

Worst Game Of SIMS

In-class exercise

9/26/2019

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Coefficients

Coefficients of the logistic regression model used to impute PTSD outcomes in Kessler et al¹

```
beta<-c(  
-1.515 ,#Intercept  
0.0263 ,#Age  
0.1105 ,#Sex is female (0 = Male, 1 = Female)  
-0.0819 ,#Race is hispanic  
-0.5597 ,#Race is black  
-0.9751 ,#Race is other  
-0.5603 ,#as child, badly beaten by parent/caregiver  
0.0504 ,#badly beaten by spouse/romantic partner  
-0.3877 ,#badly beaten by anyone else  
0.1148 ,#mugged/held up/threatened with weapon  
-0.1614 ,#ever raped (penetration occurred)  
0.5993 ,#ever sexually assaulted or molested  
0.078 ,#someone close died unexpectedly  
0.4687 ,#anyone close had extreme traumatic exper.  
0.4591 ,#as child, witnessed serious physical fights  
0.1683 ,#saw person badly injured/killed/dead body  
-0.2237 ,#ever experienced other very traumatic event  
0.3664 ,#purposely stay away things remind event  
-0.0581 ,#lose interest in things used to enjoy  
0.2516 ,#feel emotionally distant/cut-off from people  
0.1159 ,#trouble feeling love/happiness toward others  
0.64 ,#feel no reason to plan for the future  
0.8654 ,#trouble falling asleep during random event  
0.1323 ) #more easily startled by ordinary noises
```

¹Kessler RC, Duncan GJ, Gennetian LA, et al.: Associations of housing mobility interventions for children in high-poverty neighborhoods with subsequent mental disorders during adolescence. JAMA. 2014; 311(9): 937–948.

| Beta | Independent variable |
|-------------|--|
| -1.515 | Intercept |
| 0.0263 | Age |
| 0.1105 | Sex is female (0 = Male, 1 = Female) |
| -0.0819 | Race is hispanic |
| -0.5597 | Race is black |
| -0.9751 | Race is other |
| -0.5603 | as child, badly beaten by parent/caregiver |
| 0.0504 | badly beaten by spouse/romantic partner |
| -0.3877 | badly beaten by anyone else |
| 0.1148 | mugged/held up/threatened with weapon |
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| 0.8654 | trouble falling asleep during random event |
| 0.1323 | more easily startled by ordinary noises |

Figure 1: Kessler Table 1.

Play here

Modify coefficients:

```
x<-
c(
1 ,#Intercept
18 ,#Age
1 ,#Sex is female (0 = Male, 1 = Female)
0 ,#Race is hispanic
0 ,#Race is black
1 ,#Race is other
0 ,#as child, badly beaten by parent/caregiver
0 ,#badly beaten by spouse/romantic partner
1 ,#badly beaten by anyone else
1 ,#mugged/held up/threatened with weapon
1 ,#ever raped (penetration occurred)
0 ,#ever sexually assaulted or molested
1 ,#someone close died unexpectedly
1 ,#anyone close had extreme traumatic exper.
1 ,#as child, witnessed serious physical fights
0 ,#saw person badly injured/killed/dead body
0 ,#ever experienced other very traumatic event
1 ,#purposely stay away things remind event
0 ,#lose interest in things used to enjoy
0 ,#feel emotionally distant/cut-off from people
0 ,#trouble feeling love/happiness toward others
0 ,#feel no reason to plan for the future
1 ,#trouble falling asleep during random event
0 )#more easily startled by ordinary noises
```

Estimate probability of PTSD

```
bx<-x%*%beta
Z<-exp(bx)
p<-Z/(1+Z)
```

The probability of this SIM have PTSD is: 0.4742977