Understanding Logv

- Using Mplus, the mean of the random variance can be obtained using a Bayes run with MODEL CONSTRAINT. For example:

```
MODEL:          %WITHIN%
                pa ON pa&1;
                logv | pa;
                %BETWEEN%
                pa WITH logv;
                [logv] (m);
                logv (s);
MODEL
CONSTRAINT:     NEW(meanv);
                meanv = EXP(m + s/2);
```

- The mean m of the random variance called logv can be negative because it is on the log scale
- To get the mean on the regular scale, the mean should be exponentiated
- The correct exponentiation also involves s, the variance of logv: mean of variance = EXP(m + s/2) (the theory behind the expression for the exponentiation draws on the mean of the log normal distribution)
- For example, m = -1.161 and s = 1.200 gives meanv = 0.571
- MODEL CONSTRAINT also gives the standard error and confidence interval for the mean of the variance