R Code for Calculating the Relative Importance of Each Component in a PD Observed Score

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```r
# Estimated variance of each component
  fam <- 0.473
  imo <- 0.129
  ifa <- 0.417
  ioc <- 0.099
  iyc <- 0
  mofa <- 0.261
  mooc <- 0.168
  moyc <- 0.063
  faoc <- 0.045
  fayc <- 0.094
  ycoc <- 0.473


# function for calculating amount of relative variance (no need to modify, just run the following lines)
relvar <- function(c1, c2, c3, c4){
  tot <- c1+c2+c3+c4
  rv1 <- round(c1/tot*100,2)
  rv2 <- round(c2/tot*100,2)
  rv3 <- round(c3/tot*100,2)
  rv4 <- round(c4/tot*100,2)
  cat("% of variance explained by", deparse(substitute(c1)), " = ",rv1,
      "\n% of variance explained by", deparse(substitute(c2)), " = ",rv2,
      "\n% of variance explained by", deparse(substitute(c3)), " = ",rv3,
      "\n% of variance explained by", deparse(substitute(c4)), " = ",rv4)
}

# Use this function for calculate the relative variances of each PD score
  # tell R by which components the PD scores is defined
  relvar(c1 = fam, c2 = imo, c3 = ifa, c4 = mofa)
```

```
## % of variance explained by fam   =   36.95
## % of variance explained by imo   =   10.08
## % of variance explained by ifa   =   32.58
## % of variance explained by mofa  =   20.39
```

```r
  relvar(c1 = fam, c2 = imo, c3 = ioc, c4 = mooc)
```

```
## % of variance explained by fam   =   54.43
## % of variance explained by imo   =   14.84
## % of variance explained by ioc   =   11.39
## % of variance explained by mooc  =   19.33
```

```r
  relvar(c1 = fam, c2 = imo, c3 = iyc, c4 = moyc)
```

```
## % of variance explained by fam   =   71.13
## % of variance explained by imo   =   19.4
## % of variance explained by iyc   =   0
```

```
## % of variance explained by moyc  =   9.47
```

```r
  relvar(c1 = fam, c2 = ifa, c3 = ioc, c4 = faoc)
```

```
## % of variance explained by fam   =  45.74
## % of variance explained by ifa   =  40.33
## % of variance explained by ioc   =  9.57
## % of variance explained by faoc  =  4.35
```

```r
  relvar(c1 = fam, c2 = ifa, c3 = iyc, c4 = fayc)
```

```
## % of variance explained by fam   =  48.07
## % of variance explained by ifa   =  42.38
## % of variance explained by iyc   =  0
## % of variance explained by fayc  =  9.55
```

```r
  relvar(c1 = fam, c2 = iyc, c3 = ioc, c4 = ycoc)
```

```
## % of variance explained by fam   =  45.26
## % of variance explained by iyc   =  0
## % of variance explained by ioc   =  9.47
## % of variance explained by ycoc  =  45.26
```