Comparative Cognition Numerosity Analysisof Cowlog Data Part V

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This is the last script! This makes the actual full data frame with numerosity, shuttlebox, and detour information combined. For now I've got the shuttlebox data analysis in here.

Note for later on- the boxplots with sex I was having trouble putting hte labels on so I hardcoded them into the title, need to fix it.

## Warning: package 'ggplot2' was built under R version 3.2.4

## Warning: package 'dplyr' was built under R version 3.2.5

## Warning: package 'rmarkdown' was built under R version 3.2.5

## Warning: package 'knitr' was built under R version 3.2.5

## Warning: package 'readr' was built under R version 3.2.5

## Warning in left\_join\_impl(x, y, by$x, by$y, suffix$x, suffix$y): joining  
## factors with different levels, coercing to character vector

## Warning in left\_join\_impl(x, y, by$x, by$y, suffix$x, suffix$y): joining  
## factor and character vector, coercing into character vector

Shuttlebox Measures:

average distance from correct stimulus during gaps average distance from correct stimulus during stim shuttlebox slope binned average distance from correct stimulus during stim binned average distance from correct stimulus during gaps binned shuttlebox slope

shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_stimulus shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_stimulus\_slope\_across\_presentations shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations binned shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_stimulus binned shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps binned shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_stimulus\_slope\_across\_presentations binned shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations AND THE 23 presentation filtered versions of those listed above

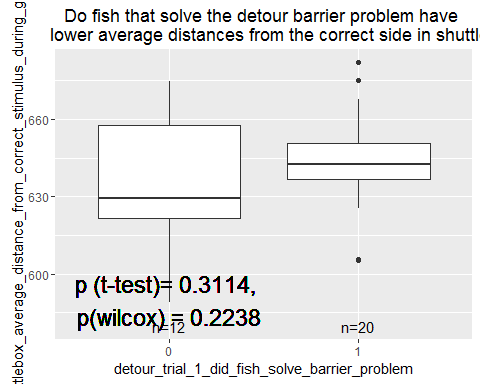
## Warning: replacing previous import by 'tidyr::%>%' when loading 'broom'

## Warning: replacing previous import by 'tidyr::gather' when loading 'broom'

## Warning: replacing previous import by 'tidyr::spread' when loading 'broom'

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

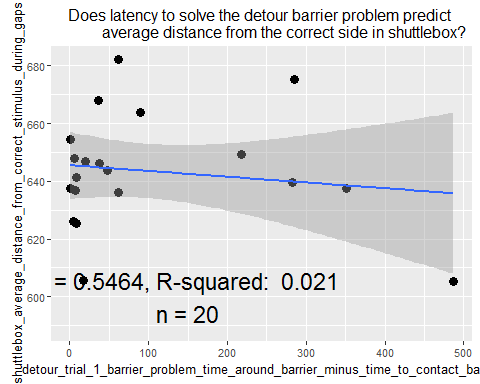
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_average\_distance\_from\_correct\_stimulus\_during\_gaps ~   
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -39.376 -8.230 -0.567 8.252 37.866   
##   
## Coefficients:  
## Estimate  
## (Intercept) 645.48291  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier -0.01990  
## Std. Error  
## (Intercept) 5.56163  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.03237  
## t value  
## (Intercept) 116.060  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier -0.615  
## Pr(>|t|)  
## (Intercept) <2e-16  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.546  
##   
## (Intercept) \*\*\*  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 20.07 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.02057, Adjusted R-squared: -0.03385   
## F-statistic: 0.378 on 1 and 18 DF, p-value: 0.5464

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

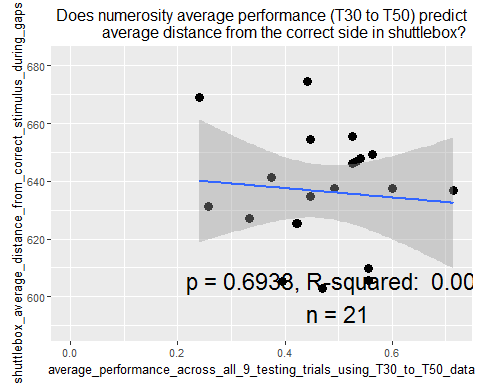
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_average\_distance\_from\_correct\_stimulus\_during\_gaps ~   
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -33.640 -11.666 3.291 12.804 37.859   
##   
## Coefficients:  
## Estimate  
## (Intercept) 643.97  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -16.08  
## Std. Error  
## (Intercept) 19.39  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 40.21  
## t value  
## (Intercept) 33.22  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -0.40  
## Pr(>|t|)  
## (Intercept) <2e-16  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.694  
##   
## (Intercept) \*\*\*  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 20.28 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.008341, Adjusted R-squared: -0.04385   
## F-statistic: 0.1598 on 1 and 19 DF, p-value: 0.6938

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

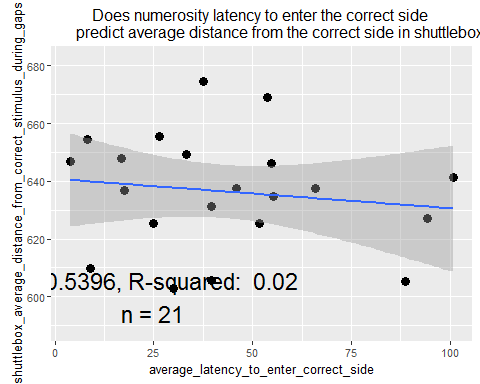
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_average\_distance\_from\_correct\_stimulus\_during\_gaps ~   
## df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -34.953 -10.085 1.396 11.151 37.750   
##   
## Coefficients:  
## Estimate Std. Error t value  
## (Intercept) 640.7954 8.2635 77.546  
## df.full$average\_latency\_to\_enter\_correct\_side -0.1022 0.1635 -0.625  
## Pr(>|t|)   
## (Intercept) <2e-16 \*\*\*  
## df.full$average\_latency\_to\_enter\_correct\_side 0.54   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 20.15 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.02013, Adjusted R-squared: -0.03145   
## F-statistic: 0.3903 on 1 and 19 DF, p-value: 0.5396

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

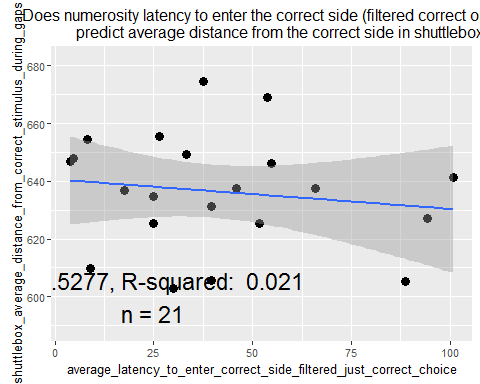
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_average\_distance\_from\_correct\_stimulus\_during\_gaps ~   
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -34.747 -9.876 1.604 11.360 37.956   
##   
## Coefficients:  
## Estimate  
## (Intercept) 640.5939  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -0.1023  
## Std. Error  
## (Intercept) 7.8299  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.1590  
## t value  
## (Intercept) 81.814  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -0.643  
## Pr(>|t|)  
## (Intercept) <2e-16  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.528  
##   
## (Intercept) \*\*\*  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 20.14 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.02132, Adjusted R-squared: -0.03019   
## F-statistic: 0.4139 on 1 and 19 DF, p-value: 0.5277

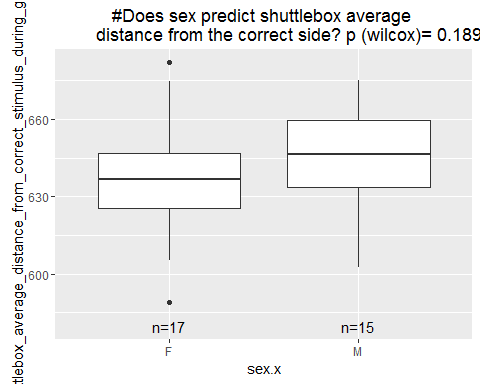
## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

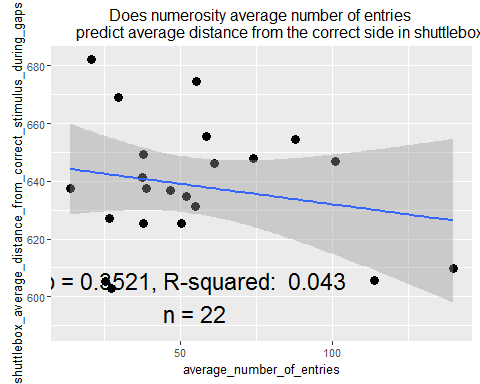
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_average\_distance\_from\_correct\_stimulus\_during\_gaps ~   
## df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -39.495 -14.772 -2.956 14.251 38.892   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)   
## (Intercept) 646.1433 9.2613 69.768 <2e-16 \*\*\*  
## df.full$average\_number\_of\_entries -0.1411 0.1481 -0.953 0.352   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 21.73 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.04342, Adjusted R-squared: -0.004414   
## F-statistic: 0.9077 on 1 and 20 DF, p-value: 0.3521

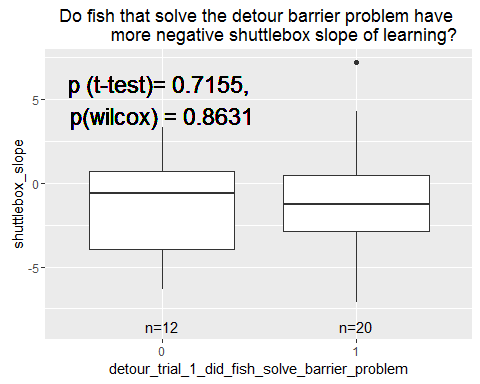
## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

## Warning: Removed 30 rows containing missing values (geom\_point).



## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

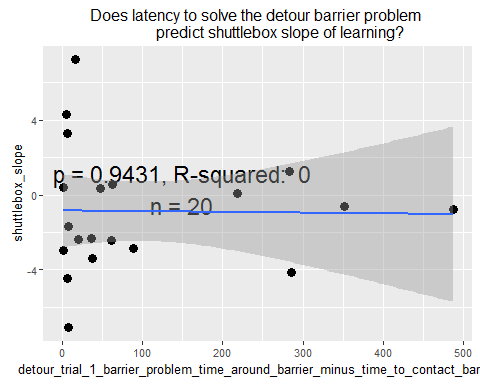
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_slope ~ df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -6.2488 -2.0181 -0.2976 1.2866 8.0686   
##   
## Coefficients:  
## Estimate  
## (Intercept) -0.8422214  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier -0.0003933  
## Std. Error  
## (Intercept) 0.9333031  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.0054316  
## t value  
## (Intercept) -0.902  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier -0.072  
## Pr(>|t|)  
## (Intercept) 0.379  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.943  
##   
## Residual standard error: 3.369 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.0002913, Adjusted R-squared: -0.05525   
## F-statistic: 0.005244 on 1 and 18 DF, p-value: 0.9431

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

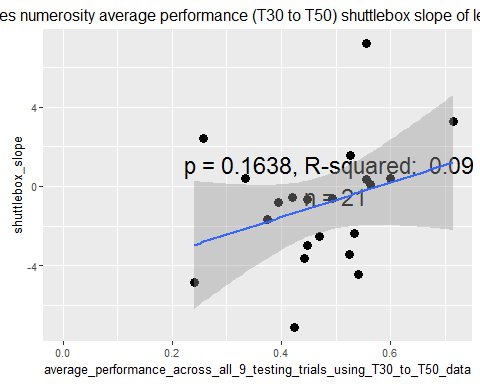
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_slope ~ df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -5.7420 -1.8797 0.2013 0.8278 7.4102   
##   
## Coefficients:  
## Estimate  
## (Intercept) -5.057  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 8.758  
## Std. Error  
## (Intercept) 2.916  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 6.047  
## t value  
## (Intercept) -1.735  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 1.448  
## Pr(>|t|)  
## (Intercept) 0.099  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.164  
##   
## (Intercept) .  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 3.049 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.09942, Adjusted R-squared: 0.05202   
## F-statistic: 2.097 on 1 and 19 DF, p-value: 0.1638

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

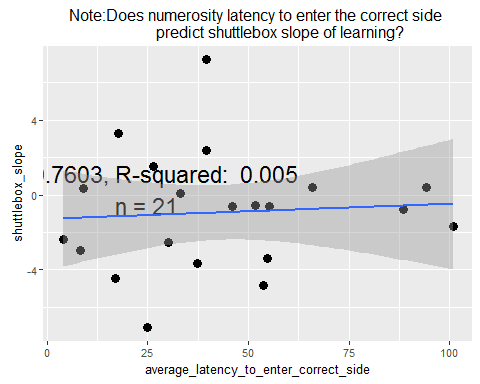
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_slope ~ df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -6.0041 -1.7523 0.2107 1.1586 8.1908   
##   
## Coefficients:  
## Estimate Std. Error t value  
## (Intercept) -1.29067 1.31398 -0.982  
## df.full$average\_latency\_to\_enter\_correct\_side 0.00805 0.02601 0.310  
## Pr(>|t|)  
## (Intercept) 0.338  
## df.full$average\_latency\_to\_enter\_correct\_side 0.760  
##   
## Residual standard error: 3.205 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.005017, Adjusted R-squared: -0.04735   
## F-statistic: 0.09581 on 1 and 19 DF, p-value: 0.7603

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

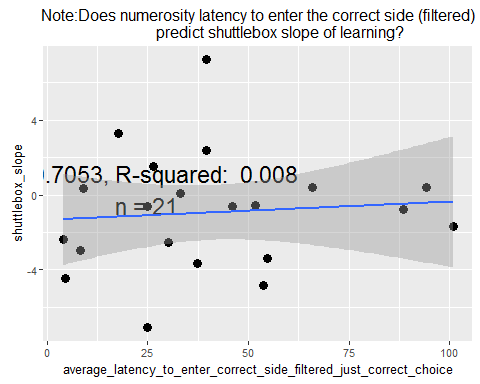
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_slope ~ df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -5.994 -1.715 0.282 1.101 8.176   
##   
## Coefficients:  
## Estimate  
## (Intercept) -1.341671  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.009702  
## Std. Error  
## (Intercept) 1.244120  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.025268  
## t value  
## (Intercept) -1.078  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.384  
## Pr(>|t|)  
## (Intercept) 0.294  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.705  
##   
## Residual standard error: 3.2 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.007699, Adjusted R-squared: -0.04453   
## F-statistic: 0.1474 on 1 and 19 DF, p-value: 0.7053

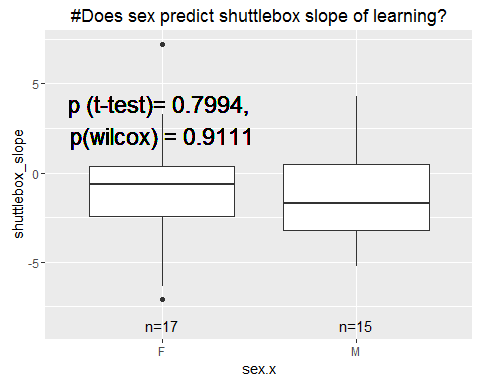
## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

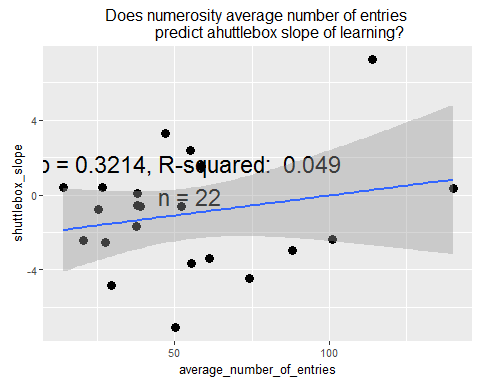
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_slope ~ df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -5.9989 -2.4921 0.0567 1.8530 6.9627   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)  
## (Intercept) -2.16611 1.30855 -1.655 0.113  
## df.full$average\_number\_of\_entries 0.02128 0.02092 1.017 0.321  
##   
## Residual standard error: 3.07 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.04915, Adjusted R-squared: 0.001606   
## F-statistic: 1.034 on 1 and 20 DF, p-value: 0.3214

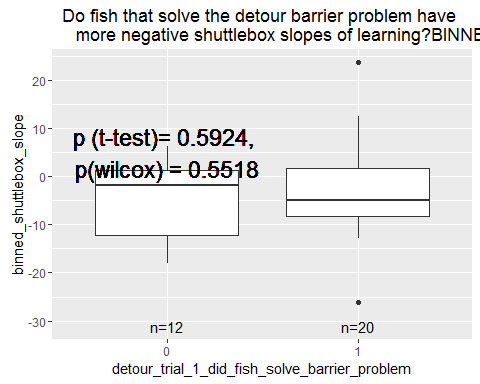
## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

## Warning: Removed 30 rows containing missing values (geom\_point).



## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

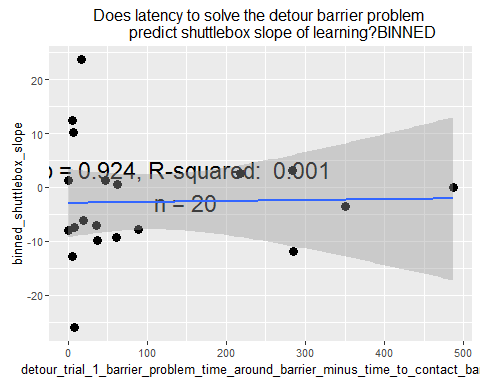
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$binned\_shuttlebox\_slope ~ df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -23.165 -5.474 -2.276 4.475 26.590   
##   
## Coefficients:  
## Estimate  
## (Intercept) -2.918366  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.001698  
## Std. Error  
## (Intercept) 3.017952  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.017564  
## t value  
## (Intercept) -0.967  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.097  
## Pr(>|t|)  
## (Intercept) 0.346  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.924  
##   
## Residual standard error: 10.89 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.0005192, Adjusted R-squared: -0.05501   
## F-statistic: 0.009351 on 1 and 18 DF, p-value: 0.924

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

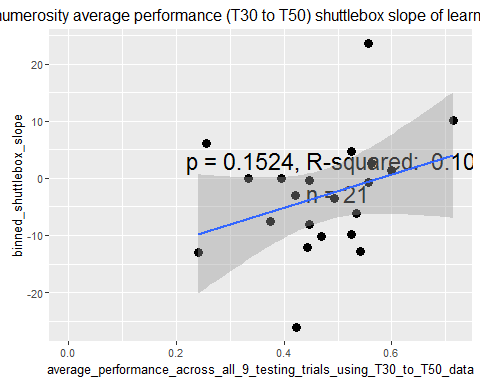
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$binned\_shuttlebox\_slope ~ df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -21.6332 -5.0075 -0.2278 5.1827 24.2578   
##   
## Coefficients:  
## Estimate  
## (Intercept) -16.811  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 29.250  
## Std. Error  
## (Intercept) 9.458  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 19.617  
## t value  
## (Intercept) -1.778  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 1.491  
## Pr(>|t|)  
## (Intercept) 0.0915  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.1524  
##   
## (Intercept) .  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 9.891 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.1047, Adjusted R-squared: 0.05763   
## F-statistic: 2.223 on 1 and 19 DF, p-value: 0.1524

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

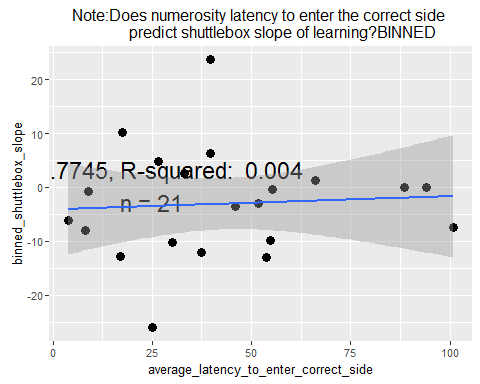
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$binned\_shuttlebox\_slope ~ df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -22.5493 -6.7662 -0.1468 3.8452 26.8576   
##   
## Coefficients:  
## Estimate Std. Error t value  
## (Intercept) -4.13374 4.27637 -0.967  
## df.full$average\_latency\_to\_enter\_correct\_side 0.02459 0.08464 0.291  
## Pr(>|t|)  
## (Intercept) 0.346  
## df.full$average\_latency\_to\_enter\_correct\_side 0.775  
##   
## Residual standard error: 10.43 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.004424, Adjusted R-squared: -0.04797   
## F-statistic: 0.08443 on 1 and 19 DF, p-value: 0.7745

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

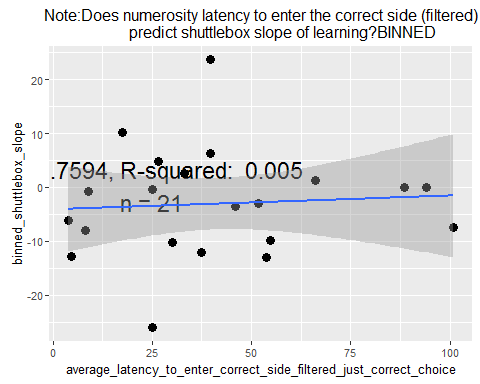
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$binned\_shuttlebox\_slope ~ df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -22.5835 -6.8055 -0.2076 3.7704 26.8088   
##   
## Coefficients:  
## Estimate  
## (Intercept) -4.12411  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.02558  
## Std. Error  
## (Intercept) 4.05320  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.08232  
## t value  
## (Intercept) -1.017  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.311  
## Pr(>|t|)  
## (Intercept) 0.322  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.759  
##   
## Residual standard error: 10.43 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.005057, Adjusted R-squared: -0.04731   
## F-statistic: 0.09657 on 1 and 19 DF, p-value: 0.7594

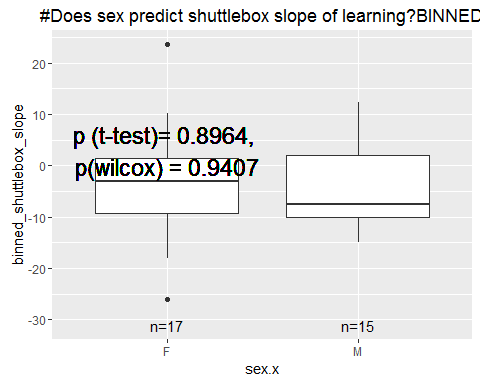
## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

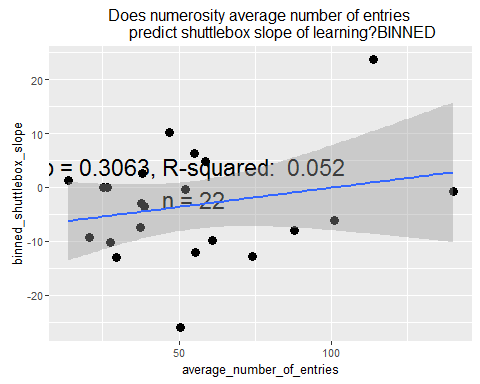
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$binned\_shuttlebox\_slope ~ df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -22.433 -6.746 -1.012 6.686 22.787   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)  
## (Intercept) -7.2412 4.2651 -1.698 0.105  
## df.full$average\_number\_of\_entries 0.0716 0.0682 1.050 0.306  
##   
## Residual standard error: 10.01 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.05223, Adjusted R-squared: 0.004842   
## F-statistic: 1.102 on 1 and 20 DF, p-value: 0.3063

## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

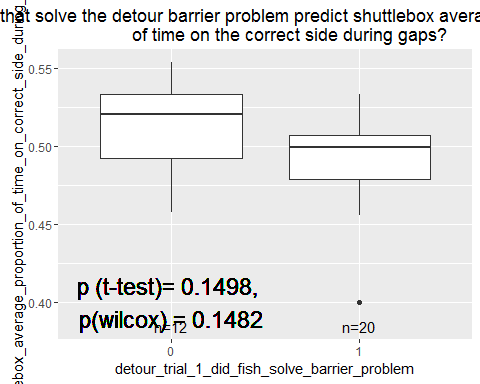
## Warning: Removed 30 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(0.553703703703704,  
## 0.533333333333333, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

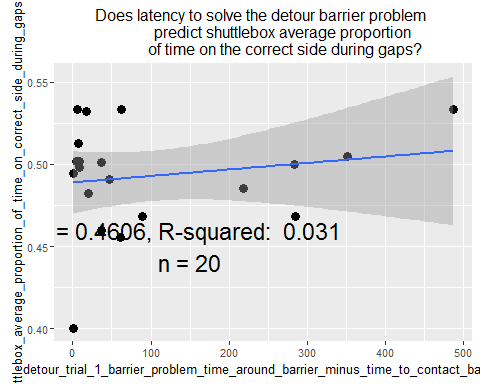
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps ~   
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.088899 -0.015211 0.003802 0.015552 0.044236   
##   
## Coefficients:  
## Estimate  
## (Intercept) 4.889e-01  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 3.967e-05  
## Std. Error  
## (Intercept) 9.041e-03  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 5.262e-05  
## t value  
## (Intercept) 54.070  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.754  
## Pr(>|t|)  
## (Intercept) <2e-16  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.461  
##   
## (Intercept) \*\*\*  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.03263 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.03062, Adjusted R-squared: -0.02324   
## F-statistic: 0.5685 on 1 and 18 DF, p-value: 0.4606

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

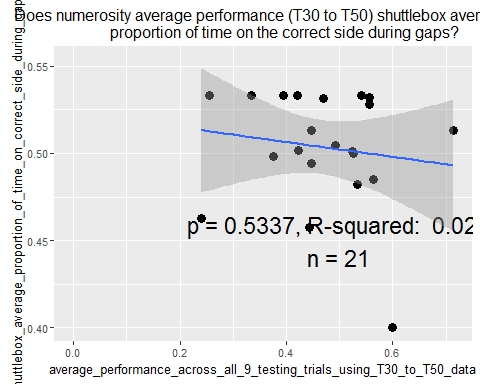
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps ~   
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.097867 -0.009948 0.002421 0.026742 0.032963   
##   
## Coefficients:  
## Estimate  
## (Intercept) 0.52340  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -0.04255  
## Std. Error  
## (Intercept) 0.03236  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.06712  
## t value  
## (Intercept) 16.174  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -0.634  
## Pr(>|t|)  
## (Intercept) 1.45e-12  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.534  
##   
## (Intercept) \*\*\*  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.03384 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.02072, Adjusted R-squared: -0.03083   
## F-statistic: 0.4019 on 1 and 19 DF, p-value: 0.5337

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

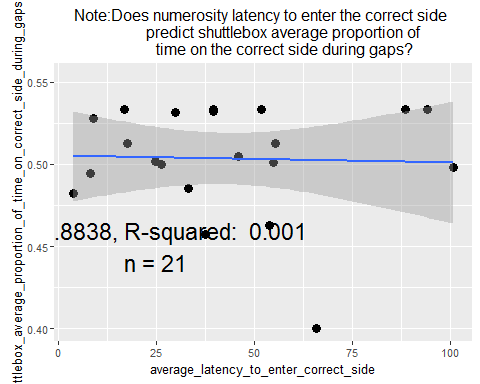
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps ~   
## df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.10247 -0.01040 0.00155 0.02850 0.03202   
##   
## Coefficients:  
## Estimate Std. Error  
## (Intercept) 5.052e-01 1.401e-02  
## df.full$average\_latency\_to\_enter\_correct\_side -4.109e-05 2.773e-04  
## t value Pr(>|t|)   
## (Intercept) 36.051 <2e-16 \*\*\*  
## df.full$average\_latency\_to\_enter\_correct\_side -0.148 0.884   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.03418 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.001154, Adjusted R-squared: -0.05142   
## F-statistic: 0.02195 on 1 and 19 DF, p-value: 0.8838

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

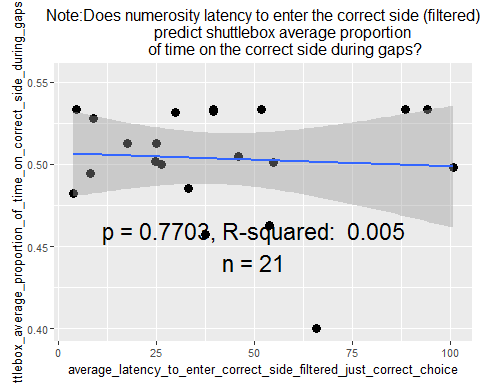
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps ~   
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.101413 -0.011572 0.001837 0.027200 0.034167   
##   
## Coefficients:  
## Estimate  
## (Intercept) 5.067e-01  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -7.979e-05  
## Std. Error  
## (Intercept) 1.326e-02  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 2.694e-04  
## t value  
## (Intercept) 38.202  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -0.296  
## Pr(>|t|)  
## (Intercept) <2e-16  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.77  
##   
## (Intercept) \*\*\*  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.03412 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.004597, Adjusted R-squared: -0.04779   
## F-statistic: 0.08775 on 1 and 19 DF, p-value: 0.7703

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

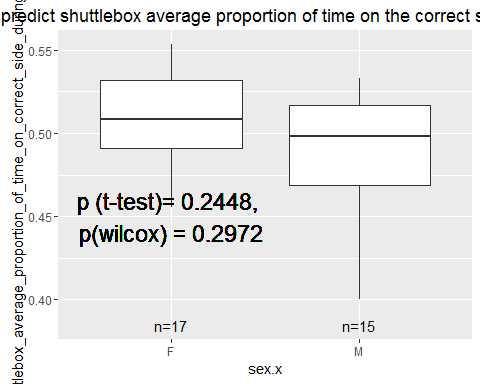
## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(0.533333333333333,  
## 0.501851851851852, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

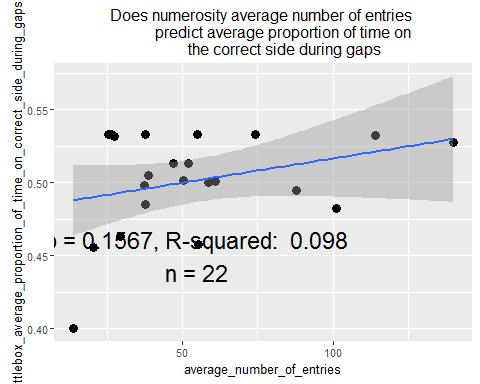
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps ~   
## df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.087849 -0.016189 0.002166 0.022615 0.041675   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)  
## (Intercept) 0.4832257 0.0141438 34.165 <2e-16  
## df.full$average\_number\_of\_entries 0.0003329 0.0002262 1.472 0.157  
##   
## (Intercept) \*\*\*  
## df.full$average\_number\_of\_entries   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.03318 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.09771, Adjusted R-squared: 0.05259   
## F-statistic: 2.166 on 1 and 20 DF, p-value: 0.1567

## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

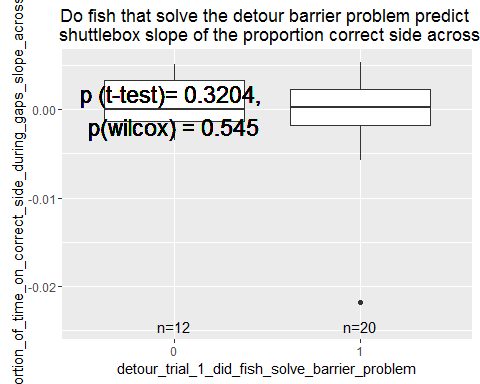
## Warning: Removed 30 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(0.00515387467556544,  
## -0.00133481646273638, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

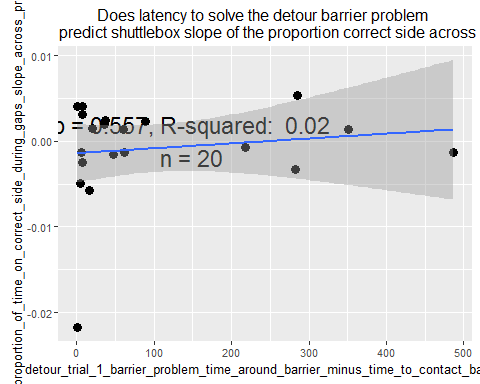
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.0203814 -0.0014927 0.0004103 0.0033443 0.0054965   
##   
## Coefficients:  
## Estimate  
## (Intercept) -1.426e-03  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 5.686e-06  
## Std. Error  
## (Intercept) 1.633e-03  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 9.502e-06  
## t value  
## (Intercept) -0.874  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.598  
## Pr(>|t|)  
## (Intercept) 0.394  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.557  
##   
## Residual standard error: 0.005893 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.01951, Adjusted R-squared: -0.03497   
## F-statistic: 0.3581 on 1 and 18 DF, p-value: 0.557

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

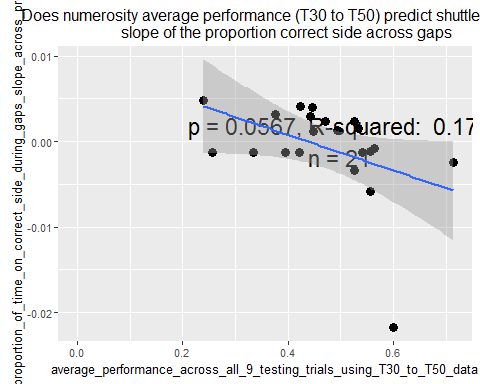
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.018406 -0.001670 0.001368 0.003074 0.004245   
##   
## Coefficients:  
## Estimate  
## (Intercept) 0.009096  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -0.020820  
## Std. Error  
## (Intercept) 0.004946  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.010260  
## t value  
## (Intercept) 1.839  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -2.029  
## Pr(>|t|)  
## (Intercept) 0.0816  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.0567  
##   
## (Intercept) .  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data .  
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.005173 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.1781, Adjusted R-squared: 0.1349   
## F-statistic: 4.118 on 1 and 19 DF, p-value: 0.05668

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

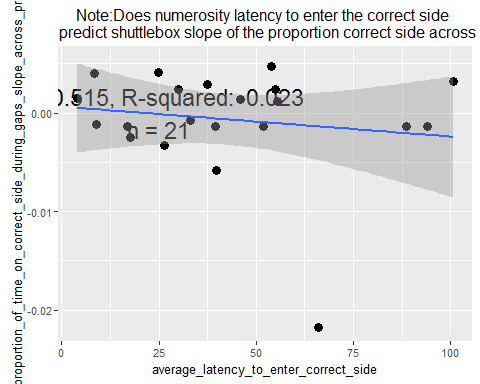
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.020421 -0.001443 0.000901 0.003435 0.005758   
##   
## Coefficients:  
## Estimate Std. Error  
## (Intercept) 6.225e-04 2.313e-03  
## df.full$average\_latency\_to\_enter\_correct\_side -3.037e-05 4.578e-05  
## t value Pr(>|t|)  
## (Intercept) 0.269 0.791  
## df.full$average\_latency\_to\_enter\_correct\_side -0.663 0.515  
##   
## Residual standard error: 0.005641 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.02264, Adjusted R-squared: -0.0288   
## F-statistic: 0.4401 on 1 and 19 DF, p-value: 0.515

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

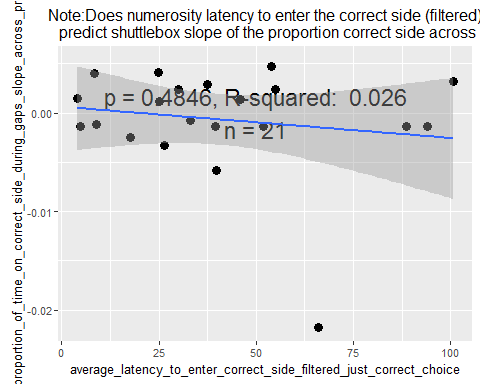
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.020326 -0.001482 0.001033 0.003501 0.005837   
##   
## Coefficients:  
## Estimate  
## (Intercept) 6.149e-04  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -3.169e-05  
## Std. Error  
## (Intercept) 2.189e-03  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 4.446e-05  
## t value  
## (Intercept) 0.281  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -0.713  
## Pr(>|t|)  
## (Intercept) 0.782  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.485  
##   
## Residual standard error: 0.005631 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.02605, Adjusted R-squared: -0.02521   
## F-statistic: 0.5082 on 1 and 19 DF, p-value: 0.4846

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

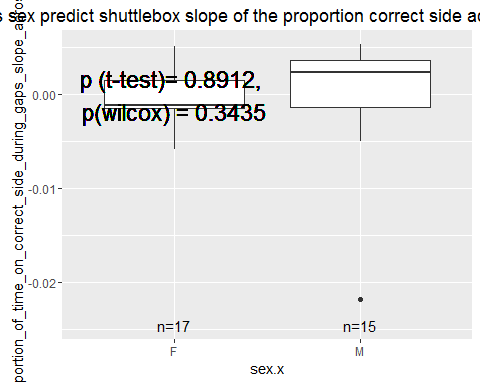
## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(-0.00133481646273638,  
## 0.00411568409343715, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

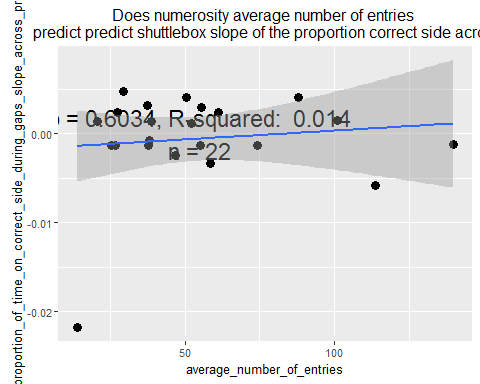
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.0204143 -0.0010524 0.0006581 0.0033278 0.0058236   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)  
## (Intercept) -1.665e-03 2.361e-03 -0.705 0.489  
## df.full$average\_number\_of\_entries 1.994e-05 3.776e-05 0.528 0.603  
##   
## Residual standard error: 0.00554 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.01374, Adjusted R-squared: -0.03557   
## F-statistic: 0.2787 on 1 and 20 DF, p-value: 0.6034

## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

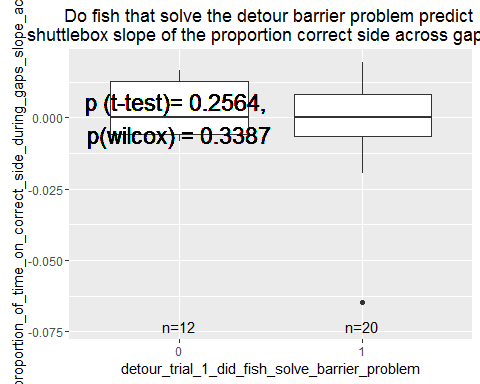
## Warning: Removed 30 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(0.0165578689388213,  
## -0.00589569160997735, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

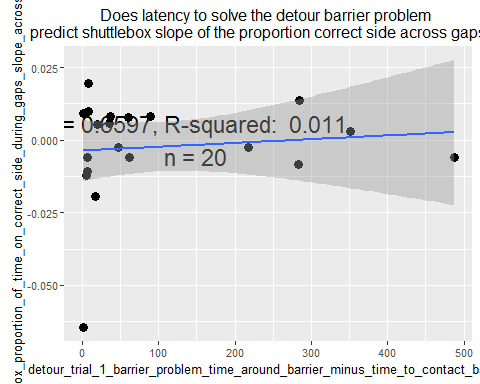
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$binned\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.060969 -0.007347 0.001268 0.010926 0.023062   
##   
## Coefficients:  
## Estimate  
## (Intercept) -3.690e-03  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 1.301e-05  
## Std. Error  
## (Intercept) 4.994e-03  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 2.907e-05  
## t value  
## (Intercept) -0.739  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.448  
## Pr(>|t|)  
## (Intercept) 0.47  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.66  
##   
## Residual standard error: 0.01803 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.01101, Adjusted R-squared: -0.04393   
## F-statistic: 0.2004 on 1 and 18 DF, p-value: 0.6597

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

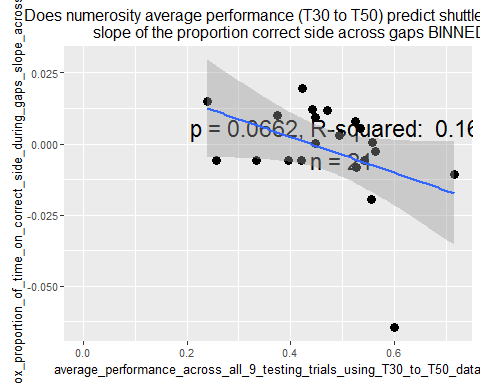
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$binned\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.054500 -0.007005 0.005184 0.009771 0.018508   
##   
## Coefficients:  
## Estimate  
## (Intercept) 0.02754  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -0.06281  
## Std. Error  
## (Intercept) 0.01553  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.03222  
## t value  
## (Intercept) 1.773  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -1.949  
## Pr(>|t|)  
## (Intercept) 0.0923  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.0662  
##   
## (Intercept) .  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data .  
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.01625 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.1667, Adjusted R-squared: 0.1228   
## F-statistic: 3.8 on 1 and 19 DF, p-value: 0.06617

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

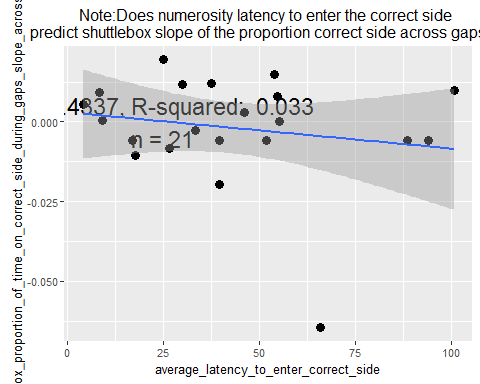
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$binned\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.060069 -0.004316 0.001880 0.011368 0.019390   
##   
## Coefficients:  
## Estimate Std. Error  
## (Intercept) 0.0029171 0.0071766  
## df.full$average\_latency\_to\_enter\_correct\_side -0.0001136 0.0001420  
## t value Pr(>|t|)  
## (Intercept) 0.406 0.689  
## df.full$average\_latency\_to\_enter\_correct\_side -0.800 0.434  
##   
## Residual standard error: 0.0175 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.03257, Adjusted R-squared: -0.01835   
## F-statistic: 0.6397 on 1 and 19 DF, p-value: 0.4337

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

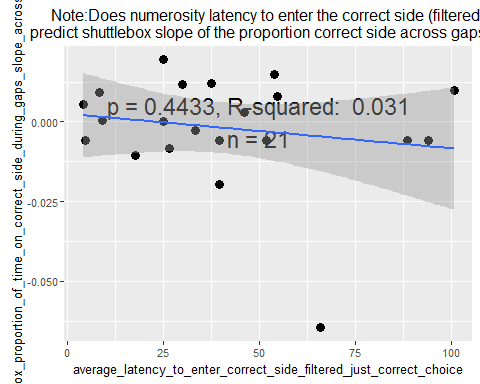
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$binned\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.059973 -0.004079 0.001224 0.011524 0.019705   
##   
## Coefficients:  
## Estimate  
## (Intercept) 0.0024699  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -0.0001083  
## Std. Error  
## (Intercept) 0.0068089  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.0001383  
## t value  
## (Intercept) 0.363  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -0.783  
## Pr(>|t|)  
## (Intercept) 0.721  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.443  
##   
## Residual standard error: 0.01752 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.03126, Adjusted R-squared: -0.01972   
## F-statistic: 0.6131 on 1 and 19 DF, p-value: 0.4433

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

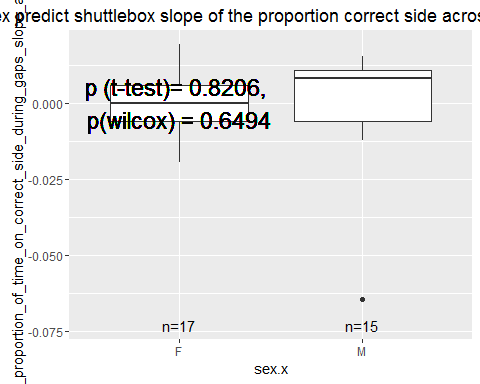
## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(-0.00589569160997735,  
## 0.0194759385235576, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

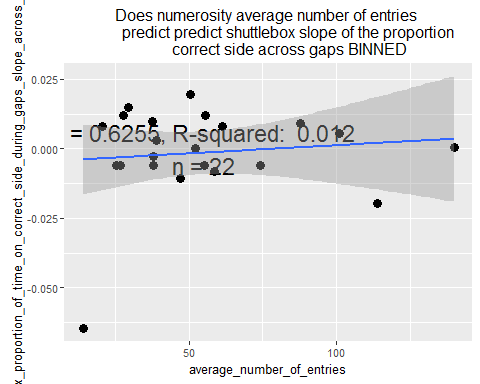
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$binned\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.060789 -0.004199 0.000741 0.010823 0.021194   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)  
## (Intercept) -0.0046729 0.0074046 -0.631 0.535  
## df.full$average\_number\_of\_entries 0.0000587 0.0001184 0.496 0.625  
##   
## Residual standard error: 0.01737 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.01214, Adjusted R-squared: -0.03725   
## F-statistic: 0.2458 on 1 and 20 DF, p-value: 0.6255

## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

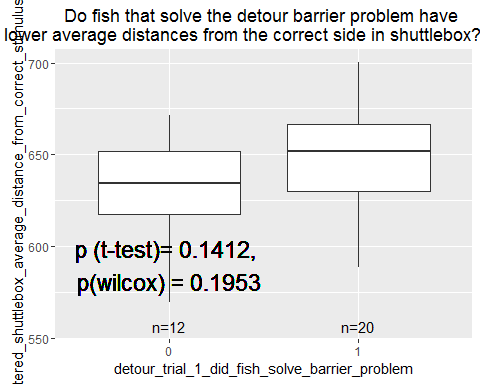
## Warning: Removed 30 rows containing missing values (geom\_point).



OK from here on out everything is going to be repeated but the shuttlebox data was cut off after 23 presentations, which was on average when fish stopped participating and "camped out" on one side for the rest of the trial

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

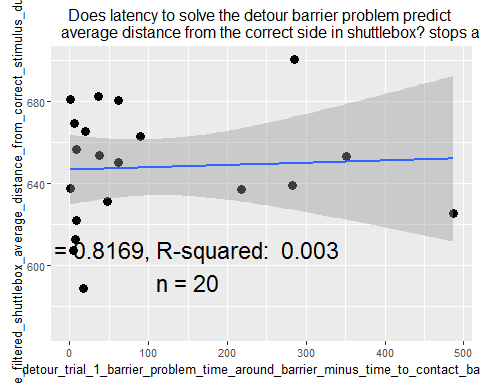
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_average\_distance\_from\_correct\_stimulus\_during\_gaps ~   
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -58.228 -18.227 2.665 19.596 50.551   
##   
## Coefficients:  
## Estimate  
## (Intercept) 646.75457  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.01106  
## Std. Error  
## (Intercept) 8.08410  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.04705  
## t value  
## (Intercept) 80.003  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.235  
## Pr(>|t|)  
## (Intercept) <2e-16  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.817  
##   
## (Intercept) \*\*\*  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 29.18 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.003059, Adjusted R-squared: -0.05233   
## F-statistic: 0.05523 on 1 and 18 DF, p-value: 0.8169

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

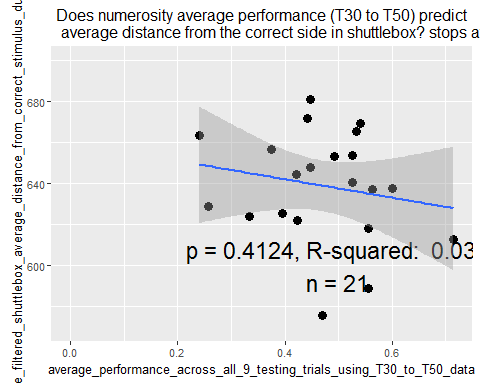
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_average\_distance\_from\_correct\_stimulus\_during\_gaps ~   
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -63.384 -16.791 4.075 15.276 41.074   
##   
## Coefficients:  
## Estimate  
## (Intercept) 660.03  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -44.90  
## Std. Error  
## (Intercept) 25.83  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 53.58  
## t value  
## (Intercept) 25.552  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -0.838  
## Pr(>|t|)  
## (Intercept) 3.56e-16  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.412  
##   
## (Intercept) \*\*\*  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 27.01 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.03565, Adjusted R-squared: -0.01511   
## F-statistic: 0.7023 on 1 and 19 DF, p-value: 0.4124

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

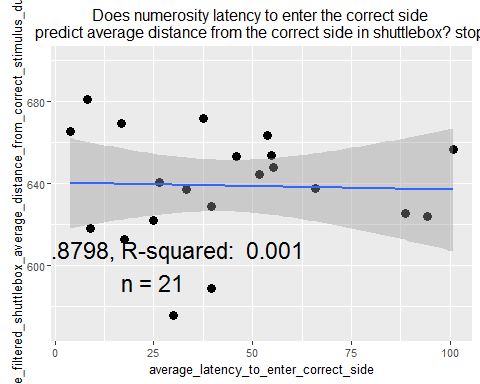
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_average\_distance\_from\_correct\_stimulus\_during\_gaps ~   
## df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -63.847 -13.222 0.994 19.680 40.914   
##   
## Coefficients:  
## Estimate Std. Error t value  
## (Intercept) 640.4122 11.2714 56.817  
## df.full$average\_latency\_to\_enter\_correct\_side -0.0342 0.2231 -0.153  
## Pr(>|t|)   
## (Intercept) <2e-16 \*\*\*  
## df.full$average\_latency\_to\_enter\_correct\_side 0.88   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 27.49 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.001235, Adjusted R-squared: -0.05133   
## F-statistic: 0.0235 on 1 and 19 DF, p-value: 0.8798

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

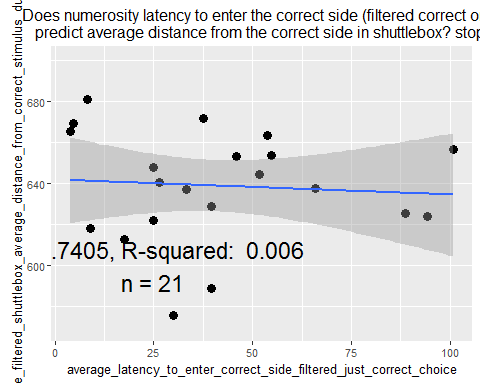
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_average\_distance\_from\_correct\_stimulus\_during\_gaps ~   
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -64.192 -11.094 0.512 22.067 39.731   
##   
## Coefficients:  
## Estimate  
## (Intercept) 641.91450  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -0.07277  
## Std. Error  
## (Intercept) 10.66155  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.21653  
## t value  
## (Intercept) 60.208  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -0.336  
## Pr(>|t|)  
## (Intercept) <2e-16  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.741  
##   
## (Intercept) \*\*\*  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 27.43 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.005909, Adjusted R-squared: -0.04641   
## F-statistic: 0.1129 on 1 and 19 DF, p-value: 0.7405

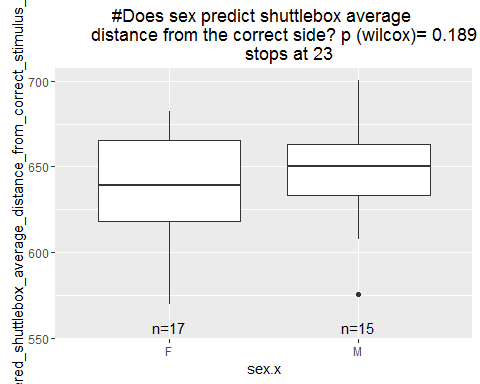
## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

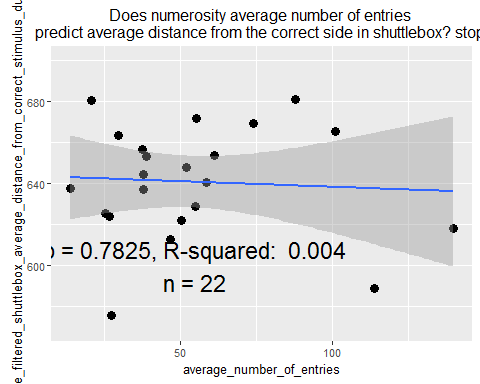
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_average\_distance\_from\_correct\_stimulus\_during\_gaps ~   
## df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -66.740 -17.677 1.396 19.573 42.021   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)  
## (Intercept) 643.75732 12.04284 53.46 <2e-16  
## df.full$average\_number\_of\_entries -0.05388 0.19258 -0.28 0.783  
##   
## (Intercept) \*\*\*  
## df.full$average\_number\_of\_entries   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 28.25 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.003898, Adjusted R-squared: -0.04591   
## F-statistic: 0.07827 on 1 and 20 DF, p-value: 0.7825

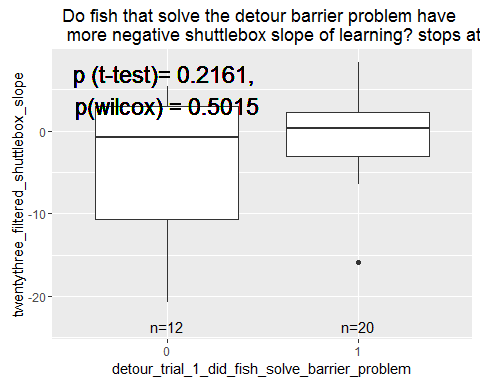
## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

## Warning: Removed 30 rows containing missing values (geom\_point).



## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

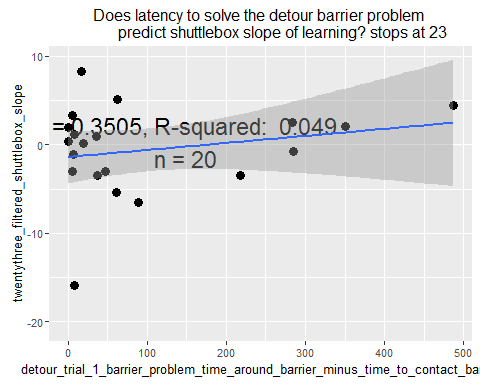
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_slope ~   
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -14.513 -2.030 1.046 2.151 9.569   
##   
## Coefficients:  
## Estimate  
## (Intercept) -1.402552  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.007960  
## Std. Error  
## (Intercept) 1.427077  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.008305  
## t value  
## (Intercept) -0.983  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.958  
## Pr(>|t|)  
## (Intercept) 0.339  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.351  
##   
## Residual standard error: 5.151 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.04855, Adjusted R-squared: -0.004304   
## F-statistic: 0.9186 on 1 and 18 DF, p-value: 0.3505

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

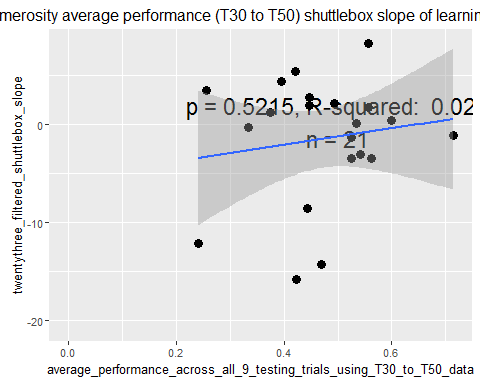
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_slope ~   
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -13.973 -2.415 1.076 3.604 9.068   
##   
## Coefficients:  
## Estimate  
## (Intercept) -5.427  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 8.387  
## Std. Error  
## (Intercept) 6.191  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 12.842  
## t value  
## (Intercept) -0.877  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.653  
## Pr(>|t|)  
## (Intercept) 0.392  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.522  
##   
## Residual standard error: 6.475 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.02195, Adjusted R-squared: -0.02952   
## F-statistic: 0.4265 on 1 and 19 DF, p-value: 0.5215

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

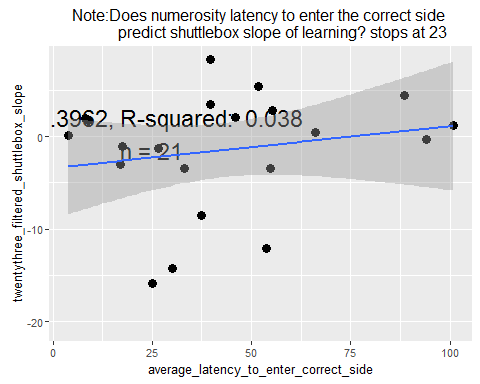
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_slope ~   
## df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -13.5541 -1.5088 0.9557 3.8539 9.9313   
##   
## Coefficients:  
## Estimate Std. Error t value  
## (Intercept) -3.42471 2.63260 -1.301  
## df.full$average\_latency\_to\_enter\_correct\_side 0.04523 0.05210 0.868  
## Pr(>|t|)  
## (Intercept) 0.209  
## df.full$average\_latency\_to\_enter\_correct\_side 0.396  
##   
## Residual standard error: 6.421 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.03814, Adjusted R-squared: -0.01248   
## F-statistic: 0.7535 on 1 and 19 DF, p-value: 0.3962

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

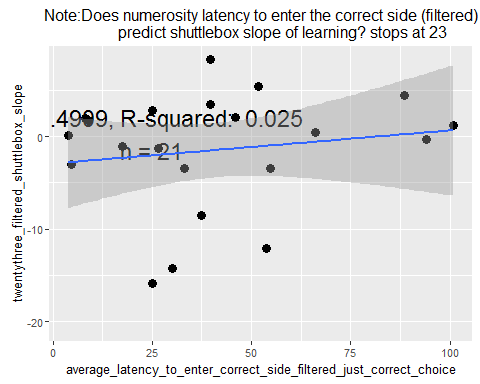
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_slope ~   
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -13.7942 -1.6713 0.9848 4.3820 9.8297   
##   
## Coefficients:  
## Estimate  
## (Intercept) -2.95084  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.03585  
## Std. Error  
## (Intercept) 2.51259  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.05103  
## t value  
## (Intercept) -1.174  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.703  
## Pr(>|t|)  
## (Intercept) 0.255  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.491  
##   
## Residual standard error: 6.464 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.02532, Adjusted R-squared: -0.02598   
## F-statistic: 0.4935 on 1 and 19 DF, p-value: 0.4909

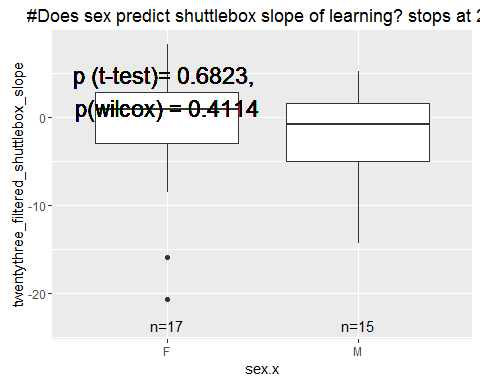
## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

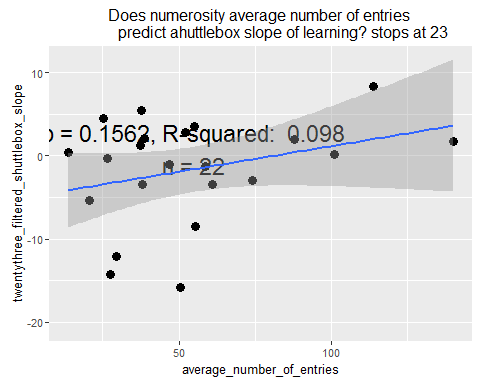
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_slope ~   
## df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -13.9502 -2.1133 0.5814 4.5885 8.0898   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)   
## (Intercept) -4.99232 2.60610 -1.916 0.0698 .  
## df.full$average\_number\_of\_entries 0.06141 0.04167 1.474 0.1562   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 6.114 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.09794, Adjusted R-squared: 0.05283   
## F-statistic: 2.171 on 1 and 20 DF, p-value: 0.1562

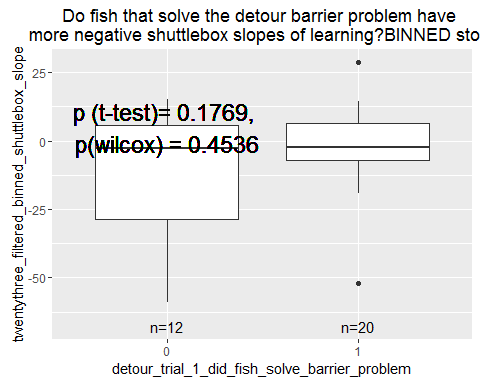
## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

## Warning: Removed 30 rows containing missing values (geom\_point).



## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

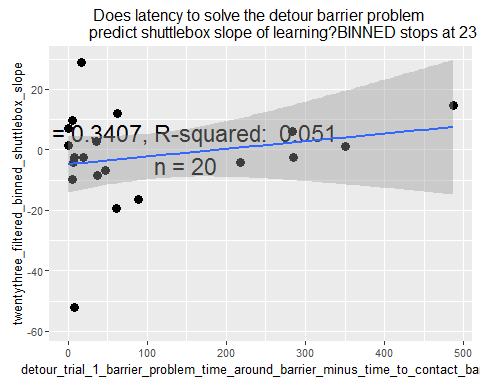
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_binned\_shuttlebox\_slope ~   
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -47.464 -4.836 1.179 6.797 33.172   
##   
## Coefficients:  
## Estimate  
## (Intercept) -4.80604  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.02535  
## Std. Error  
## (Intercept) 4.45051  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.02590  
## t value  
## (Intercept) -1.080  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.979  
## Pr(>|t|)  
## (Intercept) 0.294  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.341  
##   
## Residual standard error: 16.06 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.05052, Adjusted R-squared: -0.002228   
## F-statistic: 0.9578 on 1 and 18 DF, p-value: 0.3407

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

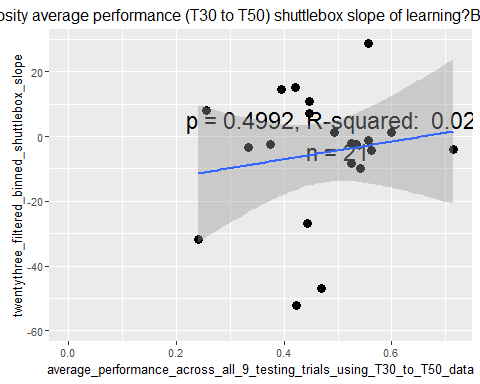
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_binned\_shuttlebox\_slope ~   
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -45.609 -5.657 1.735 12.855 31.625   
##   
## Coefficients:  
## Estimate  
## (Intercept) -18.04  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 27.37  
## Std. Error  
## (Intercept) 19.15  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 39.73  
## t value  
## (Intercept) -0.942  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.689  
## Pr(>|t|)  
## (Intercept) 0.358  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.499  
##   
## Residual standard error: 20.03 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.02438, Adjusted R-squared: -0.02697   
## F-statistic: 0.4747 on 1 and 19 DF, p-value: 0.4992

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

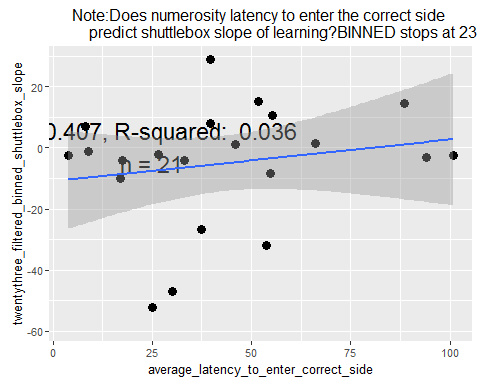
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_binned\_shuttlebox\_slope ~   
## df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -44.432 -5.111 4.493 13.503 34.409   
##   
## Coefficients:  
## Estimate Std. Error t value  
## (Intercept) -11.0491 8.1608 -1.354  
## df.full$average\_latency\_to\_enter\_correct\_side 0.1370 0.1615 0.848  
## Pr(>|t|)  
## (Intercept) 0.192  
## df.full$average\_latency\_to\_enter\_correct\_side 0.407  
##   
## Residual standard error: 19.9 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.03647, Adjusted R-squared: -0.01424   
## F-statistic: 0.7191 on 1 and 19 DF, p-value: 0.407

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

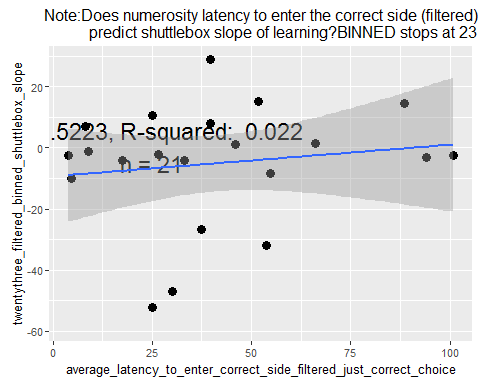
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_binned\_shuttlebox\_slope ~   
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -45.244 -3.622 3.921 13.202 34.096   
##   
## Coefficients:  
## Estimate  
## (Intercept) -9.3962  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.1032  
## Std. Error  
## (Intercept) 7.7957  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.1583  
## t value  
## (Intercept) -1.205  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.652  
## Pr(>|t|)  
## (Intercept) 0.243  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.522  
##   
## Residual standard error: 20.05 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.02188, Adjusted R-squared: -0.0296   
## F-statistic: 0.425 on 1 and 19 DF, p-value: 0.5223

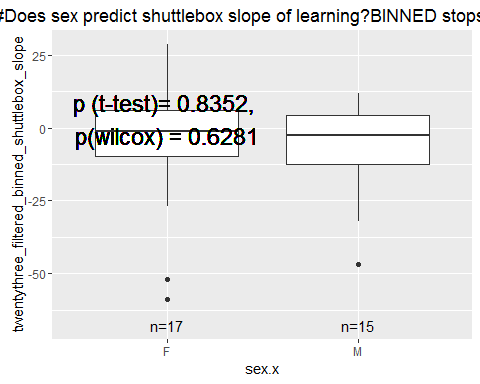
## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

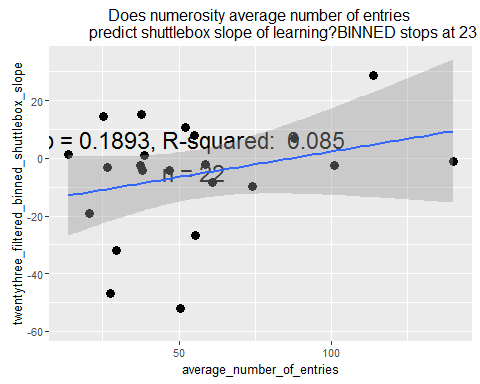
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_binned\_shuttlebox\_slope ~   
## df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -45.564 -7.565 3.742 12.599 25.517   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)   
## (Intercept) -15.4238 8.1562 -1.891 0.0732 .  
## df.full$average\_number\_of\_entries 0.1772 0.1304 1.359 0.1893   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 19.14 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.08452, Adjusted R-squared: 0.03875   
## F-statistic: 1.846 on 1 and 20 DF, p-value: 0.1893

## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

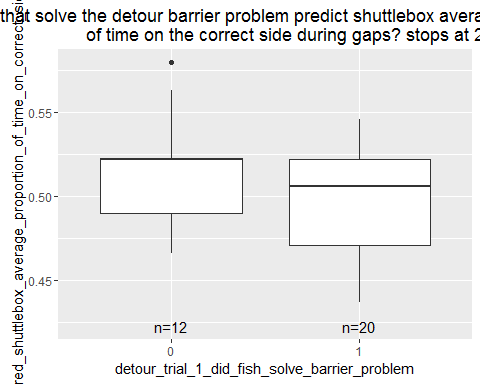
## Warning: Removed 30 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(0.579710144927536,  
## 0.521739130434783, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

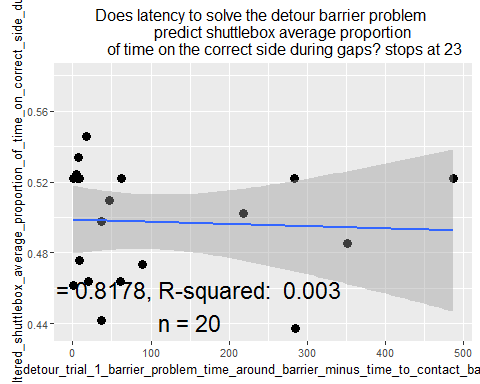
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps ~   
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.057868 -0.026570 0.009081 0.024334 0.047503   
##   
## Coefficients:  
## Estimate  
## (Intercept) 4.986e-01  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier -1.240e-05  
## Std. Error  
## (Intercept) 9.118e-03  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 5.307e-05  
## t value  
## (Intercept) 54.683  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier -0.234  
## Pr(>|t|)  
## (Intercept) <2e-16  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.818  
##   
## (Intercept) \*\*\*  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.03291 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.003026, Adjusted R-squared: -0.05236   
## F-statistic: 0.05463 on 1 and 18 DF, p-value: 0.8178

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

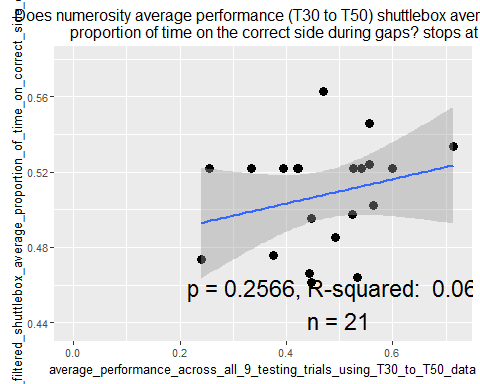
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps ~   
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.048094 -0.019447 0.009395 0.017172 0.055058   
##   
## Coefficients:  
## Estimate  
## (Intercept) 0.47738  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.06460  
## Std. Error  
## (Intercept) 0.02663  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.05523  
## t value  
## (Intercept) 17.93  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 1.17  
## Pr(>|t|)  
## (Intercept) 2.3e-13  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.257  
##   
## (Intercept) \*\*\*  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.02785 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.06716, Adjusted R-squared: 0.01807   
## F-statistic: 1.368 on 1 and 19 DF, p-value: 0.2566

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

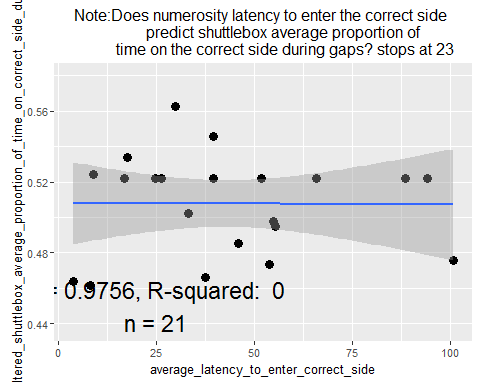
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps ~   
## df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.04660 -0.02218 0.01390 0.01436 0.05500   
##   
## Coefficients:  
## Estimate Std. Error  
## (Intercept) 5.080e-01 1.182e-02  
## df.full$average\_latency\_to\_enter\_correct\_side -7.250e-06 2.340e-04  
## t value Pr(>|t|)   
## (Intercept) 42.975 <2e-16 \*\*\*  
## df.full$average\_latency\_to\_enter\_correct\_side -0.031 0.976   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.02883 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 5.054e-05, Adjusted R-squared: -0.05258   
## F-statistic: 0.0009603 on 1 and 19 DF, p-value: 0.9756

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

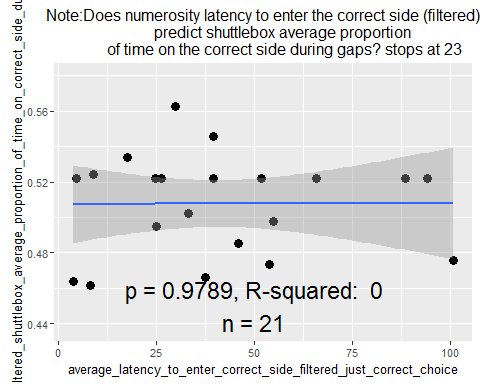
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps ~   
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.04616 -0.02223 0.01374 0.01413 0.05516   
##   
## Coefficients:  
## Estimate  
## (Intercept) 5.075e-01  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 6.098e-06  
## Std. Error  
## (Intercept) 1.121e-02  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 2.276e-04  
## t value  
## (Intercept) 45.276  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.027  
## Pr(>|t|)  
## (Intercept) <2e-16  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.979  
##   
## (Intercept) \*\*\*  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.02883 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 3.777e-05, Adjusted R-squared: -0.05259   
## F-statistic: 0.0007176 on 1 and 19 DF, p-value: 0.9789

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

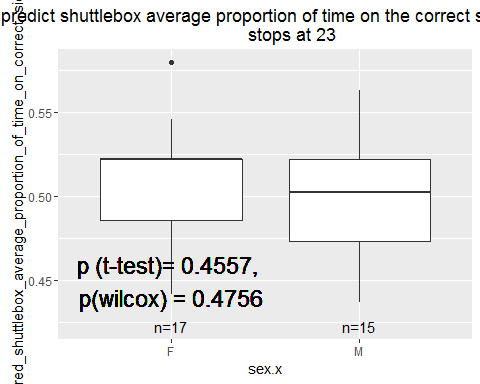
## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(0.521739130434783,  
## 0.521739130434783, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

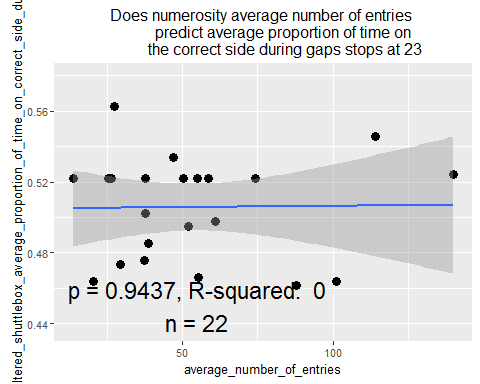
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_average\_proportion\_of\_time\_on\_correct\_side\_during\_gaps ~   
## df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.04485 -0.02721 0.01585 0.01644 0.05748   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)  
## (Intercept) 5.049e-01 1.266e-02 39.895 <2e-16  
## df.full$average\_number\_of\_entries 1.447e-05 2.024e-04 0.072 0.944  
##   
## (Intercept) \*\*\*  
## df.full$average\_number\_of\_entries   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 0.02969 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.0002556, Adjusted R-squared: -0.04973   
## F-statistic: 0.005114 on 1 and 20 DF, p-value: 0.9437

## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

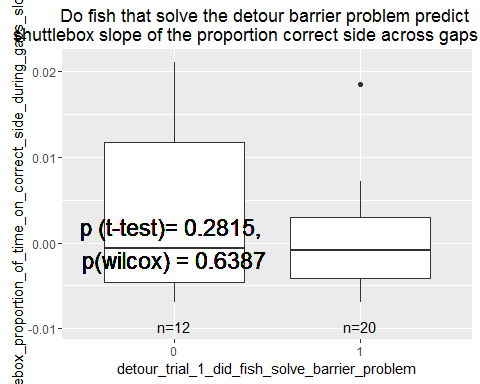
## Warning: Removed 30 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(0.0211352657004831,  
## -0.00691699604743084, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

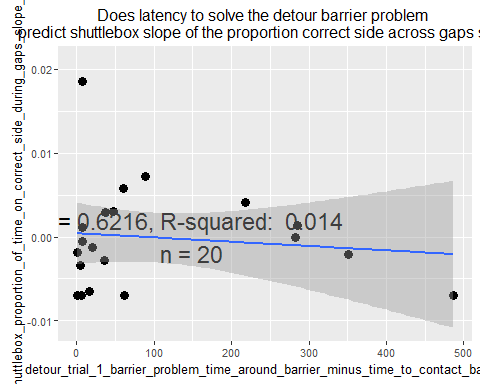
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.0073350 -0.0040216 -0.0008494 0.0027709 0.0181180   
##   
## Coefficients:  
## Estimate  
## (Intercept) 4.232e-04  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier -5.118e-06  
## Std. Error  
## (Intercept) 1.751e-03  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 1.019e-05  
## t value  
## (Intercept) 0.242  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier -0.502  
## Pr(>|t|)  
## (Intercept) 0.812  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.622  
##   
## Residual standard error: 0.006321 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.01382, Adjusted R-squared: -0.04097   
## F-statistic: 0.2522 on 1 and 18 DF, p-value: 0.6216

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

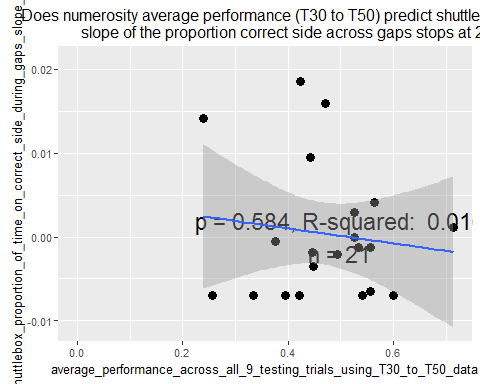
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.009192 -0.006130 -0.001762 0.003092 0.017717   
##   
## Coefficients:  
## Estimate  
## (Intercept) 0.004566  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -0.008942  
## Std. Error  
## (Intercept) 0.007740  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.016054  
## t value  
## (Intercept) 0.590  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -0.557  
## Pr(>|t|)  
## (Intercept) 0.562  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.584  
##   
## Residual standard error: 0.008094 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.01607, Adjusted R-squared: -0.03572   
## F-statistic: 0.3103 on 1 and 19 DF, p-value: 0.584

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

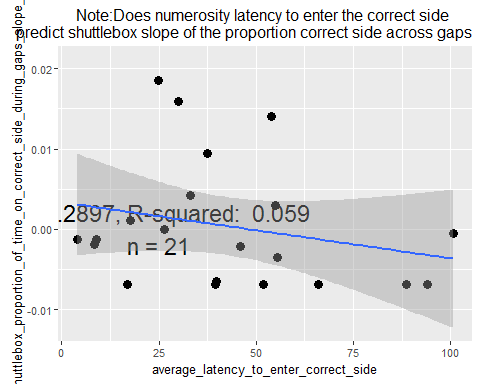
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.009093 -0.004649 -0.003004 0.003144 0.016883   
##   
## Coefficients:  
## Estimate Std. Error  
## (Intercept) 3.362e-03 3.246e-03  
## df.full$average\_latency\_to\_enter\_correct\_side -6.997e-05 6.424e-05  
## t value Pr(>|t|)  
## (Intercept) 1.036 0.313  
## df.full$average\_latency\_to\_enter\_correct\_side -1.089 0.290  
##   
## Residual standard error: 0.007916 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.05878, Adjusted R-squared: 0.009238   
## F-statistic: 1.186 on 1 and 19 DF, p-value: 0.2897

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

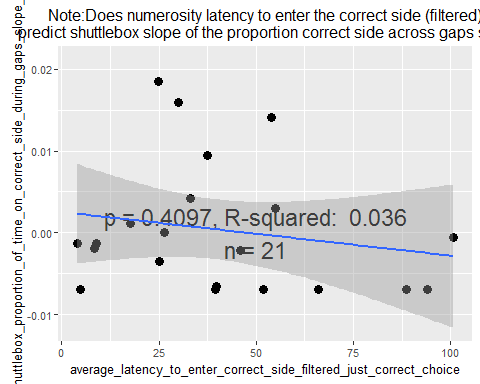
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.009210 -0.004736 -0.003328 0.003346 0.017288   
##   
## Coefficients:  
## Estimate  
## (Intercept) 2.541e-03  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -5.333e-05  
## Std. Error  
## (Intercept) 3.114e-03  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 6.325e-05  
## t value  
## (Intercept) 0.816  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -0.843  
## Pr(>|t|)  
## (Intercept) 0.425  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.410  
##   
## Residual standard error: 0.008011 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.03606, Adjusted R-squared: -0.01467   
## F-statistic: 0.7109 on 1 and 19 DF, p-value: 0.4097

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

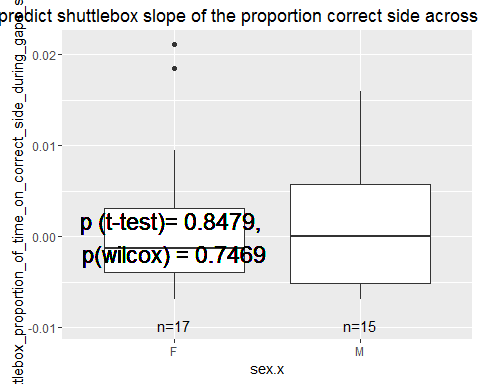
## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(-0.00691699604743084,  
## 0.0185002195871761, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

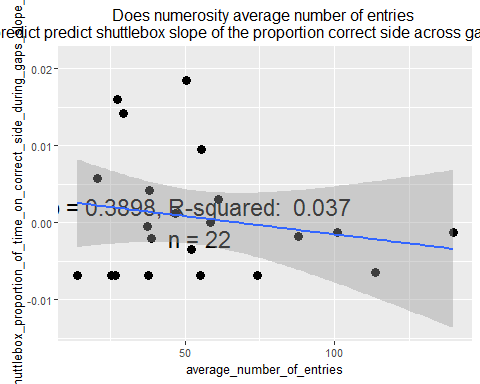
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.0094337 -0.0060213 -0.0006457 0.0027622 0.0177060   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)  
## (Intercept) 3.173e-03 3.363e-03 0.944 0.357  
## df.full$average\_number\_of\_entries -4.726e-05 5.377e-05 -0.879 0.390  
##   
## Residual standard error: 0.007889 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.03719, Adjusted R-squared: -0.01095   
## F-statistic: 0.7726 on 1 and 20 DF, p-value: 0.3898

## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

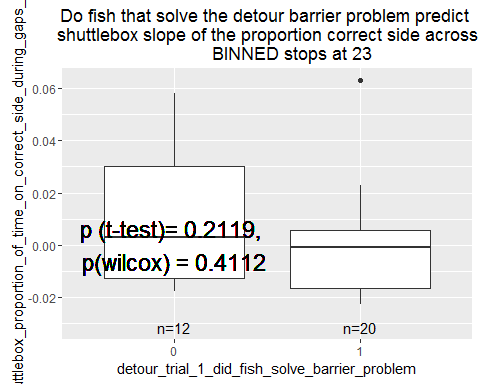
## Warning: Removed 30 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(0.0572089947089947,  
## -0.0178571428571428, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

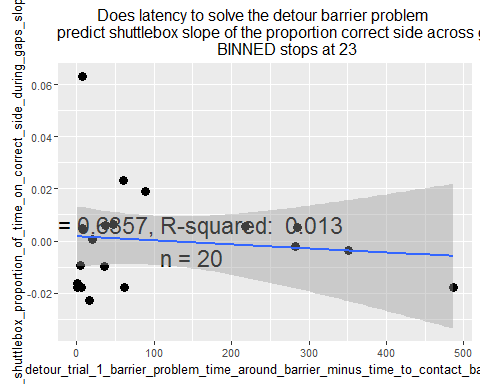
## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_binned\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.024197 -0.013487 0.000420 0.005649 0.061532   
##   
## Coefficients:  
## Estimate  
## (Intercept) 1.754e-03  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier -1.555e-05  
## Std. Error  
## (Intercept) 5.545e-03  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 3.227e-05  
## t value  
## (Intercept) 0.316  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier -0.482  
## Pr(>|t|)  
## (Intercept) 0.755  
## df.full$detour\_trial\_1\_barrier\_problem\_time\_around\_barrier\_minus\_time\_to\_contact\_barrier 0.636  
##   
## Residual standard error: 0.02001 on 18 degrees of freedom  
## (32 observations deleted due to missingness)  
## Multiple R-squared: 0.01274, Adjusted R-squared: -0.04211   
## F-statistic: 0.2322 on 1 and 18 DF, p-value: 0.6357

## Warning: Removed 32 rows containing non-finite values (stat\_smooth).

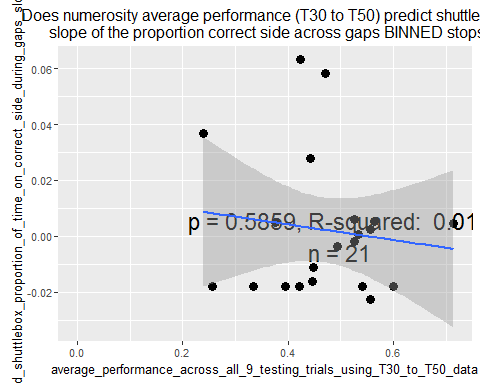
## Warning: Removed 32 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_binned\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.026047 -0.018992 -0.002691 0.005843 0.059607   
##   
## Coefficients:  
## Estimate  
## (Intercept) 0.01531  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -0.02778  
## Std. Error  
## (Intercept) 0.02417  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.05013  
## t value  
## (Intercept) 0.633  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data -0.554  
## Pr(>|t|)  
## (Intercept) 0.534  
## df.full$average\_performance\_across\_all\_9\_testing\_trials\_using\_T30\_to\_T50\_data 0.586  
##   
## Residual standard error: 0.02528 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.01591, Adjusted R-squared: -0.03589   
## F-statistic: 0.3071 on 1 and 19 DF, p-value: 0.5859

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

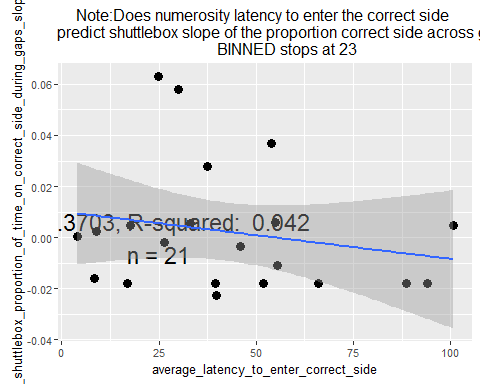
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_binned\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_latency\_to\_enter\_correct\_side)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.025547 -0.015818 -0.007285 0.005921 0.057579   
##   
## Coefficients:  
## Estimate Std. Error  
## (Intercept) 0.0102099 0.0102225  
## df.full$average\_latency\_to\_enter\_correct\_side -0.0001857 0.0002023  
## t value Pr(>|t|)  
## (Intercept) 0.999 0.33  
## df.full$average\_latency\_to\_enter\_correct\_side -0.918 0.37  
##   
## Residual standard error: 0.02493 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.04245, Adjusted R-squared: -0.007951   
## F-statistic: 0.8422 on 1 and 19 DF, p-value: 0.3703

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

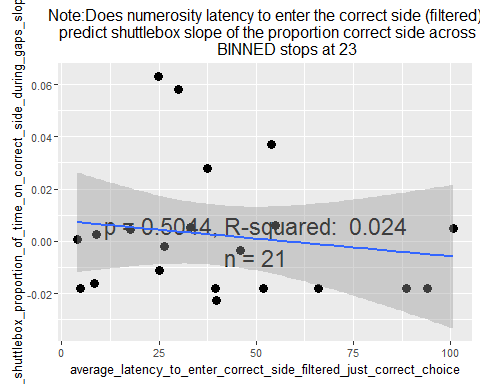
## Warning: Removed 31 rows containing missing values (geom\_point).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_binned\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.025117 -0.016713 -0.006187 0.005588 0.058754   
##   
## Coefficients:  
## Estimate  
## (Intercept) 0.0077787  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -0.0001353  
## Std. Error  
## (Intercept) 0.0097860  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.0001988  
## t value  
## (Intercept) 0.795  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice -0.680  
## Pr(>|t|)  
## (Intercept) 0.437  
## df.full$average\_latency\_to\_enter\_correct\_side\_filtered\_just\_correct\_choice 0.504  
##   
## Residual standard error: 0.02517 on 19 degrees of freedom  
## (31 observations deleted due to missingness)  
## Multiple R-squared: 0.02379, Adjusted R-squared: -0.02759   
## F-statistic: 0.4631 on 1 and 19 DF, p-value: 0.5044

## Warning: Removed 31 rows containing non-finite values (stat\_smooth).

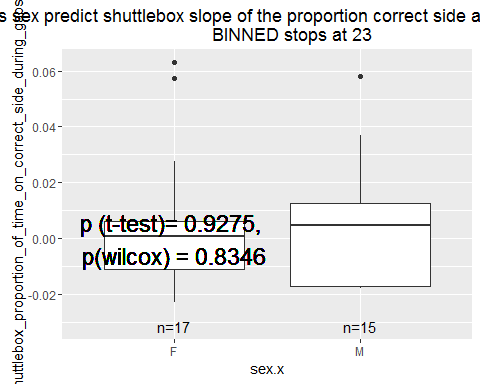
## Warning: Removed 31 rows containing missing values (geom\_point).



## Warning in wilcox.test.default(x = c(-0.0178571428571428,  
## 0.0631613756613757, : cannot compute exact p-value with ties

## Warning: Removed 20 rows containing non-finite values (stat\_boxplot).

## Warning: Removed 20 rows containing non-finite values (stat\_n\_text).



##   
## Call:  
## lm(formula = df.full$twentythree\_filtered\_binned\_shuttlebox\_proportion\_of\_time\_on\_correct\_side\_during\_gaps\_slope\_across\_presentations ~   
## df.full$average\_number\_of\_entries)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -0.027699 -0.017357 -0.002791 0.011387 0.059321   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)  
## (Intercept) 0.0121287 0.0105111 1.154 0.262  
## df.full$average\_number\_of\_entries -0.0001647 0.0001681 -0.980 0.339  
##   
## Residual standard error: 0.02466 on 20 degrees of freedom  
## (30 observations deleted due to missingness)  
## Multiple R-squared: 0.04579, Adjusted R-squared: -0.001917   
## F-statistic: 0.9598 on 1 and 20 DF, p-value: 0.3389

## Warning: Removed 30 rows containing non-finite values (stat\_smooth).

## Warning: Removed 30 rows containing missing values (geom\_point).

