The Value of Good Research

The value of good research cannot be overstated. Good research can be used by policy makers to create strategies that maximize the use of resources, allow a higher level of service to be provided, or even save lives. Conducting good research, however, is never easy.

Defining the Problem

The research process begins with defining the problem you want to investigate and then reviewing the research literature that already exists on the problem.

Creating a Testable Hypothesis

The next step is the creation of a testable hypothesis which is an operational definition of a question of interest to the researcher. Virtually any question can be used for a hypothesis, although it can be difficult to operationalize some questions.

Creating the Research Design

After the hypothesis is created, the research design must be created. The type of research design used depends on the type of hypothesis being investigated and the nature of the data being studied. Methods of design include case study (the intensive investigation of a single individual), survey (essentially a questionnaire), naturalistic observation, archival research (reevaluating prior research or using already existing data) and control vs. treatment group experiment. Each method has its uses.

The Use of Case Studies

The case study is useful in clinical settings when the focus is the treatment of a single individual. Psychologists and physicians use case studies to evaluate difficult or challenging cases to make a diagnosis or to assess the outcome of treatment. Case studies, however, are of limited usefulness because, by definition, it is difficult to generalize findings to a broader population.

The Survey Method
The survey method, wherein a representative sample of the population you are investigating is asked to respond to a questionnaire, is a cost-effective method for questioning large numbers of people at once. Surveys are especially useful in researching opinions and attitudes. They are not, however, very good at predicting actual behavior, and they are subject to problems due to volunteer bias, unrepresentative samples, wording effects, and other confounds.

**Naturalistic Observation**

Naturalistic observation refers to observing a subject "in the wild" and was originally used by zoologists studying the behavior of animals. For humans, this method usually involves observing the behavior of unsuspecting subjects through some sort of hidden surveillance (Stanley Milgram's famous experiment used this method). This approach tends to be expensive and is sometimes challenged on ethical grounds.

**Archival Research**

Archival research is typically inexpensive and is logistically easy to perform, but it is limited by the quality of the original records (or the original research, if prior research is being evaluated).

**Control vs. Treatment Group Research**

Control vs. treatment group research is a powerful method to track the effectiveness of everything from anti-smoking campaigns to new medications. However, this type of research can be difficult to perform and must overcome many possible confounds that threaten validity. The control and treatment groups must be matched to each other and must be representative of the larger sample being studied.

**Adoption by Policy Makers**

Even the best conducted and performed research is useless if it is not adopted by policy makers; conversely, even well-constructed policies backed by solid research may prove disastrous due to the law of unintended consequences.