Classical MDS of ACBC Disaster Relief Organization Survey 2018 (R script)

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levels <- c('F11','F12','F13','F21','F22','F23','F31','F32','F33','F41','F42','F43','N11','N12','N13','N21','N22','N23','N31','N32','N33','N41','N42','N43')
respondents <- c('FBO1','FBO2','FBO3','FBO4','FBO5','NGO1','NGO2','NGO3','NGO4','NGO5')
FBO1 <- c(20.2,18.6,22.7,20.8,18.2,22.5,  21.2,17.9,22.4,21.5,18.4,21.6)
FBO2 <- c(21.2,21.5,18.8,21.3,21.4,18.8,  17.8,21.5,22.2,22.1,17.1,22.3)
FBO3 <-c(21.1,18.1,22.5,20.3,18.5,22.8,   20.8,18.7,22.1,21.8,21.9,17.9)
FBO4 <- c(20.6,17.7,20.3,20.6,18.1,20.1,  21.2,17.8,20.7,21.6,15.6,21.6)
FBO5 <- c(20.3,20.4,17.8,20.1,17.6,20.7,  17.3,20.8,20.4,20.3,13.0,20.2)
NGO1 <-c(20.8,21.5,19.2,21.7, 18.7,21.0,   17.3,21.6,22.6,22.4,18.2,21.0)
NGO2 <-c(20.3,22,20.0,18.4,   21.1,22.8,   18.8,20.9,22.6,21.3,19.4,21.7)
NGO3 <-c(18.1,21.6,21.8,19.5, 20.3,21.7,   17.2,22.5,21.8,20.3,19.2,21.9)
NGO4 <-c(19.6,20.3,21.4,18.0, 21.3,22.2,   21.2,19.2,21.1,22.1,17.9,21.6)
NGO5 <- c(20.6,21.5,19.4,21.2,21.4,18.8,   16.6,22.3,22.7,18.4,21.6,21.4)
Respondent.data <- data.frame(FBO1,FBO2,FBO3,FBO4,FBO5,NGO1,NGO2,NGO3,NGO4,NGO5)
mds1 <- cmdscale(dist(Respondent.data))
par(mai=c(.75,.75,.75,.75))
plot(mds1, type = 'n', axes = FALSE, xlab = '', ylab = '')
text(mds1[, 1], mds1a[, 2], respondents)

par(new=T)
fL11 <-c(20.2,21.2,21.1,20.6,20.3)
fL12 <-c(18.6,21.5,18.1,17.7,20.4)
fL13 <-c(22.7,18.8,22.5,20.3,17.8)
fL21 <-c(20.8,21.3,20.3,20.6,20.1)
fL22 <-c(18.2,21.4,18.5,18.1,17.6)
fL23 <-c(22.5,18.8,22.8,20.1,20.7)
fL31 <-c(21.2,17.8,20.8,21.2,17.3)
fL32 <- c(17.9,21.5,18.7,17.8,20.8)
fL33 <- c(22.4,22.2,22.1,20.7,20.4)
fL41 <- c(21.5,22.1,21.8,21.6,20.3)
fL42 <-c(18.4,17.1,21.9,15.6,13.0)
fL43 <- c(21.6,22.3,17.9,21.6,21.4)
nL11 <-c(20.8,20.3,18.1,19.6,20.6)
nL12 <-c(21.5,22,22.0,18.4,21.1)
nL13 <- c(19.2,20.0,21.8,21.4,19.4)
nL21 <-c(21.7,18.4,19.5,18.0,21.4)
nL22 <- c(18.7,21.1,20.3,21.3,21.4)
nL23 <- c(21.0,22.8,21.7,22.2,18.8)
nL31 <- c(17.3,18.8,17.2,21.2,16.6)
nL32 <- c(21.6,20.9,22.5,19.2,22.3)
nL33 <-c(22.6,22.6,21.8,21.1,22.7)
nL41 <-c(22.4,21.3,20.3,22.1,18.4)
nL42 <- c(18.2, 19.4, 19.2, 17.9, 21.6)
nL43 <- c(21.0,21.7,21.9,21.6,21.4)
Level.data <- data.frame(fL11,fL12,fL13,fL21,fL22,fL23,fL31,fL32,fL33,fL41,fL42,fL43,nL11,nL12,nL13,nL21,nL22,nL23,nL31,nL32,nL33,nL41,nL42,nL43)
mds2 <- cmdscale(dist(Level.data))
par(mai=c(.5,.5,.5,.5))
plot(mds2, type = 'n', axes = FALSE, xlab = '', ylab = '')
text(mds2[, 1], mds2[, 2], levels)
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