Description of R output from the Mantel-Haneszel Method
(Need to install lawstat and DescTools packages)

R Code for Mentel-Haneszel Method

```r
> # Mantel-Haneszel Method with Odds Ratio Estimation
> library("lawstat")  # load lawstat package for M-H Method

> boymatrix <- matrix(c(20,100,15,150),nrow=2,byrow=TRUE,  # set table for boy
+          dimnames = list("Sleep" = c("Low","High"),  # label column variable
+          "Result" = c("Fail","Pass")))  # label row variable
> print(boymatrix)    # Print the table
   Result
  Sleep Fail Pass
Low   20   100
High  15   150

> girlmatrix <- matrix(c(30,100,25,200),nrow=2,byrow=TRUE,  # set table for girl
+          dimnames = list("Sleep" = c("Low","High"),  # label column variable
+          "Result" = c("Fail","Pass")))  # label row variable
> print(girlmatrix) # Print the table
   Result
  Sleep Fail Pass
Low   30   100
High  25   200

> myarray <- array(c(boymatrix, girlmatrix),dim=c(2,2,2))  # Set matrix for HM
> cmh.test(myarray)  # Run the Mantel-Haneszel Method

Cochran-Mantel-Haenszel Chi-square Test

data:  myarray
CMH statistic = 12.477, df = 1.000, p-value = 0.000, MH Estimate = 2.229, Pooled Odd Ratio = 2.188, Odd Ratio of level 1 = 2.000, Odd Ratio of level 2 = 2.400

> library("DescTools") # load DescTools package for Breslow-Day Test

> BreslowDayTest(myarray, OR = NA, correct = FALSE)

Breslow-Day test on Homogeneity of Odds Ratios

data:  myarray
X-squared = 0.15007, df = 1, p-value = 0.6985
```

Number of tables