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# Psychology 2020 Lab: Naturalistic Observation

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Naturalistic observation refers to the collection of data without manipulation of the environment. The goal of naturalistic observation in psychology is to study the behavior of an organism (including a human) in natural settings. For example, a scientist who is developing a theory about gender differences in social settings may wish to spend some time in restaurants, bars, and shopping malls in order to determine for which behaviors and in which settings such gender differences are most relevant. One problem with observational studies is that subjects who know that they are being observed may alter their behavior to try to gain approval of the experimenter.

Surprisingly, naturalistic observational research is difficult to do well. Methods have been constructed to guide the researcher, especially the beginning researcher, in the collection of data under naturalistic conditions. Most importantly for this method, the very presence of the investigator, as well as the data recording techniques that are used, must remain unobtrusive; that is, no characteristics of the observation itself should have any effect on the behavior of the organism under study.

Advantages of naturalistic observation include: (1) the collection of data that clearly reflect the constraints of the organism's normal environment (human subjects, in particular, may respond differently under laboratory conditions when they know that they are in an experiment); and (2) the collection of data in cases where experimental techniques would be impractical and/or unethical (for example, in an exploration of the social interaction patterns of mentally retarded children in the classroom).

One problem with naturalistic observation techniques is that different observers may draw different conclusions from watching the same instance of behavior. This potential problem is often addressed in two ways. One safeguard against this problem is known as "working up reliability". In the early stages of characterizing a behavioral phenomenon, the scientists working on a project will get together to create definitions of the behaviors in question, definitions upon which they can all agree and which they can implement when collecting data.

A second safeguard is to (1) have multiple observers of the same phenomenon, and (2) measure the extent to which the observations of the observers are in agreement with one another. The extent to which agreement exists is usually called inter-rater reliability and may be measured with suitable correlation techniques. Measures of inter-rater reliability are usually published in the journal article describing the research together with descriptions of the data.

A second problem with naturalistic observation techniques, especially when humans are involved as subjects, involves the ethical question of violating the privacy of the observed subjects. An important consideration in all research is respect for the organism being studied. In the case of human subjects, this respect dictates that the scientist has an ethical obligation to obtain informed consent from subjects, to protect the confidentiality of data, and so on (see APA ethical guidelines in your textbook). In the case of naturalistic observation studies, obtaining informed consent beforehand would defeat the purpose of the method itself. Where appropriate, naturalistic observations can still be conducted as long as extra precautions are taken to safeguard the rights of the subjects who, unknowingly, will participate in your study. An example of such precautions may include debriefing of subjects after the collection of data and requesting the subject's consent for the inclusion of the collected data in your study.

Some entire scientific disciplines, such as astronomy and meteorology, are predominantly based upon naturalistic observation. Within other disciplines, including psychology, certain phenomena can only be studied using naturalistic observation. For example, research on the migratory pattern of the Arctic Tern, for example, which migrates ten thousand miles each year, cannot be conducted by interfering with this pattern since such interference could have disastrous consequences for the birds involved. In psychology, naturalistic observation has been used to study a host of phenomena, including mother infant interactions, classroom behavior, and social norms in public settings.

In today's lab, you'll participate in a classroom demonstration exercise of naturalistic observation. You will be introduced to two different observational techniques or methods: Time Sampling and Event Sampling. Your lab instructor will provide you with more detailed information regarding each method during class.

### **References**

Bakeman, R., & Gottman, J.M. (1986). *Observing interaction: An introduction to sequential analysis*. Cambridge: Cambridge University Press.

Mann, J., Have, T. T., Plunkett, J. W., & Mesiels, S. J. (1991). Time sampling: A methodological critique. *Child Development*, 62, 227-241.