

1. List and define (in your own words) 4 of the 7 dimensions of applied behavior analysis according to the article. (4 points)

Baer, Wolf, & Risley (1968) define seven dimensions that provide the scope, usage, function, and context for applied behavior analysis. Applied, behavioral, analytic, technological, conceptual system, effective, and generality the dimensions of this seminal work to organize the application and function of behavior analysis. As practical examples in my vocation, music, I will describe four of the dimensions of applied behavior analysis and how they generalize to the field of instrumental performance.

Playing a clarinet is an observable and measurable form of *behavior*. Correct notes, rhythms, articulations, dynamics, tone quality, hand position, embouchure, and tempo are a few characteristics that can be measured with a clarinetist or other instrumentalist of music. “ The relevant question is not what he can say, but what he can do” is most applicable to any educator of music students. Talking about music theory and the expressive qualities of a piece of music will not lead to better performance without the player having the ability to display musical behavior. Playing an instrument can also be *generalizable* and *technological*. A flautist who is performing Beethoven’s Fifth Symphony in New York City is using the same techniques as their contemporaries in London, Paris, Tokyo, and Mexico City. The systems used with human beings for instrumental music have evolved over 1600 years to become a mainstream practice shared across all borders. This is why music is informally considered, along with mathematics, a universal language. The function and operations of the instruments remain the same for every human being using the tools for musical behavior. Method books exist to explain the correct procedures in a systematic fashion for any person to learn from and become a “self-taught”

consumer of performance. The pedagogical techniques of performance practice are structured to be efficient and effective within music of all traditions. In this sense, music is *applied* because of the significance it holds to the musician and the audience.

2. Discuss how one would determine if there is a functional relationship between the intervention and the behavior. (1 point)

Though the word function is not used in the article, Bear, Wolf, and Risley (1968) discuss the use of an AB or reversal design when conducting research trials with intervention. If ethically sound, these designs (also called withdrawal designs) can show the measured effectiveness of an intervention and if a pragmatic and socially significant rationale exists. This is only one of many models of conducting single-subject designed research within applied behavior analysis. “A researcher might withdraw the intervention to see whether the behavior changes toward or returns to the baseline level (A-B-A). In such a design, the goal is to show that there is a functional relationship between the target behavior and the intervention” (Richards, 2019). Lastly, Baer, Wolf, and Risley say “An experimenter has achieved an analysis of a behavior when he can exercise control over it...either by over-replication or an acceptable probability level” (1968).

3. Explain the specific experimental A-B design cited in the article (1 point) The A-B design will be what you utilize within your own behavior support plan.

An A-B model, or reversal design, begins with a baseline of data, followed by an intervention. It is the most fundamental of the withdrawal models in single-subject research design. The article describes a teacher giving candy to a child as an intervention to affect the

behavior of a child. Additionally, the authors suggest the intervention may actually be confounded by the attention of the teacher instead of, or paired with, the candy. The confounding and extraneous variables must be reconciled for proper experimental reliability and to show a functional relationship between the intervention and the dependent variable (target behavior). The authors recommend a multiple baseline design may be more appropriate to deduce which independent variable is the most effective treatment.

- 4. From the text (Chapter 1 Roots of Applied Behavior Analysis), explain in your own words and provide an example of circular reasoning (2 points) Ex:**

Tim is not well behaved because of his ADHD. I know Tim has ADHD because he is not well behaved.

Wolfgang Amadeus Mozart is a bad kid with behavior problems because he hangs out with a bad group of friends. That group of friends is bad because they hang out with Wolfgang Amadeus Mozart.

- 5. B.F. Skinner: summarize 1-2 sentences with mention of the basic principles in ABA that he discovered. (2 points)**

As a leading personality in psychology for the 20th century, Skinner can be credited with many important concepts that laid the groundwork for applied behavior analysis. Some of which include reinforcement, extinction, shaping, schedules of reinforcement, discrimination, and a treatise on verbal behavior. Additionally, Skinner's work generalized to education, clinical psychology, sociology, advertising, and many other fields.

References

- Baer, D.M., Wolf. M.M., & Risley, T.R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied behavior Analysis*, 1, (1), 91-97
- Richards, S. (2019). *Single Subject Research : Applications in Educational Settings* (Third edition.). Cengage.