Data Analyses for Predicting Preference for Dominant PoliticalLeaders

> summary(fit0)

Family: cumulative

Links: mu = logit; disc = identity

Formula: DOMINANCEREV ~ 1 + (1 | COUNTRY\_NAME)

Data: dat (Number of observations: 52325)

Samples: 4 chains, each with iter = 5000; warmup = 2500; thin = 1;

total post-warmup samples = 10000

Group-Level Effects:

~COUNTRY\_NAME (Number of levels: 54)

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

sd(Intercept) 0.88 0.09 0.73 1.07 547 1.01

Population-Level Effects:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

Intercept[1] -1.11 0.12 -1.34 -0.88 279 1.00

Intercept[2] 0.23 0.12 0.00 0.46 276 1.00

Intercept[3] 1.86 0.12 1.63 2.09 278 1.00

Samples were drawn using sampling(NUTS). For each parameter, Eff.Sample

is a crude measure of effective sample size, and Rhat is the potential

scale reduction factor on split chains (at convergence, Rhat = 1).

> loofit0

Computed from 10000 by 52325 log-likelihood matrix

Estimate SE

elpd\_loo -66020.3 106.0

p\_loo 55.6 0.3

looic 132040.6 212.0

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Monte Carlo SE of elpd\_loo is 0.1.

All Pareto k estimates are good (k < 0.5).

See help('pareto-k-diagnostic') for details.

> summary(fit1)

Family: cumulative

Links: mu = logit; disc = identity

Formula: DOMINANCEREV ~ mo(CLASSREV) + mo(INCOME) + mo(POLTICALIDEOLOGY) + GENDER + AGE + (1 | COUNTRY\_NAME)

Data: dat (Number of observations: 52325)

Samples: 4 chains, each with iter = 5000; warmup = 2500; thin = 1;

total post-warmup samples = 10000

Group-Level Effects:

~COUNTRY\_NAME (Number of levels: 54)

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

sd(Intercept) 0.88 0.09 0.73 1.07 816 1.00

Population-Level Effects:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

Intercept[1] -1.00 0.12 -1.24 -0.75 556 1.01

Intercept[2] 0.35 0.12 0.11 0.59 560 1.01

Intercept[3] 1.98 0.12 1.73 2.22 569 1.01

GENDERMale -0.03 0.02 -0.06 0.00 9429 1.00

AGE -0.00 0.00 -0.00 0.00 11844 1.00

moCLASSREV 0.12 0.02 0.09 0.15 8941 1.00

moINCOME -0.00 0.01 -0.02 0.01 5746 1.00

moPOLTICALIDEOLOGY 0.02 0.00 0.01 0.03 7365 1.00

Simplex Parameters:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

moCLASSREV1[1] 0.13 0.05 0.03 0.23 5896 1.00

moCLASSREV1[2] 0.01 0.01 0.00 0.03 11086 1.00

moCLASSREV1[3] 0.09 0.04 0.01 0.18 6573 1.00

moCLASSREV1[4] 0.77 0.06 0.64 0.89 6554 1.00

moINCOME1[1] 0.16 0.13 0.00 0.49 9253 1.00

moINCOME1[2] 0.11 0.10 0.00 0.37 10913 1.00

moINCOME1[3] 0.10 0.09 0.00 0.33 10349 1.00

moINCOME1[4] 0.08 0.09 0.00 0.32 7915 1.00

moINCOME1[5] 0.10 0.09 0.00 0.33 10736 1.00

moINCOME1[6] 0.12 0.10 0.00 0.38 8777 1.00

moINCOME1[7] 0.11 0.10 0.00 0.36 10411 1.00

moINCOME1[8] 0.12 0.10 0.00 0.37 9037 1.00

moINCOME1[9] 0.11 0.10 0.00 0.37 9705 1.00

moPOLTICALIDEOLOGY1[1] 0.06 0.06 0.00 0.21 11975 1.00

moPOLTICALIDEOLOGY1[2] 0.10 0.09 0.00 0.31 10528 1.00

moPOLTICALIDEOLOGY1[3] 0.28 0.15 0.02 0.59 6580 1.00

moPOLTICALIDEOLOGY1[4] 0.29 0.15 0.04 0.60 6200 1.00

moPOLTICALIDEOLOGY1[5] 0.06 0.05 0.00 0.18 11189 1.00

moPOLTICALIDEOLOGY1[6] 0.02 0.02 0.00 0.09 10776 1.00

moPOLTICALIDEOLOGY1[7] 0.02 0.02 0.00 0.07 11262 1.00

moPOLTICALIDEOLOGY1[8] 0.04 0.04 0.00 0.14 10722 1.00

moPOLTICALIDEOLOGY1[9] 0.12 0.09 0.01 0.33 6634 1.00

Samples were drawn using sampling(NUTS). For each parameter, Eff.Sample

is a crude measure of effective sample size, and Rhat is the potential

scale reduction factor on split chains (at convergence, Rhat = 1).

> loofit1

Computed from 10000 by 52325 log-likelihood matrix

Estimate SE

elpd\_loo -65977.7 106.3

p\_loo 65.1 0.3

looic 131955.3 212.6

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Monte Carlo SE of elpd\_loo is 0.1.

All Pareto k estimates are good (k < 0.5).

See help('pareto-k-diagnostic') for details.

> summary(fit2)

Family: cumulative

Links: mu = logit; disc = identity

Formula: DOMINANCEREV ~ mo(ECOUNJOBREV) + mo(ECOUNEDUCATIONREV) + mo(ECOUNFOODREV) + mo(ECOUNMEDICINEREV) + mo(ECOUNCASHREV) + (1 | COUNTRY\_NAME)

Data: dat (Number of observations: 52325)

Samples: 4 chains, each with iter = 5000; warmup = 2500; thin = 1;

total post-warmup samples = 10000

Group-Level Effects:

~COUNTRY\_NAME (Number of levels: 54)

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

sd(Intercept) 0.88 0.09 0.73 1.07 949 1.00

Population-Level Effects:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

Intercept[1] -0.82 0.13 -1.08 -0.58 657 1.00

Intercept[2] 0.53 0.13 0.28 0.78 657 1.00

Intercept[3] 2.17 0.13 1.91 2.41 662 1.00

moECOUNJOBREV 0.05 0.01 0.04 0.07 6417 1.00

moECOUNEDUCATIONREV 0.04 0.01 0.02 0.06 5225 1.00

moECOUNFOODREV 0.14 0.02 0.11 0.17 4928 1.00

moECOUNMEDICINEREV 0.06 0.01 0.04 0.08 5712 1.00

moECOUNCASHREV -0.05 0.01 -0.08 -0.03 5527 1.00

Simplex Parameters:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

moECOUNJOBREV1[1] 0.12 0.10 0.00 0.35 8324 1.00

moECOUNJOBREV1[2] 0.80 0.11 0.55 0.97 8434 1.00

moECOUNJOBREV1[3] 0.08 0.06 0.00 0.24 9256 1.00

moECOUNEDUCATIONREV1[1] 0.82 0.12 0.52 0.98 6217 1.00

moECOUNEDUCATIONREV1[2] 0.14 0.11 0.00 0.42 6121 1.00

moECOUNEDUCATIONREV1[3] 0.05 0.05 0.00 0.16 7548 1.00

moECOUNFOODREV1[1] 0.37 0.06 0.26 0.50 6168 1.00

moECOUNFOODREV1[2] 0.24 0.07 0.10 0.39 7027 1.00

moECOUNFOODREV1[3] 0.39 0.08 0.22 0.53 5828 1.00

moECOUNMEDICINEREV1[1] 0.72 0.12 0.48 0.93 6547 1.00

moECOUNMEDICINEREV1[2] 0.15 0.10 0.01 0.38 7649 1.00

moECOUNMEDICINEREV1[3] 0.13 0.09 0.01 0.34 6935 1.00

moECOUNCASHREV1[1] 0.06 0.05 0.00 0.19 8753 1.00

moECOUNCASHREV1[2] 0.30 0.14 0.05 0.59 6196 1.00

moECOUNCASHREV1[3] 0.65 0.14 0.35 0.89 6438 1.00

Samples were drawn using sampling(NUTS). For each parameter, Eff.Sample

is a crude measure of effective sample size, and Rhat is the potential

scale reduction factor on split chains (at convergence, Rhat = 1).

> loofit2

Computed from 10000 by 52325 log-likelihood matrix

Estimate SE

elpd\_loo -65818.5 107.3

p\_loo 65.1 0.3

looic 131637.0 214.6

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Monte Carlo SE of elpd\_loo is 0.1.

All Pareto k estimates are good (k < 0.5).

See help('pareto-k-diagnostic') for details.

> summary(fit3)

Family: cumulative

Links: mu = logit; disc = identity

Formula: DOMINANCEREV ~ mo(CLASSREV) + mo(INCOME) + mo(POLTICALIDEOLOGY) + GENDER + AGE + mo(ECOUNJOBREV) + mo(ECOUNEDUCATIONREV) + mo(ECOUNFOODREV) + mo(ECOUNMEDICINEREV) + mo(ECOUNCASHREV) + (1 | COUNTRY\_NAME)

Data: dat (Number of observations: 52325)

Samples: 4 chains, each with iter = 5000; warmup = 2500; thin = 1;

total post-warmup samples = 10000

Group-Level Effects:

~COUNTRY\_NAME (Number of levels: 54)

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

sd(Intercept) 0.87 0.09 0.72 1.05 786 1.00

Population-Level Effects:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

Intercept[1] -0.53 0.13 -0.77 -0.28 505 1.02

Intercept[2] 0.83 0.13 0.59 1.07 510 1.02

Intercept[3] 2.46 0.13 2.22 2.71 515 1.02

GENDERMale -0.04 0.02 -0.07 -0.00 13312 1.00

AGE 0.00 0.00 -0.00 0.00 10755 1.00

moCLASSREV 0.13 0.02 0.10 0.16 11145 1.00

moINCOME 0.01 0.00 0.00 0.02 6745 1.00

moPOLTICALIDEOLOGY 0.02 0.00 0.01 0.03 9765 1.00

moECOUNJOBREV 0.05 0.01 0.04 0.07 9993 1.00

moECOUNEDUCATIONREV 0.04 0.01 0.02 0.06 10122 1.00

moECOUNFOODREV 0.15 0.02 0.12 0.18 7471 1.00

moECOUNMEDICINEREV 0.06 0.01 0.04 0.08 7915 1.00

moECOUNCASHREV -0.04 0.01 -0.06 -0.02 8117 1.00

Simplex Parameters:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

moCLASSREV1[1] 0.18 0.05 0.09 0.28 9600 1.00

moCLASSREV1[2] 0.01 0.01 0.00 0.03 14775 1.00

moCLASSREV1[3] 0.12 0.04 0.03 0.21 9898 1.00

moCLASSREV1[4] 0.69 0.06 0.56 0.81 9484 1.00

moINCOME1[1] 0.07 0.06 0.00 0.24 13182 1.00

moINCOME1[2] 0.09 0.08 0.00 0.30 14600 1.00

moINCOME1[3] 0.10 0.09 0.00 0.33 11756 1.00

moINCOME1[4] 0.32 0.15 0.03 0.62 6853 1.00

moINCOME1[5] 0.07 0.07 0.00 0.25 11174 1.00

moINCOME1[6] 0.06 0.06 0.00 0.21 10393 1.00

moINCOME1[7] 0.07 0.07 0.00 0.25 12036 1.00

moINCOME1[8] 0.09 0.08 0.00 0.30 11015 1.00

moINCOME1[9] 0.12 0.10 0.00 0.38 8602 1.00

moPOLTICALIDEOLOGY1[1] 0.06 0.06 0.00 0.22 16161 1.00

moPOLTICALIDEOLOGY1[2] 0.10 0.09 0.00 0.31 13610 1.00

moPOLTICALIDEOLOGY1[3] 0.26 0.15 0.02 0.58 8813 1.00

moPOLTICALIDEOLOGY1[4] 0.31 0.15 0.04 0.61 8659 1.00

moPOLTICALIDEOLOGY1[5] 0.05 0.05 0.00 0.17 13055 1.00

moPOLTICALIDEOLOGY1[6] 0.02 0.02 0.00 0.09 14330 1.00

moPOLTICALIDEOLOGY1[7] 0.02 0.02 0.00 0.08 13592 1.00

moPOLTICALIDEOLOGY1[8] 0.04 0.04 0.00 0.14 13622 1.00

moPOLTICALIDEOLOGY1[9] 0.13 0.09 0.01 0.34 8137 1.00

moECOUNJOBREV1[1] 0.12 0.09 0.00 0.34 12235 1.00

moECOUNJOBREV1[2] 0.79 0.11 0.55 0.96 12738 1.00

moECOUNJOBREV1[3] 0.08 0.07 0.00 0.24 15645 1.00

moECOUNEDUCATIONREV1[1] 0.81 0.13 0.49 0.97 8952 1.00

moECOUNEDUCATIONREV1[2] 0.15 0.12 0.01 0.45 8743 1.00

moECOUNEDUCATIONREV1[3] 0.05 0.05 0.00 0.16 12232 1.00

moECOUNFOODREV1[1] 0.39 0.06 0.28 0.52 8847 1.00

moECOUNFOODREV1[2] 0.23 0.07 0.10 0.37 9885 1.00

moECOUNFOODREV1[3] 0.38 0.08 0.21 0.51 7763 1.00

moECOUNMEDICINEREV1[1] 0.73 0.11 0.50 0.93 8629 1.00

moECOUNMEDICINEREV1[2] 0.15 0.10 0.01 0.36 11874 1.00

moECOUNMEDICINEREV1[3] 0.12 0.09 0.00 0.33 9902 1.00

moECOUNCASHREV1[1] 0.06 0.06 0.00 0.22 7378 1.00

moECOUNCASHREV1[2] 0.27 0.16 0.02 0.64 9897 1.00

moECOUNCASHREV1[3] 0.67 0.17 0.27 0.93 8303 1.00

Samples were drawn using sampling(NUTS). For each parameter, Eff.Sample

is a crude measure of effective sample size, and Rhat is the potential

scale reduction factor on split chains (at convergence, Rhat = 1).

> loofit3

Computed from 10000 by 52325 log-likelihood matrix

Estimate SE

elpd\_loo -65754.5 107.7

p\_loo 75.5 0.3

looic 131509.0 215.5

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Monte Carlo SE of elpd\_loo is 0.1.

All Pareto k estimates are good (k < 0.5).

See help('pareto-k-diagnostic') for details.

> summary(fit4)

Family: cumulative

Links: mu = logit; disc = identity

Formula: DOMINANCEREV ~ mo(LACK\_CONTROLREV) + (1 | COUNTRY\_NAME)

Data: dat (Number of observations: 52325)

Samples: 4 chains, each with iter = 5000; warmup = 2500; thin = 1;

total post-warmup samples = 10000

Group-Level Effects:

~COUNTRY\_NAME (Number of levels: 54)

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

sd(Intercept) 0.87 0.09 0.72 1.07 673 1.00

Population-Level Effects:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

Intercept[1] -1.07 0.12 -1.31 -0.83 529 1.01

Intercept[2] 0.27 0.12 0.03 0.52 527 1.01

Intercept[3] 1.90 0.12 1.65 2.14 527 1.01

moLACK\_CONTROLREV 0.01 0.00 0.00 0.02 4499 1.00

Simplex Parameters:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

moLACK\_CONTROLREV1[1] 0.05 0.05 0.00 0.18 6373 1.00

moLACK\_CONTROLREV1[2] 0.05 0.05 0.00 0.19 6211 1.00

moLACK\_CONTROLREV1[3] 0.16 0.12 0.01 0.46 5343 1.00

moLACK\_CONTROLREV1[4] 0.33 0.16 0.04 0.64 4312 1.00

moLACK\_CONTROLREV1[5] 0.07 0.07 0.00 0.25 5773 1.00

moLACK\_CONTROLREV1[6] 0.08 0.08 0.00 0.28 5781 1.00

moLACK\_CONTROLREV1[7] 0.08 0.07 0.00 0.26 6470 1.00

moLACK\_CONTROLREV1[8] 0.09 0.08 0.00 0.30 6179 1.00

moLACK\_CONTROLREV1[9] 0.09 0.08 0.00 0.30 5647 1.00

Samples were drawn using sampling(NUTS). For each parameter, Eff.Sample

is a crude measure of effective sample size, and Rhat is the potential

scale reduction factor on split chains (at convergence, Rhat = 1).

> loofit4

Computed from 10000 by 52325 log-likelihood matrix

Estimate SE

elpd\_loo -66016.8 106.0

p\_loo 58.1 0.3

looic 132033.7 212.1

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Monte Carlo SE of elpd\_loo is 0.1.

All Pareto k estimates are good (k < 0.5).

See help('pareto-k-diagnostic') for details.

> summary(fit5)

Family: cumulative

Links: mu = logit; disc = identity

Formula: DOMINANCEREV ~ mo(CLASSREV) + mo(INCOME) + mo(POLTICALIDEOLOGY) + GENDER + AGE + mo(LACK\_CONTROLREV) + (1 | COUNTRY\_NAME)

Data: dat (Number of observations: 52325)

Samples: 4 chains, each with iter = 5000; warmup = 2500; thin = 1;

total post-warmup samples = 10000

Group-Level Effects:

~COUNTRY\_NAME (Number of levels: 54)

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

sd(Intercept) 0.88 0.09 0.73 1.07 905 1.00

Population-Level Effects:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

Intercept[1] -0.94 0.13 -1.21 -0.68 567 1.01

Intercept[2] 0.40 0.13 0.14 0.66 565 1.01

Intercept[3] 2.03 0.13 1.77 2.29 567 1.01

GENDERMale -0.03 0.02 -0.06 0.00 12317 1.00

AGE -0.00 0.00 -0.00 0.00 10982 1.00

moCLASSREV 0.12 0.02 0.09 0.15 10164 1.00

moINCOME -0.00 0.01 -0.01 0.01 7075 1.00

moPOLTICALIDEOLOGY 0.02 0.00 0.01 0.03 9502 1.00

moLACK\_CONTROLREV 0.01 0.00 0.01 0.02 11375 1.00

Simplex Parameters:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

moCLASSREV1[1] 0.14 0.05 0.04 0.24 10095 1.00

moCLASSREV1[2] 0.01 0.01 0.00 0.03 12652 1.00

moCLASSREV1[3] 0.09 0.05 0.01 0.19 7879 1.00

moCLASSREV1[4] 0.76 0.07 0.62 0.88 9128 1.00

moINCOME1[1] 0.13 0.12 0.00 0.45 9836 1.00

moINCOME1[2] 0.11 0.10 0.00 0.35 15060 1.00

moINCOME1[3] 0.10 0.09 0.00 0.34 13504 1.00

moINCOME1[4] 0.11 0.11 0.00 0.41 9504 1.00

moINCOME1[5] 0.10 0.09 0.00 0.33 13772 1.00

moINCOME1[6] 0.11 0.10 0.00 0.37 11217 1.00

moINCOME1[7] 0.11 0.10 0.00 0.36 12626 1.00

moINCOME1[8] 0.12 0.10 0.00 0.38 10944 1.00

moINCOME1[9] 0.12 0.11 0.00 0.39 9677 1.00

moPOLTICALIDEOLOGY1[1] 0.06 0.05 0.00 0.20 14359 1.00

moPOLTICALIDEOLOGY1[2] 0.10 0.08 0.00 0.31 14870 1.00

moPOLTICALIDEOLOGY1[3] 0.26 0.15 0.02 0.58 8775 1.00

moPOLTICALIDEOLOGY1[4] 0.30 0.15 0.04 0.60 8447 1.00

moPOLTICALIDEOLOGY1[5] 0.06 0.05 0.00 0.19 12447 1.00

moPOLTICALIDEOLOGY1[6] 0.02 0.03 0.00 0.09 12014 1.00

moPOLTICALIDEOLOGY1[7] 0.02 0.02 0.00 0.08 13347 1.00

moPOLTICALIDEOLOGY1[8] 0.04 0.04 0.00 0.14 14157 1.00

moPOLTICALIDEOLOGY1[9] 0.14 0.09 0.01 0.34 7630 1.00

moLACK\_CONTROLREV1[1] 0.04 0.04 0.00 0.14 13620 1.00

moLACK\_CONTROLREV1[2] 0.04 0.04 0.00 0.16 13915 1.00

moLACK\_CONTROLREV1[3] 0.15 0.12 0.01 0.43 9685 1.00

moLACK\_CONTROLREV1[4] 0.38 0.15 0.07 0.67 7547 1.00

moLACK\_CONTROLREV1[5] 0.06 0.06 0.00 0.22 11733 1.00

moLACK\_CONTROLREV1[6] 0.08 0.07 0.00 0.26 12828 1.00

moLACK\_CONTROLREV1[7] 0.07 0.07 0.00 0.24 11863 1.00

moLACK\_CONTROLREV1[8] 0.08 0.07 0.00 0.26 10968 1.00

moLACK\_CONTROLREV1[9] 0.08 0.07 0.00 0.27 11109 1.00

Samples were drawn using sampling(NUTS). For each parameter, Eff.Sample

is a crude measure of effective sample size, and Rhat is the potential

scale reduction factor on split chains (at convergence, Rhat = 1).

> loofit5

Computed from 10000 by 52325 log-likelihood matrix

Estimate SE

elpd\_loo -65970.4 106.4

p\_loo 67.4 0.3

looic 131940.8 212.8

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Monte Carlo SE of elpd\_loo is 0.1.

All Pareto k estimates are good (k < 0.5).

See help('pareto-k-diagnostic') for details.

> summary(fit6)

Family: cumulative

Links: mu = logit; disc = identity

Formula: DOMINANCEREV ~ mo(ECOUNJOBREV) + mo(ECOUNEDUCATIONREV) + mo(ECOUNFOODREV) + mo(ECOUNMEDICINEREV) + mo(ECOUNCASHREV) + mo(LACK\_CONTROLREV) + (1 | COUNTRY\_NAME)

Data: dat (Number of observations: 52325)

Samples: 4 chains, each with iter = 5000; warmup = 2500; thin = 1;

total post-warmup samples = 10000

Group-Level Effects:

~COUNTRY\_NAME (Number of levels: 54)

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

sd(Intercept) 0.87 0.09 0.72 1.07 1054 1.00

Population-Level Effects:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

Intercept[1] -0.83 0.13 -1.09 -0.59 648 1.00

Intercept[2] 0.52 0.13 0.26 0.76 644 1.00

Intercept[3] 2.15 0.13 1.89 2.39 645 1.00

moECOUNJOBREV 0.05 0.01 0.04 0.07 8760 1.00

moECOUNEDUCATIONREV 0.04 0.01 0.02 0.06 8406 1.00

moECOUNFOODREV 0.14 0.02 0.11 0.17 7177 1.00

moECOUNMEDICINEREV 0.06 0.01 0.04 0.08 8121 1.00

moECOUNCASHREV -0.05 0.01 -0.08 -0.03 8198 1.00

moLACK\_CONTROLREV -0.00 0.01 -0.01 0.01 5617 1.00

Simplex Parameters:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

moECOUNJOBREV1[1] 0.12 0.09 0.00 0.34 10481 1.00

moECOUNJOBREV1[2] 0.80 0.11 0.55 0.97 11457 1.00

moECOUNJOBREV1[3] 0.08 0.06 0.00 0.24 12707 1.00

moECOUNEDUCATIONREV1[1] 0.82 0.12 0.54 0.98 8984 1.00

moECOUNEDUCATIONREV1[2] 0.13 0.11 0.01 0.41 8597 1.00

moECOUNEDUCATIONREV1[3] 0.05 0.04 0.00 0.16 10327 1.00

moECOUNFOODREV1[1] 0.37 0.06 0.26 0.50 7802 1.00

moECOUNFOODREV1[2] 0.24 0.07 0.10 0.38 9343 1.00

moECOUNFOODREV1[3] 0.39 0.08 0.22 0.53 7415 1.00

moECOUNMEDICINEREV1[1] 0.72 0.12 0.48 0.93 8603 1.00

moECOUNMEDICINEREV1[2] 0.15 0.10 0.01 0.38 9743 1.00

moECOUNMEDICINEREV1[3] 0.13 0.09 0.01 0.35 8624 1.00

moECOUNCASHREV1[1] 0.06 0.05 0.00 0.18 11592 1.00

moECOUNCASHREV1[2] 0.29 0.13 0.05 0.58 8223 1.00

moECOUNCASHREV1[3] 0.65 0.13 0.36 0.89 8550 1.00

moLACK\_CONTROLREV1[1] 0.15 0.13 0.00 0.49 7985 1.00

moLACK\_CONTROLREV1[2] 0.11 0.10 0.00 0.37 11274 1.00

moLACK\_CONTROLREV1[3] 0.09 0.09 0.00 0.35 9189 1.00

moLACK\_CONTROLREV1[4] 0.09 0.11 0.00 0.40 7059 1.00

moLACK\_CONTROLREV1[5] 0.10 0.09 0.00 0.33 11059 1.00

moLACK\_CONTROLREV1[6] 0.10 0.09 0.00 0.35 11557 1.00

moLACK\_CONTROLREV1[7] 0.11 0.10 0.00 0.37 10071 1.00

moLACK\_CONTROLREV1[8] 0.12 0.10 0.00 0.37 10289 1.00

moLACK\_CONTROLREV1[9] 0.12 0.11 0.00 0.40 9832 1.00

Samples were drawn using sampling(NUTS). For each parameter, Eff.Sample

is a crude measure of effective sample size, and Rhat is the potential

scale reduction factor on split chains (at convergence, Rhat = 1).

> loofit6

Computed from 10000 by 52325 log-likelihood matrix

Estimate SE

elpd\_loo -65819.9 107.3

p\_loo 68.0 0.3

looic 131639.8 214.6

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Monte Carlo SE of elpd\_loo is 0.1.

All Pareto k estimates are good (k < 0.5).

See help('pareto-k-diagnostic') for details.

> summary(fit7)

Family: cumulative

Links: mu = logit; disc = identity

Formula: DOMINANCEREV ~ mo(CLASSREV) + mo(INCOME) + mo(POLTICALIDEOLOGY) + GENDER + AGE + mo(ECOUNJOBREV) + mo(ECOUNEDUCATIONREV) + mo(ECOUNFOODREV) + mo(ECOUNMEDICINEREV) + mo(ECOUNCASHREV) + (LACK\_CONTROLREV) + (1 | COUNTRY\_NAME)

Data: dat (Number of observations: 52325)

Samples: 4 chains, each with iter = 5000; warmup = 2500; thin = 1;

total post-warmup samples = 10000

Group-Level Effects:

~COUNTRY\_NAME (Number of levels: 54)

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

sd(Intercept) 0.88 0.09 0.72 1.07 753 1.00

Population-Level Effects:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

Intercept[1] -0.51 0.13 -0.77 -0.27 698 1.00

Intercept[2] 0.84 0.13 0.59 1.09 696 1.00

Intercept[3] 2.48 0.13 2.23 2.72 702 1.00

GENDERMale -0.03 0.02 -0.07 -0.00 12327 1.00

AGE 0.00 0.00 -0.00 0.00 10474 1.00

LACK\_CONTROLREV 0.00 0.00 -0.00 0.01 15619 1.00

moCLASSREV 0.13 0.02 0.10 0.16 10437 1.00

moINCOME 0.01 0.00 0.00 0.02 7092 1.00

moPOLTICALIDEOLOGY 0.02 0.00 0.01 0.03 10633 1.00

moECOUNJOBREV 0.05 0.01 0.04 0.07 9552 1.00

moECOUNEDUCATIONREV 0.04 0.01 0.02 0.06 8609 1.00

moECOUNFOODREV 0.15 0.02 0.11 0.18 7059 1.00

moECOUNMEDICINEREV 0.06 0.01 0.04 0.08 7535 1.00

moECOUNCASHREV -0.04 0.01 -0.06 -0.02 6824 1.00

Simplex Parameters:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

moCLASSREV1[1] 0.18 0.05 0.09 0.28 11030 1.00

moCLASSREV1[2] 0.01 0.01 0.00 0.03 14173 1.00

moCLASSREV1[3] 0.12 0.04 0.03 0.21 7049 1.00

moCLASSREV1[4] 0.69 0.06 0.56 0.81 9258 1.00

moINCOME1[1] 0.06 0.06 0.00 0.22 13373 1.00

moINCOME1[2] 0.09 0.08 0.00 0.30 13396 1.00

moINCOME1[3] 0.10 0.09 0.00 0.33 10882 1.00

moINCOME1[4] 0.33 0.15 0.04 0.63 7688 1.00

moINCOME1[5] 0.07 0.07 0.00 0.24 10909 1.00

moINCOME1[6] 0.06 0.05 0.00 0.20 10448 1.00

moINCOME1[7] 0.07 0.07 0.00 0.25 11398 1.00

moINCOME1[8] 0.09 0.08 0.00 0.30 11920 1.00

moINCOME1[9] 0.12 0.10 0.00 0.38 8833 1.00

moPOLTICALIDEOLOGY1[1] 0.06 0.06 0.00 0.21 14594 1.00

moPOLTICALIDEOLOGY1[2] 0.10 0.09 0.00 0.32 14631 1.00

moPOLTICALIDEOLOGY1[3] 0.26 0.15 0.02 0.58 8813 1.00

moPOLTICALIDEOLOGY1[4] 0.30 0.15 0.03 0.61 7783 1.00

moPOLTICALIDEOLOGY1[5] 0.05 0.05 0.00 0.17 12979 1.00

moPOLTICALIDEOLOGY1[6] 0.02 0.02 0.00 0.09 12732 1.00

moPOLTICALIDEOLOGY1[7] 0.02 0.02 0.00 0.08 14143 1.00

moPOLTICALIDEOLOGY1[8] 0.04 0.04 0.00 0.15 14454 1.00

moPOLTICALIDEOLOGY1[9] 0.14 0.09 0.01 0.35 8189 1.00

moECOUNJOBREV1[1] 0.12 0.09 0.00 0.35 12085 1.00

moECOUNJOBREV1[2] 0.79 0.11 0.55 0.96 13550 1.00

moECOUNJOBREV1[3] 0.08 0.07 0.00 0.25 15453 1.00

moECOUNEDUCATIONREV1[1] 0.81 0.13 0.50 0.97 9624 1.00

moECOUNEDUCATIONREV1[2] 0.15 0.12 0.01 0.44 8669 1.00

moECOUNEDUCATIONREV1[3] 0.05 0.05 0.00 0.17 8833 1.00

moECOUNFOODREV1[1] 0.39 0.06 0.28 0.52 8337 1.00

moECOUNFOODREV1[2] 0.23 0.07 0.10 0.37 10518 1.00

moECOUNFOODREV1[3] 0.38 0.08 0.21 0.51 7469 1.00

moECOUNMEDICINEREV1[1] 0.73 0.12 0.49 0.94 9098 1.00

moECOUNMEDICINEREV1[2] 0.15 0.10 0.01 0.36 11914 1.00

moECOUNMEDICINEREV1[3] 0.12 0.09 0.00 0.34 9223 1.00

moECOUNCASHREV1[1] 0.06 0.06 0.00 0.22 8915 1.00

moECOUNCASHREV1[2] 0.27 0.16 0.02 0.63 9965 1.00

moECOUNCASHREV1[3] 0.67 0.17 0.28 0.94 9254 1.00

Samples were drawn using sampling(NUTS). For each parameter, Eff.Sample

is a crude measure of effective sample size, and Rhat is the potential

scale reduction factor on split chains (at convergence, Rhat = 1).

> loofit7

Computed from 10000 by 52325 log-likelihood matrix

Estimate SE

elpd\_loo -65754.9 107.8

p\_loo 76.4 0.3

looic 131509.8 215.5

------

Monte Carlo SE of elpd\_loo is 0.1.

All Pareto k estimates are good (k < 0.5).

See help('pareto-k-diagnostic') for details.

> summary(fit8)

Family: cumulative

Links: mu = logit; disc = identity

Formula: DOMINANCEREV ~ mo(INTERCOUNTRYWARREV) + mo(CIVILWARREV) + mo(TERRORISTATTACKREV) + (1 | COUNTRY\_NAME)

Data: dat (Number of observations: 52325)

Samples: 4 chains, each with iter = 5000; warmup = 2500; thin = 1;

total post-warmup samples = 10000

Group-Level Effects:

~COUNTRY\_NAME (Number of levels: 54)

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

sd(Intercept) 0.86 0.09 0.71 1.05 735 1.00

Population-Level Effects:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

Intercept[1] -0.81 0.12 -1.03 -0.57 453 1.01

Intercept[2] 0.54 0.12 0.32 0.78 455 1.01

Intercept[3] 2.17 0.12 1.95 2.41 456 1.01

moINTERCOUNTRYWARREV 0.07 0.01 0.05 0.10 3670 1.00

moCIVILWARREV 0.12 0.01 0.09 0.14 3837 1.00

moTERRORISTATTACKREV -0.06 0.01 -0.09 -0.04 2964 1.00

Simplex Parameters:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

moINTERCOUNTRYWARREV1[1] 0.63 0.12 0.39 0.85 4224 1.00

moINTERCOUNTRYWARREV1[2] 0.34 0.12 0.11 0.58 4196 1.00

moINTERCOUNTRYWARREV1[3] 0.03 0.03 0.00 0.11 6830 1.00

moCIVILWARREV1[1] 0.65 0.07 0.52 0.79 3878 1.00

moCIVILWARREV1[2] 0.32 0.07 0.18 0.45 4121 1.00

moCIVILWARREV1[3] 0.03 0.03 0.00 0.09 6247 1.00

moTERRORISTATTACKREV1[1] 0.32 0.13 0.04 0.56 2729 1.00

moTERRORISTATTACKREV1[2] 0.05 0.05 0.00 0.18 6047 1.00

moTERRORISTATTACKREV1[3] 0.62 0.13 0.39 0.90 3001 1.00

Samples were drawn using sampling(NUTS). For each parameter, Eff.Sample

is a crude measure of effective sample size, and Rhat is the potential

scale reduction factor on split chains (at convergence, Rhat = 1).

> loofit8

Computed from 10000 by 52325 log-likelihood matrix

Estimate SE

elpd\_loo -65876.2 107.2

p\_loo 62.1 0.3

looic 131752.4 214.5

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Monte Carlo SE of elpd\_loo is 0.1.

All Pareto k estimates are good (k < 0.5).

See help('pareto-k-diagnostic') for details.

> summary(fit9)

Family: cumulative

Links: mu = logit; disc = identity

Formula: DOMINANCEREV ~ mo(CLASSREV) + mo(INCOME) + mo(POLTICALIDEOLOGY) + GENDER + AGE + mo(INTERCOUNTRYWARREV) + mo(CIVILWARREV) + mo(TERRORISTATTACKREV) + (1 | COUNTRY\_NAME)

Data: dat (Number of observations: 52325)

Samples: 4 chains, each with iter = 5000; warmup = 2500; thin = 1;

total post-warmup samples = 10000

Group-Level Effects:

~COUNTRY\_NAME (Number of levels: 54)

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

sd(Intercept) 0.85 0.09 0.70 1.04 961 1.00

Population-Level Effects:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

Intercept[1] -0.68 0.13 -0.93 -0.43 655 1.01

Intercept[2] 0.68 0.13 0.42 0.92 654 1.01

Intercept[3] 2.31 0.13 2.05 2.55 659 1.01

GENDERMale -0.02 0.02 -0.06 0.01 11425 1.00

AGE -0.00 0.00 -0.00 0.00 10990 1.00

moCLASSREV 0.12 0.02 0.09 0.15 9884 1.00

moINCOME -0.00 0.01 -0.01 0.01 6905 1.00

moPOLTICALIDEOLOGY 0.02 0.00 0.01 0.03 10199 1.00

moINTERCOUNTRYWARREV 0.07 0.01 0.05 0.10 7671 1.00

moCIVILWARREV 0.12 0.01 0.09 0.14 7715 1.00

moTERRORISTATTACKREV -0.06 0.01 -0.09 -0.04 6380 1.00

Simplex Parameters:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

moCLASSREV1[1] 0.12 0.05 0.02 0.22 8148 1.00

moCLASSREV1[2] 0.01 0.01 0.00 0.03 13091 1.00

moCLASSREV1[3] 0.10 0.05 0.02 0.20 9143 1.00

moCLASSREV1[4] 0.77 0.06 0.64 0.90 8274 1.00

moINCOME1[1] 0.14 0.12 0.00 0.46 10119 1.00

moINCOME1[2] 0.11 0.09 0.00 0.36 12927 1.00

moINCOME1[3] 0.10 0.09 0.00 0.33 12376 1.00

moINCOME1[4] 0.10 0.10 0.00 0.38 9488 1.00

moINCOME1[5] 0.10 0.09 0.00 0.34 12253 1.00

moINCOME1[6] 0.11 0.10 0.00 0.37 11454 1.00

moINCOME1[7] 0.11 0.10 0.00 0.36 11236 1.00

moINCOME1[8] 0.12 0.10 0.00 0.38 9895 1.00

moINCOME1[9] 0.12 0.10 0.00 0.38 9419 1.00

moPOLTICALIDEOLOGY1[1] 0.06 0.06 0.00 0.22 13923 1.00

moPOLTICALIDEOLOGY1[2] 0.11 0.09 0.00 0.34 13254 1.00

moPOLTICALIDEOLOGY1[3] 0.29 0.16 0.02 0.61 9176 1.00

moPOLTICALIDEOLOGY1[4] 0.26 0.15 0.02 0.57 7295 1.00

moPOLTICALIDEOLOGY1[5] 0.06 0.05 0.00 0.20 12646 1.00

moPOLTICALIDEOLOGY1[6] 0.03 0.03 0.00 0.09 11973 1.00

moPOLTICALIDEOLOGY1[7] 0.02 0.02 0.00 0.08 12583 1.00

moPOLTICALIDEOLOGY1[8] 0.04 0.04 0.00 0.15 12151 1.00

moPOLTICALIDEOLOGY1[9] 0.13 0.09 0.01 0.34 7862 1.00

moINTERCOUNTRYWARREV1[1] 0.63 0.12 0.38 0.85 7980 1.00

moINTERCOUNTRYWARREV1[2] 0.34 0.12 0.12 0.59 7765 1.00

moINTERCOUNTRYWARREV1[3] 0.03 0.03 0.00 0.11 14201 1.00

moCIVILWARREV1[1] 0.65 0.07 0.51 0.79 8269 1.00

moCIVILWARREV1[2] 0.32 0.07 0.18 0.46 8276 1.00

moCIVILWARREV1[3] 0.03 0.03 0.00 0.10 11898 1.00

moTERRORISTATTACKREV1[1] 0.33 0.13 0.06 0.56 6215 1.00

moTERRORISTATTACKREV1[2] 0.05 0.05 0.00 0.17 11122 1.00

moTERRORISTATTACKREV1[3] 0.62 0.13 0.39 0.89 6599 1.00

Samples were drawn using sampling(NUTS). For each parameter, Eff.Sample

is a crude measure of effective sample size, and Rhat is the potential

scale reduction factor on split chains (at convergence, Rhat = 1).

> loofit9

Computed from 10000 by 52325 log-likelihood matrix

Estimate SE

elpd\_loo -65834.6 107.6

p\_loo 71.2 0.3

looic 131669.3 215.1

------

Monte Carlo SE of elpd\_loo is 0.1.

All Pareto k estimates are good (k < 0.5).

See help('pareto-k-diagnostic') for details.

> summary(fit10)

Family: cumulative

Links: mu = logit; disc = identity

Formula: DOMINANCEREV ~ mo(CLASSREV) + mo(INCOME) + mo(POLTICALIDEOLOGY) + GENDER + AGE + mo(ECOUNJOBREV) + mo(ECOUNEDUCATIONREV) + mo(ECOUNFOODREV) + mo(ECOUNMEDICINEREV) + mo(ECOUNCASHREV) + (LACK\_CONTROLREV) + mo(INTERCOUNTRYWARREV) + mo(CIVILWARREV) + mo(TERRORISTATTACKREV) + (1 | COUNTRY\_NAME)

Data: dat (Number of observations: 52325)

Samples: 4 chains, each with iter = 5000; warmup = 2500; thin = 1;

total post-warmup samples = 10000

Group-Level Effects:

~COUNTRY\_NAME (Number of levels: 54)

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

sd(Intercept) 0.86 0.09 0.71 1.06 883 1.01

Population-Level Effects:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

Intercept[1] -0.40 0.13 -0.66 -0.15 511 1.01

Intercept[2] 0.96 0.13 0.70 1.22 512 1.01

Intercept[3] 2.59 0.13 2.34 2.85 517 1.01

GENDERMale -0.03 0.02 -0.06 0.00 13356 1.00

AGE -0.00 0.00 -0.00 0.00 10642 1.00

LACK\_CONTROLREV 0.00 0.00 -0.00 0.01 15878 1.00

moCLASSREV 0.13 0.02 0.10 0.16 10006 1.00

moINCOME 0.01 0.00 0.00 0.02 6788 1.00

moPOLTICALIDEOLOGY 0.02 0.00 0.01 0.03 10312 1.00

moECOUNJOBREV 0.05 0.01 0.03 0.06 8372 1.00

moECOUNEDUCATIONREV -0.02 0.01 -0.04 0.01 3824 1.00

moECOUNFOODREV 0.15 0.02 0.11 0.18 7741 1.00

moECOUNMEDICINEREV 0.06 0.01 0.04 0.08 8157 1.00

moECOUNCASHREV -0.04 0.01 -0.06 -0.01 8074 1.00

moINTERCOUNTRYWARREV 0.06 0.01 0.03 0.08 7497 1.00

moCIVILWARREV 0.11 0.01 0.08 0.13 7907 1.00

moTERRORISTATTACKREV -0.05 0.01 -0.08 -0.03 6359 1.00

Simplex Parameters:

Estimate Est.Error l-95% CI u-95% CI Eff.Sample Rhat

moCLASSREV1[1] 0.18 0.05 0.08 0.28 8963 1.00

moCLASSREV1[2] 0.01 0.01 0.00 0.04 12877 1.00

moCLASSREV1[3] 0.12 0.04 0.04 0.21 9597 1.00

moCLASSREV1[4] 0.69 0.06 0.56 0.81 9535 1.00

moINCOME1[1] 0.07 0.06 0.00 0.23 15090 1.00

moINCOME1[2] 0.10 0.08 0.00 0.31 13790 1.00

moINCOME1[3] 0.10 0.09 0.00 0.33 11994 1.00

moINCOME1[4] 0.31 0.15 0.04 0.60 7835 1.00

moINCOME1[5] 0.07 0.07 0.00 0.25 10877 1.00

moINCOME1[6] 0.06 0.06 0.00 0.21 11452 1.00

moINCOME1[7] 0.08 0.07 0.00 0.26 12001 1.00

moINCOME1[8] 0.09 0.08 0.00 0.30 12021 1.00

moINCOME1[9] 0.13 0.11 0.00 0.40 7946 1.00

moPOLTICALIDEOLOGY1[1] 0.07 0.06 0.00 0.23 15627 1.00

moPOLTICALIDEOLOGY1[2] 0.11 0.09 0.00 0.33 13120 1.00

moPOLTICALIDEOLOGY1[3] 0.27 0.16 0.02 0.60 7167 1.00

moPOLTICALIDEOLOGY1[4] 0.27 0.15 0.02 0.58 6227 1.00

moPOLTICALIDEOLOGY1[5] 0.05 0.05 0.00 0.18 12632 1.00

moPOLTICALIDEOLOGY1[6] 0.03 0.03 0.00 0.10 13158 1.00

moPOLTICALIDEOLOGY1[7] 0.02 0.02 0.00 0.08 13728 1.00

moPOLTICALIDEOLOGY1[8] 0.04 0.04 0.00 0.15 13414 1.00

moPOLTICALIDEOLOGY1[9] 0.14 0.10 0.01 0.36 7351 1.00

moECOUNJOBREV1[1] 0.12 0.09 0.00 0.35 14608 1.00

moECOUNJOBREV1[2] 0.75 0.12 0.48 0.95 14187 1.00

moECOUNJOBREV1[3] 0.13 0.09 0.01 0.34 14007 1.00

moECOUNEDUCATIONREV1[1] 0.14 0.16 0.00 0.67 3236 1.00

moECOUNEDUCATIONREV1[2] 0.19 0.16 0.01 0.62 10752 1.00

moECOUNEDUCATIONREV1[3] 0.67 0.22 0.07 0.96 3830 1.00

moECOUNFOODREV1[1] 0.39 0.06 0.28 0.52 8524 1.00

moECOUNFOODREV1[2] 0.22 0.07 0.09 0.37 9822 1.00

moECOUNFOODREV1[3] 0.39 0.08 0.22 0.52 8205 1.00

moECOUNMEDICINEREV1[1] 0.72 0.12 0.48 0.93 8308 1.00

moECOUNMEDICINEREV1[2] 0.15 0.10 0.01 0.37 10322 1.00

moECOUNMEDICINEREV1[3] 0.13 0.10 0.00 0.35 9379 1.00

moECOUNCASHREV1[1] 0.07 0.07 0.00 0.25 10182 1.00

moECOUNCASHREV1[2] 0.29 0.17 0.03 0.68 10061 1.00

moECOUNCASHREV1[3] 0.64 0.18 0.22 0.92 8886 1.00

moINTERCOUNTRYWARREV1[1] 0.58 0.15 0.25 0.86 7640 1.00

moINTERCOUNTRYWARREV1[2] 0.38 0.15 0.10 0.70 7617 1.00

moINTERCOUNTRYWARREV1[3] 0.04 0.04 0.00 0.14 14603 1.00

moCIVILWARREV1[1] 0.65 0.08 0.50 0.81 10495 1.00

moCIVILWARREV1[2] 0.31 0.08 0.16 0.46 10093 1.00

moCIVILWARREV1[3] 0.03 0.03 0.00 0.11 13624 1.00

moTERRORISTATTACKREV1[1] 0.37 0.15 0.04 0.64 5607 1.00

moTERRORISTATTACKREV1[2] 0.06 0.06 0.00 0.21 11931 1.00

moTERRORISTATTACKREV1[3] 0.57 0.15 0.31 0.88 6468 1.00

Samples were drawn using sampling(NUTS). For each parameter, Eff.Sample

is a crude measure of effective sample size, and Rhat is the potential

scale reduction factor on split chains (at convergence, Rhat = 1).

> loofit10

Computed from 10000 by 52325 log-likelihood matrix

Estimate SE

elpd\_loo -65667.6 108.5

p\_loo 83.3 0.4

looic 131335.1 217.0

------

Monte Carlo SE of elpd\_loo is 0.1.

All Pareto k estimates are good (k < 0.5).

See help('pareto-k-diagnostic') for details.