

# Chapter 6: Developing Hypotheses

## Answers to Exercises

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### Exercise 1: Rewriting Hypotheses

Below are suggested answers for the Chapter 6 exercises on rewriting hypotheses. These do not constitute an exhaustive list, but offer several possible correct versions.

#### Exercise 1.a

Possible hypotheses:

1. Individuals who live near an ocean are expected to have a higher belief that climate change is caused by human activity compared to individuals who do not live near an ocean.
2. Individuals who do not live near oceans are expected to have a lower belief that climate change is caused by human activity than individuals who live near an ocean.

#### Exercise 1.b

Possible hypotheses:

1. Companies with diverse workforces are expected to have higher profits than companies without diverse workforces.
2. Companies without diverse workforces are expected to have lower profits than companies with diverse workforces.
3. As companies increase their workforce diversity, profits are expected to increase.

### **Exercise 1.c**

Possible hypotheses:

1. Cities with high pollution are expected to have higher violent crime compared to cities with low pollution.
2. Cities with low pollution are expected to have lower violent crime compared to cities with high pollution.
3. As pollution in a city increases, violent crime is expected to increase.

### **Exercise 1.d**

Possible hypotheses:

1. Countries with free health care are expected to have lower economic growth than countries without free health care.
2. Countries without free health care are expected to have higher economic growth than countries with free health care.
3. As the cost of health care increases, countries are expected to have more economic growth.

### **Exercise 1.e**

Possible hypotheses:

1. Cities that offer bounties for rats are expected to have more rats than cities that do not offer bounties.
2. Cities that do not offer bounties for rats are expected to have fewer rats than cities that do offer bounties.

## Exercise 2: Beginning with Variables

Below are suggested answers for the Chapter 6 exercises on creating hypotheses when starting just with variables. These do not constitute an exhaustive list, but offer several possible correct versions.

### Exercise 2.a

Possible hypotheses:

1. College students from wealthy families are expected to be more likely to take an unpaid summer internship than college students from poor families.
2. College students from poor families are expected to be less likely to take an unpaid summer internship than college students from ealthy families.

### Exercise 2.b

Possible hypotheses:

1. Cities with high taxes are expected to have better schools compared to cities with low taxes.
2. Cities with low taxes are expected to have worse schools compared to cities with high taxes.
3. As city taxes increase, school quality in cities is expected to increase.

### Exercise 2.c

Possible hypotheses:

1. Politically stable countries are expected to control infectious disease outbreaks compared to politically unstable countries.
2. Political unstable countries are expected to not control infectious disease outbreaks compared to political stable countries.

### Exercise 2.d

Possible hypotheses:

1. Violent social protests are expected to receive more media coverage compared to non-violent social protests.
2. Non-violent social protests are expected to receive less media coverage compared to violent social protests.

### Exercise 2.e

Possible hypotheses:

1. Countries with high unemployment are expected to have higher social unrest than countries with low unemployment.
2. Countries with low unemployment are expected to have lower social unrest than countries with high unemployment.
3. As unemployment increases, countries are expected to have higher social unrest.