Theories and hypotheses

As opposed to conjectures a theory provides a reason concepts are related.

A theory explains the interconnectiveness of two or more concepts. It explains how one concept influences another concept.

Why do people who watch three or more hours of TV a day tend to have low levels of education, are depressed and have low levels of incomes?

Take each in turn:
Low level of education:
   Read less often
Depressed:
   TV allows an escape from everyday problems.
Low levels of income
   Unemployed or part-time so they have more time

A theory is made up of assumptions (like speculation). Some assumptions are obvious and do not need validation, while other assumptions need to be validated.

Topic: why are the elderly more religious than young people?

Theory: Elderly are closer to death and as you become closer to death you begin to fear it more than young people. In order to alleviate some of the elderly’s fears they try to understand and learn about death. Most religions offer an explanation for death and explains what the afterlife holds for them. Hence, elderly people are more religious because religion provides them with comfort in knowing what will become of them when they die. Religion makes them fear death less.

What concepts did I use?
Elderly
religion
   a.) acquiring knowledge about
   b.) satisfaction about religion
fear of death

Assumptions in my theory.
1.) Elderly are closer to death
2.) The closer to death you get the more you want to learn about death
3.) Religion offers an explanation for death
4.) Explanation of death provides comfort from death
5.) Religious people are more religious

{assumptions in the theory should be backed up by some source}
Now that we have a theory (a rather bad one) we need to derive hypotheses from it.

**Hypotheses formation**: This is the process of formulating “testable” statements that are derived directly from your theory.

Types of hypotheses

1.) **Directional Hypotheses**: This hypothesis states a direct relationship between two or more variables (concepts). It can be in the form of “more” or “less”, or typically “negative” and “positive”. Also, since we are say this behavior occurs on average we use word like “tend” “more often”, “more likely”.

   This hypothesis is the one that is empirically tested. There is no explanation as to why the two concepts are related.

   - $H_1$: Elderly are more likely to be religious
   - $H_2$: Elderly are more likely to fear death more
   - $H_3$: Elderly are more likely to gain comfort in religion

2.) **Null hypothesis**: Opposite explanation that you have provided

   - $H_{01}$: Elderly are not more religious
   - $H_{02}$: Elderly do not tend to fear death more
   - $H_{03}$: Elderly do not tend to gain comfort in religion

   We will not be using null hypotheses in this class.

3.) **Alternative rival hypothesis**: Provides an alternative explanation to the hypothesis derived from your theory. A different explanation that is explained in the theory.

   Elderly are more religious because they were born in a generation where religious values were emphasized more.

Assignment 4
Abortion has been a divisive issue in America ever since the Roe v. Wade decision was rendered in 1973. Basically, Pro-Choice advocates argue that a woman has the rights to make decisions about her body, and Pro-Life advocates argue that the fetus is a living being that has rights. The question addressed here is what types of people tend to be Pro-life advocates. I argued that three factors impact opinions on whether a person is pro-life. First, elderly or people born prior to the Roe v. Wade decision would more likely be pro-life because they lived in an era when abortion was illegal. Since this was the norm for them it is difficult for them to change their attitude. Second, people who are religious will tend to be pro-life because many religions preach about the sanctity of life and only God is allowed to take a life. Since they believe the fetus has a conscious, many religious people feel it is against “God’s will” to terminate its life. Finally, political conservatives will tend to be pro-life because they believe that the right to privacy ruling rendered in the Roe v. Wade decision was unconstitutional. They have actively sought to place Supreme Court justices on the Court who would overturn this decision. Hence, it is argued that pro-life people will tend to elderly, religious and political conservatives.

I. From this theory generate:
   a. three directional hypotheses
   b. one alternative rival hypothesis

II. Examine the GSS data set and use the following four variables to test your three directional hypotheses. (You do not have to test your alternative rival hypothesis)
   
   reltin (combine strong and somewhat strong = religious, not very strong and no religion = not religious ***take note of the values before recoding)

   age (create, young (18 to 35, middle (36-52), old (53 >) categories.

   polview (create Liberal, Moderate, Conservative categories)

   albany (no need to recode)

III. Use crosstabs and write a summary report about your findings. Maximum is four sentences.