Online Supplementary Material

BUGS code for TAX (independent estimate of a single individual)

```
model {
      #error parameter
      theta.pre~dbeta(1,1)
      theta <- theta.pre*5 # range of theta from 0 to 5

      #set TAX parameter
      n <- 2

      d.pre ~ dbeta(1,1)  #delta (configural weight)
      d <- 4*d.pre-2      #range of d scaled from -2 to 2

      g.pre ~ dbeta(1,1)  #gamma (probability weighting)
      g <- g.pre * 5      #range scaled from 0 to 5

      b.pre ~ dbeta(1,1)  #beta  (utility)
      b <- b.pre * 5        #range scaled from 0 to 5

      # calculate subjective probability
      pSubMaxA <- pow(probs[,1],g)
      pSubMinA <- pow(probs[,3],g)
      pSubMaxB <- pow(probs[,2],g)
      pSubMinB <- pow(probs[,4],g)


      #calculate weights
      weightAmax <- pSubMaxA - d/(n+1) * pSubMinA #weight for high outcome is reduced
      weightAmin <- pSubMinA + d/(n+1) * pSubMaxA #weight for low outcome is increased

      weightBmax <- pSubMaxB - d/(n+1) * pSubMinB
      weightBmin <- pSubMinB + d/(n+1) * pSubMaxB

      #calculate utilities
      utilMaxA <- signPayoffs[,1]*pow(abs(payoffs[,1]),b)
      utilMinA <- signPayoffs[,3]*pow(abs(payoffs[,3]),b)
      utilMaxB <- signPayoffs[,2]*pow(abs(payoffs[,2]),b)
      utilMinB <- signPayoffs[,4]*pow(abs(payoffs[,4]),b)

      #obtain tax utilities for both options
      taxA <- (weightAmax*utilMaxA+weightAmin*utilMinA)/(pSubMaxA+pSubMinA)
      taxB <- (weightBmax*utilMaxB+weightBmin*utilMinB)/(pSubMaxB+pSubMinB)


      #differnce between tax utilities
      taxDiff <- taxA-taxB

      for (choice in 1:nChoices) {

            #Luce choice rule
            pA[choice] <- 1/(1+exp(-1*theta*taxDiff[choice]))

            #Likelihood function
            choiceA[choice]~dbern(pA[choice])
      }
}
```

Data Provided from outside BUGS:

probs	138 x 4 matrix containing the probabilities for each pair of gambles A and B.
payoffs	138 x 4 matrix containing the payoffs for each pair of gambles A and B.
signPayoff	138 x 4 matrix indicating positive (1) and negative (-1) payoffs
nChoices	138
choiceA	vector containing the observed choices for all 138 pairs of gambles (coded 0 and 1)

Columns for probs and payoffs are sorted by the maximum payoff: maximum A, maximum B, minimum A, and maximum B

BUGS code for TAX (hierarchical estimate for a group as a whole)

```
model {

      #set TAX parameter
      n <- 2

      #set group-level parameters
      mu.phi.d    ~ dnorm(0,1)
      tau.phi.d  <- pow(sigma.phi.d, -2)
      sigma.phi.d ~ dunif(0,10)

      mu.phi.g    ~ dnorm(0,1)
      tau.phi.g  <- pow(sigma.phi.g, -2)
      sigma.phi.g ~ dunif(0,10)

      mu.phi.b    ~ dnorm(0,1)
      tau.phi.b  <- pow(sigma.phi.b, -2)
      sigma.phi.b ~ dunif(0,10)

      mu.phi.theta    ~ dnorm(0,1)
      tau.phi.theta  <- pow(sigma.phi.theta, -2)
      sigma.phi.theta ~ dunif(0,10)


      for (i in 1:nVpn) {

            #error parameter
            theta.probit[i]~dnorm(mu.phi.theta,tau.phi.theta)
            theta.pre[i]<-phi(theta.probit[i])
            theta[i]<-theta.pre[i]*5

            d.probit[i] ~ dnorm(mu.phi.d,tau.phi.d)  #delta (configural weight)
            d.pre[i] <- phi(d.probit[i])

            d[i] <- 4*d.pre[i]-2                     #- scale d from -2 to 2

            g.probit[i] ~ dnorm(mu.phi.g, tau.phi.g)
            g.pre[i] <- phi(g.probit[i])             #gamma (probability weighting)
            g[i] <- g.pre[i] * 5                     #scale from 0 to 5

            b.probit[i] ~ dnorm(mu.phi.b, tau.phi.b)
            b.pre[i] <- phi(b.probit[i])  #beta  (utility)
            b[i] <- b.pre[i] * 5    #scale from 0 to 5


            for (choice in 1:nChoices[i]) {

                  # calculate subjective probability
                  pSubMaxA[i,choice] <- pow(probs[i,choice,1],g[i])
                  pSubMinA[i,choice] <- pow(probs[i,choice,3],g[i])
                  pSubMaxB[i,choice] <- pow(probs[i,choice,2],g[i])
                  pSubMinB[i,choice] <- pow(probs[i,choice,4],g[i])
```

```
			#calculate weights
			weightAmax[i,choice] <- pSubMaxA[i,choice]
			- d[i]/(n+1) * pSubMinA[i,choice] #weight for high outcome reduced

			weightAmin[i,choice] <- pSubMinA[i,choice]
			+ d[i]/(n+1) * pSubMaxA[i,choice] #weight for low outcome increased

			weightBmax[i,choice] <- pSubMaxB[i,choice]
			- d[i]/(n+1) * pSubMinB[i,choice]

			weightBmin[i,choice] <- pSubMinB[i,choice]
			+ d[i]/(n+1) * pSubMaxB[i,choice]

			#calculate utilities
			utilMaxA[i,choice] <-
			signPayoffs[i,choice,1]*pow(abs(payoffs[i,choice,1]),b[i])

			utilMinA[i,choice] <-
			signPayoffs[i,choice,3]*pow(abs(payoffs[i,choice,3]),b[i])

			utilMaxB[i,choice] <-
			signPayoffs[i,choice,2]*pow(abs(payoffs[i,choice,2]),b[i])

			utilMinB[i,choice] <-
			signPayoffs[i,choice,4]*pow(abs(payoffs[i,choice,4]),b[i])

			#obtain tax utilities for both options
			taxA[i,choice] <-
			(weightAmax[i,choice]*utilMaxA[i,choice]+weightAmin[i,choice]
			*utilMinA[i,choice])/(pSubMaxA[i,choice]+pSubMinA[i,choice])

			taxB[i,choice] <-
			(weightBmax[i,choice]*utilMaxB[i,choice]+weightBmin[i,choice]
			*utilMinB[i,choice])/(pSubMaxB[i,choice]+pSubMinB[i,choice])


			#differnce between tax utilities
			taxDiff[i,choice] <- taxA[i,choice]-taxB[i,choice]

			#Luce choice rule
			pA[i,choice] <- 1/(1+exp(-1*theta[i]*taxDiff[i,choice]))

			#Likelihood function
			choiceA[i,choice]~dbern(pA[i,choice])
		}
	}

}
```

Data Provided from outside BUGS:

probs	64 x 138 x 4 array containing the probabilities for each pair of gambles A and B for each participant
payoffs	64 x 138 x 4 array containing the payoffs for each pair of gambles A and B for each participant.
signPayoff	64 x 138 x 4 array indicating positive (1) and negative (-1) payoffs
nChoices	Vector containing the number of choices (i.e. 138) for each participant.
choiceA	Vector containing the observed choices for all 138 pairs of gambles (coded 1 for choosing option A and 0 for choosing option B)
nVpn	64

Columns for probs and payoffs are sorted by the maximum payoff: maximum A, maximum B, minimum A, and maximum B

BUGS code for CPT (independent estimate for a single individual)

```
model
{

	for (j in 1:64)# Subject-loop
	{

	alpha[j]  ~ dbeta(1,1) #range 0 to 1

	luce.pre[j]   ~dbeta(1,1)     luce[j]<-luce.pre[j]*5
	lambda.pre[j] ~dbeta(1,1)
	lambda[j]<-lambda.pre[j]*5


	#probability weighting
	gamma.gain[j]  ~dbeta(1,1) #range 0 to 1
	gamma.loss[j]  ~dbeta(1,1) #range 0 to 1

	delta.gain.pre[j]  ~dbeta(1,1)
	delta.loss.pre[j]  ~dbeta(1,1)

	delta.gain[j]<-delta.gain.pre[j]*5
	delta.loss[j]<-delta.loss.pre[j]*5



	for (i in 1:70)# Item-Loop - positive gambles
		{

	#-------------------------
	#positive gambles,gamble A
	v.x.a[i,j] <- pow(prospects.a[j,i,1],alpha[j])
	v.y.a[i,j] <- pow(prospects.a[j,i,3],alpha[j])

	#2parameter weighting function
	w.x.a[i,j] <- delta.gain[j]*pow(prospects.a[j,i,2],gamma.gain[j])/
(delta.gain[j]*pow(prospects.a[j,i,2],gamma.gain[j])+pow((1-
prospects.a[j,i,2]),gamma.gain[j]))
	w.y.a[i,j] <- 1-w.x.a[i,j] #delta[j]*pow(prospects.a[j,i,4],gamma[j])/
(delta[j]*pow(prospects.a[j,i,4],gamma[j])+pow((1-prospects.a[j,i,4]),gamma[j]))
	Vf.a[i,j]  <- w.x.a[i,j] * v.x.a[i,j] + w.y.a[i,j] * v.y.a[i,j]


	#--------------------------
	#positive gambles,gamble B

	v.x.b[i,j] <- pow(prospects.b[j,i,1],alpha[j])
v.y.b[i,j] <- pow(prospects.b[j,i,3],alpha[j])

	#2parameter weighting function
	w.x.b[i,j] <- delta.gain[j]*pow(prospects.b[j,i,2],gamma.gain[j])/
(delta.gain[j]*pow(prospects.b[j,i,2],gamma.gain[j])+pow((1-
prospects.b[j,i,2]),gamma.gain[j]))
```

```
		w.y.b[i,j] <- 1-w.x.b[i,j] #delta[j]*pow(prospects.b[j,i,4],gamma[j])/
(delta[j]*pow(prospects.b[j,i,4],gamma[j])+pow((1-prospects.b[j,i,4]),gamma[j]))

		Vf.b[i,j]  <- w.x.b[i,j] * v.x.b[i,j] + w.y.b[i,j] * v.y.b[i,j]



		#-----------------
		# positive gambles,choice-rule

		binval[i,j] <- (1)/(1+exp((-1*luce[j])*(Vf.b[i,j]-Vf.a[i,j])))
		rawdata[i,j] ~ dbern(binval[i,j])
		}



		for (i in 71:100)# Item-Loop, negative gambles,gamble A
		{
		v.x.a[i,j] <- lambda[j]*(-1) * pow((-1 * prospects.a[j,i,1]),alpha[j])
		v.y.a[i,j] <- lambda[j]*(-1) * pow((-1 * prospects.a[j,i,3]),alpha[j])


		#2parameter weighting function
		w.x.a[i,j] <- 1-(delta.loss[j]*pow(prospects.a[j,i,4],gamma.loss[j])/
(delta.loss[j]*pow(prospects.a[j,i,4],gamma.loss[j])+pow(prospects.a[j,i,2],gamma.loss[
j])))
		w.y.a[i,j] <- 1-w.x.a[i,j

		Vf.a[i,j]  <- w.x.a[i,j] * v.x.a[i,j] + w.y.a[i,j] * v.y.a[i,j]


		#-------------------------------------
		# Item-Loop, negative gambles,gamble B

		v.x.b[i,j] <- lambda[j]*(-1) * pow((-1 * prospects.b[j,i,1]),alpha[j])
		v.y.b[i,j] <- lambda[j]*(-1) * pow((-1 * prospects.b[j,i,3]),alpha[j])

		#2parameter weighting function
		w.x.b[i,j] <- 1-(delta.loss[j]*pow(prospects.b[j,i,4],gamma.loss[j])/
(delta.loss[j]*pow(prospects.b[j,i,4],gamma.loss[j])+pow(prospects.b[j,i,2],gamma.loss[
j])))
		w.y.b[i,j] <- 1-w.x.b[i,j]

		Vf.b[i,j]  <- w.x.b[i,j] * v.x.b[i,j] + w.y.b[i,j] * v.y.b[i,j]


		#---------------------------------------
		# Item-Loop, negative gambles,choice-rule

		binval[i,j] <- (1)/(1+exp((-1*luce[j])*(Vf.b[i,j]-Vf.a[i,j])))
		rawdata[i,j] ~ dbern(binval[i,j])
		}


		for (i in 101:138)# Item-Loop, mixed gambles,gamble A
		{
		v.x.a[i,j] <- pow(prospects.a[j,i,1],alpha[j])
```

```
            v.y.a[i,j] <- (-1 * lambda[j]) * pow((-1 * prospects.a[j,i,3]),alpha[j])

            #2parameter weighting function
            w.x.a[i,j] <- delta.gain[j]*pow(prospects.a[j,i,2],gamma.gain[j])/
(delta.gain[j]*pow(prospects.a[j,i,2],gamma.gain[j])+pow((prospects.a[j,i,4]),gamma.gai
n[j]))
            w.y.a[i,j] <- delta.loss[j]*pow(prospects.a[j,i,4],gamma.loss[j])/
(delta.loss[j]*pow(prospects.a[j,i,4],gamma.loss[j])+pow((prospects.a[j,i,2]),gamma.los
s[j]))

            Vf.a[i,j]  <- w.x.a[i,j] * v.x.a[i,j] + w.y.a[i,j] * v.y.a[i,j]


            #-----------------------------------
            # Item-Loop, mixed gambles,gamble B

            v.x.b[i,j] <- pow(prospects.b[j,i,1],alpha[j])
            v.y.b[i,j] <- (-1 * lambda[j]) * pow((-1 * prospects.b[j,i,3]),alpha[j])

            #2parameter weighting function
            w.x.b[i,j] <- delta.gain[j]*pow(prospects.b[j,i,2],gamma.gain[j])/
(delta.gain[j]*pow(prospects.b[j,i,2],gamma.gain[j])+pow((prospects.b[j,i,4]),gamma.gai
n[j]))
            w.y.b[i,j] <- delta.loss[j]*pow(prospects.b[j,i,4],gamma.loss[j])/
(delta.loss[j]*pow(prospects.b[j,i,4],gamma.loss[j])+pow((prospects.b[j,i,2]),gamma.los
s[j]))
            Vf.b[i,j]  <- w.x.b[i,j] * v.x.b[i,j] + w.y.b[i,j] * v.y.b[i,j]


            #--------------------------------------
            # Item-Loop, mixed gambles,choice-rule

            binval[i,j] <- (1)/(1+exp((-1*luce[j])*(Vf.b[i,j]-Vf.a[i,j])))
            rawdata[i,j] ~ dbern(binval[i,j])
            }
          }
      }
```

Data Provided from Outside BUGS:

prospects.a 64 x 138 x 4 array containing the payoffs and probabilities for gamble A

prospects.b 64 x 138 x 4 array containing the payoffs and probabilities for gamble B

rawdata 138 x 64 matrix containing the observed choices for all 138 pairs of gambles (0 for choosing option A and 1 for choosing option B)

BUGS code for CPT (hierarchical estimate for a group of individuals)

```
model
{


      for (j in 1:64)
      {


            alpha.phi[j] ~ dnorm(mu.phi.alpha,tau.phi.alpha)  T(-5, 5)
            alpha[j]  <- phi(alpha.phi[j]) #range 0 to 1

            gamma.gain.phi[j] ~ dnorm(mu.phi.gamma.gain,tau.phi.gamma.gain)  T(-5, 5)
            gamma.loss.phi[j] ~ dnorm(mu.phi.gamma.loss,tau.phi.gamma.loss)  T(-5, 5)

            gamma.gain[j]  <- phi(gamma.gain.phi[j]) #range 0 to 1
            gamma.loss[j]  <- phi(gamma.loss.phi[j]) #range 0 to 1

            delta.gain.phi[j] ~ dnorm(mu.phi.delta.gain,tau.phi.delta.gain) T(-5,5)
            delta.gain.pre[j] <- phi(delta.gain.phi[j])
            delta.gain[j] <- delta.gain.pre[j]*5

            delta.loss.phi[j] ~ dnorm(mu.phi.delta.loss,tau.phi.delta.loss) T(-5,5)
            delta.loss.pre[j] <- phi(delta.loss.phi[j])
            delta.loss[j] <- delta.loss.pre[j]*5

            luce.phi[j] ~ dnorm(mu.phi.luce, tau.phi.luce) T(-5,5)
            luce.pre[j] <- phi(luce.phi[j])
            luce[j]   <- luce.pre[j]*5

            lambda.phi[j] ~ dnorm(mu.phi.lambda, tau.phi.lambda) T(-5,5)
            lambda.pre[j] <- phi(lambda.phi[j])
            lambda[j]   <- lambda.pre[j]*5

      }

      mu.phi.alpha ~ dnorm(0,1)
      tau.phi.alpha  <- pow(sigma.phi.alpha,-2)
      sigma.phi.alpha ~ dunif(0,10)

      #probability weighing
      mu.phi.gamma.gain ~ dnorm(0,1)
      tau.phi.gamma.gain <- pow(sigma.phi.gamma.gain,-2)
      sigma.phi.gamma.gain ~ dunif(0,10)

      mu.phi.gamma.loss ~ dnorm(0,1)
      tau.phi.gamma.loss <- pow(sigma.phi.gamma.loss,-2)
      sigma.phi.gamma.loss ~ dunif(0,10)

      mu.phi.delta.gain    ~ dnorm(0,1)
      tau.phi.delta.gain <- pow(sigma.phi.delta.gain,-2)
      sigma.phi.delta.gain ~ dunif(0,10)

      mu.phi.delta.loss    ~ dnorm(0,1)
      tau.phi.delta.loss <- pow(sigma.phi.delta.loss,-2)
```

```
	sigma.phi.delta.loss ~ dunif(0,10)

	mu.phi.lambda  ~ dnorm(0,1)
	tau.phi.lambda  <- pow(sigma.phi.lambda,-2)
	sigma.phi.lambda ~ dunif(0,10)

	mu.phi.luce ~ dnorm(0,1)
	tau.phi.luce <- pow(sigma.phi.luce,-2)
	sigma.phi.luce ~ dunif(0,10)



	for (j in 1:64)# Subject-loop
	{

		for (i in 1:70)# Item-Loop - positive gambles
		{

		#------------------------
		#positive gambles,gamble A

		v.x.a[i,j] <- pow(prospects.a[j,i,1],alpha[j])
		v.y.a[i,j] <- pow(prospects.a[j,i,3],alpha[j])

		#2parameter weighting function
		w.x.a[i,j] <- delta.gain[j]*pow(prospects.a[j,i,2],gamma.gain[j])/
(delta.gain[j]*pow(prospects.a[j,i,2],gamma.gain[j])+pow((1-
prospects.a[j,i,2]),gamma.gain[j]))
		w.y.a[i,j] <- 1-w.x.a[i,j]

		Vf.a[i,j]  <- w.x.a[i,j] * v.x.a[i,j] + w.y.a[i,j] * v.y.a[i,j]


		#-------------------------
		#positive gambles,gamble B

		v.x.b[i,j] <- pow(prospects.b[j,i,1],alpha[j])
		v.y.b[i,j] <- pow(prospects.b[j,i,3],alpha[j])

		#2parameter weighting function
		w.x.b[i,j] <- delta.gain[j]*pow(prospects.b[j,i,2],gamma.gain[j])/
(delta.gain[j]*pow(prospects.b[j,i,2],gamma.gain[j])+pow((1-
prospects.b[j,i,2]),gamma.gain[j]))
		w.y.b[i,j] <- 1-w.x.b[i,j] #delta[j]*pow(prospects.b[j,i,4],gamma[j])/
(delta[j]*pow(prospects.b[j,i,4],gamma[j])+pow((1-prospects.b[j,i,4]),gamma[j]))

		Vf.b[i,j]  <- w.x.b[i,j] * v.x.b[i,j] + w.y.b[i,j] * v.y.b[i,j]



		#-----------------
		# positive gambles,choice-rule

		binval[i,j] <- (1)/(1+exp((-1*luce[j])*(Vf.b[i,j]-Vf.a[i,j])))
		rawdata[i,j] ~ dbern(binval[i,j])
		}
```

```
	for (i in 71:100)# Item-Loop, negative gambles,gamble A
		{
		v.x.a[i,j] <- lambda[j]*(-1) * pow((-1 * prospects.a[j,i,1]),alpha[j])
		v.y.a[i,j] <- lambda[j]*(-1) * pow((-1 * prospects.a[j,i,3]),alpha[j])


		#2parameter weighting function
		w.x.a[i,j] <- 1-(delta.loss[j]*pow(prospects.a[j,i,4],gamma.loss[j])/
(delta.loss[j]*pow(prospects.a[j,i,4],gamma.loss[j])+pow(prospects.a[j,i,2],gamma.loss[
j])))

		w.y.a[i,j] <- 1-w.x.a[i,j]#delta[j]*pow(prospects.a[j,i,4],gamma[j])/
(delta[j]*pow(prospects.a[j,i,4],gamma[j])+pow((1-prospects.a[j,i,4]),gamma[j]))


		Vf.a[i,j]  <- w.x.a[i,j] * v.x.a[i,j] + w.y.a[i,j] * v.y.a[i,j]


		#--------------------------------------
		# Item-Loop, negative gambles,gamble B
		v.x.b[i,j] <- lambda[j]*(-1) * pow((-1 * prospects.b[j,i,1]),alpha[j])
		v.y.b[i,j] <- lambda[j]*(-1) * pow((-1 * prospects.b[j,i,3]),alpha[j])

		#2parameter weighting function
		w.x.b[i,j] <- 1-(delta.loss[j]*pow(prospects.b[j,i,4],gamma.loss[j])/
(delta.loss[j]*pow(prospects.b[j,i,4],gamma.loss[j])+pow(prospects.b[j,i,2],gamma.loss[
j])))
		w.y.b[i,j] <- 1-w.x.b[i,j]#delta[j]*pow(prospects.b[j,i,4],gamma[j])/
(delta[j]*pow(prospects.b[j,i,4],gamma[j])+pow((1-prospects.b[j,i,4]),gamma[j]))

		Vf.b[i,j]  <- w.x.b[i,j] * v.x.b[i,j] + w.y.b[i,j] * v.y.b[i,j]


		#----------------------------------------
		# Item-Loop, negative gambles,choice-rule
		binval[i,j] <- (1)/(1+exp((-1*luce[j])*(Vf.b[i,j]-Vf.a[i,j])))
		rawdata[i,j] ~ dbern(binval[i,j])
		}


		for (i in 101:138)# Item-Loop, mixed gambles,gamble A
		{
		v.x.a[i,j] <- pow(prospects.a[j,i,1],alpha[j])
		v.y.a[i,j] <- (-1 * lambda[j]) * pow((-1 * prospects.a[j,i,3]),alpha[j])

		#2parameter weighting function
		w.x.a[i,j] <- delta.gain[j]*pow(prospects.a[j,i,2],gamma.gain[j])/
(delta.gain[j]*pow(prospects.a[j,i,2],gamma.gain[j])+pow((prospects.a[j,i,4]),gamma.gai
n[j]))
		w.y.a[i,j] <- delta.loss[j]*pow(prospects.a[j,i,4],gamma.loss[j])/
(delta.loss[j]*pow(prospects.a[j,i,4],gamma.loss[j])+pow((prospects.a[j,i,2]),gamma.los
s[j]))

		Vf.a[i,j]  <- w.x.a[i,j] * v.x.a[i,j] + w.y.a[i,j] * v.y.a[i,j]
```

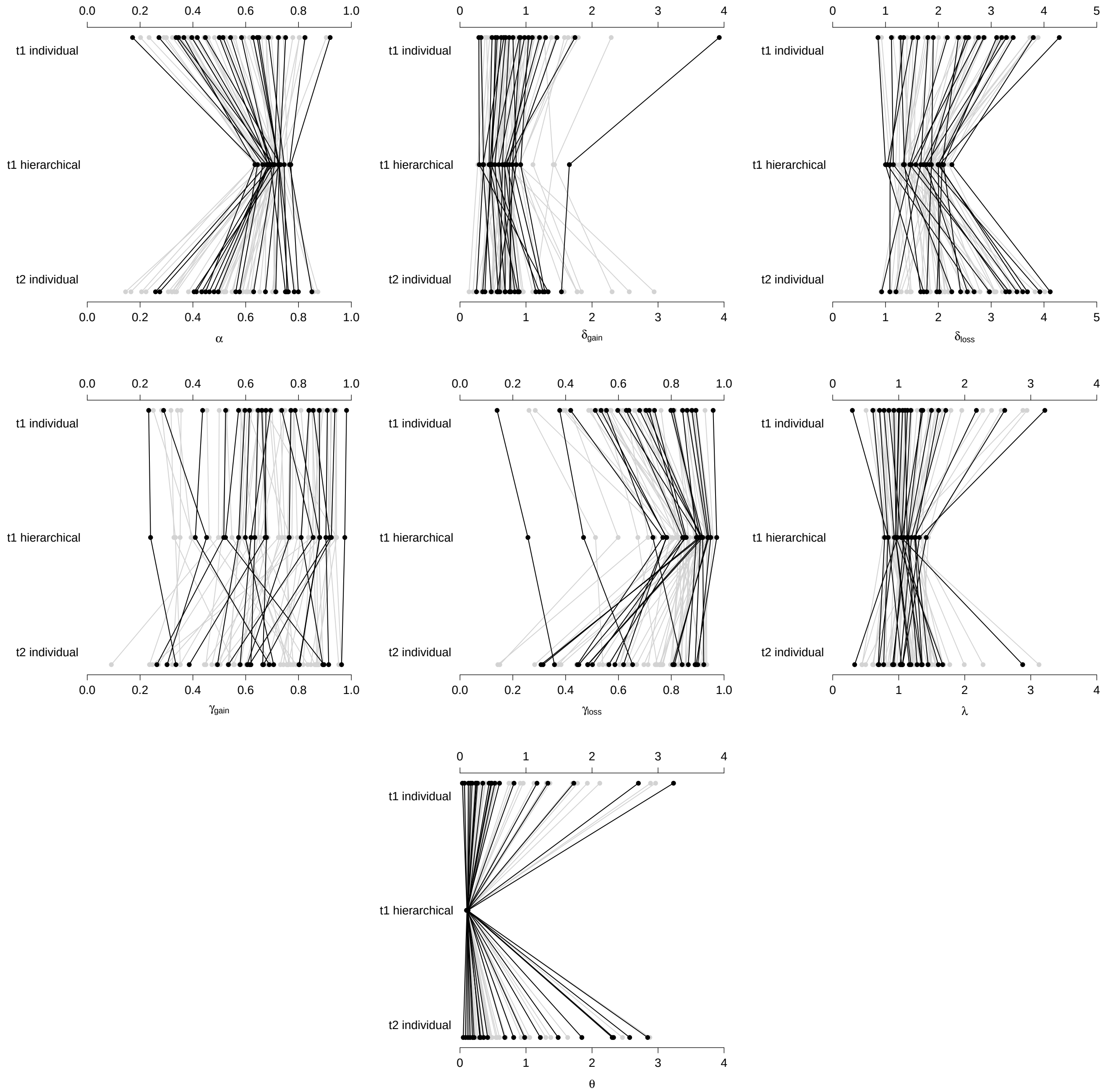
```
            #-----------------------------------
            # Item-Loop, mixed gambles,gamble B

            v.x.b[i,j] <- pow(prospects.b[j,i,1],alpha[j])
            v.y.b[i,j] <- (-1 * lambda[j]) * pow((-1 * prospects.b[j,i,3]),alpha[j])

            #2parameter weighting function
            w.x.b[i,j] <- delta.gain[j]*pow(prospects.b[j,i,2],gamma.gain[j])/
(delta.gain[j]*pow(prospects.b[j,i,2],gamma.gain[j])+pow((prospects.b[j,i,4]),gamma.gai
n[j]))
            w.y.b[i,j] <- delta.loss[j]*pow(prospects.b[j,i,4],gamma.loss[j])/
(delta.loss[j]*pow(prospects.b[j,i,4],gamma.loss[j])+pow((prospects.b[j,i,2]),gamma.los
s[j]))

            Vf.b[i,j]  <- w.x.b[i,j] * v.x.b[i,j] + w.y.b[i,j] * v.y.b[i,j]


            #--------------------------------------
            # Item-Loop, mixed gambles,choice-rule

            binval[i,j] <- (1)/(1+exp((-1*luce[j])*(Vf.b[i,j]-Vf.a[i,j])))
            rawdata[i,j] ~ dbern(binval[i,j])
            }
    }
}
```

Data Provided from Outside BUGS:

same as for the independent code

Shrinkage for CPT Parameters

In resemblance to Figure 4, the plots display mean posterior estimates of the free parameters in CPT separately for each individual at t1 and t2 (upper and lower row) and the hierarchically estimated parameters at t1 (middle row). For illustrative purposes, the points indicate a subset of 20 participants spaced out across the whole data range.



Shrinkage for TAX parameters

In resemblance to Figure 4, the plots display mean posterior estimates of the free parameters in TAX separately for each individual at t1 and t2 (upper and lower row) and the hierarchically estimated parameters at t1 (middle row). For illustrative purposes, the points indicate a subset of 20 participants spaced out across the whole data range.