

effect3

2023-08-18

파일 불러오기

```
effect3 <- read.csv("C:\\Users\\phl02\\Desktop\\P\\bio_sas\\data\\prop12.csv")  
head(effect3)
```

```
##      study event   n g  
## 1 study1     27 190 0  
## 2 study2     21 189 0  
## 3 study3     64 215 1  
## 4 study4     53 226 1  
## 5 study5    113 973 2  
## 6 study6      7  33 2
```

분석 진행

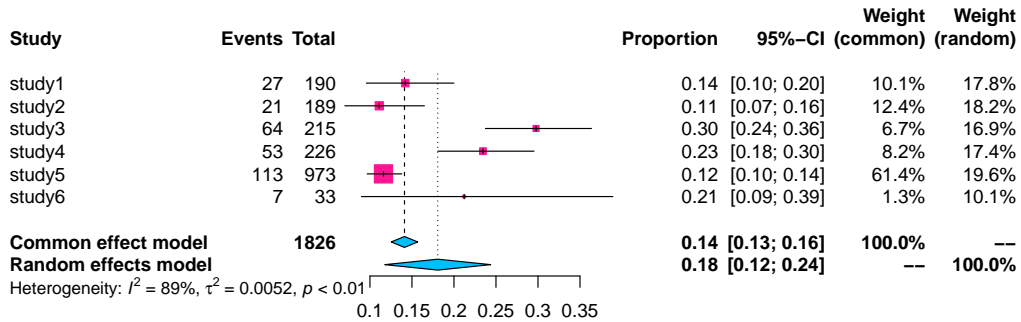
'metaprop'명령어를 사용하여 분석을 진행

```
library(meta)
meta3 <- metaprop(event,n,data=effect3,sm='PRAW',method.ci='CP',study)
meta3

## Number of studies: k = 6
## Number of observations: o = 1826
## Number of events: e = 285
##
##              proportion      95%-CI
## Common effect model    0.1411 [0.1253; 0.1569]
## Random effects model    0.1807 [0.1177; 0.2437]
##
## Quantifying heterogeneity:
## tau^2 = 0.0052 [0.0015; 0.0328]; tau = 0.0718 [0.0383; 0.1811]
## I^2 = 88.8% [78.3%; 94.3%]; H = 2.99 [2.15; 4.17]
##
## Test of heterogeneity:
##      Q d.f.  p-value
## 44.82    5 < 0.0001
##
## Details on meta-analytical method:
## - Inverse variance method
## - Restricted maximum-likelihood estimator for tau^2
## - Q-Profile method for confidence interval of tau^2 and tau
## - Untransformed proportions
```

효과크기 확인

```
forest(meta3,col.diamond = 'deepskyblue1',col.square = 'deeppink1')
```



변수로 저장

```
meta3_result <- c(meta3$TE.fixed,meta3$lower.fixed,meta3$upper.fixed,
                  meta3$TE.random,meta3$lower.random,meta3$upper.random)
```

```
meta3_result
```

```
## [1] 0.1411121 0.1253367 0.1568876 0.1807218 0.1177288 0.2437149
```

결과 정리

```
library(kableExtra)
result3 <- matrix(0,2,5)
colnames(result3) <- c('ES', '95% CI_low', '95% CI_up', 'Q(df)', expression('I^2'))
row.names(result3) <- c('Fixed', 'random')
result3[1,1] <- round(meta3_result[1],2)
result3[1,2] <- round(meta3_result[2],2)
result3[1,3] <- round(meta3_result[3],2)
result3[2,1] <- round(meta3_result[4],2)
result3[2,2] <- round(meta3_result[5],2)
result3[2,3] <- round(meta3_result[6],2)
result3[,4] <- paste(round(meta3$Q,2), '(', meta3$df.Q, ')')
result3[,5] <- round(meta3$I2*100,2)
kable(result3)
```

	ES	95% CI_low	95% CI_up	Q(df)	I ²
Fixed	0.14	0.13	0.16	44.82 (5)	88.85
random	0.18	0.12	0.24	44.82 (5)	88.85