Results

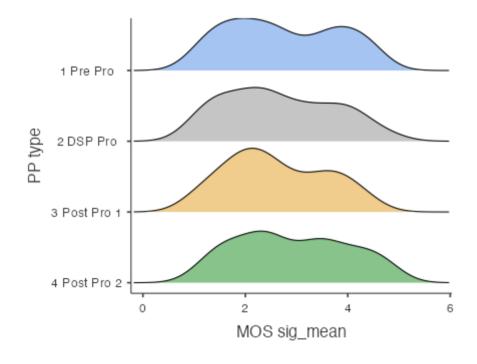
Descriptives

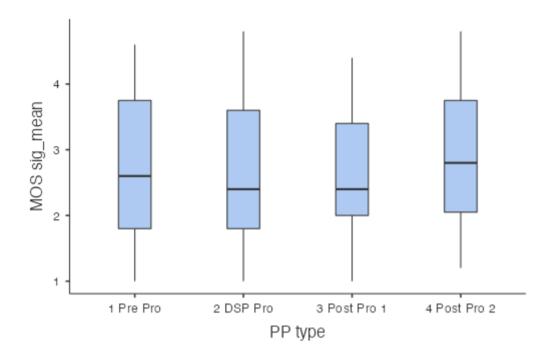
Descriptives

| | PP type | Mean |
|--------------|--------------|------|
| MOS sig_mean | 1 Pre Pro | 2.74 |
| | 2 DSP Pro | 2.65 |
| | 3 Post Pro 1 | 2.60 |
| | 4 Post Pro 2 | 2.92 |
| MOS bak_mean | 1 Pre Pro | 3.64 |
| | 2 DSP Pro | 2.83 |
| | 3 Post Pro 1 | 3.61 |
| | 4 Post Pro 2 | 3.62 |
| MOS ovl_mean | 1 Pre Pro | 2.74 |
| | 2 DSP Pro | 2.46 |
| | 3 Post Pro 1 | 2.63 |
| | 4 Post Pro 2 | 2.85 |

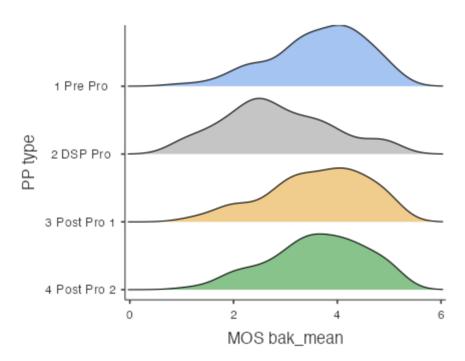
Plots

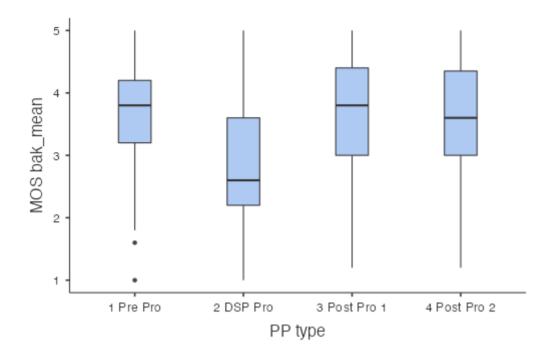
MOS sig_mean



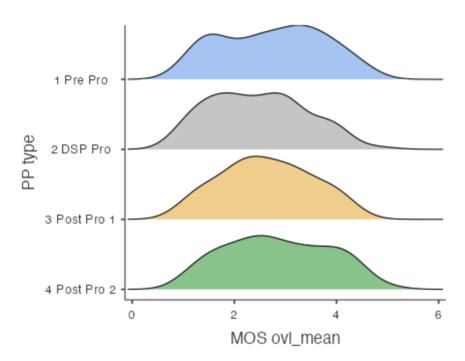


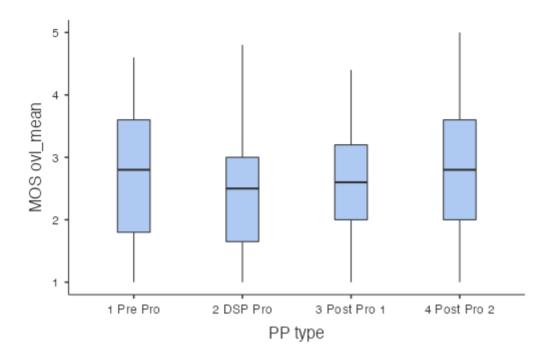
MOS bak_mean



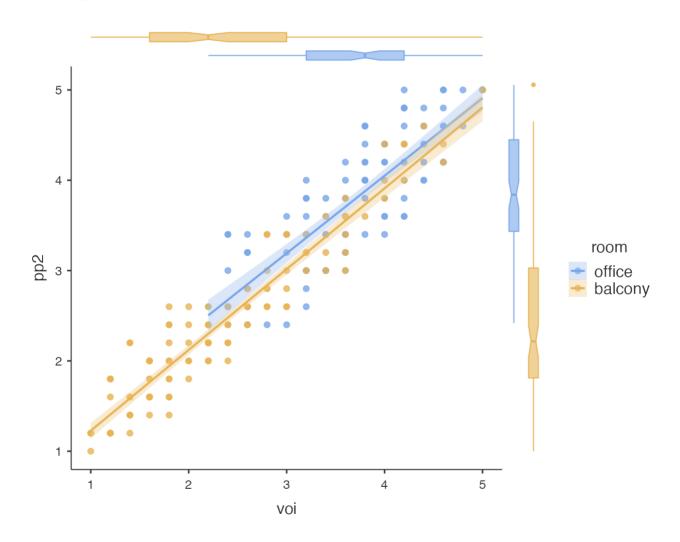


MOS ovl_mean





Scatterplot



Correlation Matrix

| | | pp1 | pp2 | ffm | voi | G5birth | G5expertise |
|-------------|------------------------------|---------------------------|--------------------------|-----------------------------------|-------------------------|----------------------|-------------|
| pp1 | Pearson's r df p-value | _ _ _ | | | | | |
| pp2 | Pearson's r df p-value | 0.942*** 232 <.001 | _ _ _ | | | | |
| ffm | Pearson's r df p-value | 0.804*** 232 <.001 | 0.844*** 232 <.001 | _ _ _ | | | |
| voi | Pearson's r df p-value | 0.943 *** 232 <.001 | 0.949*** 232 <.001 | 0.810 *** 232 <.001 | _ _ _ | | |
| G5birth | Pearson's r df p-value | 0.389 * 37 0.014 | 0.265 37 0.103 | 0.388 [*] 37 0.015 | 0.414 ** 37 0.009 | - - - | |
| G5expertise | Pearson's r df p-value | -0.144 37 0.383 | -0.164 37 0.317 | -0.289 37 0.074 | -0.158 37 0.338 | 0.055 37 0.741 | - - - |

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

ANOVA

ANOVA - MOS sig_mean

| | Sum of Squares | df | Mean Square | F | р | η²p |
|-----------------|----------------|-----|-------------|---------|-------|-------|
| PP type | 4.46 | 3 | 1.488 | 3.355 | 0.019 | 0.032 |
| room1 | 195.54 | 1 | 195.542 | 440.917 | <.001 | 0.592 |
| PP type * room1 | 1.12 | 3 | 0.373 | 0.841 | 0.473 | 0.008 |
| Residuals | 134.82 | 304 | 0.443 | | | |

[3]

General Linear Model

Model Info

| Info | |
|----------------|--|
| Estimate | Linear model fit by OLS |
| Call | MOS sig_mean ~ 1 + `PP type` + room1 + `PP type`:room1 |
| R-squared | 0.599 |
| Adj. R-squared | 0.589 |

[4]

Model Results

ANOVA Omnibus tests

| | SS | df | F | р | η²p |
|-----------------|--------|-----|---------|-------|-------|
| Model | 201.12 | 7 | 64.786 | <.001 | 0.599 |
| PP type | 4.46 | 3 | 3.355 | 0.019 | 0.032 |
| room1 | 195.54 | 1 | 440.917 | <.001 | 0.592 |
| PP type * room1 | 1.12 | 3 | 0.841 | 0.473 | 0.008 |
| Residuals | 134.82 | 304 | | | |
| Total | 335.94 | 311 | | | |

Fixed Effects Parameter Estimates

| | | | | | nfidence rval | | | | |
|-------------------|---|----------|--------|---------|------------------|----------|-----|---------|-------|
| Names | Effect | Estimate | SE | Lower | Upper | β | df | t | р |
| (Intercept) | (Intercept) | 2.72628 | 0.0377 | 2.6521 | 2.8005 | 0.00000 | 304 | 72.3114 | <.001 |
| PP type1 | 2 DSP Pro - 1 Pre Pro | -0.08974 | 0.1066 | -0.2996 | 0.1201 | -0.08635 | 304 | -0.8416 | 0.401 |
| PP type2 | 3 Post Pro 1 - 1 Pre Pro | -0.13590 | 0.1066 | -0.3457 | 0.0739 | -0.13075 | 304 | -1.2744 | 0.203 |
| PP type3 | 4 Post Pro 2 - 1 Pre Pro | 0.17692 | 0.1066 | -0.0329 | 0.3868 | 0.17023 | 304 | 1.6591 | 0.098 |
| room11 | 2 office - 1 balcony | 1.58333 | 0.0754 | 1.4350 | 1.7317 | 1.52342 | 304 | 20.9980 | <.001 |
| PP type1 * room11 | 2 DSP Pro - 1 Pre Pro * 2 office - 1 balcony | -0.15897 | 0.2133 | -0.5787 | 0.2607 | -0.15296 | 304 | -0.7454 | 0.457 |
| PP type2 * room11 | 3 Post Pro 1 - 1 Pre Pro * 2 office - 1 balcony | -0.28205 | 0.2133 | -0.7017 | 0.1376 | -0.27138 | 304 | -1.3225 | 0.187 |
| PP type3 * room11 | 4 Post Pro 2 - 1 Pre Pro * 2 office - 1 balcony | 0.00513 | 0.2133 | -0.4146 | 0.4248 | 0.00493 | 304 | 0.0240 | 0.981 |

Post Hoc Tests

Post Hoc Comparisons - PP type

| Comparison | | _ | | | | | |
|--------------|---|--------------|------------|-------|--------|-----|--------------------|
| PP type | | PP type | Difference | SE | t | df | p _{tukey} |
| 1 Pre Pro | - | 2 DSP Pro | 0.0897 | 0.107 | 0.842 | 304 | 0.835 |
| 1 Pre Pro | - | 3 Post Pro 1 | 0.1359 | 0.107 | 1.274 | 304 | 0.580 |
| 1 Pre Pro | - | 4 Post Pro 2 | -0.1769 | 0.107 | -1.659 | 304 | 0.347 |
| 2 DSP Pro | - | 3 Post Pro 1 | 0.0462 | 0.107 | 0.433 | 304 | 0.973 |
| 2 DSP Pro | - | 4 Post Pro 2 | -0.2667 | 0.107 | -2.501 | 304 | 0.062 |
| 3 Post Pro 1 | - | 4 Post Pro 2 | -0.3128 | 0.107 | -2.934 | 304 | 0.019 |

Post Hoc Comparisons - room1

| Comp | oari | son | _ | | | | |
|-----------|------|----------|------------|--------|-------|-----|--------------------|
| room1 | | room1 | Difference | SE | t | df | p _{tukey} |
| 1 balcony | - | 2 office | -1.58 | 0.0754 | -21.0 | 304 | <.001 |

General Linear Model

Model Info

| Info | |
|----------------|--|
| Estimate | Linear model fit by OLS |
| Call | MOS bak_mean ~ 1 + `PP type` + room1 + `PP type`:room1 |
| R-squared | 0.286 |
| Adj. R-squared | 0.270 |

[4]

Model Results

ANOVA Omnibus tests

| | SS | df | F | р | η²p |
|-----------------|--------|-----|--------|-------|-------|
| Model | 90.32 | 7 | 17.415 | <.001 | 0.286 |
| PP type | 36.61 | 3 | 16.473 | <.001 | 0.140 |
| room1 | 52.68 | 1 | 71.101 | <.001 | 0.190 |
| PP type * room1 | 1.03 | 3 | 0.463 | 0.709 | 0.005 |
| Residuals | 225.23 | 304 | | | |
| Total | 315.54 | 311 | | | |

Fixed Effects Parameter Estimates

| | | | | Confi | 5% dence rval | | | | |
|-------------------|---|-----------|--------|--------|---------------------|-----------|-----|-----------|-------|
| Names | Effect | Estimate | SE | Lower | Upper | β | df | t | р |
| (Intercept) | (Intercept) | 3.4237 | 0.0487 | 3.328 | 3.520 | 0.0000 | 304 | 70.259 | <.001 |
| PP type1 | 2 DSP Pro - 1 Pre Pro | -0.8103 | 0.1378 | -1.081 | -0.539 | -0.8044 | 304 | -5.879 | <.001 |
| PP type2 | 3 Post Pro 1 - 1 Pre Pro | -0.0333 | 0.1378 | -0.305 | 0.238 | -0.0331 | 304 | -0.242 | 0.809 |
| PP type3 | 4 Post Pro 2 - 1 Pre Pro | -0.0256 | 0.1378 | -0.297 | 0.246 | -0.0255 | 304 | -0.186 | 0.853 |
| room11 | 2 office - 1 balcony | 0.8218 | 0.0975 | 0.630 | 1.014 | 0.8159 | 304 | 8.432 | <.001 |
| PP type1 * room11 | 2 DSP Pro - 1 Pre Pro * 2 office - 1 balcony | -0.2769 | 0.2757 | -0.819 | 0.266 | -0.2749 | 304 | -1.005 | 0.316 |
| PP type2 * room11 | 3 Post Pro 1 - 1 Pre Pro * 2 office - 1 balcony | -0.0462 | 0.2757 | -0.589 | 0.496 | -0.0458 | 304 | -0.167 | 0.867 |
| PP type3 * room11 | 4 Post Pro 2 - 1 Pre Pro * 2 office - 1 balcony | -2.84e–16 | 0.2757 | -0.542 | 0.542 | -9.24e–16 | 304 | -1.03e–15 | 1.000 |

Post Hoc Tests

Post Hoc Comparisons - PP type

| Con | npaı | rison | _ | | | | |
|--------------|------|--------------|------------|-------|---------|-----|--------------------|
| PP type | | PP type | Difference | SE | t | df | p _{tukey} |
| 1 Pre Pro | - | 2 DSP Pro | 0.81026 | 0.138 | 5.8787 | 304 | <.001 |
| 1 Pre Pro | - | 3 Post Pro 1 | 0.03333 | 0.138 | 0.2418 | 304 | 0.995 |
| 1 Pre Pro | - | 4 Post Pro 2 | 0.02564 | 0.138 | 0.1860 | 304 | 0.998 |
| 2 DSP Pro | - | 3 Post Pro 1 | -0.77692 | 0.138 | -5.6369 | 304 | <.001 |
| 2 DSP Pro | - | 4 Post Pro 2 | -0.78462 | 0.138 | -5.6927 | 304 | <.001 |
| 3 Post Pro 1 | - | 4 Post Pro 2 | -0.00769 | 0.138 | -0.0558 | 304 | 1.000 |

Post Hoc Comparisons - room1

| Comparison | | | | | | | |
|------------|---|----------|------------|--------|-------|-----|--------------------|
| room1 | | room1 | Difference | SE | t | df | p _{tukey} |
| 1 balcony | - | 2 office | -0.822 | 0.0975 | -8.43 | 304 | <.001 |

General Linear Model

Model Info

| Info | |
|----------------|--|
| Estimate | Linear model fit by OLS |
| Call | MOS ovl_mean ~ 1 + `PP type` + room1 + `PP type`:room1 |
| R-squared | 0.597 |
| Adj. R-squared | 0.588 |

[4]

Model Results

ANOVA Omnibus tests

| | SS | df | F | р | η²p |
|-------------------------------------|------------------------|-------------|------------------------|-------------------------|-------------------------|
| Model | 172.04 | 7 | 64.29 | <.001 | 0.597 |
| PP type room1 PP type * room1 | 6.45 163.99 1.60 | 3 1 3 | 5.62 429.00 1.39 | <.001 <.001 0.245 | 0.053 0.585 0.014 |
| Residuals Total | 116.21 288.25 | 304 311 | | | |

| | | | | 95% Confidence Interval | | | | | |
|-------------------|---|----------|--------|----------------------------|---------|-----------|-----|--------------|-------|
| Names | Effect | Estimate | SE | Lower | Upper | β | df | t | р |
| (Intercept) | (Intercept) | 2.669 | 0.0350 | 2.5997 | 2.7375 | 0.000 | 304 | 76.24 | <.001 |
| PP type1 | 2 DSP Pro - 1 Pre Pro | -0.282 | 0.0990 | -0.4769 | -0.0872 | -0.293 | 304 | -2.85 | 0.005 |
| PP type2 | 3 Post Pro 1 - 1 Pre Pro | -0.105 | 0.0990 | -0.2999 | 0.0897 | -0.109 | 304 | -1.06 | 0.289 |
| PP type3 | 4 Post Pro 2 - 1 Pre Pro | 0.108 | 0.0990 | -0.0871 | 0.3025 | 0.112 | 304 | 1.09 | 0.278 |
| room11 | 2 office - 1 balcony | 1.450 | 0.0700 | 1.3122 | 1.5878 | 1.506 | 304 | 20.71 | <.001 |
| PP type1 * room11 | 2 DSP Pro - 1 Pre Pro ∗ 2 office - 1 balcony | -0.236 | 0.1980 | -0.6255 | 0.1537 | -0.245 | 304 | -1.19 | 0.234 |
| PP type2 * room11 | 3 Post Pro 1 - 1 Pre Pro ※ 2 office - 1 balcony | -0.323 | 0.1980 | -0.7127 | 0.0666 | -0.336 | 304 | -1.63 | 0.104 |
| PP type3 * room11 | 4 Post Pro 2 - 1 Pre Pro * 2 office - 1 balcony | 8.36e-16 | 0.1980 | -0.3896 | 0.3896 | -4.62e–16 | 304 | 4.22e- 15 | 1.000 |

Post Hoc Tests

Post Hoc Comparisons - PP type

| Comparison | | | | | | | |
|-----------------|---|--------------|--------|--------|-------|--------------------|-------|
| PP type PP type | | Difference | SE | t | df | p _{tukey} | |
| 1 Pre Pro | - | 2 DSP Pro | 0.282 | 0.0990 | 2.85 | 304 | 0.024 |
| 1 Pre Pro | - | 3 Post Pro 1 | 0.105 | 0.0990 | 1.06 | 304 | 0.713 |
| 1 Pre Pro | - | 4 Post Pro 2 | -0.108 | 0.0990 | -1.09 | 304 | 0.697 |
| 2 DSP Pro | - | 3 Post Pro 1 | -0.177 | 0.0990 | -1.79 | 304 | 0.282 |
| 2 DSP Pro | - | 4 Post Pro 2 | -0.390 | 0.0990 | -3.94 | 304 | <.001 |
| 3 Post Pro 1 | - | 4 Post Pro 2 | -0.213 | 0.0990 | -2.15 | 304 | 0.140 |

Post Hoc Comparisons - room1

| Comparison | | | | | | | |
|------------|---|----------|------------|--------|-------|-----|--------------------|
| room1 | | room1 | Difference | SE | t | df | p _{tukey} |
| 1 balcony | - | 2 office | -1.45 | 0.0700 | -20.7 | 304 | <.001 |

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- [2] R Core Team (2021). *R: A Language and environment for statistical computing*. (Version 4.1) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from MRAN snapshot 2022-01-01).
- [3] Fox, J., & Weisberg, S. (2020). *car: Companion to Applied Regression*. [R package]. Retrieved from https://cran.r-project.org/package=car.
- [4] Gallucci, M. (2019). GAMLj: General analyses for linear models. [jamovi module]. Retrieved from https://gamlj.github.io/.