

Chapter 6: Fisher Example

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Set up Environment

```
library(gimme)

## Registered S3 method overwritten by 'xts':
##   method      from
##   as.zoo.xts zoo

## Registered S3 method overwritten by 'quantmod':
##   method      from
##   as.zoo.data.frame zoo

## Registered S3 methods overwritten by 'huge':
##   method      from
##   plot.sim    BDgraph
##   print.sim   BDgraph

library(perturbR)
library(reshape2)
```

Fisher Data Example

Let's select the negative symptom variables from the Fisher and see what relations we find across time.

First, organize your data.

```
load("~/Dropbox/Classes/IAV/Data/Fisher/FisherData.Rdata")

# Let's just select variables that seem negative
fisherNeg <- list() # initialize
for (p in 1:length(FisherDataInterp))
fisherNeg[[p]] <- FisherDataInterp[[p]][,c(4:7, 9,11,12,16)]

colnames(fisherNeg[[1]])
```

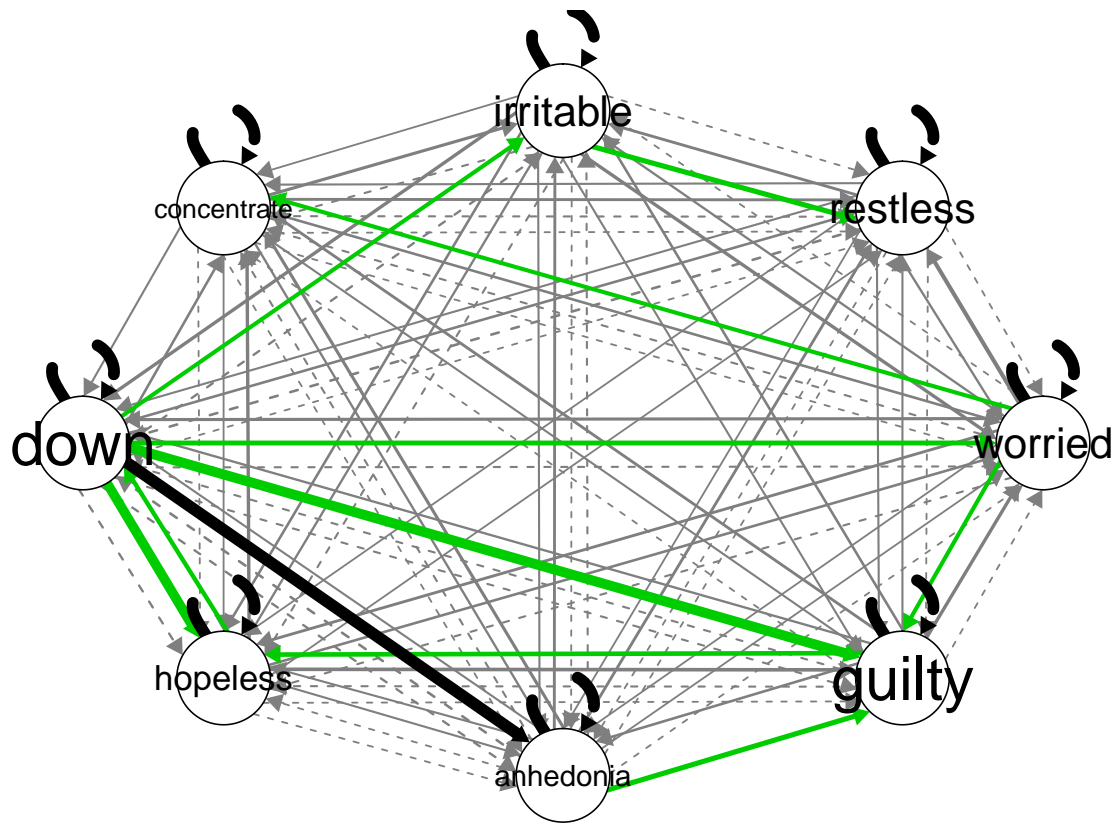
```
## [1] "irritable"    "restless"    "worried"     "guilty"      "anhedonia"
## [6] "hopeless"    "down"        "concentrate"
```

Next, run gimme. This will take a few minutes... good time to grab a coffee or check your email ;)

```
gimme_out <- gimme(data = fisherNeg, subgroup = TRUE)

plot(gimme_out)
```

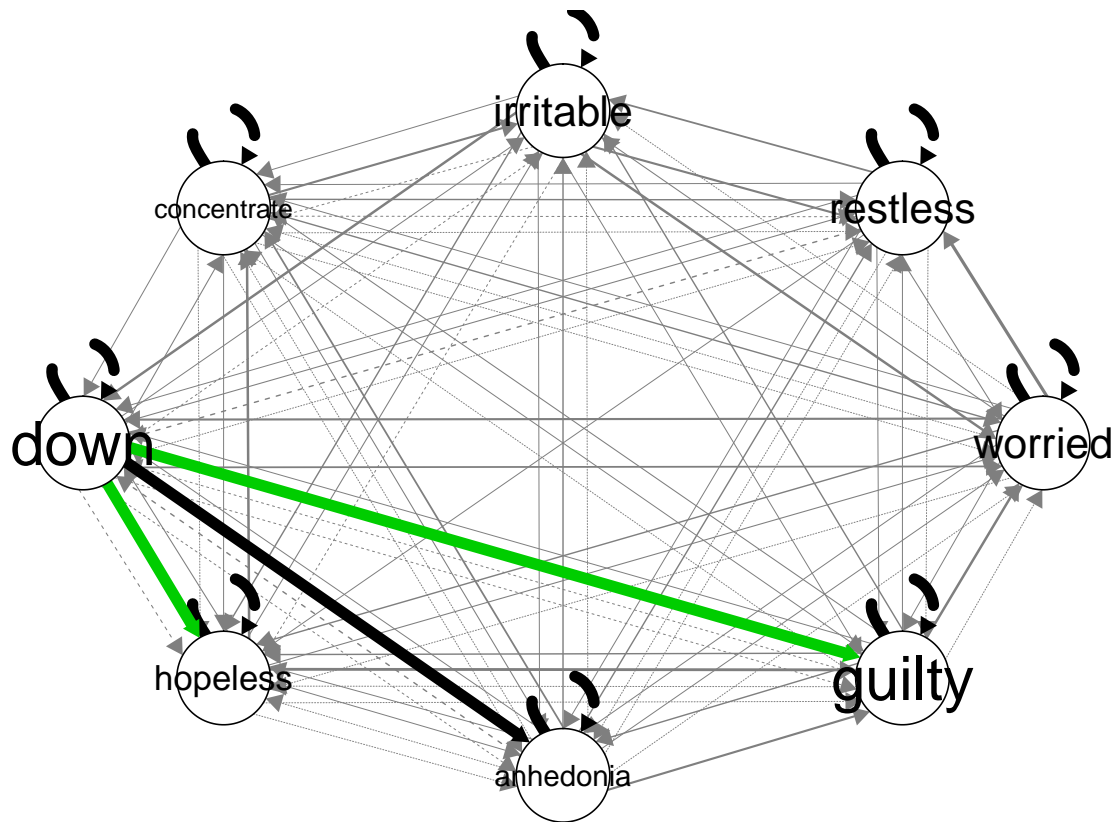
Please specify a file id for individual plots. Otherwise, summary plot is presented.



We see that Down relates to Anhedonia for all individuals.

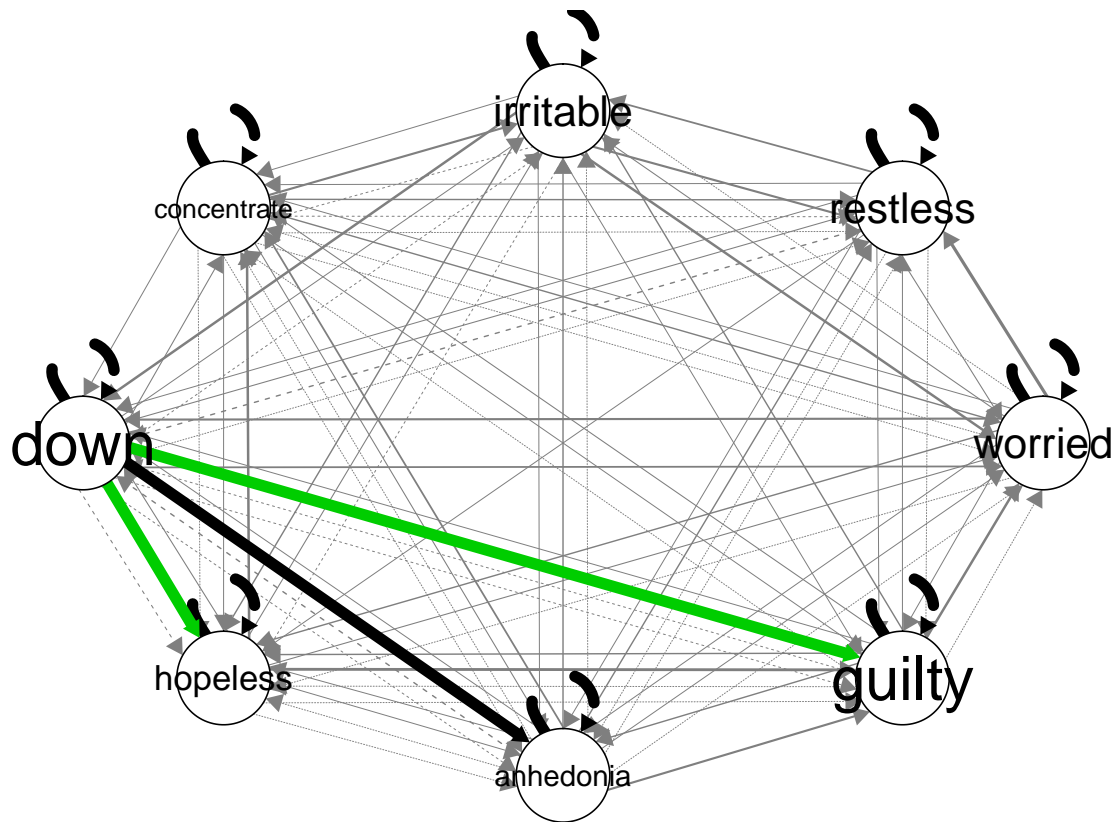
Let's check out the two subgroup-level plots.

```
plot(gimme_out$sub_plots_paths[[1]], main = "Subgroup 1")
```



Here we see that Down also relates to Guilty and Hopeless for these individuals. Down appears to be very central to the processes for these individuals.

```
plot(gimme_out$sub_plots_paths[[1]], main = "Subgroup 2")
```



We see many more subgroup-level paths for the second subgroup. Here, Down is related to Irritable, Worried, and Hopeless. In addition, Anhedonia relate to each other, as does Concentrate and Worried as well as Irritable and Restless. There seems to be an indirect effect between Down and Restless, as well as one between Down and Concentrate.