Scientific Method and Emile Durkheim's Study of Suicide

1. Define the problem.
   A problem is a question for which a scientific answer is sought. The subject of a scientific investigation becomes the dependent variable. The dependent variable is the variable that is thought to be the effect of an independent variable (the variable the investigator wants to explain).

   In Durkheim's study, the dependent variable was the suicide rate.

   Durkheim defined suicide as "all cases of death resulting directly or indirectly from a positive or negative act of the victim himself, which he knows will produce this result."

   Durkheim believed that social forces would affect the overall suicide rate. These forces became his independent variables.

   An independent variable is a variable thought to be the cause or explanation of one or more dependent variables (a factor which explains changes in the dependent variable).

   Possible relationships are:
   a. positive correlation—an increase in one variable is matched by and increase in the other variable.
   b. negative correlation—an increase in one variable is matched by a decrease in the other.
   c. null hypothesis—no relationship exists.
   d. spurious correlation—correlations that are not based on causal connections.

   Durkheim's major independent variables were religious affiliation, marital status, military/civilian status, and economic conditions.

2. Form a hypothesis.
   A hypothesis is a tentative statement (educated guess) about the way in which two or more variables are related (how the researcher thinks that the independent variables will affect the dependent variable).

   Durkheim's hypothesis was that the suicide rate would vary by religion (Protestants, Catholics, Jews); by marital status (single people and married people); by military status (soldiers and civilians); and by economic conditions (boom, bust, or stability).

3. Build a research design.
   A research design is a plan for the collection, analysis and evaluation of the data that will allow us to confirm or disconfirm the original hypothesis.

   Sociologist must choose the method that best fits the type of problem being investigated.

   Durkheim used secondary analysis which is the reuse of previously collected data.

   Durkheim's data came from government records which included information about all of his variables. He was thus able to analyze these records statistically.
4. Collect the data.

When Durkheim collected his data he found that suicide was higher among Protestants than Catholics, and lowest among Jews. It was high among single people than married people and lowest among married people with children. The rate of suicide declined with each additional child a parent had. Suicide was higher among soldiers than among civilians. It was higher for officers than enlisted men, and among enlisted men, it was higher for volunteers than draftees. The suicide rate was higher in times of economic depression and economic booms than during more stable periods.

5. Analyze the data

During the analysis stage, the researcher must make sense out of the data he has collected to see if the hypothesis was right.

Durkheim's analysis led him to identify four distinct patterns of suicide. The three patterns most commonly referred to are egoistic suicide, altruistic suicide and anomic suicide.

**Egoistic suicide** is committed by people who are not strongly supported by membership in a cohesive social group. As outsiders, they depend more on themselves than on group goals and rules of conduct to sustain them in their lives. In times of stress, they feel isolated and helpless.

**Altruistic suicide** is committed by people who are deeply committed to group norms and goals and who see their own lives as unimportant. Basically, these suicides involved dying for a cause.

**Anomic suicide** is committed by people when society is in crisis or rapid change. In such times, customary norms may weaken or break down. With no clear standards of behavior to guide them, many people become confused, their usual goals lose meaning, and life seems aimless.

6. Draw conclusions and/or form a theory.

The last step is a matter of interpretation. A **theory** is a comprehensive explanation of observed relationships among variables.

Durkheim's theory was suicide is clearly related to the links people have with social groups. To little commitment to groups and group norms was likely to produce egoistic suicide. Too much was likely to produce altruistic suicide. Commitment shaken by rapid social change was likely to increase the chances of anomic suicide.

This sociological explanation does not oppose a psychological view of suicide. The sociological explanation can point out the social forces that will increase a person's probability of committing suicide. But this theory cannot predict exactly which individuals will actually commit suicide. For that answer, the psychologist's study of individual behavior would be much more useful.

7. Any scientific study must meet the tests of validity and reliability.

**Validity** is the degree to which a scientific study actually measures what it is attempting to measure. **Reliability** is the degree to which the study provides consistently accurate results. Can the results be reproduced in later studies by the same researcher or other researchers?

Durkheim's study has consistently been shown to be both valid and reliable.