Model Plots

Configuration 20

```
## [1] "model_data_conf20.csv"
```

```
##
## Call:
## glm(formula = SR ~ TA + H + RS + NP + FA + TS, family = "binomial",
##     data = lm_DF)
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -2.5232  -0.8785   0.1668   0.9111   1.9587
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## (Intercept)  1.391136   0.676468   2.056  0.03974 *
## TA          -0.024124   0.012415  -1.943  0.05200 .
## H            0.014597   0.006723   2.171  0.02992 *
## RS2         -0.429243   0.251857  -1.704  0.08832 .
## NP2         -1.304220   0.280909  -4.643 3.44e-06 ***
## NP3         -1.979749   0.324476  -6.101 1.05e-09 ***
## FA2         -0.056198   0.320304  -0.175  0.86072
## FA3          0.227374   0.554508   0.410  0.68177
## FA4          3.482917   1.066966   3.264  0.00110 **
## FA5          0.684706   0.686253   0.998  0.31840
## FA6          1.721708   0.550780   3.126  0.00177 **
## TS2          0.501253   0.244991   2.046  0.04076 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 511.41  on 368  degrees of freedom
## Residual deviance: 411.54  on 357  degrees of freedom
## AIC: 435.54
##
## Number of Fisher Scoring iterations: 5
```

Configuration 30

```
## [1] "model_data_conf30.csv"
```

```
##
## Call:
## glm(formula = SR ~ TA + H + RS + NP + FA + DS + FR, family = "binomial",
##     data = lm_DF)
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
```

```
## -1.8999  -0.7812  -0.4659   0.8447   2.5448
##
## Coefficients:
##              Estimate Std. Error z value Pr(>|z|)
## (Intercept)  1.945369   0.765777   2.540  0.01107 *
## TA          -0.030127   0.014080  -2.140  0.03238 *
## H            0.012754   0.007272   1.754  0.07946 .
## RS2         -0.529107   0.267998  -1.974  0.04835 *
## NP2         -1.147061   0.289124  -3.967 7.27e-05 ***
## NP3         -2.378302   0.399992  -5.946 2.75e-09 ***
## FA2         -0.233706   0.349244  -0.669  0.50338
## FA3         -0.126576   0.613821  -0.206  0.83663
## FA4          1.114343   0.553478   2.013  0.04408 *
## FA5          0.056198   0.825641   0.068  0.94573
## FA6          1.651308   0.517925   3.188  0.00143 **
## DS2         -0.661006   0.277496  -2.382  0.01722 *
## FR2         -0.786906   0.395185  -1.991  0.04646 *
## FR3         -0.360188   0.386304  -0.932  0.35113
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 457.87  on 368  degrees of freedom
## Residual deviance: 368.43  on 355  degrees of freedom
## AIC: 396.43
##
## Number of Fisher Scoring iterations: 5
```

Configuration 50

```
## [1] "model_data_conf50.csv"
```

```
##
## Call:
## glm(formula = SR ~ E + OP + AV + Task + H + BF + NP + FA + PR +
##     DS, family = "binomial", data = lm_DF)
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -1.7033  -0.5431  -0.3245  -0.1567   3.3163
##
## Coefficients:
##             Estimate Std. Error z value Pr(>|z|)
## (Intercept) -3.17560    1.76484  -1.799  0.07196 .
## E           -0.27360    0.08747  -3.128  0.00176 **
## OP           0.18655    0.10130   1.842  0.06553 .
## AV           0.06618    0.03596   1.841  0.06567 .
## Task         0.06824    0.04932   1.384  0.16647
## H            0.01658    0.00806   2.057  0.03965 *
## BF2          0.74969    0.35013   2.141  0.03226 *
## NP2         -1.03832    0.36851  -2.818  0.00484 **
## NP3         -2.54968    0.59503  -4.285 1.83e-05 ***
```

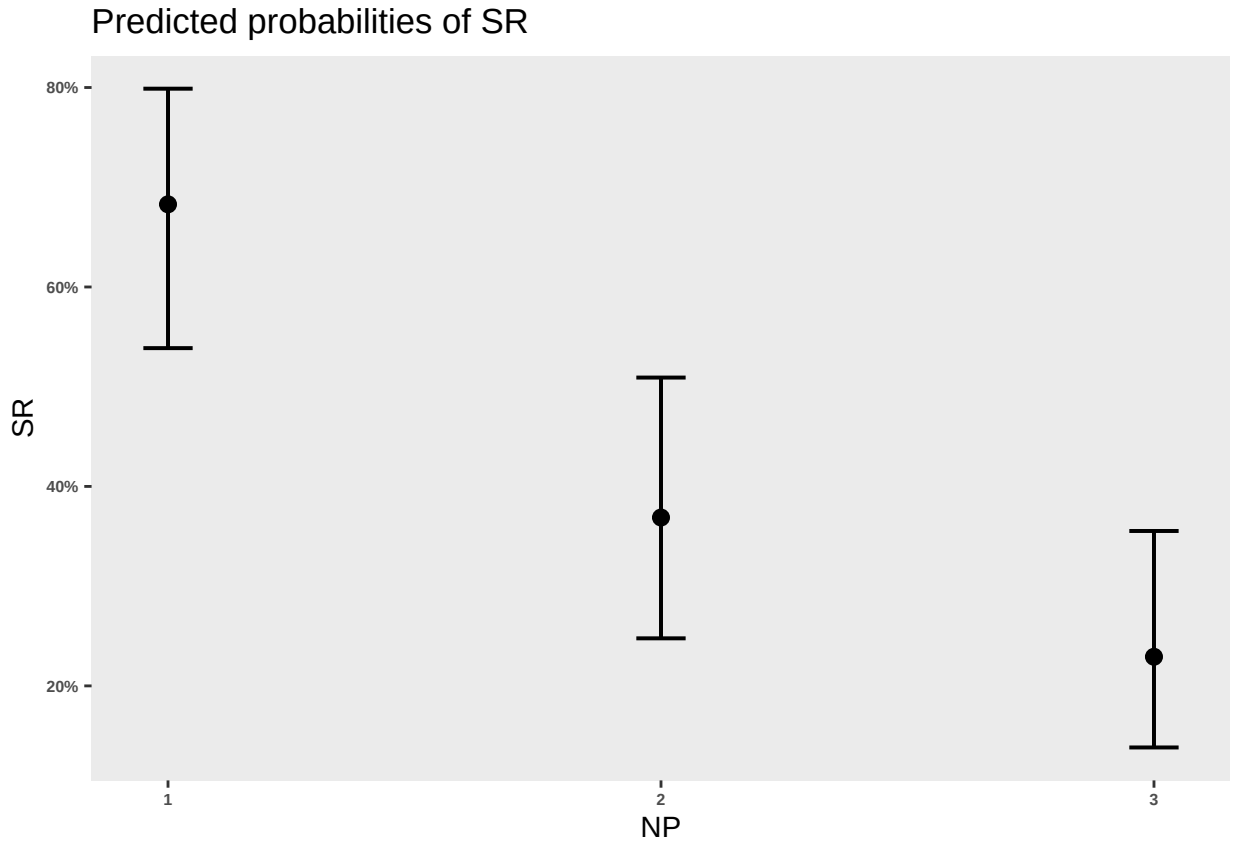
```
## FA2         -0.36691    0.50080  -0.733  0.46377
## FA3          1.37349    0.66246   2.073  0.03814 *
## FA4          1.17230    0.63062   1.859  0.06303 .
## FA5          0.07405    1.15515   0.064  0.94889
## FA6          1.78275    0.55381   3.219  0.00129 **
## PR2         -1.60529    0.66711  -2.406  0.01611 *
## PR3         -2.09690    0.69066  -3.036  0.00240 **
## PR4         -1.44026    0.63073  -2.283  0.02240 *
## PR5         -2.05175    0.65559  -3.130  0.00175 **
## DS2         -0.53673    0.34989  -1.534  0.12503
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 324.34  on 368  degrees of freedom
## Residual deviance: 241.62  on 350  degrees of freedom
## AIC: 279.62
##
## Number of Fisher Scoring iterations: 6
```

Dummy plot

plot in new orientation

```
plot_model(model_20, type = "pred", terms = "NP")+
  scale_color_sjplot("simply")+
        theme(
          # plot.title = plot_title_,
          panel.grid = element_blank(),
          axis.text.x = element_text(face = "bold", size = 6),
          axis.text.y = element_text(face = "bold", size = 6))
```

```
## Scale for 'colour' is already present. Adding another scale for
## 'colour', which will replace the existing scale.
```



SectionA plots

```
##
## Call:  glm(formula = SR ~ TA + H + RS + NP + FA + TS, family = "binomial",
##     data = lm_DF)
##
## Coefficients:
## (Intercept)           TA            H          RS2          NP2
##     1.39114     -0.02412      0.01460     -0.42924     -1.30422
##         NP3          FA2          FA3          FA4          FA5
##    -1.97975     -0.05620      0.22737      3.48292      0.68471
##         FA6          TS2
##     1.72171      0.50125
##
## Degrees of Freedom: 368 Total (i.e. Null);  357 Residual
## Null Deviance:       511.4
## Residual Deviance: 411.5     AIC: 435.5

## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.

## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.

##
```

```
## Call:  glm(formula = SR ~ TA + H + RS + NP + FA + TS, family = "binomial",
##     data = lm_DF)
##
## Coefficients:
## (Intercept)           TA            H          RS2          NP2
##     1.39114     -0.02412      0.01460     -0.42924     -1.30422
##         NP3          FA2          FA3          FA4          FA5
##    -1.97975     -0.05620      0.22737      3.48292      0.68471
##         FA6          TS2
##     1.72171      0.50125
##
## Degrees of Freedom: 368 Total (i.e. Null);  357 Residual
## Null Deviance:       511.4
## Residual Deviance: 411.5     AIC: 435.5
```

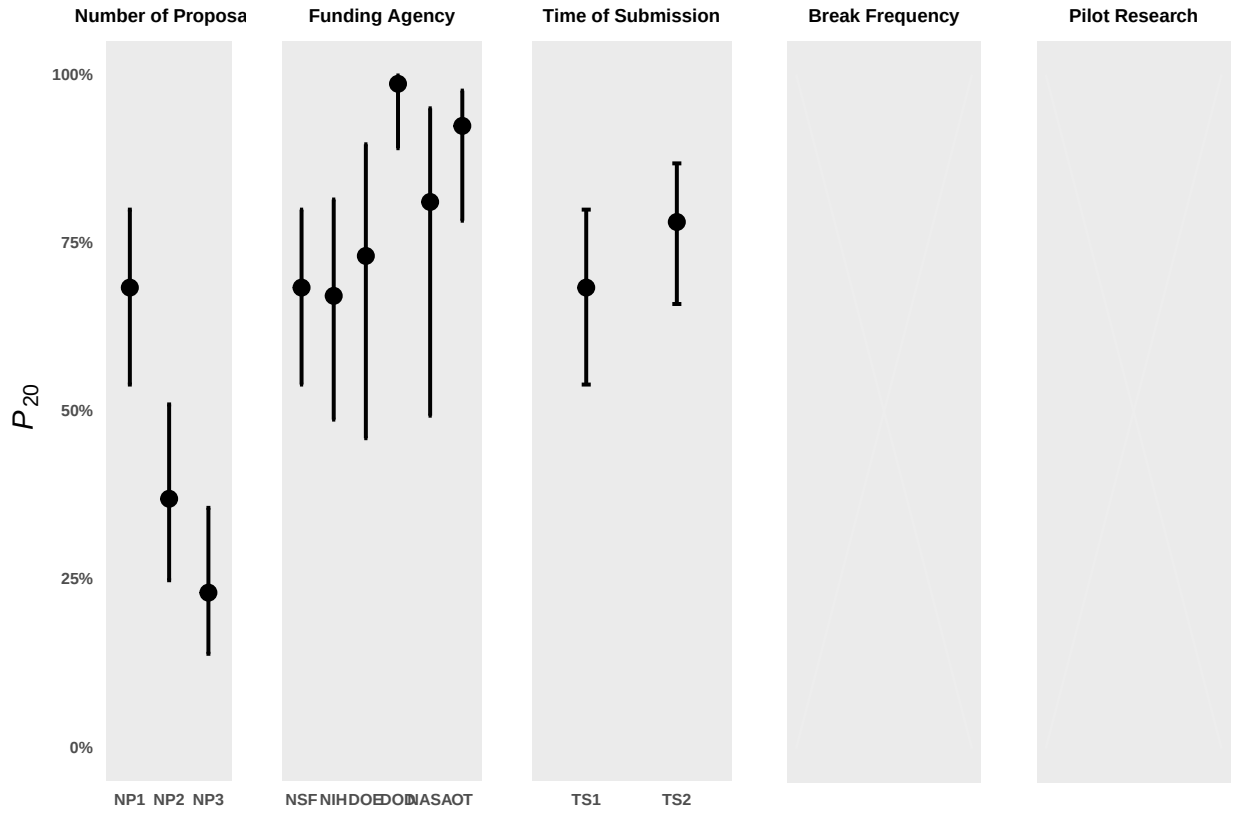
```
## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.
```

```
##
## Call:  glm(formula = SR ~ TA + H + RS + NP + FA + TS, family = "binomial",
##     data = lm_DF)
##
## Coefficients:
## (Intercept)           TA            H          RS2          NP2
##     1.39114     -0.02412      0.01460     -0.42924     -1.30422
##         NP3          FA2          FA3          FA4          FA5
##    -1.97975     -0.05620      0.22737      3.48292      0.68471
##         FA6          TS2
##     1.72171      0.50125
##
## Degrees of Freedom: 368 Total (i.e. Null);  357 Residual
## Null Deviance:       511.4
## Residual Deviance: 411.5     AIC: 435.5
```

```
## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.
```

```
## Warning: Ignoring unknown parameters: scale
```

```
## Warning: Ignoring unknown parameters: scale
```




```
##
## Call:  glm(formula = SR ~ TA + H + RS + NP + FA + DS + FR, family = "binomial",
##     data = lm_DF)
##
## Coefficients:
## (Intercept)           TA            H          RS2          NP2
##     1.94537     -0.03013      0.01275     -0.52911     -1.14706
##         NP3          FA2          FA3          FA4          FA5
##    -2.37830     -0.23371     -0.12658      1.11434      0.05620
##         FA6          DS2          FR2          FR3
##     1.65131     -0.66101     -0.78691     -0.36019
##
## Degrees of Freedom: 368 Total (i.e. Null);  355 Residual
## Null Deviance:       457.9
## Residual Deviance: 368.4     AIC: 396.4

## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.

##
## Call:  glm(formula = SR ~ TA + H + RS + NP + FA + DS + FR, family = "binomial",
##     data = lm_DF)
##
```

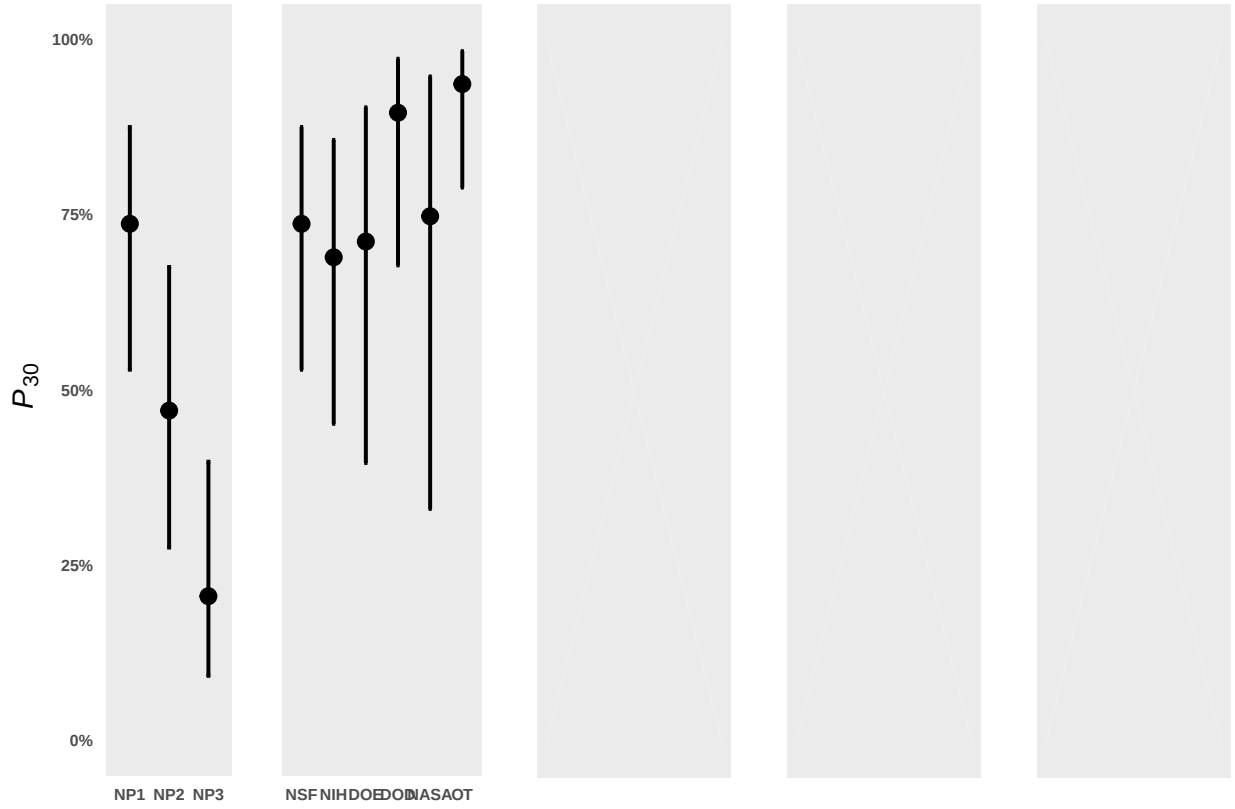
```
## Coefficients:
## (Intercept)           TA            H          RS2          NP2
##     1.94537     -0.03013      0.01275     -0.52911     -1.14706
##         NP3          FA2          FA3          FA4          FA5
##    -2.37830     -0.23371     -0.12658      1.11434      0.05620
##         FA6          DS2          FR2          FR3
##     1.65131     -0.66101     -0.78691     -0.36019
##
## Degrees of Freedom: 368 Total (i.e. Null);  355 Residual
## Null Deviance:       457.9
## Residual Deviance: 368.4     AIC: 396.4
```

```
## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.
```

```
## Warning: Ignoring unknown parameters: scale
```

```
## Warning: Ignoring unknown parameters: scale
```

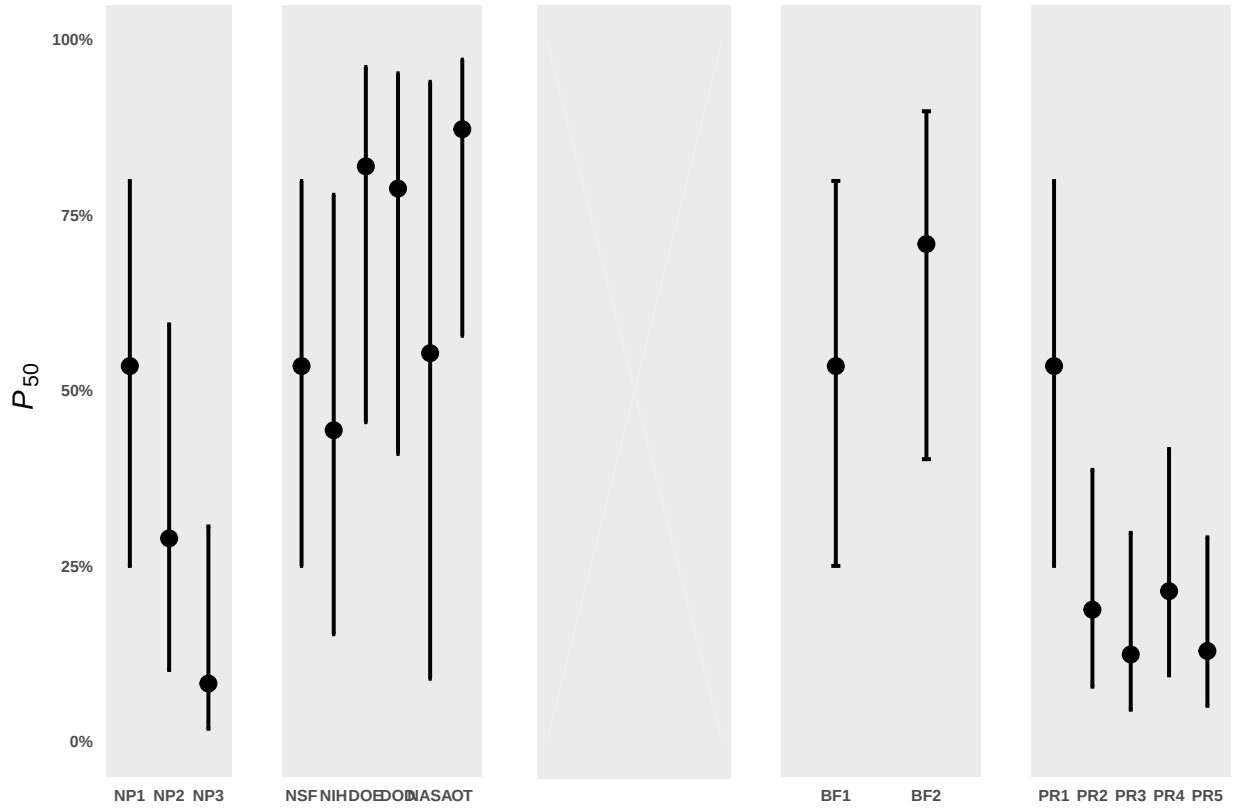
```
## Warning: Ignoring unknown parameters: scale
```




```
##
## Call:  glm(formula = SR ~ E + OP + AV + Task + H + BF + NP + FA + PR +
```

```
##     DS, family = "binomial", data = lm_DF)
##
## Coefficients:
## (Intercept)            E           OP           AV         Task
##    -3.17560     -0.27360      0.18655      0.06619      0.06823
##           H          BF2          NP2          NP3          FA2
##     0.01658      0.74969     -1.03832     -2.54968     -0.36691
##         FA3          FA4          FA5          FA6          PR2
##     1.37349      1.17230      0.07405      1.78275     -1.60529
##         PR3          PR4          PR5          DS2
##    -2.09690     -1.44026     -2.05175     -0.53673
##
## Degrees of Freedom: 368 Total (i.e. Null);  350 Residual
## Null Deviance:       324.3
## Residual Deviance: 241.6     AIC: 279.6

## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.

##
## Call:  glm(formula = SR ~ E + OP + AV + Task + H + BF + NP + FA + PR +
##     DS, family = "binomial", data = lm_DF)
##
## Coefficients:
## (Intercept)            E           OP           AV         Task
##    -3.17560     -0.27360      0.18655      0.06619      0.06823
##           H          BF2          NP2          NP3          FA2
##     0.01658      0.74969     -1.03832     -2.54968     -0.36691
##         FA3          FA4          FA5          FA6          PR2
##     1.37349      1.17230      0.07405      1.78275     -1.60529
##         PR3          PR4          PR5          DS2
##    -2.09690     -1.44026     -2.05175     -0.53673
##
## Degrees of Freedom: 368 Total (i.e. Null);  350 Residual
## Null Deviance:       324.3
## Residual Deviance: 241.6     AIC: 279.6

## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.

##
## Call:  glm(formula = SR ~ E + OP + AV + Task + H + BF + NP + FA + PR +
##     DS, family = "binomial", data = lm_DF)
##
## Coefficients:
## (Intercept)            E           OP           AV         Task
##    -3.17560     -0.27360      0.18655      0.06619      0.06823
##           H          BF2          NP2          NP3          FA2
##     0.01658      0.74969     -1.03832     -2.54968     -0.36691
```

```
##         FA3          FA4          FA5          FA6          PR2
##     1.37349      1.17230      0.07405      1.78275     -1.60529
##         PR3          PR4          PR5          DS2
##    -2.09690     -1.44026     -2.05175     -0.53673
##
## Degrees of Freedom: 368 Total (i.e. Null);  350 Residual
## Null Deviance:       324.3
## Residual Deviance: 241.6     AIC: 279.6

## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.


##
## Call:  glm(formula = SR ~ E + OP + AV + Task + H + BF + NP + FA + PR +
##     DS, family = "binomial", data = lm_DF)
##
## Coefficients:
## (Intercept)            E           OP           AV         Task
##    -3.17560     -0.27360      0.18655      0.06619      0.06823
##           H          BF2          NP2          NP3          FA2
##     0.01658      0.74969     -1.03832     -2.54968     -0.36691
##         FA3          FA4          FA5          FA6          PR2
##     1.37349      1.17230      0.07405      1.78275     -1.60529
##         PR3          PR4          PR5          DS2
##    -2.09690     -1.44026     -2.05175     -0.53673
##
## Degrees of Freedom: 368 Total (i.e. Null);  350 Residual
## Null Deviance:       324.3
## Residual Deviance: 241.6     AIC: 279.6

## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.

## Warning: Ignoring unknown parameters: scale
```




```
##
## ********************************************************

## Note: As of version 1.0.0, cowplot does not change the

##   default ggplot2 theme anymore. To recover the previous

##   behavior, execute:
##   theme_set(theme_cowplot())

## ********************************************************

##
## Attaching package: 'cowplot'

## The following object is masked from 'package:ggpubr':
##
##     get_legend

## The following objects are masked from 'package:sjPlot':
##
##     plot_grid, save_plot
```

SectionB plots

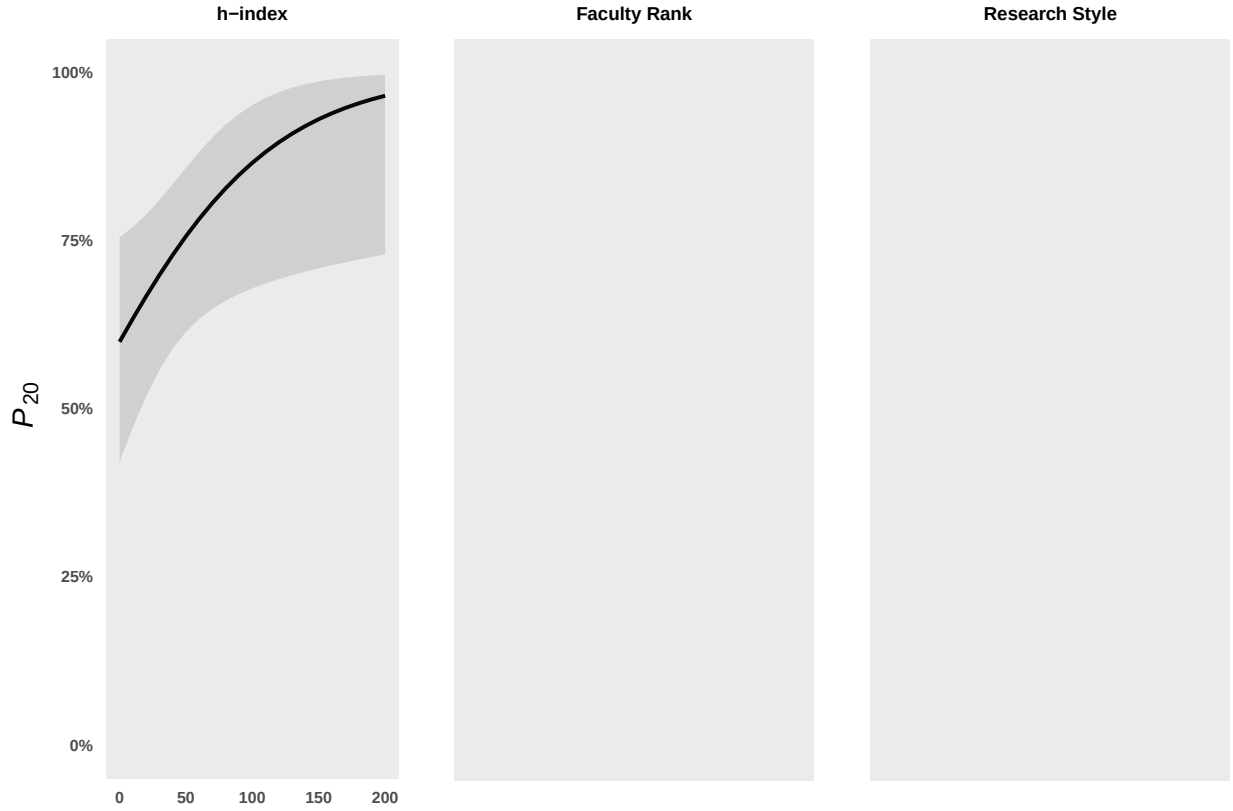
```
##
## Call:  glm(formula = SR ~ TA + H + RS + NP + FA + TS, family = "binomial",
##     data = lm_DF)
##
## Coefficients:
## (Intercept)           TA            H          RS2          NP2
##     1.39114     -0.02412      0.01460     -0.42924     -1.30422
##         NP3          FA2          FA3          FA4          FA5
##    -1.97975     -0.05620      0.22737      3.48292      0.68471
##         FA6          TS2
##     1.72171      0.50125
##
## Degrees of Freedom: 368 Total (i.e. Null);  357 Residual
## Null Deviance:       511.4
## Residual Deviance: 411.5     AIC: 435.5
```

```
## Data were 'prettified'. Consider using `terms="H [all]"` to get smooth plots.
```

```
## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
```

```
## Warning: Ignoring unknown parameters: scale
```

```
## Warning: Ignoring unknown parameters: scale
```



```
##
## Call:  glm(formula = SR ~ TA + H + RS + NP + FA + DS + FR, family = "binomial",
##     data = lm_DF)
##
## Coefficients:
## (Intercept)           TA            H          RS2          NP2
##     1.94537     -0.03013      0.01275     -0.52911     -1.14706
##         NP3          FA2          FA3          FA4          FA5
##    -2.37830     -0.23371     -0.12658      1.11434      0.05620
##         FA6          DS2          FR2          FR3
##     1.65131     -0.66101     -0.78691     -0.36019
##
## Degrees of Freedom: 368 Total (i.e. Null);  355 Residual
## Null Deviance:       457.9
## Residual Deviance: 368.4     AIC: 396.4
```

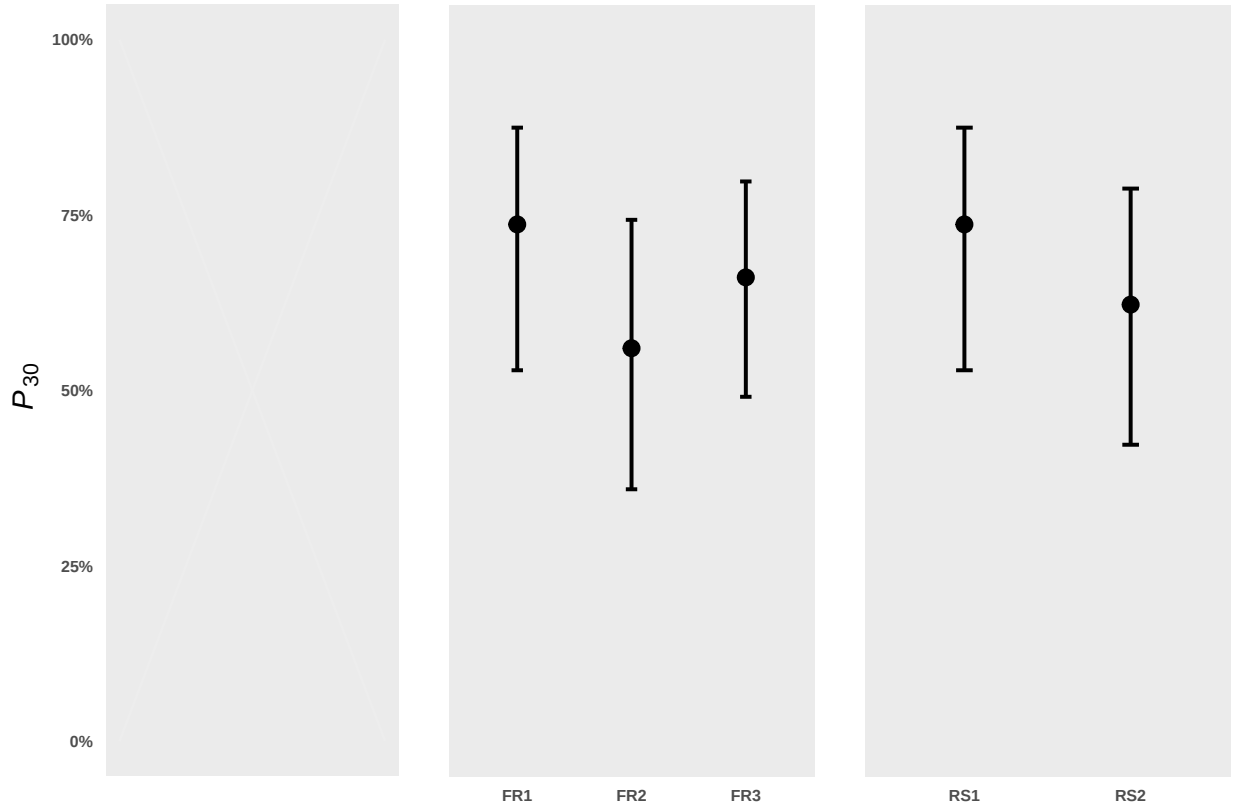
```
## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
```

```
## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.
```

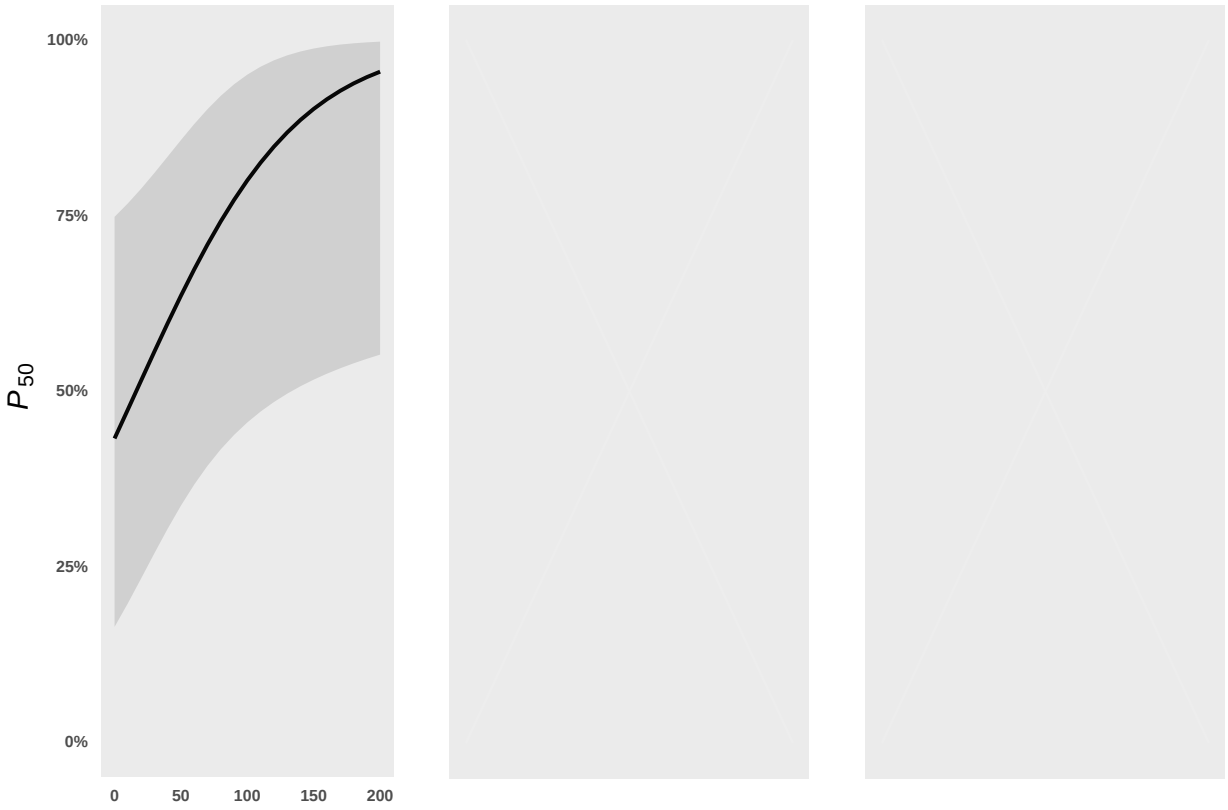
```
##
## Call:  glm(formula = SR ~ TA + H + RS + NP + FA + DS + FR, family = "binomial",
##     data = lm_DF)
##
## Coefficients:
## (Intercept)           TA            H          RS2          NP2
##     1.94537     -0.03013      0.01275     -0.52911     -1.14706
##         NP3          FA2          FA3          FA4          FA5
##    -2.37830     -0.23371     -0.12658      1.11434      0.05620
##         FA6          DS2          FR2          FR3
##     1.65131     -0.66101     -0.78691     -0.36019
##
## Degrees of Freedom: 368 Total (i.e. Null);  355 Residual
## Null Deviance:       457.9
## Residual Deviance: 368.4     AIC: 396.4
```

```
## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.
```

```
## Warning: Ignoring unknown parameters: scale
```




```
##
## Call:  glm(formula = SR ~ E + OP + AV + Task + H + BF + NP + FA + PR +
##     DS, family = "binomial", data = lm_DF)
##
## Coefficients:
## (Intercept)            E           OP           AV         Task
##    -3.17560     -0.27360      0.18655      0.06619      0.06823
##           H          BF2          NP2          NP3          FA2
##     0.01658      0.74969     -1.03832     -2.54968     -0.36691
##         FA3          FA4          FA5          FA6          PR2
##     1.37349      1.17230      0.07405      1.78275     -1.60529
##         PR3          PR4          PR5          DS2
##    -2.09690     -1.44026     -2.05175     -0.53673
##
## Degrees of Freedom: 368 Total (i.e. Null);  350 Residual
## Null Deviance:       324.3
## Residual Deviance: 241.6     AIC: 279.6

## Data were 'prettified'. Consider using `terms="H [all]"` to get smooth plots.

## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.

## Warning: Ignoring unknown parameters: scale

## Warning: Ignoring unknown parameters: scale
```



SectionC plots

```
## Warning: Ignoring unknown parameters: scale

## Warning: Ignoring unknown parameters: scale

## Warning: Ignoring unknown parameters: scale
```

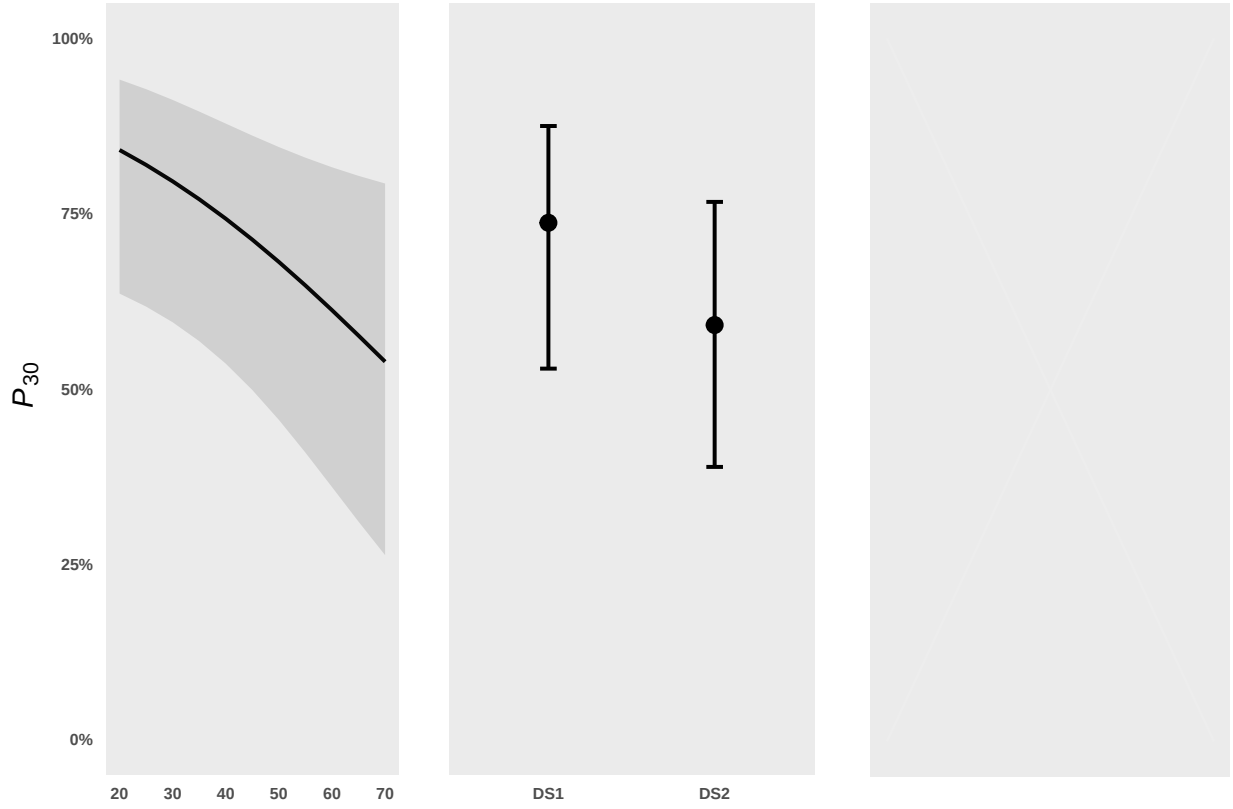

```
##
## Call:  glm(formula = SR ~ TA + H + RS + NP + FA + DS + FR, family = "binomial",
##     data = lm_DF)
##
## Coefficients:
## (Intercept)           TA            H          RS2          NP2
##     1.94537     -0.03013      0.01275     -0.52911     -1.14706
##         NP3          FA2          FA3          FA4          FA5
##    -2.37830     -0.23371     -0.12658      1.11434      0.05620
##         FA6          DS2          FR2          FR3
##     1.65131     -0.66101     -0.78691     -0.36019
##
## Degrees of Freedom: 368 Total (i.e. Null);  355 Residual
## Null Deviance:       457.9
## Residual Deviance: 368.4     AIC: 396.4

## Data were 'prettified'. Consider using `terms="TA [all]"` to get smooth plots.

## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.

##
## Call:  glm(formula = SR ~ TA + H + RS + NP + FA + DS + FR, family = "binomial",
##     data = lm_DF)
##
```

```
## Coefficients:
## (Intercept)           TA            H          RS2          NP2
##     1.94537     -0.03013      0.01275     -0.52911     -1.14706
##         NP3          FA2          FA3          FA4          FA5
##    -2.37830     -0.23371     -0.12658      1.11434      0.05620
##         FA6          DS2          FR2          FR3
##     1.65131     -0.66101     -0.78691     -0.36019
##
## Degrees of Freedom: 368 Total (i.e. Null);  355 Residual
## Null Deviance:       457.9
## Residual Deviance: 368.4     AIC: 396.4
```

```
## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
```

```
## Scale for 'x' is already present. Adding another scale for 'x', which
## will replace the existing scale.
```

```
## Warning: Ignoring unknown parameters: scale
```




```
##
## Call:  glm(formula = SR ~ E + OP + AV + Task + H + BF + NP + FA + PR +
##     DS, family = "binomial", data = lm_DF)
##
```

```
## Coefficients:
## (Intercept)            E           OP           AV         Task
##    -3.17560     -0.27360      0.18655      0.06619      0.06823
##           H          BF2          NP2          NP3          FA2
##     0.01658      0.74969     -1.03832     -2.54968     -0.36691
##         FA3          FA4          FA5          FA6          PR2
##     1.37349      1.17230      0.07405      1.78275     -1.60529
##         PR3          PR4          PR5          DS2
##    -2.09690     -1.44026     -2.05175     -0.53673
##
## Degrees of Freedom: 368 Total (i.e. Null);  350 Residual
## Null Deviance:       324.3
## Residual Deviance: 241.6     AIC: 279.6
```

```
## Scale for 'y' is already present. Adding another scale for 'y', which
## will replace the existing scale.
```

```
## Warning: Ignoring unknown parameters: scale
```

```
## Warning: Ignoring unknown parameters: scale
```