

- antecedents and consequences and the problem behavior. (p. 250)
11. What is the difference between a functional assessment and a functional analysis? (p. 242)
 12. What is the first step in conducting a functional assessment? (p. 257)
 13. At what point would you consider your functional assessment of a problem behavior complete? Provide an example. (p. 258)
 14. Under what circumstances do you need to conduct a functional analysis of a problem behavior? Provide an example. (p. 258)
 15. Describe the three essential features of a functional analysis. (p. 259)
 16. Iwata and his colleagues found three types of reinforcers for self-injurious behavior in children and adolescents with developmental disabilities. What are they? (p. 256)
 17. Describe the three experimental conditions in the functional analysis of self-injurious behavior conducted by Iwata and his colleagues. (pp. 254–256)

APPLICATIONS

1. If the goal of your self-management project is to decrease an undesirable behavior, describe how you will conduct a functional assessment of that behavior. Describe each of the functional assessment methods you will use to identify the controlling variables for your target behavior.
 2. Luther, an 80-year-old man, was recently admitted to a nursing home because he had Alzheimer's disease and his wife could no longer take care of him at home. Luther had spent his life as a farmer. This was the first time he had ever lived anywhere in which his freedom of movement was restricted. Luther could not leave the nursing home by himself and had to learn to adapt to the daily routine in the nursing home. Although the Alzheimer's disease had impaired Luther's memory, he was still physically fit, and he enjoyed walking around the building and talking to the staff and other residents. Shortly after he moved into the nursing home, Luther started to exhibit a problem behavior: He walked outside alone. He was not allowed to go outside alone for safety reasons, but he walked out the door a number of times each day. When the weather was cold, he walked outside without a coat. The staff had to bring him back inside each time. The nursing home has a main door near the nurse's station, another door near the business office, and three fire doors at the sides and back of the building. The building has four wings that form a square with a totally enclosed courtyard in the center of the building. Two doors open to the courtyard. Four hallways, one down every wing of the building, come together to form a square. Assume that you are a behavioral consultant who has been called by the nursing home staff to help them deal with Luther's problem behavior. The staff does not know whether the problem is caused by the Alzheimer's disease, which causes Luther to become confused so that he doesn't know where he is or where he is going, or whether it is the result of some contingencies of reinforcement operating in the nursing home. Your first step in developing a treatment strategy is to conduct a functional assessment to determine why the problem is occurring. You have scheduled a group interview with some of the staff members who work regularly with Luther. Provide a list of the questions you will ask the staff to assess the antecedent events, the problem behavior, and the consequences of the problem.
 3. Interview questions from Application 2 and their answers are provided here.
- Problem behavior:**
- Q:** What exactly does Luther do when he walks outside?
- A:** He just walks up to the door, opens it, and starts to go outside.
- Q:** Does he say or do anything as he is walking out the door?

A: He sometimes mumbles to himself about going to see his wife or going to see somebody. Or he says he has to go outside without giving a reason. Sometimes he says nothing and just walks outside. He usually looks at the nurse who is at the nursing station as he walks out the door.

Q: What does he do once he is outside?

A: He's not outside for more than a few seconds because a staff person goes after him and brings him back in. Usually, he gets outside and just stands a few feet from the door. Often, he turns and looks back in the building. Sometimes, the nurse sees him going for the door and stops him before he even gets outside.

Antecedents:

Q: What is Luther usually doing right before he walks out the door?

A: Usually, he is walking around the hallways or hanging around by the door.

Q: Is he usually by himself or with somebody when he walks out the door?

A: He likes to talk to people when he's walking around the halls, but he is most often alone when he goes for the door.

Q: Which door is he most likely to go out?

A: He's tried them all, but most of the time he goes out by the main nurse's station.

Q: Does he ever walk out the door to the courtyard?

A: No, hardly ever.

Q: What time of day is he most likely to walk out?

A: Usually when the staff are the most busy: when they are providing care routines with the other residents, before meals when they are helping other residents, and at shift changes.

Q: Is there someone at the nurse's station when he walks out?

A: Almost always. We have someone at the nurse's station almost all the time.

Q: Even at busy times?

A: Yes, usually the nurse is charting or doing paperwork at the nurse's station at that time.

Consequences:

Q: What happens as soon as Luther walks out the door?

A: A staff person runs out after him and brings him back. Usually it is the nurse or nursing assistant at the nurse's station who sees him leave.

Q: What happens then?

A: The nurse or nursing assistant walks back with Luther and tells him why he can't go outside by himself. The staff person usually takes him to the break room and sits down with him for a few minutes with a cookie or cup of coffee. The staff tries to get him interested in something other than leaving. It usually takes 5 minutes or more each time he tries to go outside.

Q: What would happen if Luther went out the door to the courtyard?

A: He has done that only once or twice. When he went out in the courtyard, staff left him alone because it is enclosed and he couldn't wander away or harm himself. He doesn't go out that door anymore.

On the basis of this information, what is your initial hypothesis about the function of Luther's problem behavior? Describe the ABC observation procedure you will develop in conjunction with the nursing home staff. Describe the data sheet you will use and the instructions you will give to the staff to carry out the direct observation procedure.

- The ABC observation procedure for Luther is described here, together with the information derived from the ABC observation. Because Luther almost always goes out the door by the nurse's station, the data sheet will be kept at the nurse's station. Having already gathered information on probable antecedents and consequences, the consultant will have staff record ABCs using a checklist. The checklist will itemize the probable antecedents and consequences; the staff will put a check mark in the column that corresponds to the relevant events. The staff will also record the time of the behavior. The data sheet will have a column for the time of the behavior, a column where the staff member who observes the behavior puts his or her initials, and columns for each of the antecedents and consequences as follows.

Antecedents:

- Luther is alone or no one is talking to him.
- Luther is walking the hallways.
- Luther looks at the nurse at the nurse's station as he goes for the door or goes out the door.

Consequences:

- Staff run after Luther and walk him back.
- Staff talk to Luther as they walk with him.
- Staff spend time with Luther after he is back in the building.
- Luther gets coffee or cookies.

Staff will record these events immediately each time the problem behavior occurs for 1 week.

The results of the ABC observations were as follows. Luther exhibited the problem behavior an average of five times per day. Luther was alone or no one

was talking to him 100% of the times that the problem occurred. He was walking the hallways or hanging around the door 100% of the time, and he looked at the nurse in the nurse's station 90% of the time before he walked out the door. When Luther walked out the door, 100% of the time a staff person ran after him and talked to him as he or she brought him back. A staff person spent a few minutes with him every time but one, and he got coffee and cookies 50% of the time.

Does this information support your initial hypothesis developed from the interview? Explain. On the basis of the information from the interview and ABC observations, describe the functional analysis procedure you will use to confirm your hypothesis about the function of the problem. Describe the two functional analysis conditions you will have the nurses conduct with Luther. Describe the type of results you expect from the functional analysis procedure.

MISAPPLICATIONS

1. Hanna, a first grade student, was exhibiting disruptive behaviors in the classroom. She was out of her seat frequently; she talked, teased other students, and got into the supply cabinet. To decrease this behavior, the teacher came up with the following plan. He decided to ignore Hanna's disruptive behavior and to praise Hanna whenever she was in her seat paying attention and not exhibiting disruptive behavior. He believed that the use of differential reinforcement (extinction of the disruptive behavior and reinforcement of appropriate behavior) would decrease the disruptive behavior while increasing the appropriate behavior. What is wrong with this plan?
2. After talking to the school psychologist, Hanna's teacher learned that before you decide on a treatment for a problem behavior, you must conduct a functional assessment of the problem to identify the environmental variables that are causing the behavior. The school psychologist wanted the teacher to collect information on the antecedents and consequences of the problem behavior by conducting ABC observations in the classroom. The psychologist gave the teacher a data sheet with three columns: one for antecedents, one for the problem behavior, and one for the consequences. The psychologist asked the teacher to keep the data sheet on his desk and, each time Hanna exhibited a problem behavior, to get the data sheet and write down a description of the antecedents, a description of the behavior, and a description of the consequences. The psychologist told the teacher that they could get a good understanding of why the problem behavior was occurring if the teacher would do this ABC recording each day for a week. What is wrong with the functional assessment method used in this situation?
3. The director of a residential program for people with severe intellectual disabilities asked the staff to do behavioral observations of two residents who were having behavioral difficulties and to develop hypotheses about why their behavior problems were occurring. One resident, Robyn, engaged in aggressive behavior in which she screamed at and slapped staff when they asked that she engage in some training activities. The other resident, Melvin, engaged in disruptive behavior in which