

## Confidence interval for kappa

```
library(boot)
library(psy)

r1 <- c(1,2,3,4,2,3,4,5,6,7)
r2 <- c(2,2,3,5,1,4,5,5,6,7)
dta <- cbind(r1,r2)

# original kappa

ckappa(dta)$kappa
ckappa.boot <- function(data,x) {ckappa(data[x,])[[2]]}
res <- boot(dta,ckappa.boot,1000)
cinf <- quantile(res$t,c(0.025,0.975)) # two-sided bootstrapped confidence interval
boot.ci(res,type="bca") # adjusted bootstrap percentile (BCa) confidence interval

# weighted kappa (squared weights)

wkappa(dta,weights="squared")$kappa
wkappa.boot <- function(data,x) {wkappa(data[x,])[[3]]}
res <- boot(dta,wkappa.boot,1000)
quantile(res$t,c(0.025,0.975))

# weighted kappa (absolute weights)

wkappa(dta,weights="absolute")$kappa
wkappa.boot <- function(data,x) {wkappa(data[x,],weights="absolute")[[3]]}
res <- boot(dta,wkappa.boot,1000)
quantile(res$t,c(0.025,0.975))
```