

Week 1 db



03 October 2007 Week DB The research process consists of the certain steps and is based on intellectual investigation of the problem. It is true to say that “ Research is, by its nature, cyclical or, more exactly, helical.” The research can be characterized as ‘ cyclical’ because a researcher has to follow certain steps, ‘ the cycle’, in order to investigate the problem. The researchers can follow different roots and use different methods but all of them will ‘ arrive at the same destination’. Research means that something “ goes with” or is “ associated with” something else. In the research process, all parts of the cycle are co-dependant, and if one step is omitted the research will loose its scientific value. One of the most important tasks for any researcher, therefore, is to think through the value of his intended research before too much preliminary work is done. The research process can be identified as ‘ helix’ because every stage of investigation brings new information and questions about the problem. Such information is often necessary to pave the way for designing other research or to make decisions of some sort. It is possible to say that there are many variables “ out there” in the real world that can be investigated. Obviously, one research cannot investigate them all. For this reason, researchers choose certain variables to investigate because they have a suspicion that they are somehow related, and that if they can discover the nature of this relationship, they will be able to make more sense out of the world in which they live. This process is endless and spiral.

2. Two concepts that are used in judging the value of an instrument are reliability and validity. Reliability can be defined as the consistency of the information obtained. If researchers used a yardstick to measure a desk three times and obtained different readings each time, they would conclude

that the information was unreliable. In contrast to reliability, validity refers to the extent to which an instrument gives researchers the information they want. In this case, inadequate measures and tools would give misleading information and data. Validity is the most important idea to consider when preparing or selecting an instrument for use. More than anything else, a researcher wants the information obtained with an instrument to serve his or her purposes. Validity has been defined to include the appropriateness, meaningfulness, and usefulness of the specific inferences a researcher makes on the basis of the data he or she collects. Reliability refers to the consistency of scores or answers—how consistent they are for each individual from one administration of an instrument to another, and from one set of items to another. In research, both validity and reliability are important because using an instrument is extremely helpful in judging reliability and validity. Using these two instruments, a researcher should be able to make some judgments concerning the probable reliability and validity of any information obtained using them.

3. The carefully written up research is very important because it ensures scientific accuracy and reliability of all facts included into report. Also, it helps other researchers to understand ideas and results presented in the research, the question investigated, the formulation of a hypothesis, the appropriate research methodology, the clarity of terminology, the selection of a sample, the choice of instruments, and so forth. Accuracy is the main criteria for any scientific study. The research should be made available to the scientific community to receive its approval and ensure scientific value and high standards of the research. The community examines the work and decides whether it meets scientific standards and of high quality. Also, the

research should be made available to the community because it can help other researchers to continue their work in this field or support current investigations. In addition, it allows researchers to reframe from repetition in research topics and hypotheses testing.

#### Works Cited

1. Leedy, P. D., & Ormrod, J. E. (2005). Practical research: Planning and design. Upper Saddle River, NJ: Pearson. Chapters 1-2.