introduction of the plants. Furthermore, as the interaction between office design X study phase (T2 vs. T3) shows, the positive effect of workplace satisfaction within the green condition deteriorates only slightly in the long time, *t*(167) = 1.68, *p* = .094. Overall, these results support the univariate analyses.

*Concentration.* Analysis of responses on this measure revealed a main effect for study phase (T1 vs. T2 T3), *t*(167) = 3.07, *p* = .002, suggesting that participants felt better able to concentrate after the introduction of the plants. In line with the univariate analysis, this effect is not qualified by office design, *t*(167) = .75, *p* = .452. Furthermore, there is a slight decrease of concentration within the green office in the long time, as the interaction between office design X study phase (T2 vs. T3) shows, *t*(167) = 1.68, *p* = .095. Overall, these results are in line with the univariate analyses.

*Perceived air quality.* Analysis of responses on this measure revealed a main effect for study phase (T1 vs. T2 T3), *t*(167) = 3.13, *p* = .002, suggesting that participants perceived the air quality to be improved after the introduction of the plants. However, this effect is qualified by office design, *t*(167) = 2.79, *p* = .006, which shows that only in the green condition participants thought the air quality had improved after the introduction of the plants. Furthermore, as the interaction between office design X study phase (T2 vs. T3) shows, the positive effect of perceived air quality within the green condition does not significantly deteriorate in the long time, *t*(167) = 1.15, *p* = .250. Overall, these results support the univariate analyses.

Table 1.

*Study 1: Regression coefficients for workplace satisfaction, concentration and perceived air quality*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Workplace satisfaction | Concentration | Perceived air quality |
| Variable | B | SE | 95% CI | B | SE | 95% CI | B | SE | 95% CI |
| Intercept | 3.98\*\*\* | .08 | [3.82; 4.13] | 4.22\*\*\* | .11 | [4.00; 4.43] | 3.83\*\*\* | .12 | [3.60; 4.06] |
| Office design (lean = ref category) | .10 | .16 | [-.20; .41] | -.20 | .21 | [-.62; .23] | .31 | .23 | [-.15; .77] |
|  Study phase T1 vs. T2 (T1 = ref category) | .74\*\*\* | .11 | [.52; .96] | .48\*\* | .16 | [.16; .80] | .44\*\* | .15 | [.13; .74] |
| Office design X study phase T1 vs. T2 | .21 | .22 | [-.24; .65] | .98\*\* | .32 | [.35; 1.62] | .53† | .31 | [-.08; 1.15] |

*Note.* \* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001. † p < .10.

Table 2.

*Study 2: Regression coefficients for workplace satisfaction, concentration and perceived air quality*

|  |  |  |  |
| --- | --- | --- | --- |
|  | Workplace satisfaction | Concentration | Perceived air quality |
| Variable | *B* | *SE* | 95% CI | *B* | *SE* | 95% CI | *B* | *SE* | 95% CI |
| Intercept | 5.24\*\*\* | .06 | [5.13; 5.36] | 4.79\*\*\* | .09 | [4.61; 4.96] | 3.74\*\*\* | .09 | [3.56; 3.92] |
| Office design (lean = ref category) | .10 | .13 | [-.16; .36] | -.11 | .20 | [-.52; .29] | -.16 | .21 | [-.57; .25] |
| Study phase T1 vs. T2 T3 (T1 = ref category) | .20\* | .08 | [.04; .36] | .42\*\* | .14 | [.15; .68] | .34\*\* | .11 | [.13; .56] |
| Study phase T2 vs. T3 (T2 = ref category) | -.01 | .07 | [-.14; .13] | -.03 | .13 | [-.29; .22] | .02 | .11 | [-.20; .25] |
| Office design X study phase T1 vs. T2 T3  | .72\*\*\* | .20 | [.34; 1.11] | -.24 | .32 | [-.87; .39] | .73\*\* | .26 | [.21; 1.25] |
| Office design X study phase T2 vs. T3  | -.27 | .16 | [-.59; .05] | -.51 | .30 | [-.11; .09] | -.30 | .27 | [-.84; .22] |

*Note.* \* *p* < .05. \*\* *p* < .01. \*\*\* *p* < .001.