**Assignment 1**

**UNI: xo2119**

**Exercise 1**

1. Yes.

Treatment group: 80 of the villages chosen at random that recruiters delivered the information about job opportunities for women and provided ongoing support free of charge for three years.

Control group: the other 80 of the villages chosen at random that no recruiters visited and no other intervention was made.

2. Randomized controlled experiment.

3. On the one hand, if there is a decrease in boys’ health and education, it might be a reason for girls’ increase. On the other hand, if there is an increase in boy’s health and education, it might suggest that this factor is not special for girls. After the same treatments and measures in villages, the lack of the change in boys further reinforcing the factor that information about women's access to job opportunities might result in greater attention to girls' health and education.

**Exercise 2**

The data can’t fully support the claim that burglars are more likely to go to work during the summer vacation period than at other times. Another 75% of home burglaries happen at other times. Probably there exists a period when the rate of home burglaries is higher than the 25% of the summer vacation period. Information is not enough for comparison.

**Exercise 3**

1. Study observational.
2. The date doesn’t support the statement. Nearsightedness, results from a number of genetic and environmental factors. The date only showed the influences of environmental factors. It should take the genetic factors from different families into account which is the confounding factor.
3. No.
4. Yes.