# Unit 7

Now that we have discussed indirect and direct descriptive methods of FBA in the past two units, you are going to learn when it may be necessary to conduct a functional analysis and the process of functional analysis.

When should we conduct a functional analysis?

For most situations, the use of indirect and direct descriptive methods will lead to a solid hypothesis of the predictors and function of the target behavior. However, there are times in which the information obtained from these methods fails to reveal a consistent pattern of behavior and the hypothesis cannot be clearly confirmed through direct descriptive methods. In this case, a functional analysis could be considered. A functional analysis requires skilled professionals to carry out the conditions effectively and safely. In some cases, approval from a Human Rights Committee or Institutional Review Board would be necessary prior to conducting the functional analysis. This is why we should only use functional analysis when absolutely necessary.

Functional analysis is designed specifically to test the hypotheses generated by our indirect and direct descriptive data regarding the variables or events related to the occurrence of the target behavior. Let’s look at an example.

Let’s suppose the data appears to show that Betty usually screams and hits others when given tasks that are difficult, and your hypothesis is that the behaviors were displayed in order to escape those types of tasks. You can test your hypothesis by giving Betty easy tasks for 10 minutes, taking a break, then giving her difficult tasks for 10 minutes, then easy tasks, then difficult tasks. If she does not engage in the target behavior when given the task, she receives praise. If she engages in the target behavior, the task is removed for 1 minute. If the target behavior is observed more often during the difficult tasks, and if removing the work results in a temporary reduction of the target behavior, then the functional analysis would have validated your hypothesis. The basic focus of a functional analysis is to identify functional relationships between events in the environment (antecedents and/or consequences) and the target behavior. The process may involve comparing many different conditions such as alone, attention, demand, play, and tangible to test the hypothesis, but the basic idea is to test whether the functional relations you have hypothesized hold true under experimental manipulations. Functional analysis is the only approach that shows a true functional relationship between the target behavior and the antecedent or consequent events.

As was discussed in the previous example, the functional analysis involves presenting different environmental variables and observing how they affect a person’s behavior. We can do this in two approaches: manipulation of structural (or antecedent) variables and manipulation of consequent variables. Some of the ways in which we can manipulate structural variables include presenting particular requests or instructions, asking the person to participate in certain activities, having a particular person or thing present, etc. Some of the ways in which we can manipulate consequent variables include providing specific consequences contingent upon the occurrence of the target behavior. For example, if the target behavior occurs during the attention condition, we would provide attention to the target behavior. If the target behavior occurs during the demand condition, we would remove the demand contingent upon the display of the target behavior.