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PAPUA NEW GUINEA

Relationship between health and education outcomes in four provinces of PNG.

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Inquire Inform Influence



Outline of the Presentation.

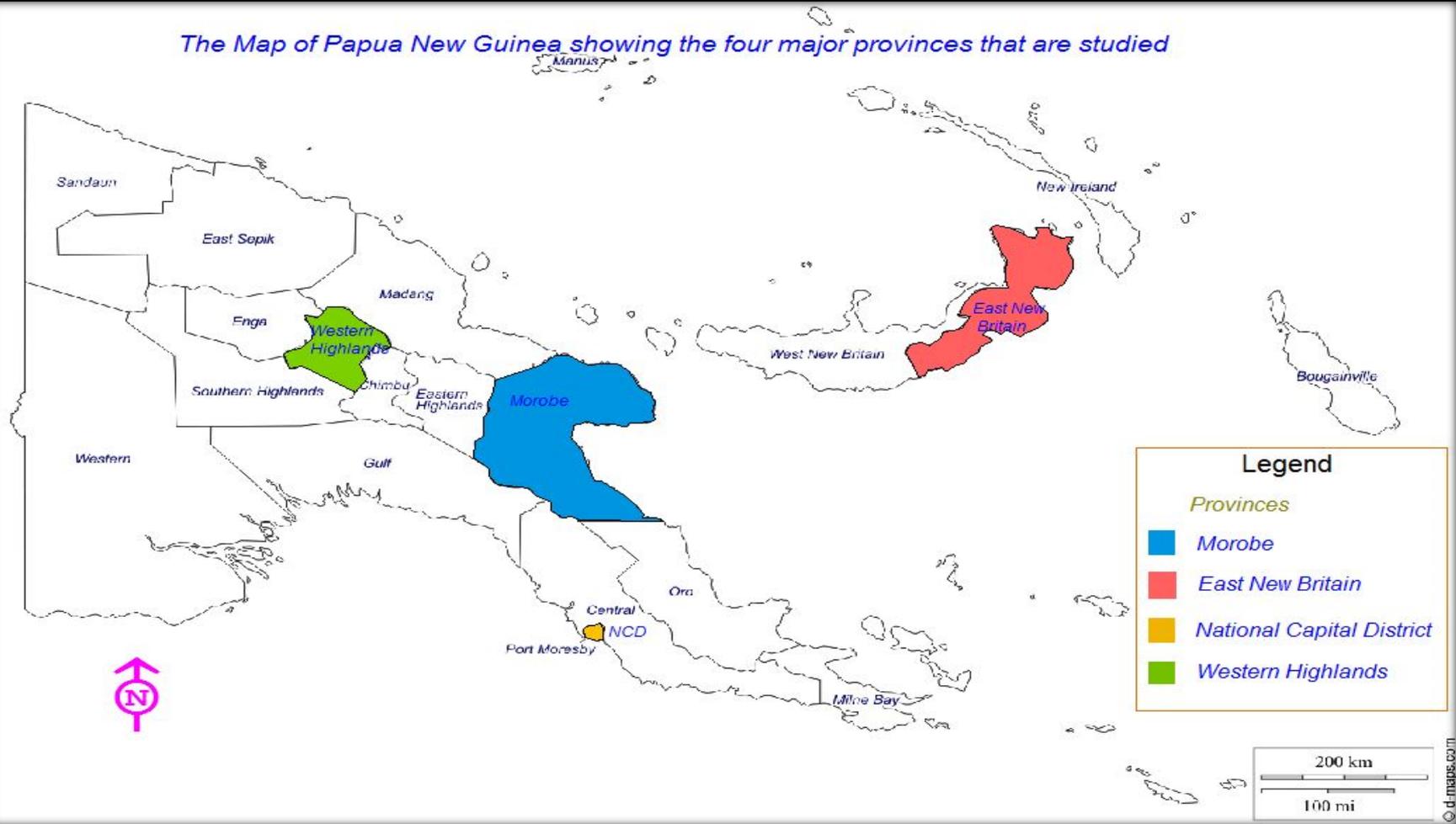
- 1. Introduction**
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Introduction

- **Improved education and health standards are fundamental development objective; they are important ends in themselves (Todaro and Smith, 2015)**
- **Health and education are key enablers (SDG4 ,Vision 2015,Education Policy, Health Policy)***
- **Importance of health and education**
- **PNG four provinces, one from each region of PNG.**
- **Sample: Respondents that are 26 years old and above**



The Map of Papua New Guinea showing the four major provinces that are studied



Research objective

- **To identify and understand the relationship between education and health outcome***
- **See if there is a relationship? If there is, what is the nature of the relationship?**

Literature Review

- It is generally perceived that, being educated reduces the chances of having health problem.
- The effect of education increase with increasing years of education(Cutler 2006).*
- Education is the most critical determinant of health for women, and for society in general (Health in Asia and Pacific, 2007)*
- Children living in homes where the heads of the households have higher level of education were less likely to be malnourished after controlling for wealth information (aims Public Health, 2016)

Continue.

- Relationship between education and health can be seen and measured from different dimensions(Voghl 2012).
- In my report I will specifically concentrate on relationship of education and health outcome of adult population.
- I will be using method used by Cutler(2006) to analyze the NSO HIES data set.

Methodology

- **Qualitative-desktop Review**
- **Quantitative-to analyse the data***
- **Data Source: PNG Household Income Expenditure Survey 2009-2011 data by National Statistical Office (NSO).**
- **Four provinces chosen, one from each region in PNG.**
- **Using the Primary Sample Unit (PSU) number the relevant data for the 4 provinces were extracted from the large data set.**

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- **Sample: Respondents that are 26 years and above- individuals are most likely to have completed their education.**
- **There are several factors that affects the relationship between education and health but what will be analyze is limited to what I am able to extract from the NSO data set*.**

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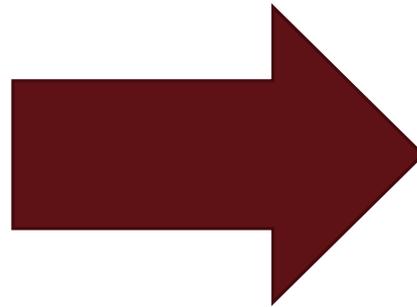
Relevant variables

- Sex
- Marital status
- Age
- Highest Grade Completed
- Any health complain within the last 3 months
- Health Problem
- Did you ever smoke?
- Does chew betelnut?
- Has had alcohol drink in the past month.

Continue...

- **Since most of the variables used are categorical in nature (Yes, no, male, female) Probit Regression method will be used to analyze the data.**
- **Probit Regression is used to analyze binary or a yes or a no outcome.**
- **Hence, dummy variable will be created.**

Preparing Data for analysis





Summary of the Dummy Variables created

The Variables	
General Information	
Gender: Male	1
Female	0
Marital Status: Married	1
otherwise	0
Age: 25-29	1, 0 if otherwise
30-34	1, 0 if otherwise
35-39	1, 0 if otherwise
40-44	1, 0 if otherwise
45-49	1, 0 if otherwise
50-54	1, 0 if otherwise
55-59	1, 0 if otherwise
60-64	1, 0 if otherwise
65+	1, 0 if otherwise
Education	
Highest Grade Completed	1, 0 if otherwise
Health	
<i>Health Problem</i>	
Sickness	1, 0 if otherwise
Pain	1, 0 if otherwise
Malaria and Fever	1, 0 if otherwise
Others	1, 0 if otherwise
<i>Health Behavior</i>	
Smoke	1, 0 if otherwise
Alcohol	1, 0 if otherwise
Betelnut	1, 0 if otherwise

Continue

To estimate the basic correlation between education and health, I estimate the following regression:

Dependent variable=Independent variable

Condensed Health Problem=Gender, marital status, each age groups, Each Highest Grade Completed. (1)

Condensed Health Problem=Gender, marital status, each age groups, Each Highest Grade Completed, smoke, chew betelnut, alcohol. (2)

Challenges

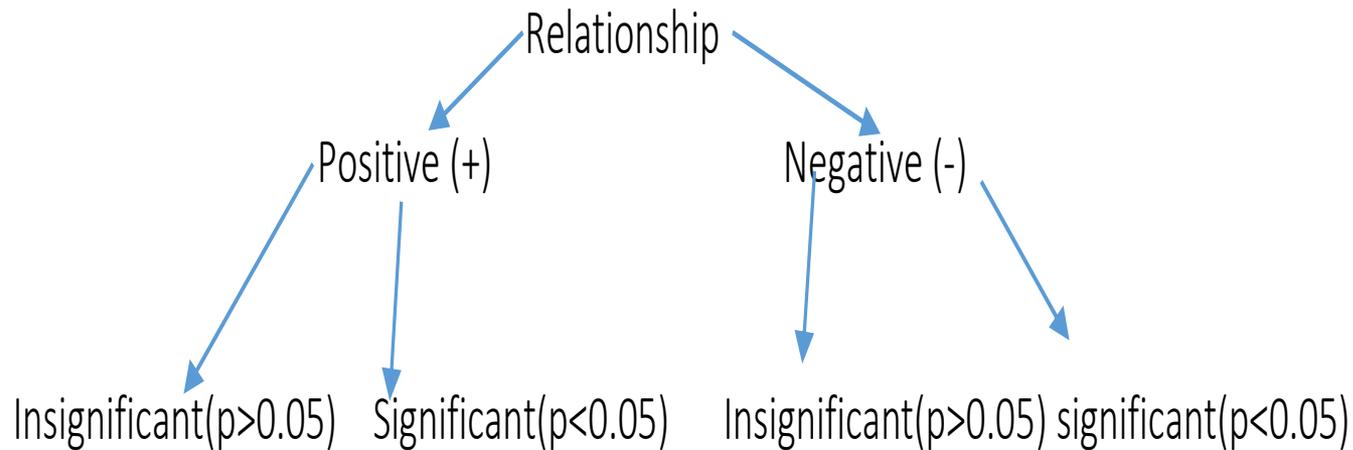
- There were missing data and I have to go back to the questionnaire to see if I can find a valid explanation.

Limitations

- Looks at the quantity of schooling not the quality of education.
- The Health complaints are self reported.
- Recalled health complaints.

Findings(Preliminary)

The Mapping of the nature of Relationships that exists between Education and Health in PNG



Discussion

- Relationship between Education and health outcome is positively significant in almost all of the Health complains (Sickness, pain, malaria and others) in the four provinces (NCD*, WHP, MOROBE and EHP) .
- According to the analysis, in NCD the relationship is positive significant for Sickness, Malaria fever and Others and negative for Pain.
- Positively significant relationship exist between education and health outcome and the 3 health complains (Sickness, Malaria_fever and Others.

Cont'

- The relationship between Pain and education outcome is negative, but not significant.

Conclusion

- The relationship between education and health outcome is positively significant. That is, completing a level of education does not reduce the probability of having health complaints*
- *In NCD, the nature of relationship between education and health varies from Health complaint to health complaint.
- The result is contradicting to commonly accepted knowledge and the reviews of the other studies done.
- Probit Regression might not be the right method? The model used? The way the data was prepared?
- Questions on the quality of the data used?

Way Forward...

- A qualitative study will be useful to really understand why the relationship between level of education and health complaints is positive*.



End of presentation

Thank you.

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