

# Your Age, Gender and Where You Were Born May Explain Why You Are Alone in Canada

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$$y_j \sim \quad (1)$$

```
my_labels <- list(age = "Age", sex = "Gender", place_birth_canada = "Place of Birth",
  marital_status = "Marital Status")
table1 <- tableby(~age + sex + place_birth_canada + marital_status,
  data = dftmp)
summary(table1, labelTranslations = my_labels, title = "Characteristics of the 2017 GSS") %>%
  kable()
```

	Overall (N=20499)
<b>Age</b>	
Mean (SD)	52.199 (17.748)
Range	15.000 - 80.000
<b>Gender</b>	
Female	11155 (54.4%)
Male	9344 (45.6%)
<b>Place of Birth</b>	
Born in Canada	16350 (79.8%)
Born outside Canada	4096 (20.0%)
Don't know	53 (0.3%)
<b>Marital Status</b>	
Divorced	1760 (8.6%)
Living common-law	2066 (10.1%)
Married	9453 (46.1%)
Separated	640 (3.1%)
Single, never married	4688 (22.9%)
Widowed	1892 (9.2%)

Table 2: Results

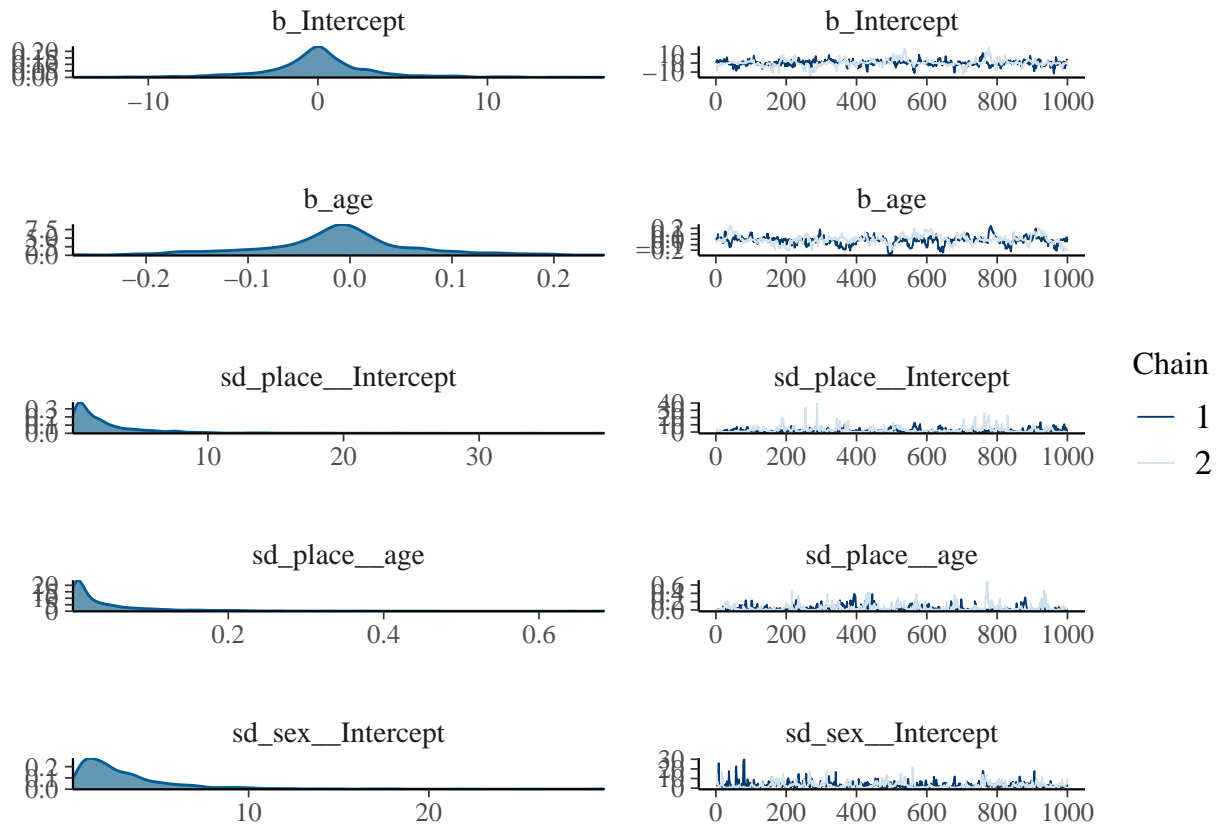
	<i>Dependent variable:</i>				
	factor(Marital)				
	(1)	(2)	(3)	(4)	(5)
age	−0.006*** (0.001)			−0.007*** (0.001)	0.006*** (0.001)
sexMale		−0.277*** (0.028)		−0.288*** (0.029)	1.323*** (0.089)
placeBorn outside Canada			−0.212*** (0.036)	−0.218*** (0.036)	−0.374*** (0.110)
age:sexMale					−0.031*** (0.002)
age:placeBorn outside Canada					0.003 (0.002)
Constant	0.081* (0.044)	−0.123*** (0.019)	−0.206*** (0.016)	0.283*** (0.047)	−0.410*** (0.064)
Observations	20,446	20,446	20,446	20,446	20,446
Log Likelihood	−13,984.510	−13,968.380	−13,998.250	−13,914.070	−13,728.670
Akaike Inf. Crit.	27,973.010	27,940.760	28,000.500	27,836.150	27,469.340

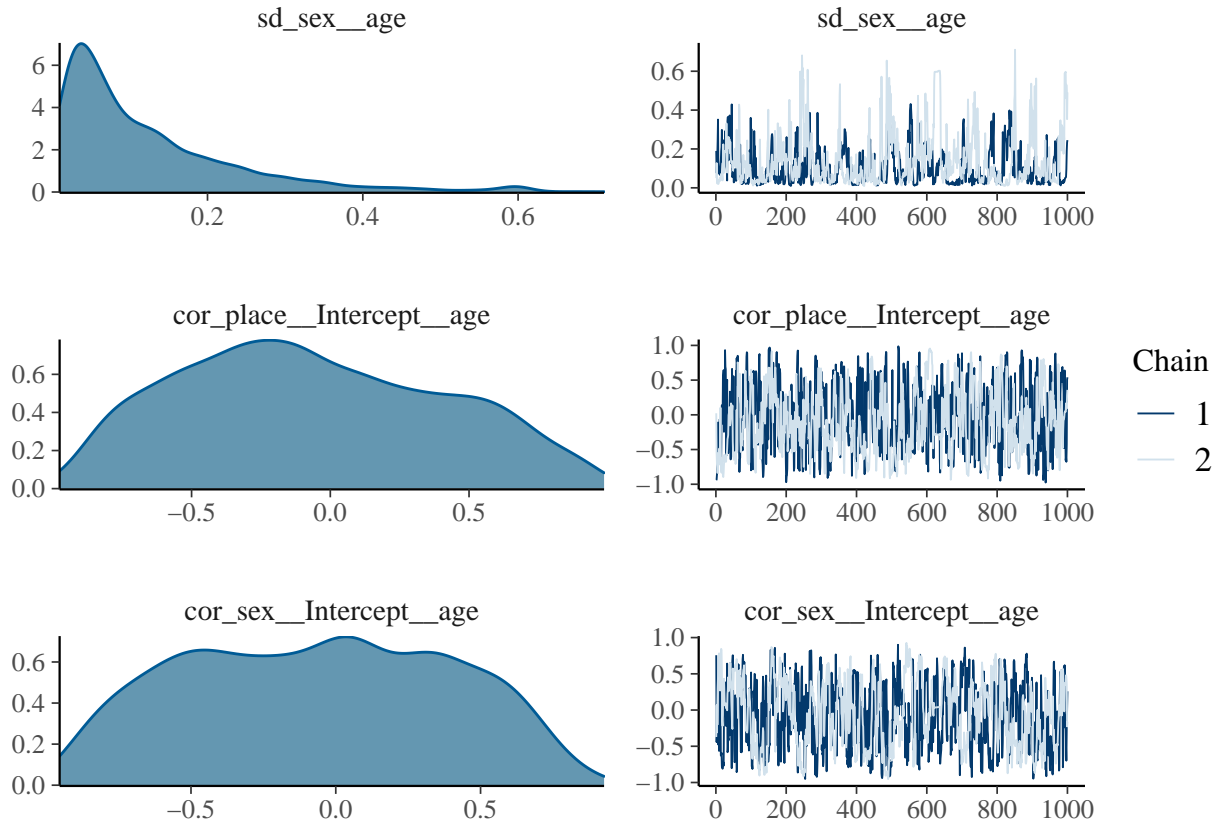
*Note:*

\*p&lt;0.1; \*\*p&lt;0.05; \*\*\*p&lt;0.01

# 1 Results

```
load("mc_f.Rdata")  
plot(mc_f)
```





## 2 Discussion

In the 2017 GSS dataset.

### 2.1 Weakness and next steps

Among all 81 variables in the 2017 GSS data, besides the age, gender and POB used in this work, other variables such as province of residence, education level, household income level and having children or not might also be closely related to the singleness in Canada. A more completed modeling approach might

## 3 Appendix

### 3.1 Acknowledgement

The code used to clean the 2017 GSS dataset was from Dr. Rohan Alexander and Dr. Sam Caetano, please contact rohan.alexander@utoronto.ca for more information. The code was distributed under the MIT License.

### 3.2 References

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