EyeDOC

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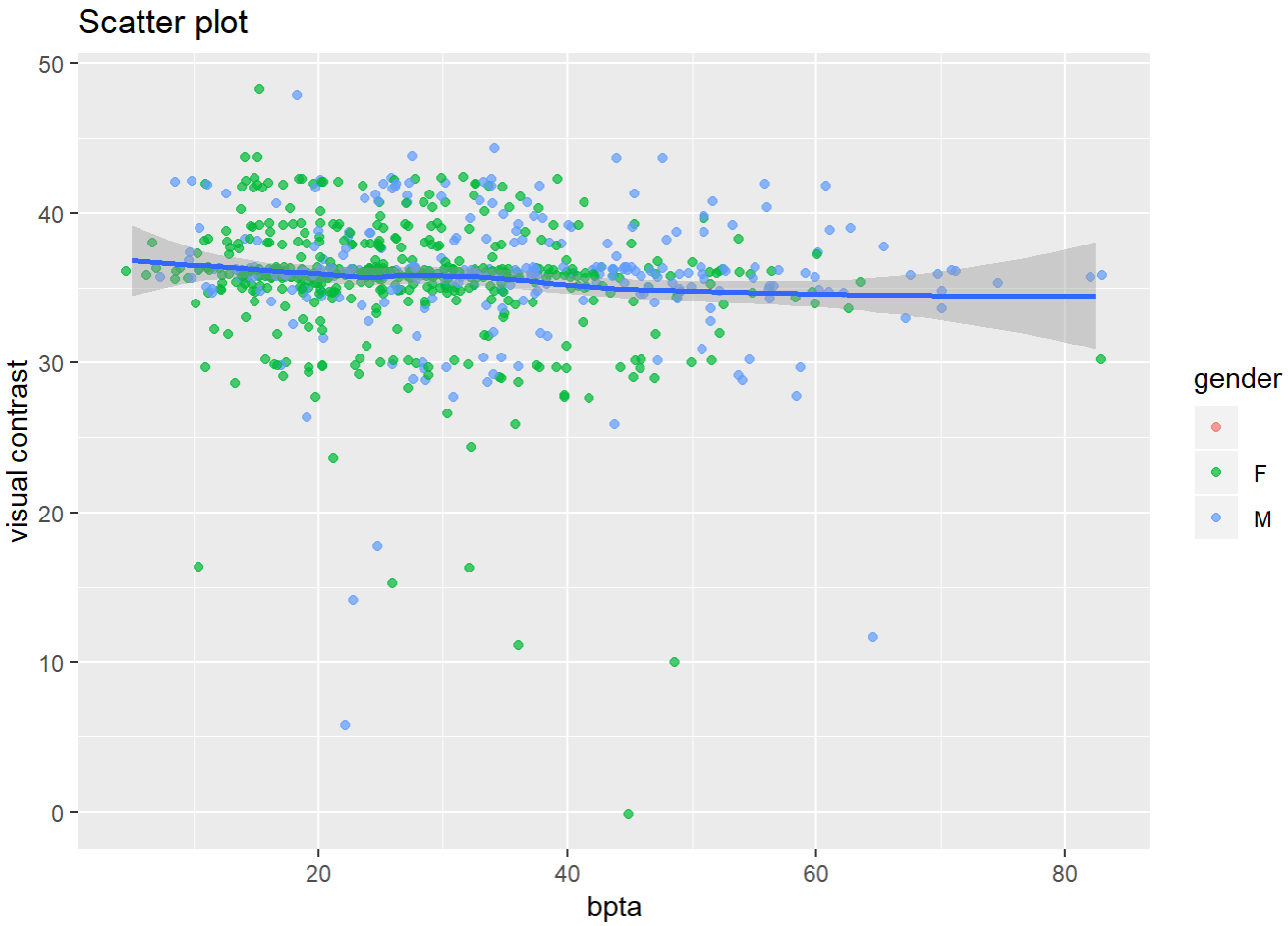
Scatter plot

##1 BPTA

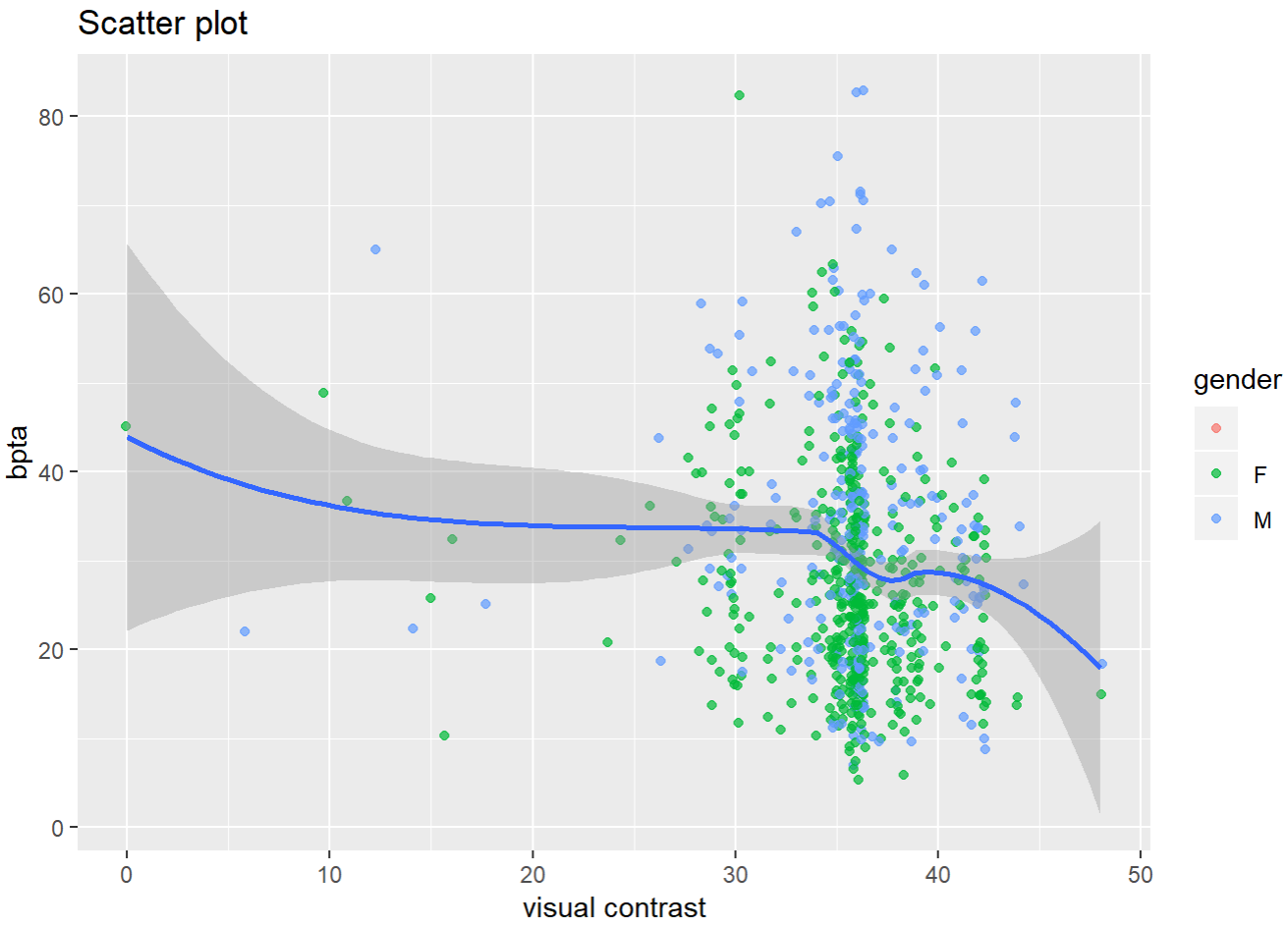
###1.1.1 BPTA & contrast sensitivity

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```



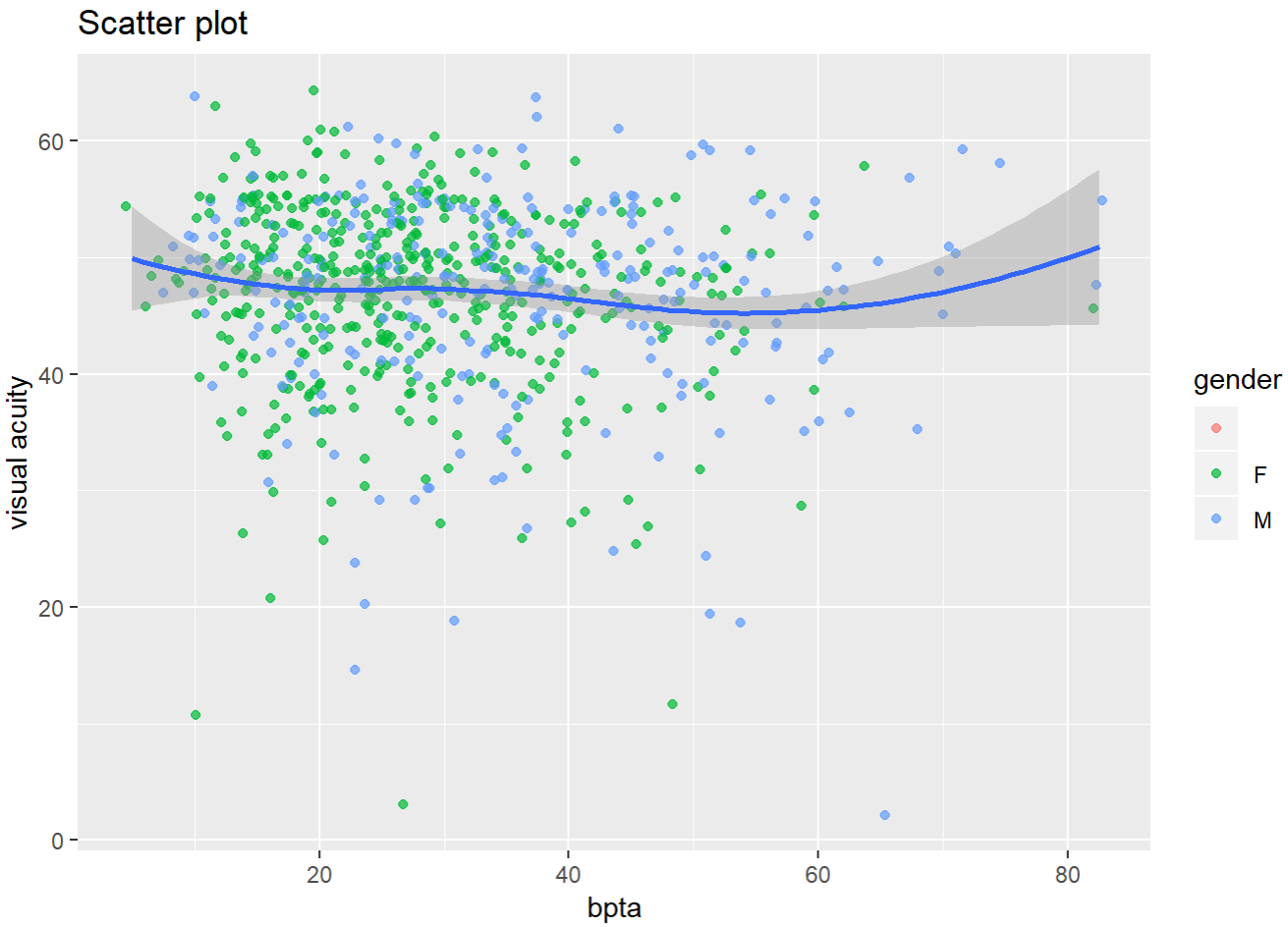
###1.1.2

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

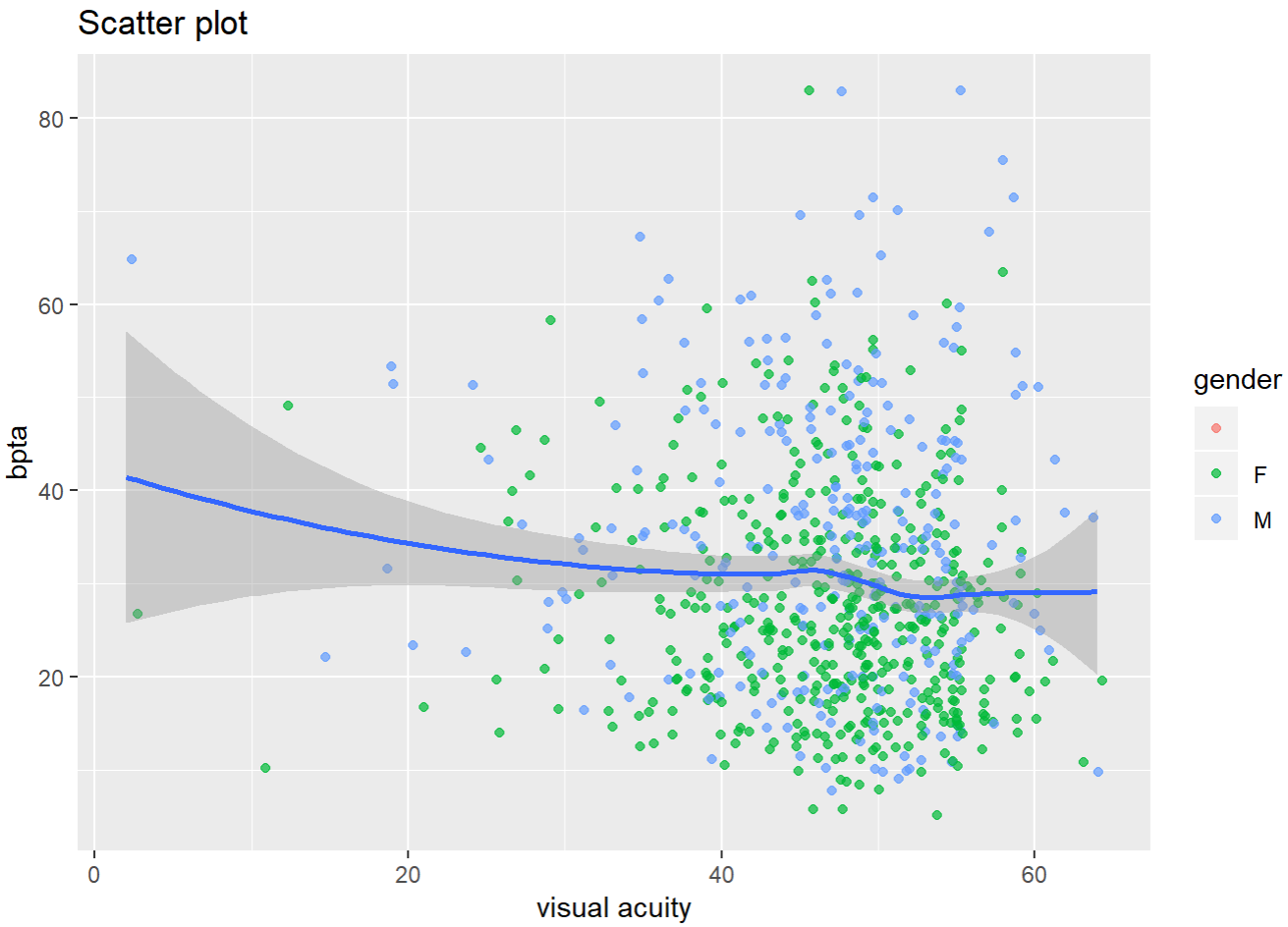


1.2 BPTA & Visual Acuity

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```



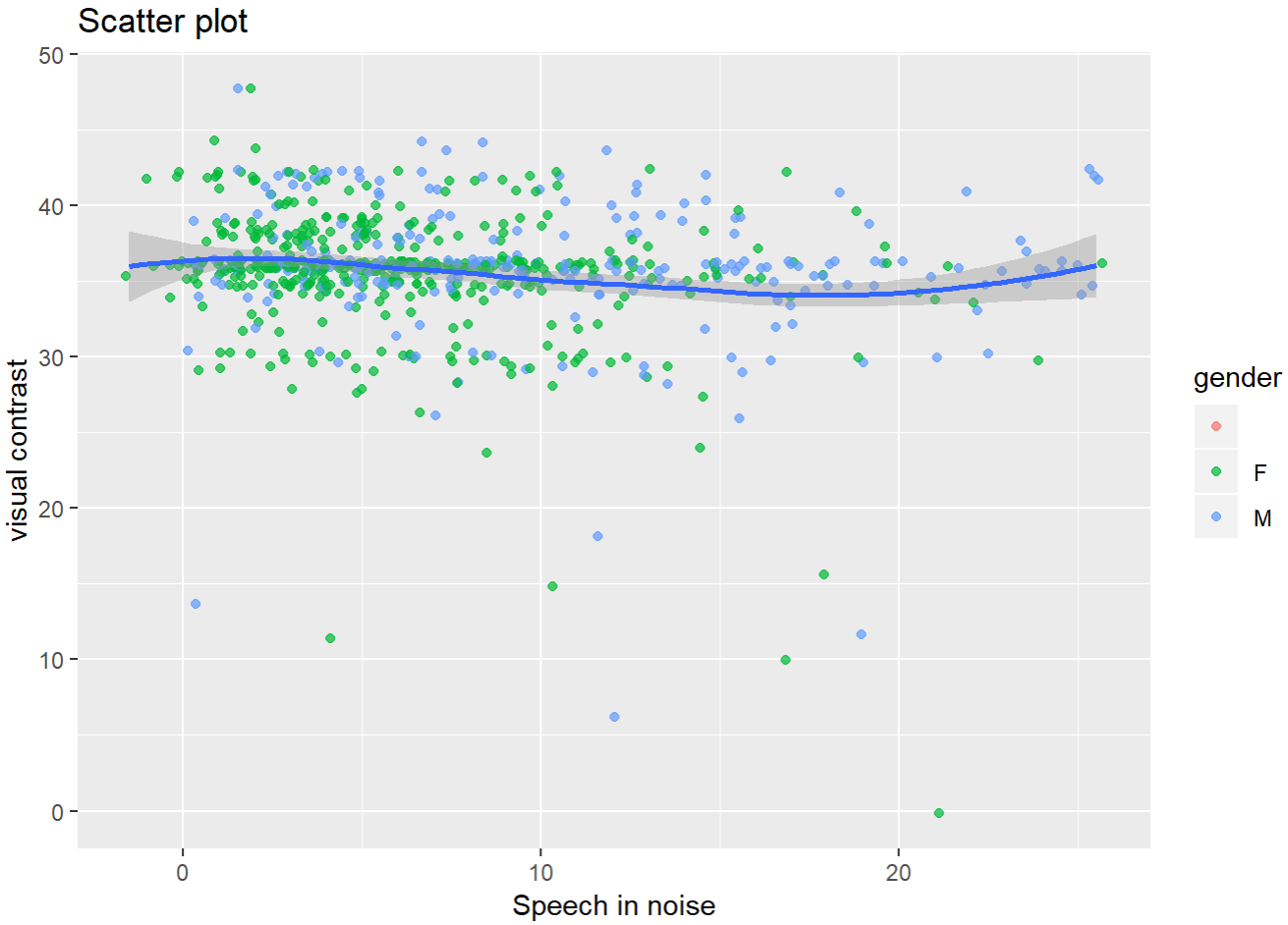

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```



2 SNR

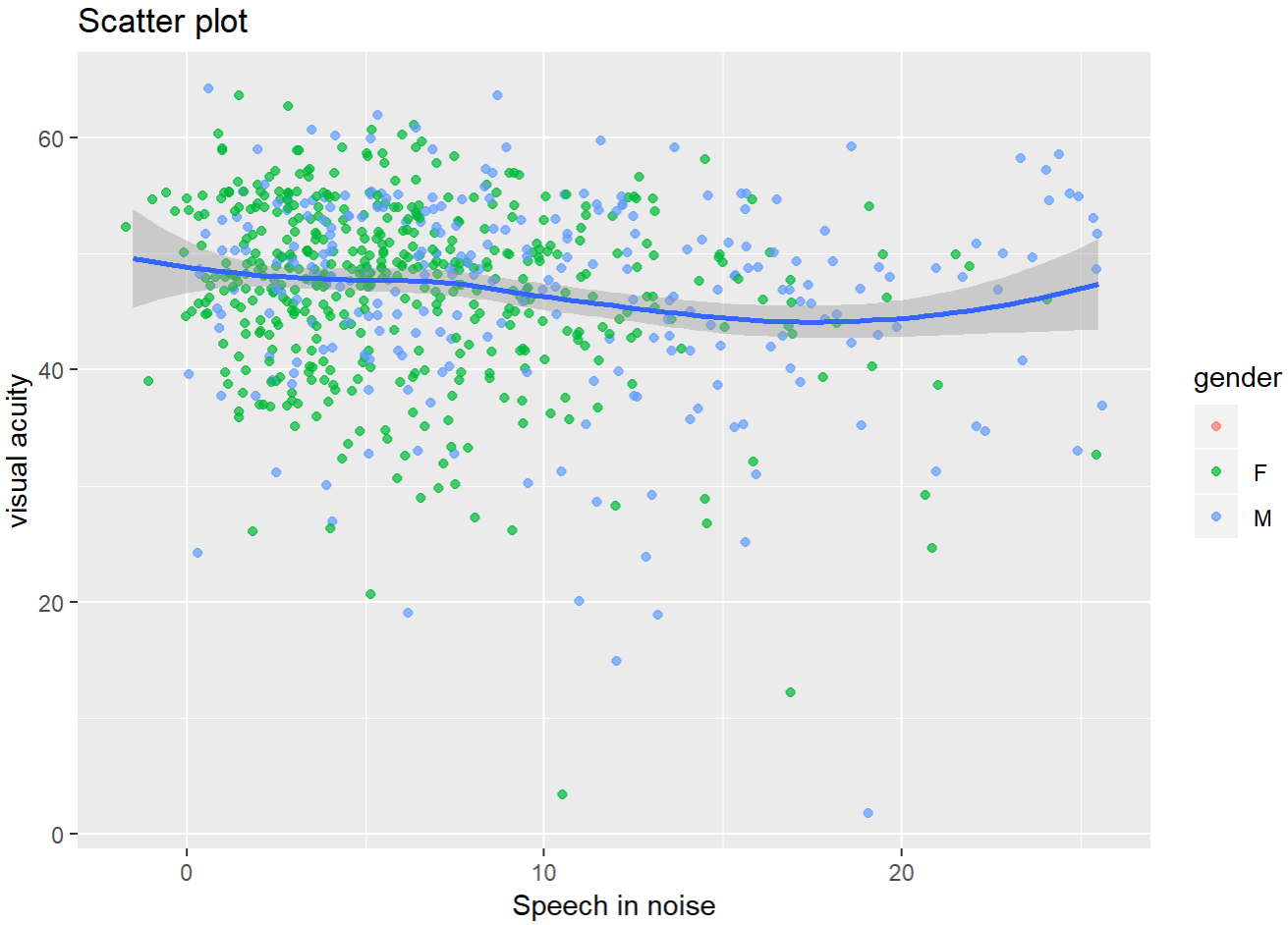
2.1 Signal to noise ratio and Visual contrast sensitivity

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```



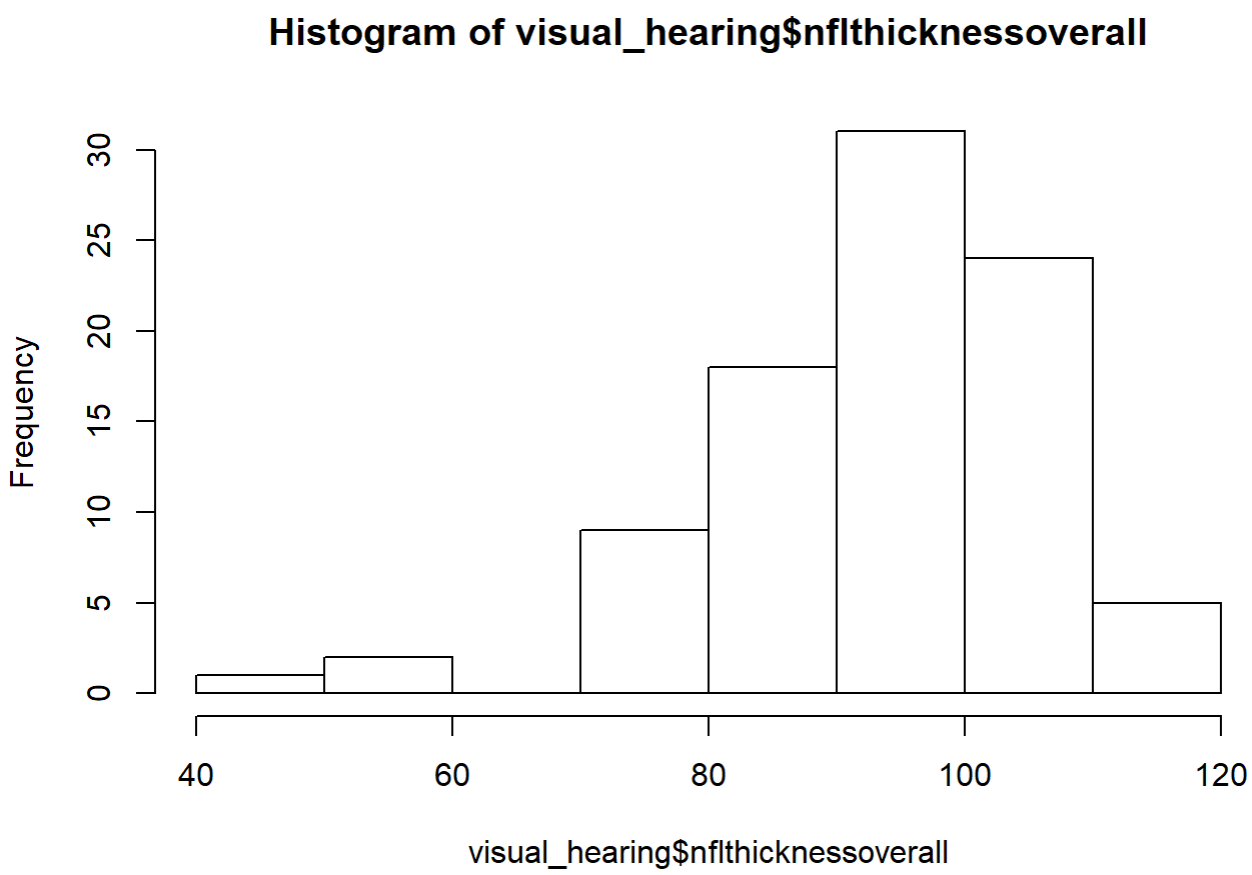
2.2 Signal to noise ratio and Visual acuity

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

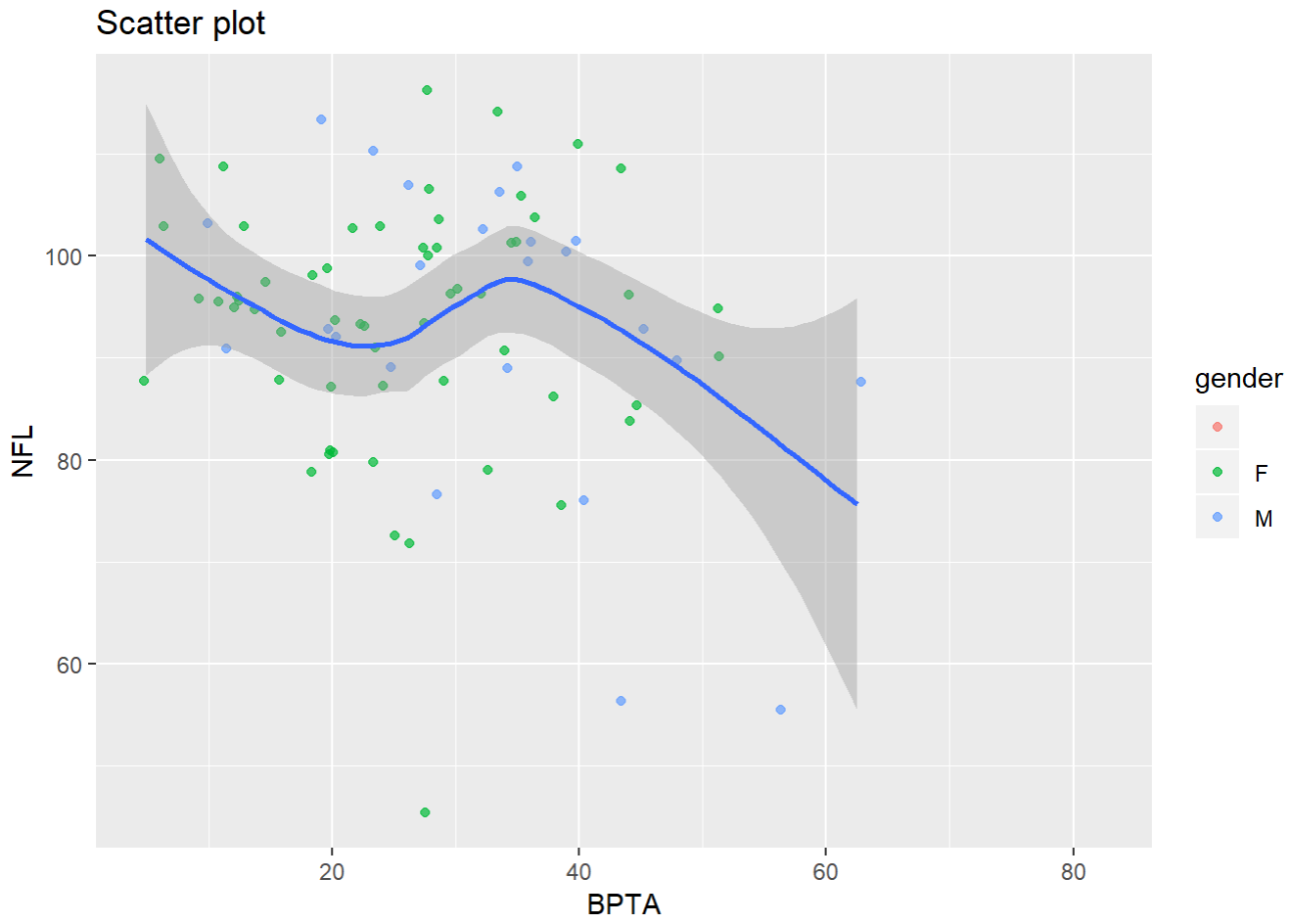

Scatter plot
visual acuity
60
40
20
0
0
10
20
Speech in noise
gender
F
M

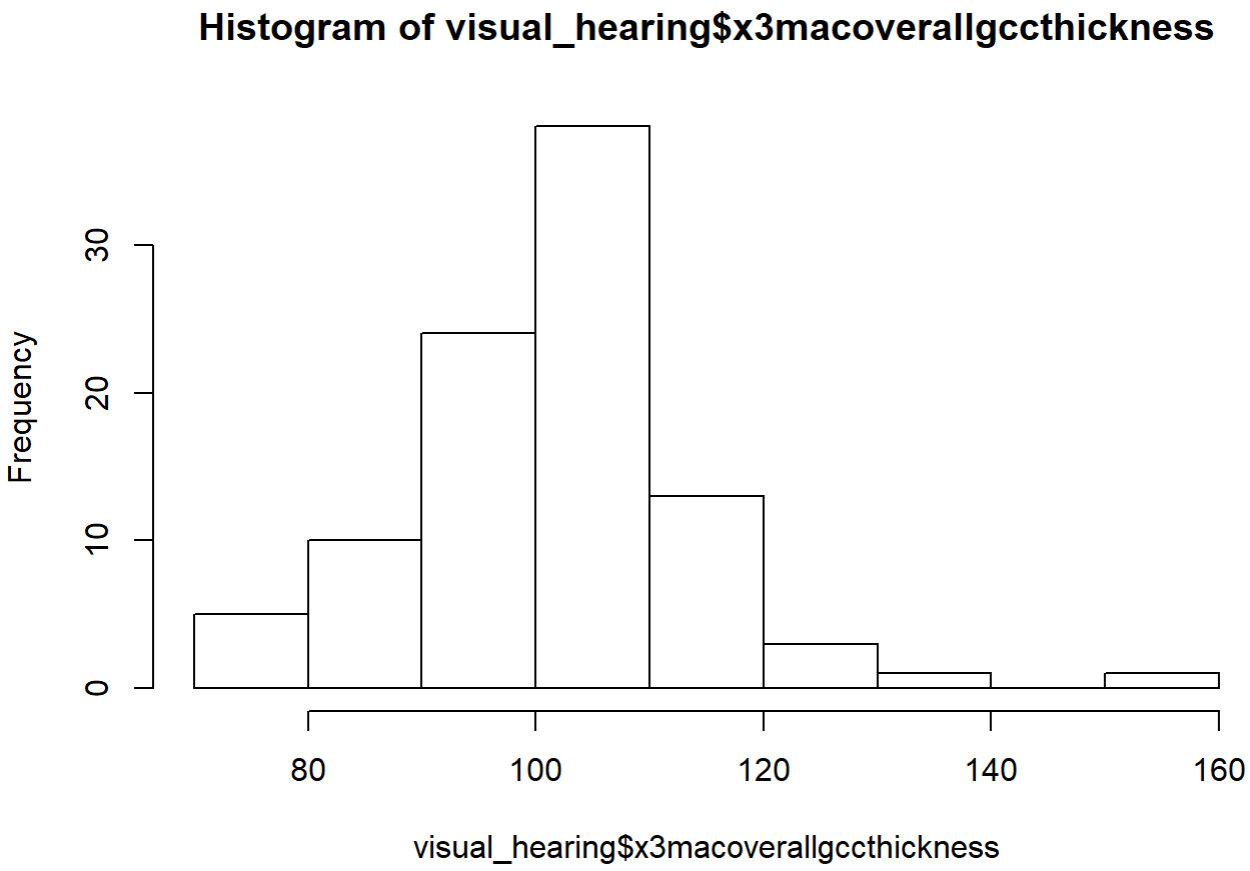
OCT

PTA

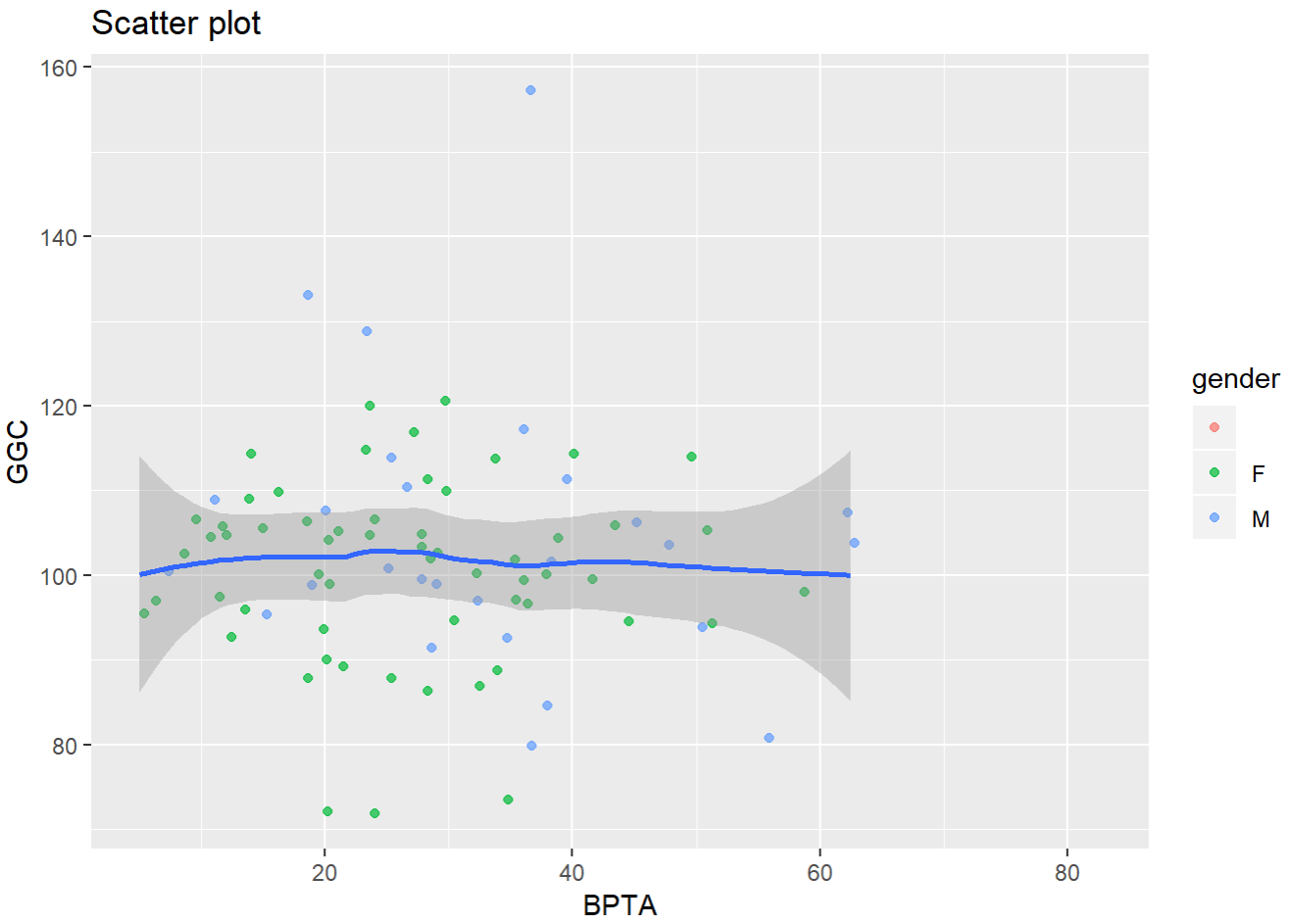



```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

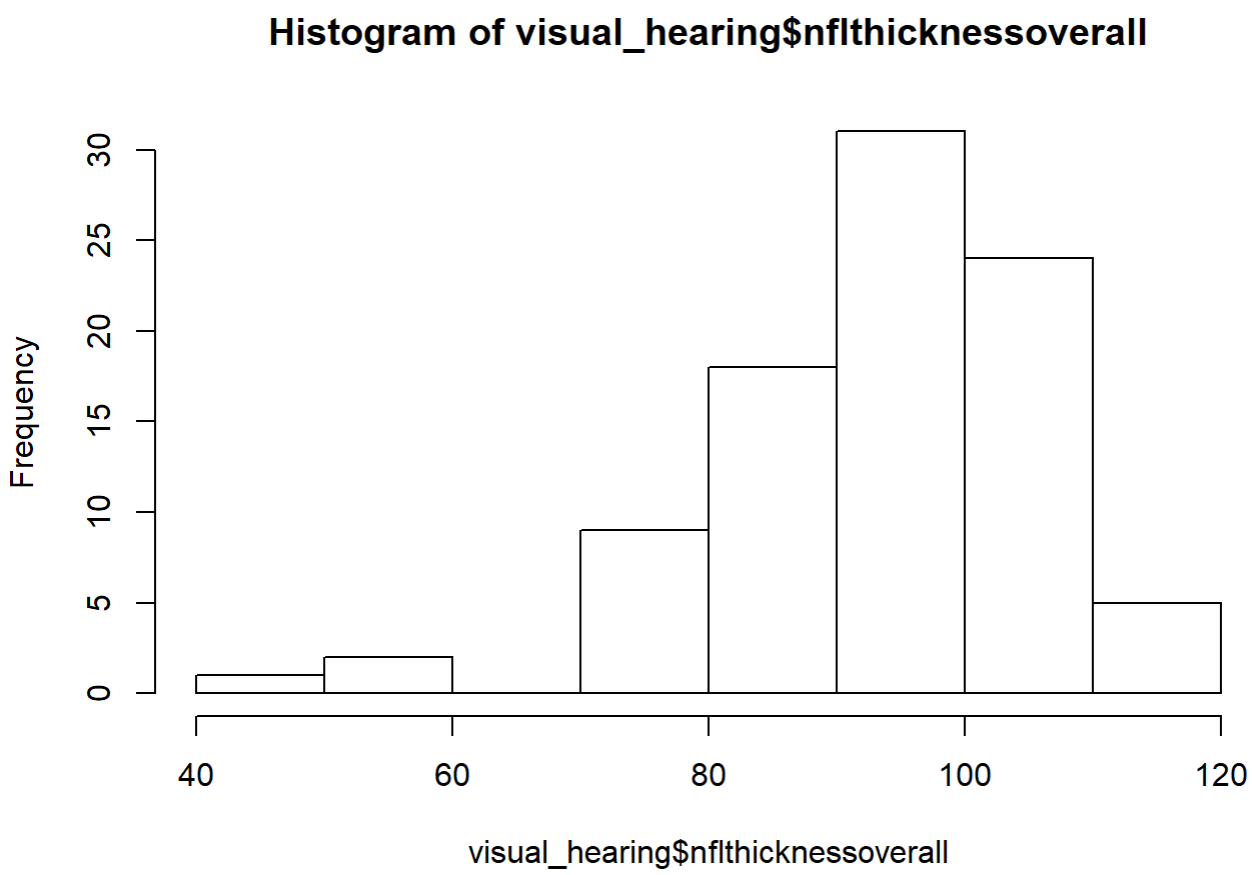

Scatter plot
NFL
BPTA
gender
F
M
100
80
60
20
40
60
80


Histogram of visual_hearing$x3macoverallgccthickness
Frequency
visual_hearing$x3macoverallgccthickness
0
10
20
30
80
100
120
140
160

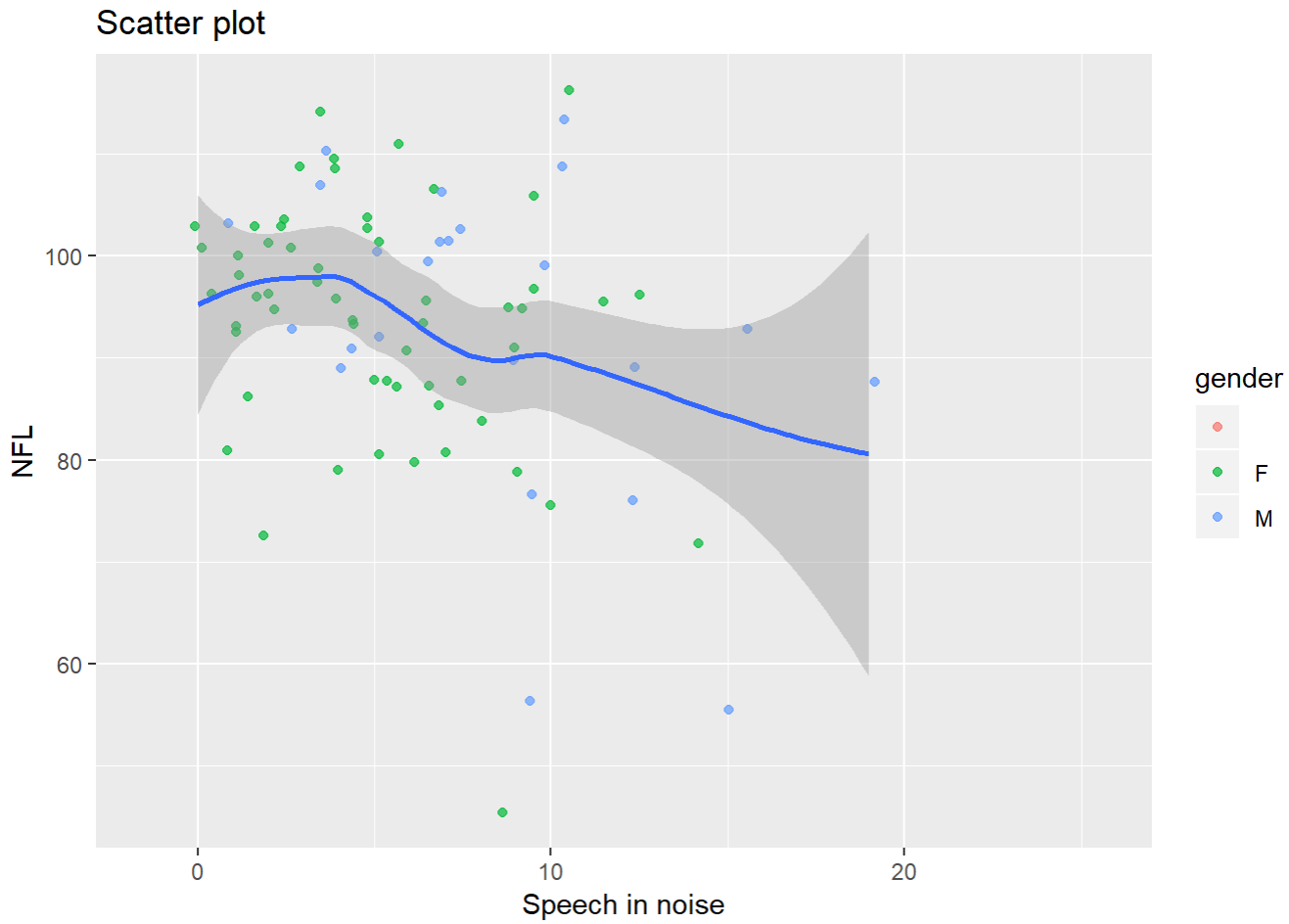
```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```

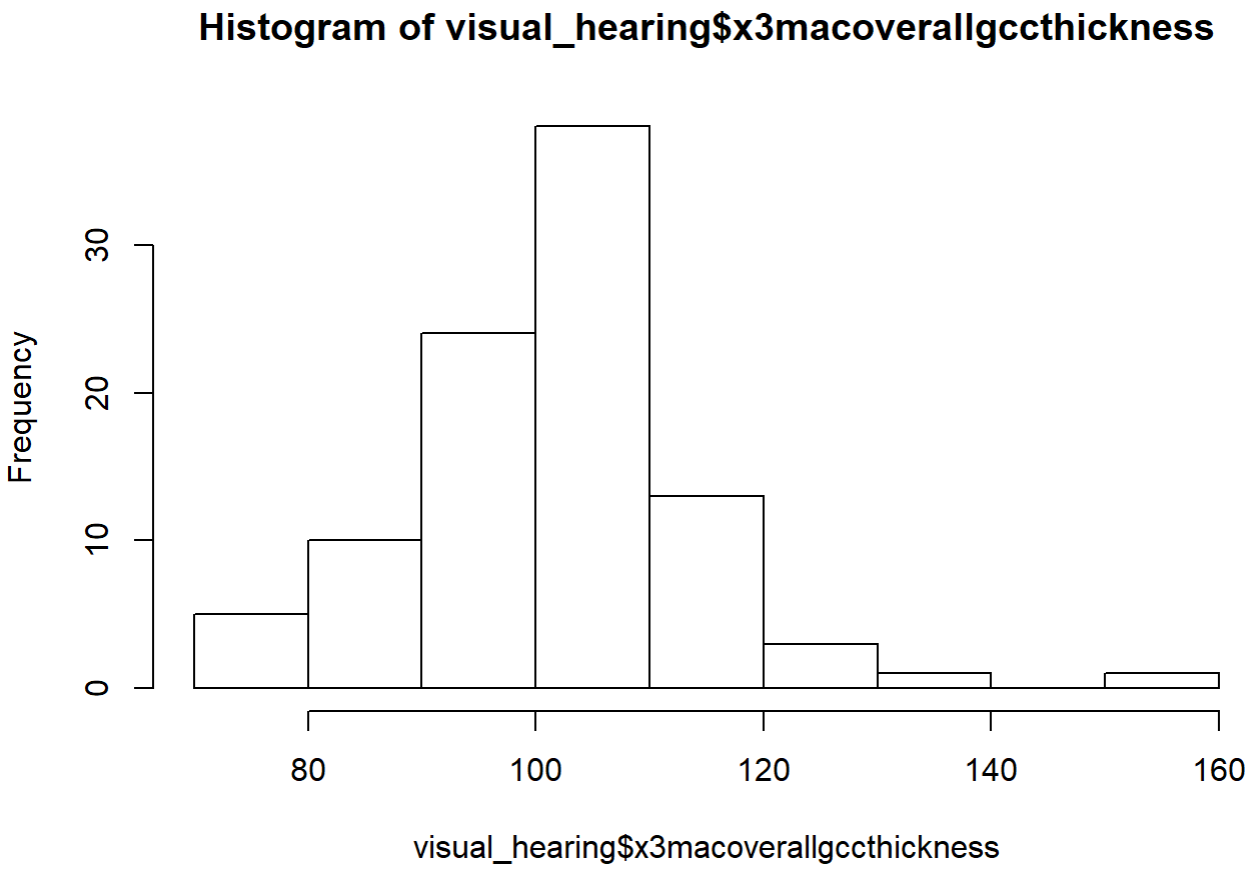


Speech in noise

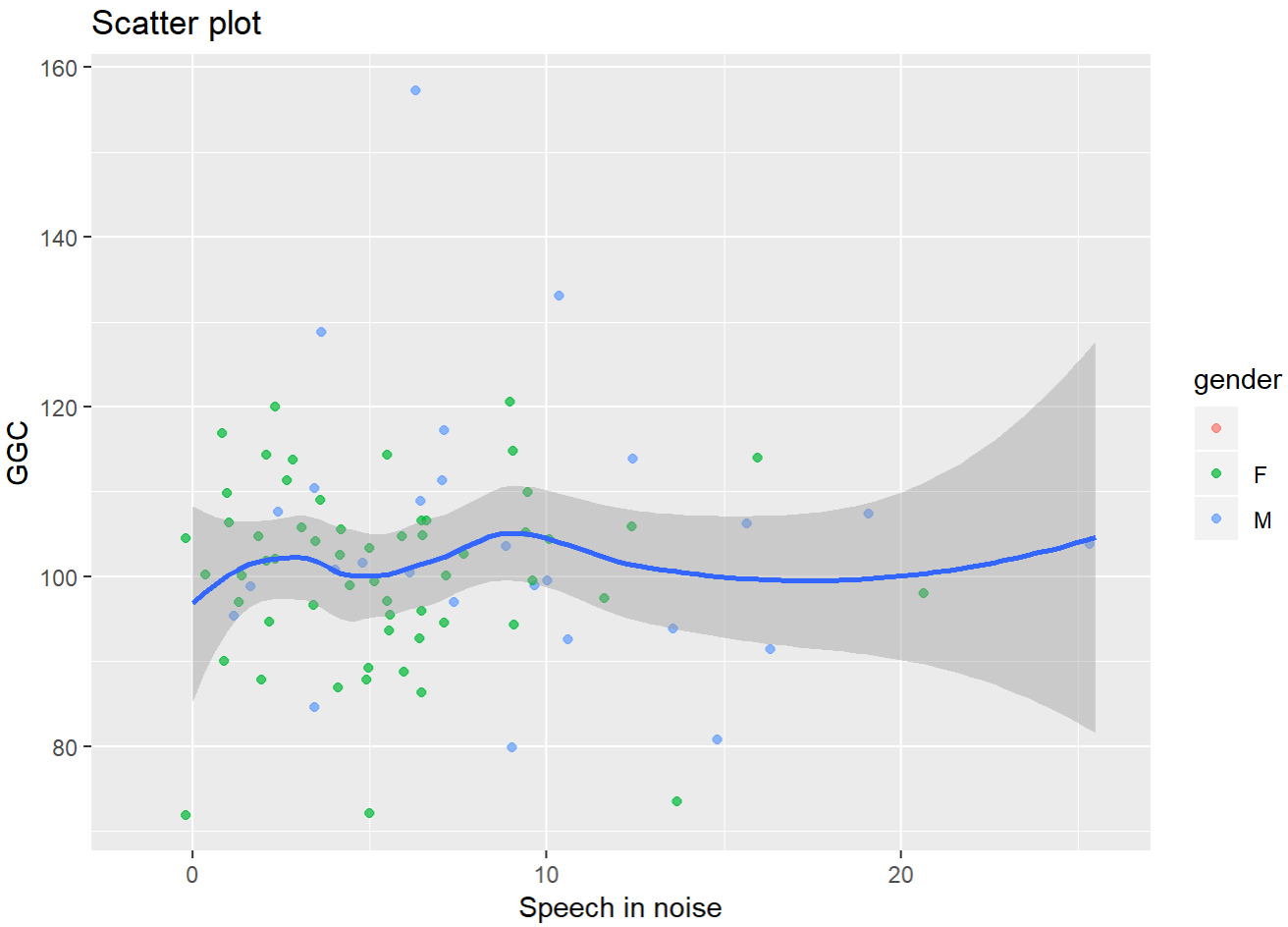


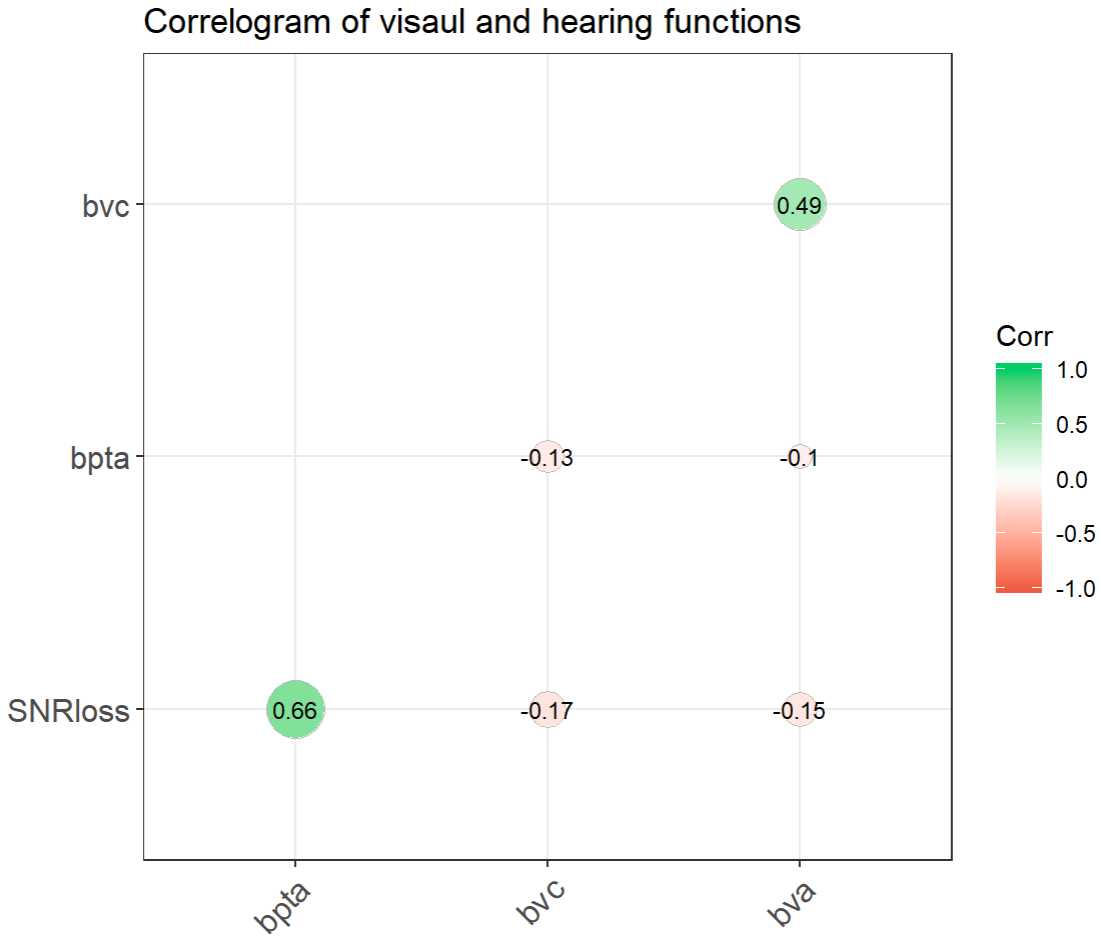

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```


Scatter plot
NFL
100
80
60
0
10
20
Speech in noise
gender
F
M


Histogram of visual_hearing$x3macoverallgccthickness
Frequency
0
10
20
30
80
100
120
140
160
visual_hearing$x3macoverallgccthickness

```
## `geom_smooth()` using method = 'loess' and formula 'y ~ x'
```






```
## function (x, y = NULL, use = "everything", method = c("pearson",
##     "kendall", "spearman"))
## {
##     na.method <- pmatch(use, c("all.obs", "complete.obs", "pairwise.complete.obs",
##         "everything", "na.or.complete"))
##     if (is.na(na.method))
##         stop("invalid 'use' argument")
##     method <- match.arg(method)
##     if (is.data.frame(y))
##         y <- as.matrix(y)
##     if (is.data.frame(x))
##         x <- as.matrix(x)
##     if (!is.matrix(x) && is.null(y))
##         stop("supply both 'x' and 'y' or a matrix-like 'x'")
##     if (!(is.numeric(x) || is.logical(x)))
##         stop("'x' must be numeric")
##     stopifnot(is.atomic(x))
##     if (!is.null(y)) {
##         if (!(is.numeric(y) || is.logical(y)))
##             stop("'y' must be numeric")
##         stopifnot(is.atomic(y))
##     }
##     Rank <- function(u) {
##         if (length(u) == 0L)
##             u
##         else if (is.matrix(u)) {
```

```
##             if (nrow(u) > 1L)
##                 apply(u, 2L, rank, na.last = "keep")
##             else row(u)
##         }
##         else rank(u, na.last = "keep")
##     }
##     if (method == "pearson")
##         .Call(C_cor, x, y, na.method, FALSE)
##     else if (na.method %in% c(2L, 5L)) {
##         if (is.null(y)) {
##             .Call(C_cor, Rank(na.omit(x)), NULL, na.method, method ==
##                 "kendall")
##         }
##         else {
##             nas <- attr(na.omit(cbind(x, y)), "na.action")
##             dropNA <- function(x, nas) {
##                 if (length(nas)) {
##                   if (is.matrix(x))
##                     x[-nas, , drop = FALSE]
##                   else x[-nas]
##                 }
##                 else x
##             }
##             .Call(C_cor, Rank(dropNA(x, nas)), Rank(dropNA(y,
##                 nas)), na.method, method == "kendall")
##         }
##     }
##     else if (na.method != 3L) {
##         x <- Rank(x)
##         if (!is.null(y))
##             y <- Rank(y)
##         .Call(C_cor, x, y, na.method, method == "kendall")
##     }
##     else {
##         if (is.null(y)) {
##             ncy <- ncx <- ncol(x)
##             if (ncx == 0)
##                 stop("'x' is empty")
##             r <- matrix(0, nrow = ncx, ncol = ncy)
##             for (i in seq_len(ncx)) {
##                 for (j in seq_len(i)) {
##                   x2 <- x[, i]
##                   y2 <- x[, j]
##                   ok <- complete.cases(x2, y2)
##                   x2 <- rank(x2[ok])
##                   y2 <- rank(y2[ok])
##                   r[i, j] <- if (any(ok))
##                     .Call(C_cor, x2, y2, 1L, method == "kendall")
##                   else NA
##                 }
##             }
##             r <- r + t(r) - diag(diag(r))
##             rownames(r) <- colnames(x)
##             colnames(r) <- colnames(x)
```

```
##             r
##         }
##         else {
##             if (length(x) == 0L || length(y) == 0L)
##                 stop("both 'x' and 'y' must be non-empty")
##             matrix_result <- is.matrix(x) || is.matrix(y)
##             if (!is.matrix(x))
##                 x <- matrix(x, ncol = 1L)
##             if (!is.matrix(y))
##                 y <- matrix(y, ncol = 1L)
##             ncx <- ncol(x)
##             ncy <- ncol(y)
##             r <- matrix(0, nrow = ncx, ncol = ncy)
##             for (i in seq_len(ncx)) {
##                 for (j in seq_len(ncy)) {
##                   x2 <- x[, i]
##                   y2 <- y[, j]
##                   ok <- complete.cases(x2, y2)
##                   x2 <- rank(x2[ok])
##                   y2 <- rank(y2[ok])
##                   r[i, j] <- if (any(ok))
##                     .Call(C_cor, x2, y2, 1L, method == "kendall")
##                   else NA
##                 }
##             }
##             rownames(r) <- colnames(x)
##             colnames(r) <- colnames(y)
##             if (matrix_result)
##                 r
##             else drop(r)
##         }
##     }
## }
## <bytecode: 0x000000001aebfa18>
## <environment: namespace:stats>
```