

Fitting Distribution Functions to Empirical Distribution of Parameter Estimates

Model Comparison

Drift Rate v

Distribution Function	AIC	wAIC
normal	9120.41	0
t	8666.28	1
norm mix	8697.38	0

Boundary Separation a

Distribution Function	AIC	wAIC
truncated normal	1899.11	0.00
t	1536.66	0.00
gamma	1641.12	0.00
lognormal	1657.21	0.00
weibull	1797.44	0.00
tnorm & tnorm	1536.34	0.00
gamma & gamma	1516.80	0.76
gamma & tnorm	1522.49	0.04
lognormal & tnorm	1519.45	0.20

Mean start point z

Distribution Function	AIC	wAIC
truncated normal	229.09	0.00
t	-7.78	0.01
gamma	70.23	0.00
lognormal	22.23	0.00
weibull	161.98	0.00
tnorm & tnorm	42.23	0.00
gamma & gamma	-12.78	0.10
gamma & tnorm	-12.42	0.08
lognormal & tnorm	-17.06	0.82

Bias z

Distribution Function	AIC	wAIC
truncated normal	-377.80	0
truncated t	-537.16	1

Mirrored Bias z

Distribution Function	AIC	wAIC
truncated normal	-730.71	0
truncated t	-915.98	1

Non-decision time Ter

Distribution Function	AIC	wAIC
truncated normal	263.34	0
t	-775.25	1
gamma	-258.43	0
lognormal	22.23	0
weibull	30.47	0
tnorm & tnorm	-743.71	0
gamma & gamma	-573.36	0
gamma & tnorm	-755.81	0
lognormal & tnorm	-730.15	0

across-trial variability drift rate sv

Distribution Function	AIC	wAIC
truncated normal	637.96	0.11
t	640.67	0.03
gamma	677.25	0.00
lognormal	767.91	0.00
weibull	654.96	0.00
tnorm & tnorm	636.73	0.21
gamma & gamma	637.89	0.12
gamma & tnorm	635.69	0.35
lognormal & tnorm	636.93	0.19

relative across-trial variability sz

Distribution Function	AIC	wAIC
truncated normal	-146.66	0.74
t	-144.61	0.26

across-trial variability non-decision time ster

Distribution Function	AIC	wAIC
truncated normal	263.34	0
t	-775.25	1
gamma	-258.43	0
lognormal	22.23	0
weibull	30.47	0
tnorm & tnorm	-743.71	0
gamma & gamma	-573.36	0
gamma & tnorm	-755.81	0
lognormal & tnorm	-730.15	0