ECON326 final proposal\_group 9

Deliverables

1. **Track are we following:**

Regular track 

1. **Research Statement:**

What is the relationship between income and general life satisfaction among individuals residing in British Columbia, after controlling for the effects of perceived health, education level, age, and marital status?

1. **Data set used:**

CCHS\_Annual\_2017\_2018\_curated\_trimmed.dta

1. **independent variables that will be used:**

* Income
* Perceived health
* Education level
* Age
* Marital status

1. **Regression equation**

Let:

* Y be satisfaction
* I be income
* H be health
* E be education
* A be age
* M be marital status

**Yi  = β0 + β1I + β2H + β3E + β4A + β5M + ε**

*Satisfaction (GEN\_010) = Income (INCDGHH)  + General Health, perceived health (GEN\_005) + Education Level(EHG2DVR3)*

*+ Age(DHHGAGE) + Marital status (DHHGMS)*

1. **Dependant variable:**

* Satisfaction - GEN\_010

1. **Summary** **statistics**
   1. **quantitative variables**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **(incdghh) *Total household income - all sources***  ***calculating using interval midpoints*** | **(dhhgage) age**  ***calculating using interval midpoints*** | **(GEN\_010) *Satisfaction with life in general*** |
| **mean** | 64018 | 49.34 | 8.0657 |
| **min** | 10000 | 13 | 0 |
| **max** | 90000 | 82 | 10 |
| **SD** | 28141.41 | 19.90146 | 1.6822 |

1. **qualitative variables**

|  |  |  |  |
| --- | --- | --- | --- |
| **(dhhgms)**  ***Marital status***  **dummy** | **Married** | **Common\_law** | **Widowed\_Divorced\_Separated** |
| **mean** | 0.4054 | 0.103 | 0.2028 |
| **min** | 0 | 0 | 0 |
| **max** | 1 | 1 | 1 |
| **SD** | 0.4909644 | 0.3039267 | 0.4021193 |

|  |  |  |
| --- | --- | --- |
| **(EHG2DVR3)**  ***Highest level of education - respondent***  **dummy** | **Less\_than\_secondary** | **Post\_secondary\_university** |
| **mean** | 0.2087 | 0.5668 |
| **min** | 0 | 0 |
| **max** | 1 | 1 |
| **SD** | 0.4063878 | 0.4955137 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **(GEN\_005)**  ***perceived health***  **dummy** | **excellent** | **veryGood** | **good** | **fair** |
| **mean** | 0.217 | 0.3691 | 0.2854 | 0.09464 |
| **min** | 0 | 0 | 0 | 0 |
| **max** | 1 | 1 | 1 | 1 |
| **SD** | 0.4121788 | 0.482552 | 0.4516104 | 0.2927143 |

1. **explanation for dummies**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Married** | **Common\_law** | **Widowed\_Divorced\_Separated** | **Meaning** | **Code** |
| 1 | 0 | 0 | Married | 1 |
| 0 | 1 | 0 | Common-law | 2 |
| 0 | 0 | 1 | Widowed/Divorced/Separated | 3 |
| 0 | 0 | 0 | Single | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Less\_than\_secondary** | **Post\_secondary\_university** | meaning | Code |
| 1 | 0 | Less than secondary school graduation | 1 |
| 0 | 1 | Secondary school graduation, no  post-secondary education | 2 |
| 0 | 0 | Post-secondary certificate diploma or univ  degree | 3 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **excellent** | **veryGood** | **good** | **fair** | **meaning** | **Code** |
| 1 | 0 | 0 | 0 | Excellent | 1 |
| 0 | 1 | 0 | 0 | Very good | 2 |
| 0 | 0 | 1 | 0 | Good | 3 |
| 0 | 0 | 0 | 1 | Fair | 4 |
| 0 | 0 | 0 | 0 | Poor | 5 |

Our R codes could be found at <https://github.com/HantzeWANG/ECON326/blob/main/finalProject.r>

Group Charter

1. **Group members:**

Max Geyer (15660236)

Hanze Wang (39408695)

Jiayin Kralik (59967844)

1. **Group Coordinator**

* Max Geyer

1. **Meeting Schedule**

* We will meet once a week for 30-60 minutes to go over tasks and outline the next steps; this will mean ten meetings in total.
* Meeting will usually be on Monday at 10:15 am.
* We will meet in person or via Zoom (audio and video chat).

1. **Communication plan**

* Text message
* Email

1. **Responsibilities**

* Hanze is the best with Coding in R; he will take the primary lead in that department.
* Jiayin and Max will do a literature review.
* All the group members will develop and estimate the model together
* Max will make the tables of results
* All group members will analyze data together
* Max will be the coordinator

1. **Conflict resolution statement**

* If we have an issue (i.e. student not completing their task), we will first discuss the issue and try to reach a mutual agreement.
* If we cannot come to a mutual agreement, we will take a vote on a solution (with Max Geyer acting as a tie-breaker); we all agree to abide by such a vote.
* We will contact the instructor for assistance if a vote does not resolve the issue.
* We will note any issue in our action logs during our meetings so that we have documentation of issues.

1. **Action log/meeting log (we can update this as we go)**

* 1. **Meeting 1 (Feb 13th): all present**
* **Accomplished:** discussed topics for the project, and decided on the Happiness and Income topic.
* **To-do:** Jiayin will read over available research for the topic, and Max and Hanze will go over the dataset for a preliminary variable selection.

1. **Meeting 2 (Feb 20th): all present**

* **Accomplished:** created a basic multiple-regression model and decided on the variables, finished group charter.
* **To-do:** Max and Hanze will finalize the regression model and create summary statistics, Jiayin will develop a research statement.

1. **Meeting 3 (March 2nd): all present**

* **Accomplished:** Summary statistics are now finished, regression-model is finalized, research statement has been completed
* **To-do:** Submit final proposal on Canvas. Next meeting, implement the feedback we get on our research statement and variable selection in our regression model.