Supplementary Materials – Association between pet ownership and mental health and well-being of Canadians assessed in a cross-sectional study during the COVID-19 pandemic

Figure 1. Density plots (left) and trace plots (right) for the models' intercept (b_Intercept; [1] to [4] in cumulative ordinal models), the coefficients for pet ownership (b_O1Yes), the group-level parameters (sd_region__Intercept), and the models' sigma (linear regression models; sigma) for multivariable[1] Bayesian gaussian linear regression or cumulative ordinal models (probit link) mixed[2] models from a cross-sectional study including 1,500 Canadian surveyed during COVID-19 pandemic (April 14 to May 5, 2021).

A. Quality of life, as measured by the EQ-5D-5L tool (EuroQol Group, 1990) on a Canadian scale (range = -0.15 to 0.95; (Xie et al., 2016).
B. Global health, as measured by the EQ-5D-5L tool (range = 0 to 100; (EuroQol Group, 1990).
C. Perceived mental health during the pandemic (Statistics Canada, 2020b).
D. Loneliness, as measured by a 3-question scale (range = 3 to 9; (Hughes et al., 2004).
E. Self-reported level of stress (Statistics Canada, 2020b).
F. Anxiety, as categorized using the generalized anxiety disorder (GAD-7) score (Spitzer et al., 2006).

[1] Includes the minimal sufficient adjustment set for estimating total effect of pet ownership (age, gender, highest level of education, ethnicity, annual household income, social support, disability, current mental health change, pet change in the previous year, number of people in the household, and pet attitude score).

[2] Geographical regions as group-level effect.

Figure 1A.

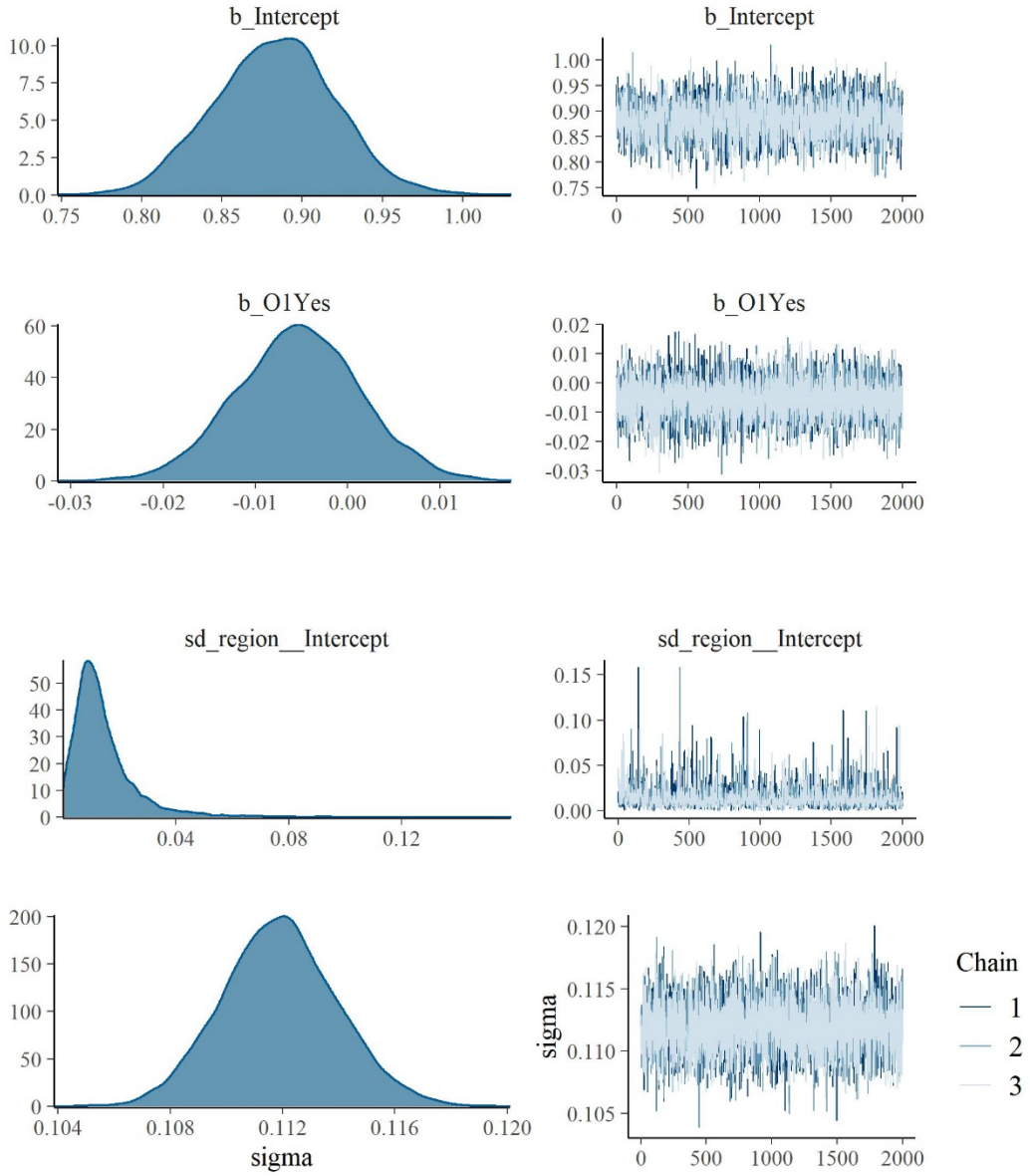

b_Intercept
b_Intercept
b_O1Yes
b_O1Yes
sd_region__Intercept
sd_region__Intercept
sigma
sigma
Chain
1
2
3

Figure 1B.

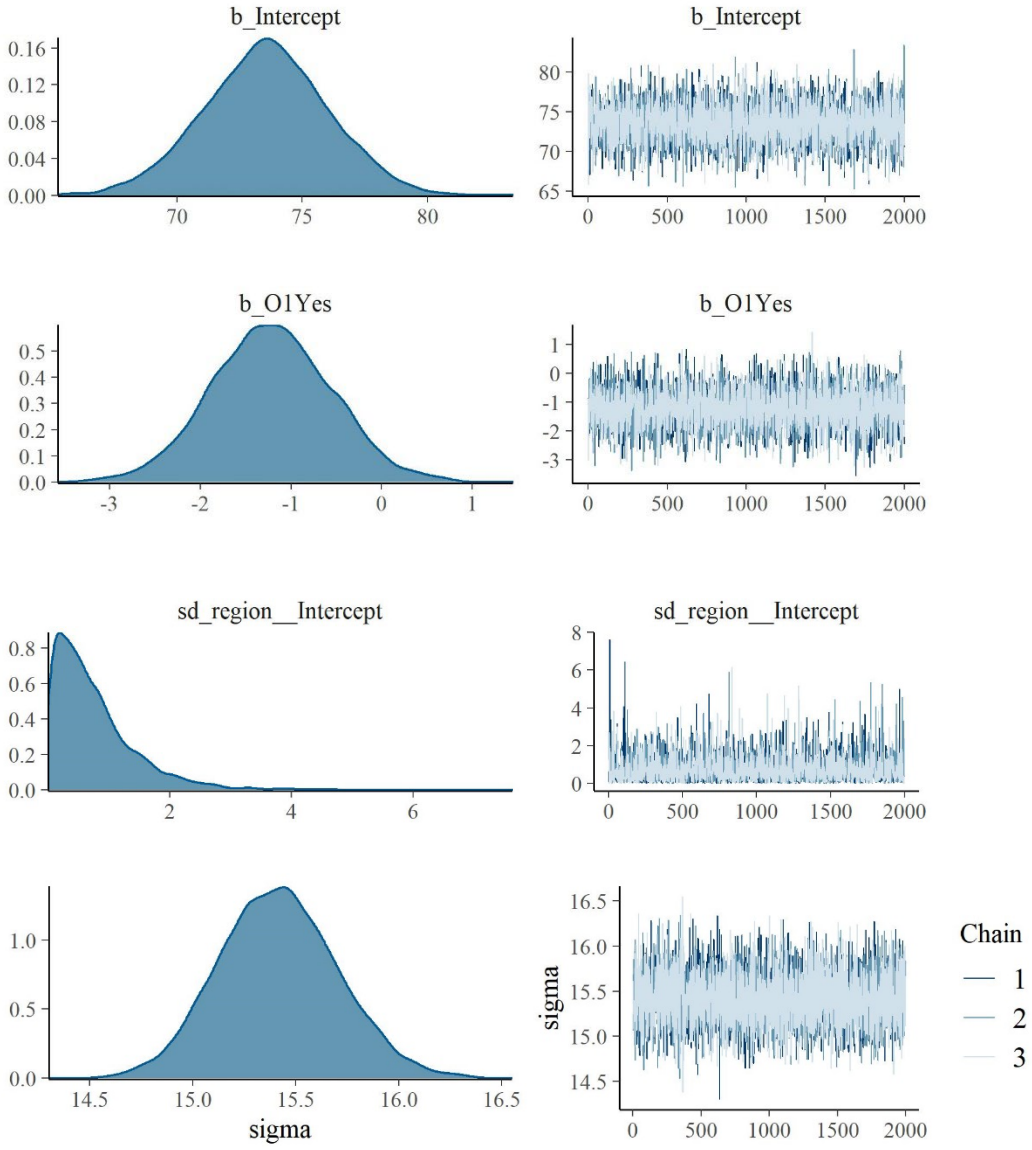

b_Intercept
b_Intercept
b_O1Yes
b_O1Yes
sd_region__Intercept
sd_region__Intercept
sigma
sigma
Chain
1
2
3

Figure 1C.

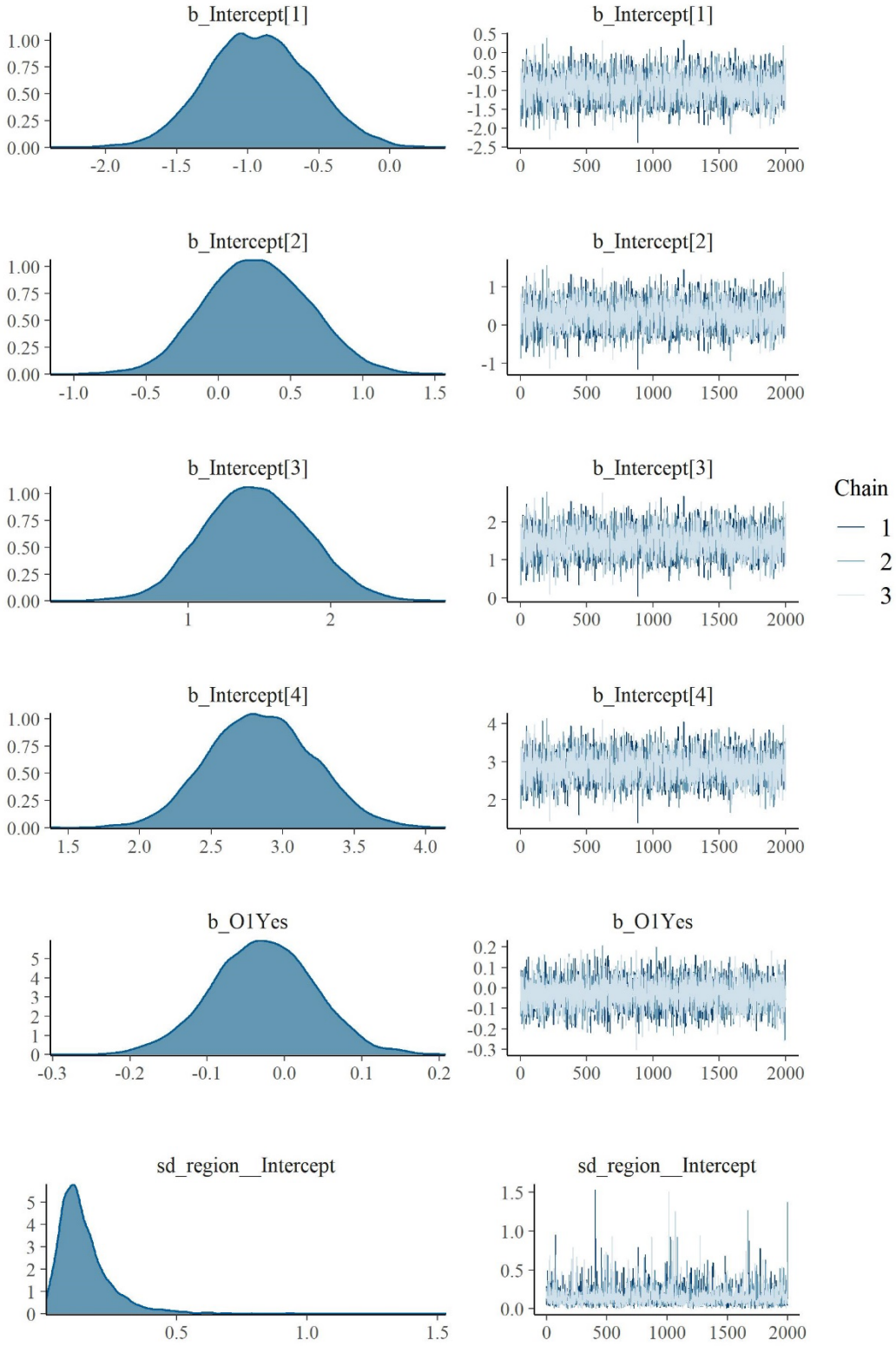

b_Intercept[1]
b_Intercept[1]
b_Intercept[2]
b_Intercept[2]
b_Intercept[3]
b_Intercept[3]
b_Intercept[4]
b_Intercept[4]
b_O1Yes
b_O1Yes
sd_region__Intercept
sd_region__Intercept
Chain
1
2
3

Figure 1D.

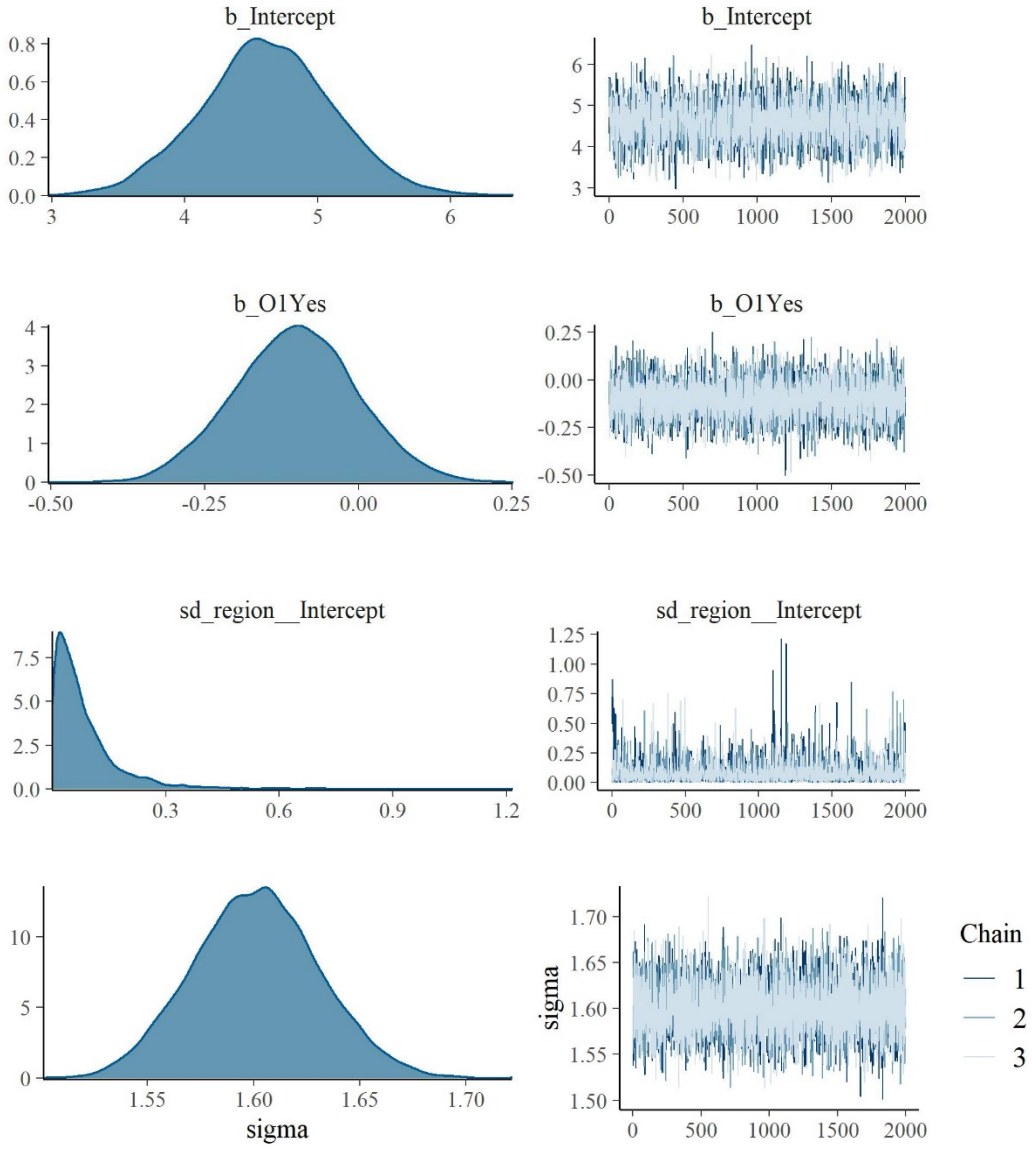

b_Intercept
b_Intercept
b_O1Yes
b_O1Yes
sd_region__Intercept
sd_region__Intercept
sigma
sigma
Chain
1
2
3

Figure 1E.

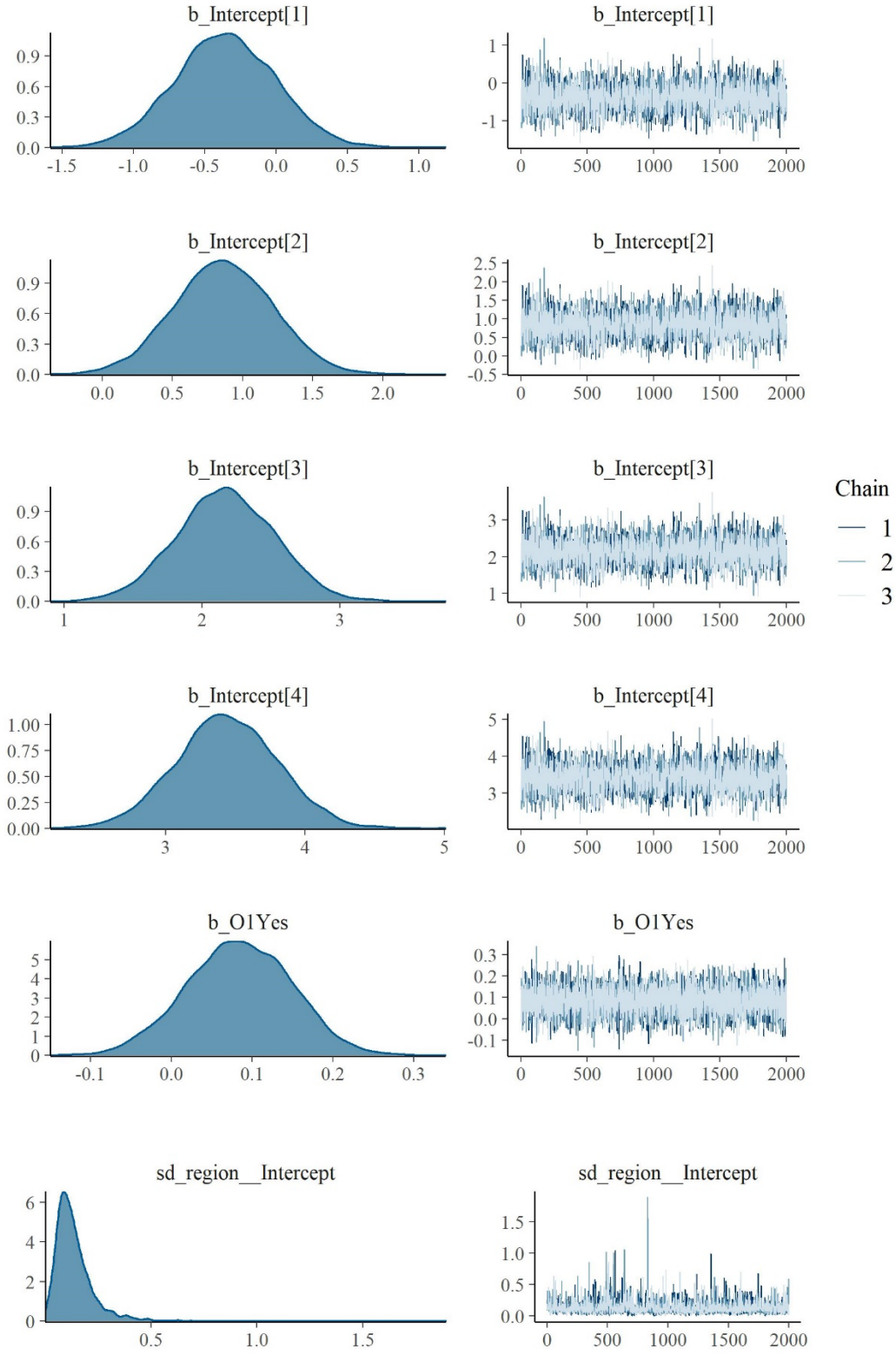
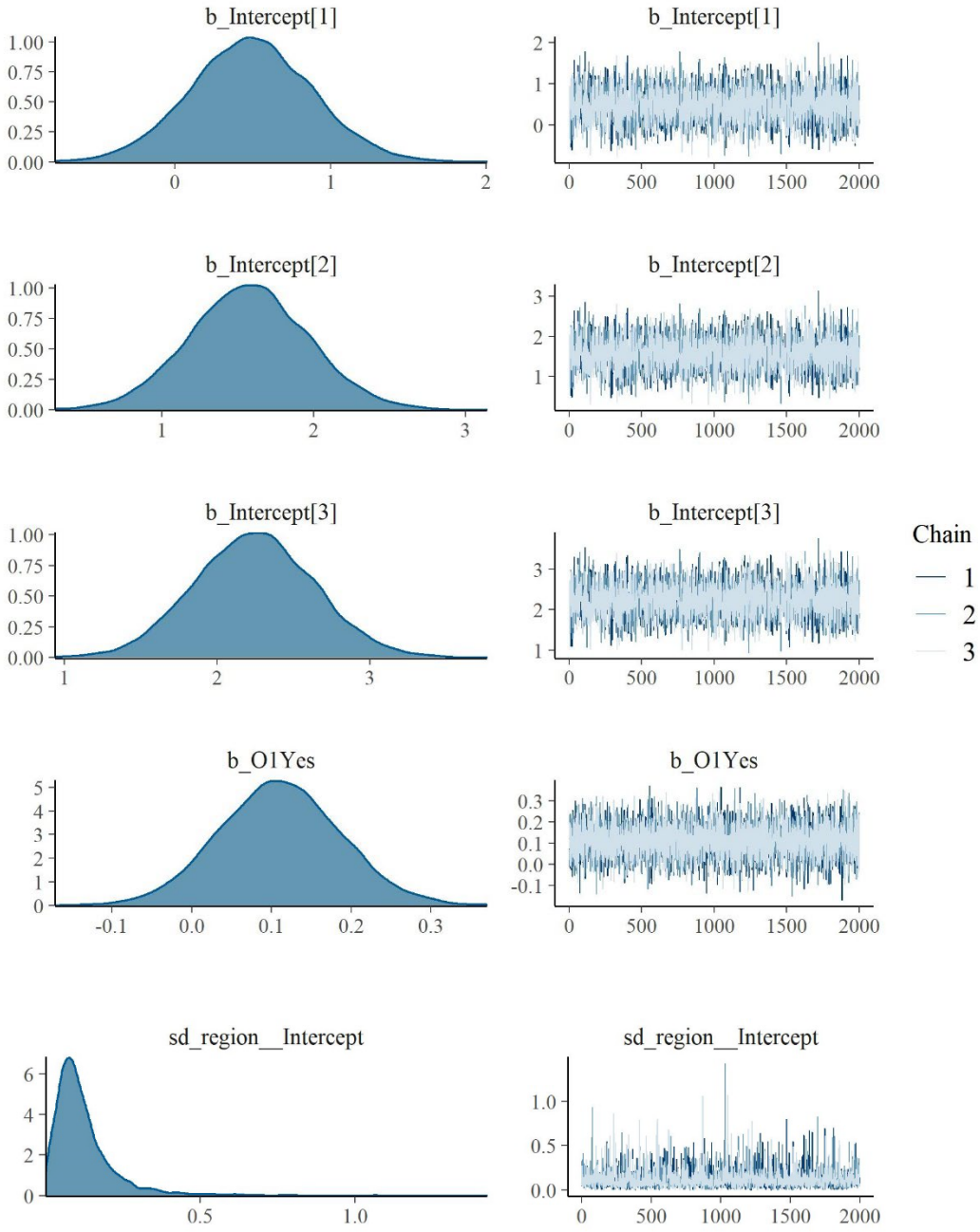

b_Intercept[1]
b_Intercept[1]
b_Intercept[2]
b_Intercept[2]
b_Intercept[3]
b_Intercept[3]
b_Intercept[4]
b_Intercept[4]
b_O1Yes
b_O1Yes
sd_region__Intercept
sd_region__Intercept
Chain
1
2
3

Figure 1F.


b_Intercept[1]
b_Intercept[1]
b_Intercept[2]
b_Intercept[2]
b_Intercept[3]
b_Intercept[3]
Chain
1
2
3
b_O1Yes
b_O1Yes
sd_region__Intercept
sd_region__Intercept