



APPLICATION OF
**BEHAVIOR ANALYSIS IN
LEISURE CONTEXTS**

An Introductory Learning Manual

John Dattilo
Kari Kensinger

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**We dedicate this book to the many wonderful people
whose lives we have humbly attempted to enhance;
they have taught us much and touched our hearts.**

Contents

Preface.....	vii
Section A: Examine and Assess Behaviors	
1 Introduction to Behavior Analysis	1
2 Describe Behaviors	7
3 Observe Behaviors.....	13
4 Measure Behaviors	23
5 Assess Preferences.....	35
6 Sequence Analysis.....	43
Section B: Accelerate and Decelerate Behaviors	
7 Accelerate Behaviors: Positive Reinforcement.....	49
8 Accelerate Behaviors: Token Economies	59
9 Decelerate Behaviors: Negative Reinforcement.....	67
10 Decelerate Behaviors: Extinction	75
11 Decelerate Behaviors: Punishment.....	83
12 Decelerate Behaviors: Withdrawal of Reinforcement	93
Section C: Teach Behaviors	
13 Implement Schedules of Reinforcement	105
14 Shape Behaviors.....	115
15 Chain Behaviors Together	123
16 Provide Discrete Trials.....	131
17 Develop Functional Communication	139
Section D: Discriminate Between and Maintain Behaviors	
18 Promote Discrimination.....	147
19 Generalize Behaviors	155
Section E: Be Consistent and Informed	
20 Support Positive Behaviors.....	163
21 Use Evidence-Based Practice	171
Conclusion.....	181
Glossary.....	186
References and Resources	190
Index	191

Preface

This self-study learning manual is designed to introduce leisure service providers and students to behavior analysis and to assist them in developing and strengthening their skills in the application of associated techniques. The manual may be of value to other human service providers who are interested in applying behavior analysis techniques in situations designed to promote leisure engagement. It is our hope that this manual will assist those individuals who are dedicated to helping others engage in leisure. Leisure engagement leads to people experiencing meaning and enjoyment in their lives and, ultimately, increases their happiness and their ability to flourish.

This manual assumes that the reader has no previous knowledge of behavior analysis. The text contains five major sections with 21 associated chapters. The first section is devoted to examining and assessing behaviors that includes details on ways to describe, observe, and measure behaviors. This section also focuses on preference assessment and understanding behaviors through sequence analysis. The second section describes ways to influence behaviors by accelerating or decelerating behaviors. Procedures identified to accelerate behaviors conducive for leisure participation include positive reinforcement, token economies, and negative reinforcement. Extinction, punishment, and withdrawal of reinforcement are strategies designed to decelerate behaviors that are incompatible with leisure engagement. The third section identifies strategies to help teach behaviors facilitating leisure involvement that include schedules of reinforcement, shaping behaviors, chaining behaviors together, providing discrete trials, and developing functional communication. The fourth section of the manual provides details on promoting discrimination and generalization of behaviors with the purpose of encouraging maintenance and generalization of behaviors that facilitate leisure participation. The final section encourages readers to be consistent and informed in their application of behavior analysis procedures. As a result, this section contains information on supporting positive behaviors and using evidence-based practices.

Each chapter contains descriptions of procedures and associated exercises. A series of questions is provided at the end of each chapter to allow readers to test their acquisition and retention of the material addressed in the chapter. An answer key is included at the end of the manual to assist readers in evaluating their answers. We hope that readers find the manual to be helpful in improving their ability to interact with people in a helpful and respectful manner and create contexts that encourage leisure engagement.

1 INTRODUCTION TO BEHAVIOR ANALYSIS

Behavior analysis includes a systematic approach to understand behavior used by many professionals including those who provide leisure services. In recent years, the field of behavior analysis has grown in popularity because there is considerable research documenting the effectiveness of the approach. Although this book is about behavior analysis in leisure contexts, the concepts of leisure and play are embedded into the practice of behavior analysis.

An understanding of introductory techniques of behavior analysis can provide practitioners with helpful techniques to encourage positive behavior and discourage negative behaviors while people are engaged in leisure pursuits. The appropriate application of the procedures described in this book can encourage service providers to more effectively encourage individuals to engage in enjoyable and meaningful leisure experiences. An advantage of behavior analysis is that it can be used in any setting or circumstance where people interact with each other or their environment.

Behavior analysis is a systematic, performance-based, evaluative method for changing behavior. **Behavior** is any observable and measurable act, response, or movement by an individual. A behavior that is identified in need of improvement or change is referred to as a **target behavior**. Behavior analysis involves application of procedures designed to change behavior in a measurable manner.

Behavior analysis originates from the belief that **behaviors are learned**, rather than inherent, and can thus be changed by additional learning. Behavior analysis seeks to avoid inferences, vague reasoning, or undefined impulses as explanations for behavior. Whatever the behavior and whatever its cause, the behavior is present in an environment and is influenced and shaped by that environment. Behavior analysis focuses on the following:

- **Observable and measurable behaviors**
- **The environment**
- **Goals and objectives**
- **Planning and implementation**
- **Teaching techniques**
- **Antecedent, behaviors, and consequences**
- **Evaluation and documentation**

Behavior is the concern of behavior analysis, and it is behavior that can be changed. Behavior analysis is not a process concerned with attempts to determine the causes of behavior. The procedures used in behavior analysis focus on **observable and measurable behaviors** rather than presume influential internal agents. This approach does not deny the existence of internal agents, but rather concentrates specifically on the observable behaviors exhibited by an individual. Regardless of what is causing the behavior, it is behavior that can be observed and measured. Internal behavioral agents cannot be seen, nor can they be measured with any certainty or precision. Behavior is the focus of behavior analysis because it is behavior that can be changed by environmental manipulation.

Behavior analysis is based on the premise that humans are reactors to their environment. The **environment** contains all the circumstances, objects, people, behaviors, and conditions that an individual encounters. The emphasis in behavior analysis is placed on the relationship between changes in the environment and changes in the individual's behavior. Through environmental manipulation, an individual's behavior can change.

The procedures of behavior analysis are very compatible with the programming approach used by leisure service providers and other professionals. Based on the needs of participants, professionals develop **goals and objectives** designed to promote leisure engagement of program participants. The concentration on measurable behaviors in behavior analysis facilitates identification of participant needs and subsequent development of explicit objectives. These goals and objectives provide direction in determining the delivery of appropriate leisure programs.

Procedures used in behavior analysis are considered during the **planning** phase of developing leisure programs and applied during the actual **implementation** phase of the program. Professionals implementing behavior analysis techniques can assist participants in achieving program objectives by facilitating the acceleration of positive behaviors that are beneficial in a specific context, while decreasing behaviors that are disruptive or problematic for that context.

Application of the principles of behavior analysis can facilitate **identification of successful teaching techniques**. This identification encourages more frequent and systematic application of effective, precise, and clear learning strategies. As a result, behavior analysis techniques can be easily incorporated into professionals' existing repertoire of skills dedicated to facilitating the leisure experience and can be applied across a variety of settings.

Behavior analysis involves careful observation and analysis of individuals' behaviors by examining the relationship among behavioral **antecedents**, the **behaviors** themselves, and the **consequences** of these behaviors occurring in the environment. The emphasis in behavior analysis on the identification of observable and measurable target behaviors as well as on the antecedents and consequences of these behaviors enhances the ability of service providers to conduct systematic program evaluation.

Conducting effective program **evaluation** allows professionals to clearly document program effectiveness. **Documentation** of program effectiveness increases the ability of professionals to demonstrate the provision of quality services and subsequent enhancement of participants' leisure lifestyles.

Try the Following Exercise

Identify if the following statements are TRUE or FALSE by placing a T or an F in the space immediately to the left of the statement.

- ___ 1. Implementation of principles associated with behavior analysis should be restricted to clinical settings.
- ___ 2. A behavior is defined as any observable and measurable act, response, or movement by a person.
- ___ 3. Behavior analysis originates from the belief that many behaviors occur spontaneously, without prior learning.
- ___ 4. Behavior analysis focuses on measurable and observable behaviors rather than internal agents.
- ___ 5. Behavior analysis is primarily concerned with the relationship of an individual's behavior and associated feelings.
- ___ 6. The environment contains all the circumstances, objects, people, behaviors, and conditions that a person encounters.
- ___ 7. The professional develops goals and objectives based on the interests and expertise of existing personnel.
- ___ 8. Procedures used in behavior analysis should be considered during the planning, implementation, and evaluation phases of a leisure program.
- ___ 9. Behavior analysis focuses on the individuals' behavior and is not concerned with what occurs before or after the target behavior.
- ___ 10. Effective program evaluation increases the ability of professionals to document program effectiveness.

Please see the next page to determine the accuracy of your responses.

All statements associated with odd numbers are FALSE and all statements corresponding to even numbers are TRUE.

In review, the following are **characteristics of behavior analysis**:

- Evaluates methods for changing **behaviors**
- Originates from the belief the behaviors are **learned**
- Focuses on **observable and measurable** behaviors
- Based on premise that humans are reactors to the **environment**
- Is compatible with recreation **programming**
- Should be considered during program **planning** and **implementation**
- Focuses on **antecedents, behaviors, and consequences**
- Facilitates **evaluation** of behavior and programs

You have now completed the introductory material on behavior analysis. Next you can evaluate how well you retained the information on the following pages.

Test Your Knowledge of an Introduction to Behavior Analysis

1. Behavior may be defined as:
 - a. a systematic method for changing the environment.
 - b. observable and measurable acts, responses, or movements by an individual.
 - c. the emotional response of individuals to unfamiliar environments.
 - d. the physical movements or actions of an individual.
 - e. the presence of internal impulses that cause an individual to act in an inappropriate manner.
2. Behavior analysis is a systematic method for:
 - a. altering or changing behavior.
 - b. determining the causes of behavior.
 - c. determining the presence of internal agents.
 - d. estimating the effects of behavior in social environments.
3. Behavior analysis procedures may be used:
 - a. in any setting where humans interact with each other or their environment.
 - b. only by certified therapeutic recreation specialists.
 - c. only in clinical settings.
 - d. only with individuals who have emotional limitations.
 - e. only with individuals who have physical disabilities.
4. Behavior analysis is based on the premise that:
 - a. behaviors are determined by internal agents.
 - b. behaviors are inherent, rather than learned.
 - c. behaviors are learned, rather than inherent.
 - d. internal agents are determined by behaviors.
 - e. internal agents are determined by environments.
5. A target behavior that is:
 - a. a model to be adopted by an individual in a behavior analysis program.
 - b. aimed at modifying the environment.
 - c. exhibited by the individual who is applying behavior analysis techniques.
 - d. the focus of systematic efforts aimed at altering it.
 - e. to remain unchanged by an individual in a behavior analysis program.
6. Behavior analysis focuses on:
 - a. hypotheses to be tested.
 - b. individuals with disabilities.
 - c. inferences.
 - d. internal agents.
 - e. observable and measureable behaviors.

7. A basis for behavior analysis is the belief that:
 - a. change in internal agents can cause change in the environment.
 - b. changes in the environment can effect a change in behavior.
 - c. internal agents can be measured with the same precision as external agents.
 - d. the cause of a behavior must be identified before the behavior can be modified.
 - e. it is easier to identify internal agents than it is external agents.
8. Behavior analysis emphasized the concept that:
 - a. behavior cannot be influenced by environmental manipulation.
 - b. humans are not influenced by their environments.
 - c. humans react only to internal agents.
 - d. humans react to their environment.
 - e. target behaviors must remain unchanged.
9. Behavior analysis is based on:
 - a. environmental manipulation.
 - b. manipulation of internal agents.
 - c. the belief that behavior is an inherent trait.
 - d. the belief that clinical settings are the best environments for behavior analysis procedures to be applied.
 - e. the belief that target behaviors must not be changed.
10. Environmental manipulation can facilitate:
 - a. change in an individual's behavior.
 - b. the determination of causes of behavior.
 - c. the measurement of internal agents.
 - d. the reduction of the influence of leisure as a determinant of lifestyle.
 - e. the reduction of the strength of internal agents.
11. Behavior analysis procedures are:
 - a. compatible with the concept that behavior is inherent.
 - b. compatible with programming approaches used by leisure service providers.
 - c. incompatible with programming approaches used by leisure service providers.
 - d. most useful when applied in clinical settings.
 - e. most useful when focused on internal agents.
12. Behavior analysis procedures should first be considered during the:
 - a. acceleration phase of leisure programs.
 - b. delivery phase of leisure programs.
 - c. evaluation phase of leisure programs.
 - d. implementation phase of leisure programs.
 - e. planning phase of leisure programs.

13. Behavior analysis procedures should:

- a. decrease the strength of behaviors that are appropriate in a specific context.
- b. increase the strength of behaviors that are appropriate in a specific context.
- c. increase the strength of behaviors that are inappropriate in a specific context.
- d. increase the strength of internal agents.
- e. neutralize the effects of environmental manipulation.

14. Behavior analysis techniques are:

- a. easily incorporated into the repertoire of skills possessed by recreation professionals.
- b. too sophisticated to be applied by recreation professionals.
- c. useful only in clinical settings.
- d. useful only in natural environments.
- e. useful only when applied to individuals with disabilities.

15. Behavior analysis involves the analysis of behavior and their:

- a. antecedents and consequences.
- b. effect on the environment.
- c. effect on recreation professionals.
- d. expression during leisure
- e. internal causes.

Now that you have completed the evaluation, please check your answers with the ones in the back of the book. If needed, review the introductory material on behavior analysis and try the evaluation again. When you are satisfied with your acquisition of the information and understand the concepts, begin work on the next chapter.