Noah Foilb

Homework Chapter 1 exercises

1.35

A) It was an observational study

B) For the dogs it was lucy and for cats it was Luna

C) Of the few it was Oliver and Lily

D) Positive, as the proportion of dogs increase so does the cats

1.36

A) This was an experimental study

B) Having such a weird way to induce muscle cramps is not ideal, because maybe the fall could cause the cramp

1.37

A) it was an experiment

B) the control treatment was the fact they gave out 15 grams of chia seeds twice a day and the control group were the placebo effect.

C) The blocking in this experiment was gender

D) The blinding in this experiment was they didn’t know which treatment they received

E) Since the group was not randomly selected, we cannot make a casual statement

1.38

A) This may not be as effective because neighborhood representation in the results may not be accurate

B) This is the best method as all neighborhoods are included

C) This will not give a good representation.   
D) This will also not give a good representation of the neighborhoods

E) There is not reason for this kind of disputation

1.39

A) One big flaw is that if a parent did have trouble spending time with their kids, they are mostly likely not able to fill out the survey

B) This is most likely not a random sample as people moved for many reasons, mostly economic reasons which will impact the experiment as we are potentially filtering the lower class.

C) this is not an experiment but rather a observational study. He is notices correlations, but they may not actually be related until studied with an experiment.

1.40

A) The explanatory variable was the precent of county with bachelor degree while the response was the per capita income in the county  
B) there is a positive correlation as when the response variable increases so does the explanatory  
C) No as there is not experimented to prove this, this is only a observational study.

1.41

A) This is a randomized controlled experiment  
B) The explanatory variable was the treatment group, and the response variable was the well-being of the volunteer  
C) This was not a random sample as they were volunteers   
D) This was an experiment so it could be used  
E) This experiment was not proof. They should have rewritten what they stated to create a more accurate article.

1.42

A) Observational study  
B)Explanatory variable would be screen time, sex and age, mothers education, ethnicity, psychological distress, and employment status  
C) the response variable would be the adolescent well-being  
D) Yes the study can be generalized because it covers a large area  
E) Yes it can because we know it has an impact on the individuals  
  
1.43

A) The county, state, drivers’ race, car searched, and drivers arrested.   
B) it is a non-ordinal all categorical  
C) The response variable would be if the car was searched while the explanatory would be the race of the driver

1.44

A) Year of launch, Outcome of launch, and type of launching agency  
B) Year of launch is numerical and discrete, outcome of launch is categorical and is not ordinal, type of launch is categorical and is not ordinal

C) Outcome would be the response variable and the other variables would be the explanatory