

JAGS code for Sumner, Lee, and Sarnecka model

```
model{
  for (j in 1:nTrials){
    y[j]~dbern(theta[j])
    theta[j] =
      #Guessing
      equals(z[subjid[j]], 1) * .50

      #Perseverate L
      +equals(z[subjid[j]], 2) * .99

      #Perseverate R
      +equals(z[subjid[j]], 3) * .01

      #Risky
      +equals(z[subjid[j]], 4) * equals(block[j],1)*equals(two[j],1)*.99
      +equals(z[subjid[j]], 4) * equals(block[j],1)*equals(two[j],0)*.01
      +equals(z[subjid[j]], 4) * equals(block[j],2)*equals(two[j],1)*(alpha)
      +equals(z[subjid[j]], 4) * equals(block[j],2)*equals(two[j],0)*(1-alpha)
      +equals(z[subjid[j]], 4) * equals(block[j],3)*.5
      +equals(z[subjid[j]], 4) * equals(block[j],3)*equals(two[j],1)*.99
      +equals(z[subjid[j]], 4) * equals(block[j],3)*equals(two[j],0)*.01
      +equals(z[subjid[j]], 4) * equals(block[j],4)*equals(two[j],1)*(alpha)
      +equals(z[subjid[j]], 4) * equals(block[j],4)*equals(two[j],0)*(1-alpha)

      #Risk Averse
      +equals(z[subjid[j]], 5) * equals(block[j],1)*equals(two[j],1)*.99
      +equals(z[subjid[j]], 5) * equals(block[j],1)*equals(two[j],0)*.01
      +equals(z[subjid[j]], 5) * equals(block[j],2)*equals(two[j],1)*(1-beta)
      +equals(z[subjid[j]], 5) * equals(block[j],2)*equals(two[j],0)*(beta)
      +equals(z[subjid[j]], 5) * equals(block[j],3)*.5

      #+equals(z[subjid[j]], 5) * equals(block[j],3)*equals(two[j],1)*.99
      #+equals(z[subjid[j]], 5) * equals(block[j],3)*equals(two[j],0)*.01

      +equals(z[subjid[j]], 5) * equals(block[j],4)*equals(two[j],1)*(1-beta)
      +equals(z[subjid[j]], 5) * equals(block[j],4)*equals(two[j],0)*(beta)

      #Strategy Switch
      +equals(z[subjid[j]], 6) * equals(block[j],1)*equals(two[j],1)*(.99)
      +equals(z[subjid[j]], 6) * equals(block[j],1)*equals(two[j],0)*(.01)
      +equals(z[subjid[j]], 6) * equals(block[j],2)*equals(two[j],1)*(gamma)
      +equals(z[subjid[j]], 6) * equals(block[j],2)*equals(two[j],0)*(1-gamma)
      +equals(z[subjid[j]], 6) * equals(block[j],3)*.5
      #+equals(z[subjid[j]], 6) * equals(block[j],3)*equals(two[j],1)*.99
      #+equals(z[subjid[j]], 6) * equals(block[j],3)*equals(two[j],0)*.01
      +equals(z[subjid[j]], 6) * equals(block[j],4)*equals(two[j],1)*(1-gamma)
      +equals(z[subjid[j]], 6) * equals(block[j],4)*equals(two[j],0)*(gamma)
  }

  for (i in 1:subjNum){
    z[i]~dcat(base[1:6])
  }

  for (k in 1:6){
    base[k]=1
  }

  alpha~dunif(.85,1)
  beta~dunif(.85,1)
  gamma~dunif(.8,1)
}
```

