2020_31_jan-tigers-tables

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```r
require(list)
```

```
## Loading required package: list
```

```
## Loading required package: sandwich
```

```r
require(pander)
```

```
## Loading required package: pander
```

```r
require(tidyverse)
```

```
## Loading required package: tidyverse
```

```
## -- Attaching packages --------------------------------------------------------- tidyverse 1.2.1 --
```

```
## v ggplot2 3.2.1     v readr   1.3.1
## v tibble  2.1.3     v purrr   0.3.3
## v tidyr   1.0.0     v stringr 1.4.0
## v ggplot2 3.2.1     v forcats 0.4.0
```

```
## -- Conflicts ------------------------------------------------------- tidyverse_conflicts() --
## x stats::filter()        masks dplyr::filter()
## x readr::guess_encoding() masks rvest::guess_encoding()
## x stats::lag()           masks dplyr::lag()
## x purrr::pluck()         masks rvest::pluck()
```

```r
require(broom)
```

```
## Loading required package: broom
```

```r
tiger <- read.csv("2020_tiger-dq-glm.csv")
tiger$numuse <- as.integer(tiger$numuse)
tiger$numuse <- as.factor(tiger$numuse)
tiger$agegroup <- as.integer(tiger$agegroup)
x <- glm(lastuse ~ city + agegroup + gender +religion + education + occupation + income +numuseprev +nu
```

```
# %>%
#   broom::tidy() %>%
#   knitr::kable(
#     caption = "",
#     col.names = c("Predictor", "B", "SE", "t", "p"),
#     digits = c(0, 2, 3, 2, 3),
#     "html"
#   )
#
# kableExtra::row_spec(x, 3, bold = TRUE, italic = TRUE)

pander( summary(x), add.significance.stars = T )
```

Table 1: Table continues below

	Estimate	Std. Error	z value
(Intercept)	-20.54	1595	-0.01288
cityHo Chi Minh City	0.2122	0.3911	0.5427
agegroup	1.001	0.1957	5.115
genderMale	0.2497	0.323	0.7731
religionCao Dai	1.508	1.57	0.9607
religionChristian	-0.5834	0.5745	-1.015
religionNone	-0.006295	0.4045	-0.01556
religionOthers	-12.31	1322	-0.009307
educationHigh school	1.227	0.7467	1.644
educationHigher education	0.6847	1.185	0.5777
educationNone	-0.2559	1.268	-0.2018
educationOthers	0.9139	2.163	0.4225
educationPrimary school	0.9032	0.8456	1.068
educationSecondary school	1.817	0.7615	2.387
educationUniversity	0.3196	0.8364	0.3821
occupationAssemblers and machine operators	14.82	1595	0.009297
occupationHigh-level professionals	15.85	1595	0.009938
occupationLeaders	15.34	1595	0.00962
occupationMid-level professionals	16.93	1595	0.01061
occupationOthers	16.02	1595	0.01005
occupationSkilled handicraftsmen	14.65	1595	0.009187
occupationSkilled workers in agriculture	16.42	1595	0.0103
occupationSkilled workers in personal services	15.62	1595	0.009797
occupationStaff	15.64	1595	0.009808
occupationUnemployed	16.27	1595	0.01021
occupationUnskilled workers	15.61	1595	0.009788
incomeDon't know/ Don't remember	1.549	0.9297	1.666
incomeOver $10-18$ million VND	1.353	0.526	2.573
incomeOver $18-32$ million VND	2.019	0.7278	2.775
incomeOver $32-52$ million VND	-13.23	865.8	-0.01528
incomeOver 52 million VND	1.618	1.351	1.198
numuseprev6 - 10	1.564	0.8143	1.92
numuseprevMore than 10	0.255	0.9791	0.2604
numuseprevNone	-2.1	0.3498	-6.003

	Estimate	Std. Error	z value
numusenext6 - 10	-1.912	1.692	-1.131
numusenextMore than 10	0.9407	1.189	0.7913
numusenextNone	-1.088	0.523	-2.081

	Pr(>|z|)	
(Intercept)	0.9897	
cityHo Chi Minh City	0.5873	
agegroup	3.129e-07	* * *
genderMale	0.4395	
religionCao Dai	0.3367	
religionChristian	0.3099	
religionNone	0.9876	
religionOthers	0.9926	
educationHigh school	0.1002	
educationHigher education	0.5635	
educationNone	0.8401	
educationOthers	0.6727	
educationPrimary school	0.2855	
educationSecondary school	0.017	*
educationUniversity	0.7024	
occupationAssemblers and machine operators	0.9926	
occupationHigh-level professionals	0.9921	
occupationLeaders	0.9923	
occupationMid-level professionals	0.9915	
occupationOthers	0.992	
occupationSkilled handicraftsmen	0.9927	
occupationSkilled workers in agriculture	0.9918	
occupationSkilled workers in personal services	0.9922	
occupationStaff	0.9922	
occupationUnemployed	0.9919	
occupationUnskilled workers	0.9922	
incomeDon't know/ Don't remember	0.09569	
incomeOver 10 − 18 million VND	0.01008	*
incomeOver 18 − 32 million VND	0.005524	* *
incomeOver 32 − 52 million VND	0.9878	
incomeOver 52 million VND	0.2309	
numuseprev6 - 10	0.0548	
numuseprevMore than 10	0.7946	
numuseprevNone	1.933e-09	* * *
numusenext6 - 10	0.2583	
numusenextMore than 10	0.4288	
numusenextNone	0.03745	*

(Dispersion parameter for binomial family taken to be 1)

Null deviance:	496.2 on 1119 degrees of freedom

	Residual deviance:	336.5 on 1083 degrees of freedom

```
y <- glm(lastuse ~ agegroup, data = tiger, binomial)
pander( summary(y), add.significance.stars = T )
```

	Estimate	Std. Error	z value	Pr(>|z|)	
(Intercept)	-4.815	0.4113	-11.71	1.147e-31	* * *
agegroup	0.8003	0.136	5.884	4.011e-09	* * *

(Dispersion parameter for binomial family taken to be 1)

Null deviance:	496.2 on 1119 degrees of freedom
Residual deviance:	458.6 on 1118 degrees of freedom

```
z <-  glm(lastuse ~ income, data = tiger, binomial)
pander( summary(z), add.significance.stars = T )
```

	Estimate	Std. Error	z value	Pr(>|z|)
(Intercept)	-18.57	613.6	-0.03026	0.9759
income0 − 10 million VND	15.63	613.6	0.02548	0.9797
incomeDon't know/ Don't remember	16.31	613.6	0.02659	0.9788
incomeOver 10 − 18 million VND	16.19	613.6	0.02639	0.9789
incomeOver 18 − 32 million VND	16.73	613.6	0.02727	0.9782
incomeOver 32 − 52 million VND	1.327e-07	2541	5.223e-11	1
incomeOver 52 million VND	17.18	613.6	0.028	0.9777

(Dispersion parameter for binomial family taken to be 1)

Null deviance:	509.1 on 1232 degrees of freedom
Residual deviance:	488.8 on 1226 degrees of freedom

```
model_ed <- glm(lastuse ~ education, data = tiger, binomial)
pander( summary(model_ed), add.significance.stars = T )
```

	Estimate	Std. Error	z value	Pr(>|z|)
(Intercept)	-18.57	613.6	-0.03026	0.9759
educationCollege	14.94	613.6	0.02434	0.9806
educationHigh school	15.74	613.6	0.02566	0.9795
educationHigher education	16.12	613.6	0.02628	0.979
educationNone	14.44	613.6	0.02353	0.9812

	Estimate	Std. Error	z value	Pr(>|z|)
educationOthers	16.37	613.6	0.02668	0.9787
educationPrimary school	15.61	613.6	0.02545	0.9797
educationSecondary school	16.47	613.6	0.02684	0.9786
educationUniversity	15.39	613.6	0.02509	0.98

(Dispersion parameter for binomial family taken to be 1)

Null deviance:	509.1 on 1232 degrees of freedom
Residual deviance:	480.5 on 1224 degrees of freedom

```
model_pre <- glm(lastuse ~ numuseprev, data = tiger, binomial)
pander( summary(model_pre), add.significance.stars = T )
```

	Estimate	Std. Error	z value	Pr(>|z|)
(Intercept)	-18.57	613.6	-0.03026	0.9759
numuseprev1 - 5	17.05	613.6	0.02779	0.9778
numuseprev6 - 10	18.16	613.6	0.0296	0.9764
numuseprevMore than 10	18.28	613.6	0.02979	0.9762
numuseprevNone	15.01	613.6	0.02447	0.9805

(Dispersion parameter for binomial family taken to be 1)

Null deviance:	509.1 on 1232 degrees of freedom
Residual deviance:	422.0 on 1228 degrees of freedom

```
model_next <- glm(lastuse ~ numusenext, data = tiger, binomial)
pander( summary(model_next), add.significance.stars = T )
```

	Estimate	Std. Error	z value	Pr(>|z|)
(Intercept)	-18.57	613.6	-0.03026	0.9759
numusenext1 - 5	17.3	613.6	0.02819	0.9775
numusenext6 - 10	18.57	613.6	0.03026	0.9759
numusenextMore than 10	19.08	613.6	0.03109	0.9752
numusenextNone	15.55	613.6	0.02534	0.9798

(Dispersion parameter for binomial family taken to be 1)

Null deviance:	509.1 on 1232 degrees of freedom
Residual deviance:	460.4 on 1228 degrees of freedom