

# DA2-Assignment-1

Gyongyver Kamenar (2103380)

11/20/2021

## Introduction

The chosen occupations:

1006 Computer systems analysts 1007 Information security analysts 1010 Computer programmers 1020 Software developers, applications and systems software 1030 Web developers

## Descriptive statistics

## Modelling

## Summary

## Appendix

## Variables 'sex:grade9237', 'sex:grade9238' and 'sex:grade9246' have been removed because of collinearity

Table 1: Descriptive Statistics

|          | N      | Percent | Mean    | SD      | Min   | Max      | Median  | P25     | P75     |
|----------|--------|---------|---------|---------|-------|----------|---------|---------|---------|
| earnwke  | 149316 | 100.00  | 888.83  | 643.74  | 0.01  | 2884.61  | 719.60  | 430.00  | 1153.84 |
| weight   | 149316 | 100.00  | 2375.62 | 1295.35 | 53.23 | 24595.83 | 2662.68 | 1271.73 | 3319.09 |
| uhours   | 149316 | 100.00  | 38.94   | 10.26   | 1     | 99       | 40.00   | 40.00   | 40.00   |
| grade92  | 149316 | 100.00  | 40.81   | 2.50    | 31    | 46       | 40.00   | 39.00   | 43.00   |
| age      | 149316 | 100.00  | 40.71   | 12.78   | 16    | 64       | 41.00   | 30.00   | 52.00   |
| ownchild | 149316 | 100.00  | 0.64    | 1.02    | 0     | 10       | 0.00    | 0.00    | 1.00    |
| chldpres | 149316 | 100.00  | 1.77    | 3.08    | 0     | 15       | 0.00    | 0.00    | 3.00    |

|                 | reg1                   | reg2                   | reg3                   | reg4                   | reg5                   |
|-----------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Dependent Var.: | ln_earnhrs             | ln_earnhrs             | ln_earnhrs             | ln_earnhrs             | ln_earnhrs             |
| (Intercept)     | 3.546***<br>(0.0109)   | 3.071***<br>(0.0364)   | 2.506***<br>(0.0136)   | 2.506***<br>(0.0136)   | 2.509***<br>(0.0135)   |
| sex             | -0.1570***<br>(0.0221) | -0.1804***<br>(0.0216) | -0.1726***<br>(0.0206) | -0.0440<br>(0.1753)    | -0.1670***<br>(0.0205) |
| age             |                        | 0.0119***<br>(0.0009)  | 0.0119***<br>(0.0008)  | 0.0119***<br>(0.0008)  | 0.0117***<br>(0.0008)  |
| grade9237       |                        |                        | -0.6346***<br>(0.0042) | -0.6346***<br>(0.0042) | -0.6345***<br>(0.0042) |
| grade9238       |                        |                        | 0.7941***<br>(0.0917)  | 0.7935***<br>(0.0919)  | 0.7227***<br>(0.1177)  |
| grade9239       |                        |                        | 0.3522***<br>(0.0477)  | 0.3873***<br>(0.0514)  | 0.3176***<br>(0.0473)  |
| grade9240       |                        |                        | 0.2605***<br>(0.0391)  | 0.2722***<br>(0.0424)  | 0.2297***<br>(0.0388)  |
| grade9241       |                        |                        | 0.3922***<br>(0.0566)  | 0.4129***<br>(0.0595)  | 0.3616***<br>(0.0573)  |
| grade9242       |                        |                        | 0.3605***<br>(0.0402)  | 0.3825***<br>(0.0432)  | 0.3236***<br>(0.0398)  |
| grade9243       |                        |                        | 0.5981***<br>(0.0219)  | 0.5902***<br>(0.0223)  | 0.5627***<br>(0.0221)  |
| grade9244       |                        |                        | 0.6762***<br>(0.0254)  | 0.6760***<br>(0.0267)  | 0.6321***<br>(0.0261)  |
| grade9245       |                        |                        | 0.7565***<br>(0.0725)  | 0.7657***<br>(0.0769)  | 0.7201***<br>(0.0674)  |
| grade9246       |                        |                        | 0.8673***<br>(0.0580)  | 0.8548***<br>(0.0608)  | 0.8118***<br>(0.0586)  |
| sex x grade9239 |                        |                        |                        | -0.2258<br>(0.1998)    |                        |
| sex x grade9240 |                        |                        |                        | -0.1784<br>(0.1939)    |                        |
| sex x grade9241 |                        |                        |                        | -0.2139<br>(0.2207)    |                        |
| sex x grade9242 |                        |                        |                        | -0.2005<br>(0.1936)    |                        |
| sex x grade9243 |                        |                        |                        | -0.0995<br>(0.1776)    |                        |
| sex x grade9244 |                        |                        |                        | -0.1298<br>(0.1801)    |                        |
| sex x grade9245 |                        |                        |                        | -0.2660<br>(0.1908)    |                        |
| ownchild        |                        |                        |                        |                        | 0.0565***<br>(0.0085)  |
| S.E. type       | Heteroskedast.-rob.    | Heteroskedast.-rob.    | Heteroskedast.-rob.    | Heteroskedast.-rob.    | Heteroskedast.-rob.    |
| Observations    | 2,646                  | 2,646                  | 2,646                  | 2,646                  | 2,646                  |
| R2              | 0.01957                | 0.08922                | 0.16987                | 0.17126                | 0.18323                |
| Adj. R2         | 0.01920                | 0.08853                | 0.16608                | 0.16527                | 0.17920                |

