Ask the Expert: Motivating an "Unmotivated" Child or Teen with ADHD

Jeffrey Sprague, Ph.D.

The University of Oregon

Jeffrey Sprague, Ph.D. (jeffreysprague@gmail.com)

UNIVERSITY OF OREGON

IVDB *Institute on Violence and Destructive Behavior*
Community-Based Prevention and Intervention

Webinar objectives

- Discuss definitions of motivation

- Provide a definition of reinforcement

- Discuss issues around the use of reward and reinforcement

- Define the major classes of reinforcement

- Define factors that may affect the value of reward/reinforcement

  - Child and Adolescent Development

  - Physical and Mental Health Considerations

  - The role of relationships

- Describe procedures for selecting appropriate consequences (positive and negative)

  - The role of functional Behavior Assessment

- Outline procedures for using reward systems

Jeffrey Sprague, Ph.D.
(jeffreysprague@gmail.com)

Motivating the Unmotivated

What is motivation?

- What is reinforcement?

- What is reward?

- Types of rewards

What is motivation?

- Motivation is the desire to act in service of a goal. It's the crucial element in setting and attaining our objectives.

- Motivation is one of the driving forces behind human behavior. It fuels [competition](#) and sparks social connection. Its absence can lead to mental illnesses such as [depression](#). Motivation encompasses the desire to continue striving toward meaning, purpose, and a life worth living.

  - https://www.psychologytoday.com/us/basics/motivation

Sources of Motivation

- Motivation might be ***extrinsic***, whereby a person is inspired by outside forces—other people or rewards.

- Motivation can also be ***intrinsic***, whereby the inspiration comes from within—the desire to improve at a certain activity.

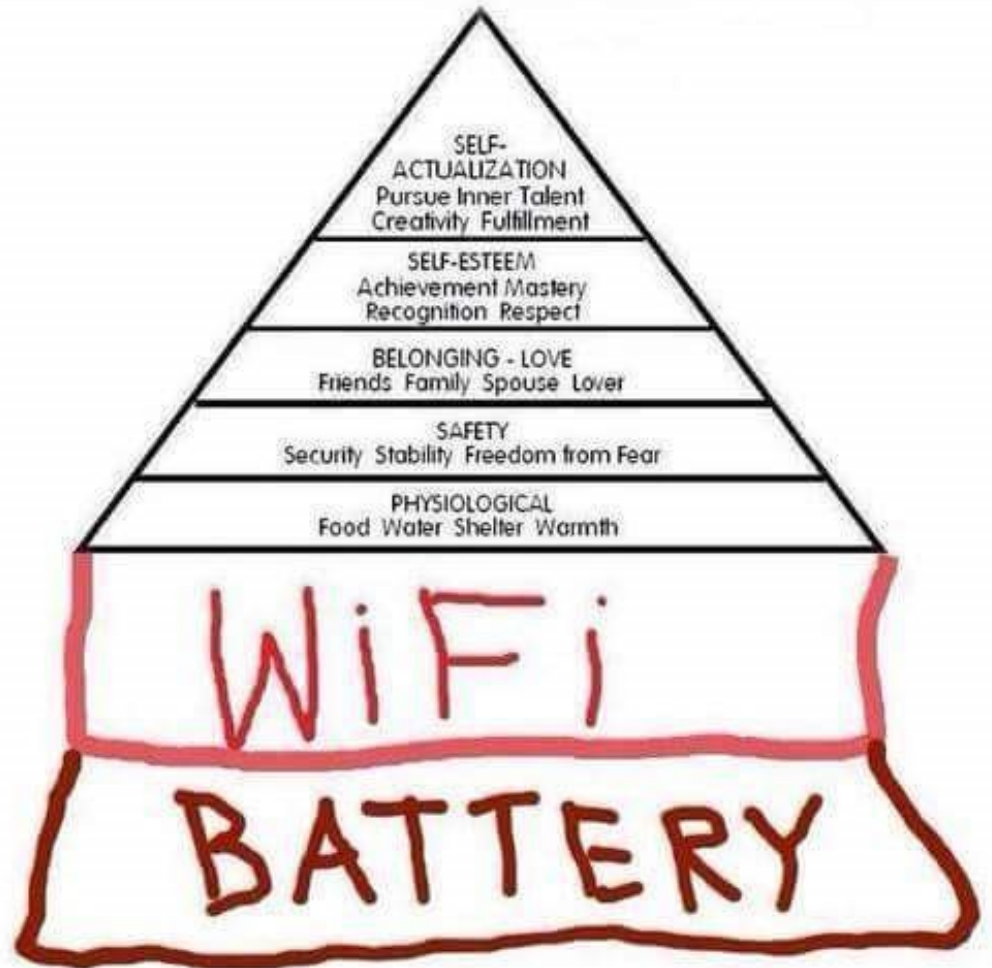- Many discuss extrinsic and intrinsic motivation as dichotomous – **they are NOT**!

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(jeffreysprague@gmail.com)

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Need categories		Need examples
Self-actualization needs		Self-fulfillment; Growth; Unity Understanding; Beauty; Morality; Transcendence; Exploration; Play
Esteem needs		Positive self-evaluation; Dignity; Achievement; Mastery; Competence; Independence; Reputation; Prestige
Social needs		Giving and receiving affection; Intimacy; Friendship; Tenderness; Affiliation; Love; Belongingness
Safety needs		Security; Stability; Predictability; Protection; Freedom from fear; Structure; Order; Law; Limits
Physiological needs		Nutrition; Water; Air; Sleep; Shelter; Clothing (temperature control); Reproduction

Sources of Motivation: Maslow's Hierarchy

Jeffrey Sprague, Ph.D.
(jeffreysprague@gmail.com)

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Sources of Motivation

Maslow's Hierarchy

Jeffrey Sprague, Ph.D. (jeffreysprague@gmail.com)

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Definition of a reinforcing stimulus (aka reward or reinforcer)

- A stimulus that occurs <u>after</u> the performance of a response that increases the **future** probability of that response

- Considerations
  - timing: should be close as possible to the behavior (initial learning)
  - schedule: continuous initially, fade to intermittent as soon as possible (thinning)
  - type: edible, tangible, verbal, physical/sensory, symbolic, activity
  - variation in delivery typically increases value---deliver a variety of reinforcing consequences

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(jeffreysprague@gmail.com)

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Two basic types of reinforcers

- Primary (unconditioned) reinforcer
    - Unlearned
        - Food
        - Warmth
        - Physical Sensation
- Secondary (conditioned)
    - Learned
        - Praise
        - Points/Grades

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(jeffreysprague@gmail.com)

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Examples of "Possible" Reinforcing Stimuli

- Social
- Tangible
    - Food
    - Items
- Verbal
- Activity
    - Access to an activity
    - Ability to terminate an activity and begin another

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(jeffreysprague@gmail.com)

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Why use reinforcement?

- Teach new replacement behaviors

- Encourage/establish infrequent & recently acquired behavior

- Establish a positive relationship between student, others, & learning environment

- Strengthen specific replacement behaviors that compete with habitual undesirable behavior

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(jeffreysprague@gmail.com)

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Reward/Reinforcement is dynamic

- We reward intentionally

- We reward accidentally

- We don't control all sources of reward

- Sources of reward "compete" and the balance shifts with the influence of setting events

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(jeffreysprague@gmail.com)

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Issues Regarding Positive Reinforcement

- Children at this age should know what is expected

- Praising feels unnatural.

- Praise is coercive.

- Isn't it bribing?

- Students will come to depend on tangible rewards.

- Awards are only for special achievements.

- We can't afford this type of system.

- Middle and high school students don't need it.

Intrinsic or Extrinsic Motivation? That is not the question!

- What is the pathway?
  - External control precedes internal control
  - Children need years of external control before internal control takes over
    - In younger children, you may never see the "internal" effects
  - At risk children tend to favor short term, low value rewards vs. longer term, high value rewards

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(jeffreysprague@gmail.com)

What does the research indicate?

Intrinsic motivation is affected by

- The interest value of the task
- The student's relationship with the parent/teacher/peer

Student's will come to "depend" on extrinsic motivation if

- It's too predictable
- Withdrawn without fading (tolerance for delay)

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(jeffreysprague@gmail.com)

What else does the research indicate?

Extrinsic rewards are valuable during acquisition

Praise and acknowledge
- "trying"
- "risk taking"

Extrinsic rewards are valuable during fluency building

Practice is sometimes boring!

Research on "intrinsic" motivation

- The undermining effect of reward does not occur if students are told they have achieved a preset standard and the task is at a challenging level for them

- Rewards have a helpful effect on intrinsic motivation when given contingent on behavior

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(jeffreysprague@gmail.com)

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Factors that may affect the value of reward/reinforcement

- Child and Adolescent Development
  - Physical and Mental Health Considerations
  - The role of relationships
    - Family
    - Educators
    - Peers

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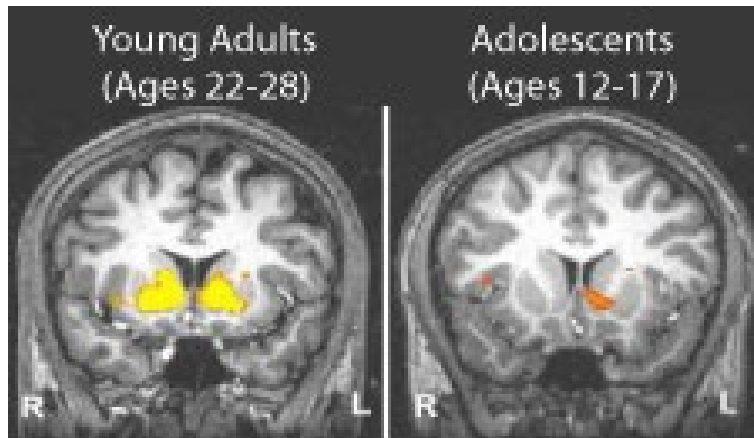(jeffreysprague@gmail.com)

Support or control?

Research has shown that if we think an individual has complete control over his actions, it can potentially invoke anger in us (Weiner, 1993). It increases the likelihood that we will use punishment.

On the other hand, if we think that the individual does not have complete control over his actions, we're much more likely to reach out and help in some way (Katz, 1997)

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(jeffreysprague@gmail.com)

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Adolescent Changing Personalities

Levels of Serotonin and Teen Emotions Over Time
12 Years Old → 17+ Years Old

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(jeffreysprague@gmail.com)

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Brain Reward Centers

Young Adults (Ages 22-28)   Adolescents (Ages 12-17)
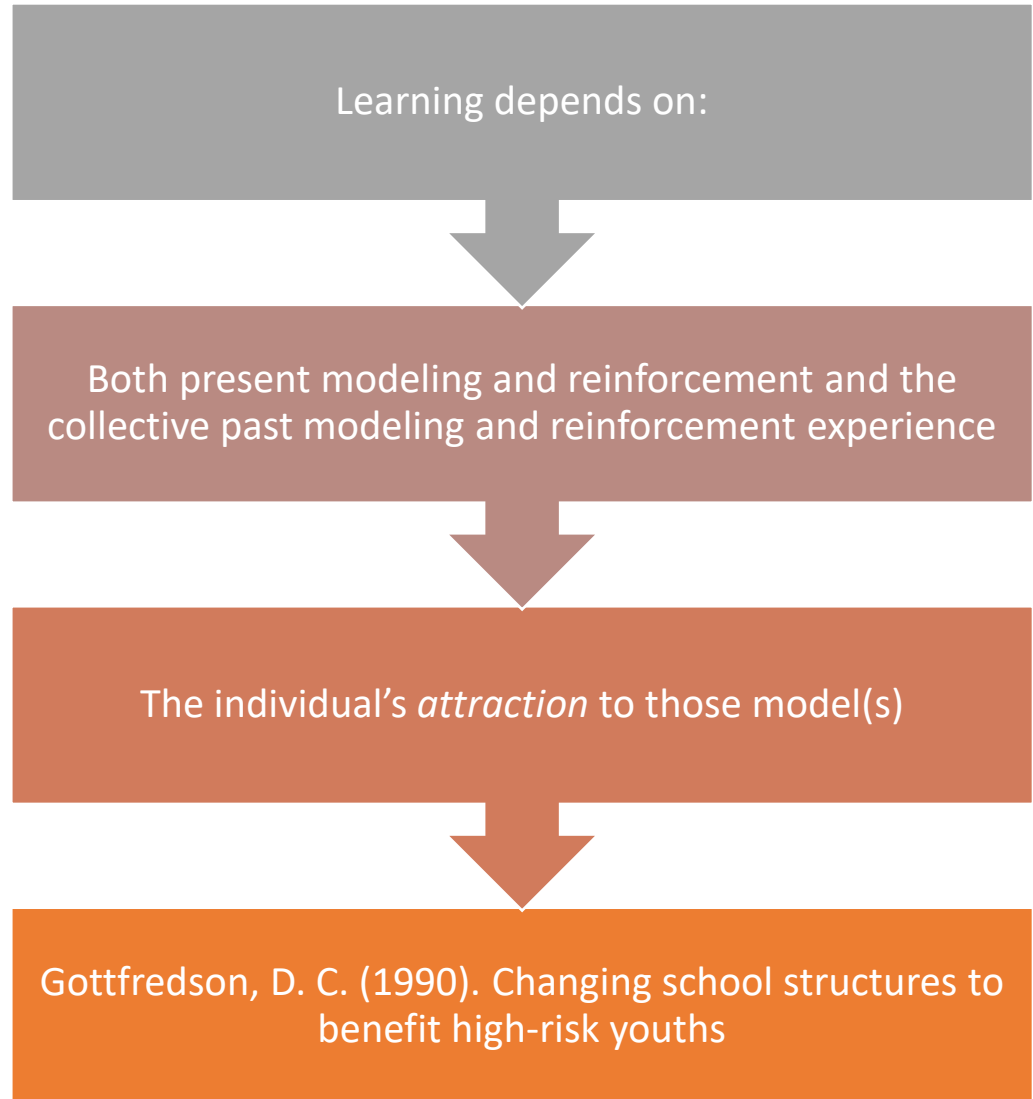
R — L   R — L
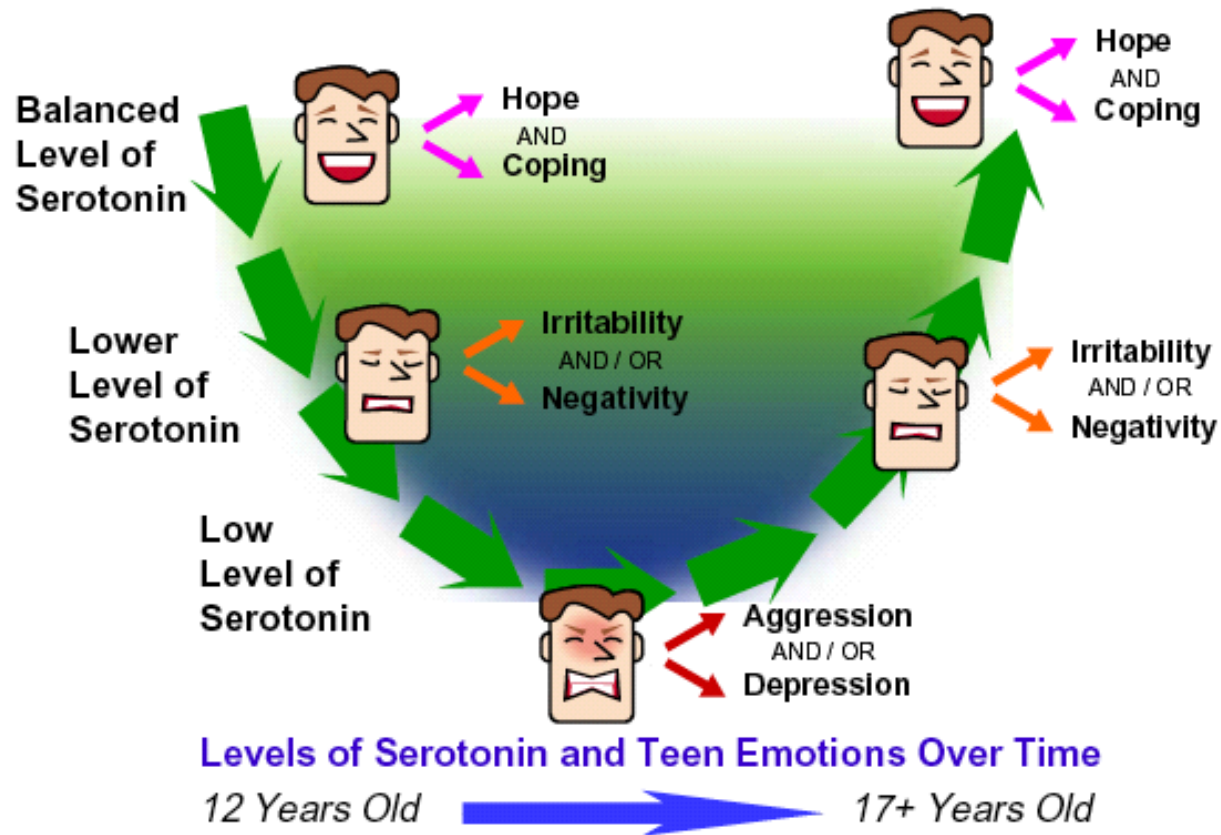
Source: NIH/National Institute On Alcohol Abuse And Alcoholism

- Early adolescents show fewer reward signals in the brain to stimuli, meaning that the intensity of rewards must be higher for early adolescents to feel rewarded.

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(jeffreysprague@gmail.com)

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Some of what we know about behavior….

- Behavior is learned (we observe and imitate models)

- Once learned, behavior is maintained if reinforced – or extinguished if they are punished or fail to earn expected reward

- Behaviors are shaped by interaction with models for behavior and that control the sources of reinforcement and punishment

Sources: Gottfredson, D. C. (1982, 1990); Bandura (1971, 1977); Akers, Krohn, Lanza-Kaduce, & Radosevich (1979); Hindenlang (1973); Hirshchi (1969)

Jeffrey Sprague, Ph.D.
(jeffreysprague@gmail.com)

Some of what we know about behavior....

Learning depends on:

↓

Both present modeling and reinforcement and the collective past modeling and reinforcement experience

↓

The individual's *attraction* to those model(s)

↓

Gottfredson, D. C. (1990). Changing school structures to benefit high-risk youths

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(jeffreysprague@gmail.com)

Social Bonding (attachment to others) and Appropriate Behavior

- Experiences that socially bond the student to a group engaged in overall appropriate behavior patterns are essential to the establishment and maintenance of prosocial behavior patterns in that student.

- This bonding gives the student something to lose when engaging in unacceptable behavior (his/her friends won't like them, etc.)

- Social bonding (school attachment, being part of the community and it's standards of conduct) tends to restrain problem behavior by increasing the cost of engaging in it.

Gottfredson, D. C. (1990). Changing school structures to benefit high-risk youths

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(jeffreysprague@gmail.com)

Peer groups as sources of Reinforcement

Students of like values or characteristics can form "deviant peer groups"

- Ability
- Involvement in extracurriculars
- Race
- Other

These groups can reframe the goal of schooling and reinforce each other for achieving low expectations

Jeffrey Sprague, Ph.D. (jeffreysprague@gmail.com)

Implications for Families and Schools

- Build a culture and climate that promotes membership and community

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Procedures for selecting appropriate consequences (positive and negative)

Functional Behavior Assessment

Reinforcer sampling and menus

What is Functional Behavioral Assessment?

- A process for identifying the events that predict and maintain patterns of problem behavior

- Outcomes of a functional assessment
  - Description of the behaviors (problem and replacement)
  - Predictors and consequences of problem behaviors (likely and unlikely)
  - Hypothesis statements about the function(s) of the problem behaviors (aka maintaining consequences)
  - Direct observation data to confirm the hypotheses
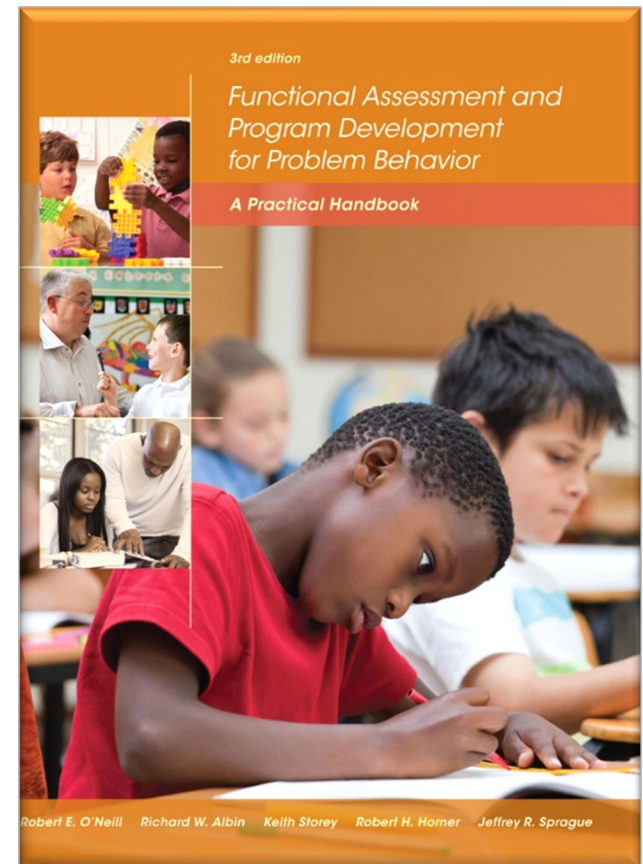
FBA in research and practice

- The research supporting best practices in moving from FBA to BIP

  - FBA can improve the effectiveness of behavioral interventions when implemented with fidelity
    - Carr, E.G., Horner, R.H., Turnbull, A.P., Marquis, J.G., Magito-McLaughlin, D., McAtee, M.L., & al, et. (1999). Positive behavior support for people with developmental disabilities: A research synthesis. *American Association on Mental Retardation Monograph Series.*
    - Dunlap, Glen, Iovannone, Rose, Wilson, Kelly J., Kincaid, Donald K., & Strain, Phillip. (2010). Prevent-Teach-Reinforce: A Standardized Model of School-Based Behavioral Intervention. *Journal of Positive Behavior Interventions, 12(1), 9-22. doi: 10.1177/1098300708330880*

Three Ways to Conduct a Functional Assessment

Functional assessment interviews (hypothesis development)

Functional assessment observations (hypothesis testing)

Instructional and environmental tests (hypothesis testing/functional analysis)

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(jeffreysprague@gmail.com)

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Big takeaways about FBA

FBA should be considered a continuous process

FBA results are not necessarily stable over time and repeat FBA activities will typically need to be done at regular intervals or during the ongoing implementation of a behavior support plan

An FBA should be conducted for a single routine or time of day, rather than for everything the student does during the entire school day.

Jeffrey Sprague, Ph.D. (jeffreysprague@gmail.com)

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Selecting potential reinforcers

- Consider age, interests and appetites

- Consider the value of the behavior

- List potential reinforcers

- Ask the person

- Watch the person

- Consider novel reinforcers

- Consider "natural" reinforcers

Reinforcer sampling

- Reinforcer menu
  - Offer choice and observe

- Forced choice
  - You can have a or b

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(jeffreysprague@gmail.com
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Sample reinforcement survey

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(jeffreysprague@gmail.com)

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Reinforcer Survey

Name: _____ Grade: ____

Date: _____

1. What activities do you like to do after school?
   _____
   _____

2. If I had twenty dollars, I would
   _____
   _____

3. My favorite TV shows are
   _____.

4. My favorite movies are _____

5. My favorite thing to do at school is _____

6. My favorite time at school is _____

7. My favorite games are _____

8. My favorite music artists or kind of music is
   _____
   _____

9. My favorite subject at school is _____

10. I like to read books about _____

11. The places I like to go that are near my school are
    _____
    _____

12. My favorite restaurant is _____

Procedures for using reward systems

Premack principle:

- Premack principle: make a high probability behavior contingent on the performance of a low probability behavior

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(jeffreysprague@gmail.com)

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Premack Principle

- When Ms. Token's students complete their history worksheet early, they can use the computers in the classroom to search the web for information on current events.

- When students in Mr. Time's science class finish their project, they may talk quietly at their tables.

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(jeffreysprague@gmail.com)

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Guidelines for using rewards

- Timing
  - Use contingently
    - In close association with target or replacement behavior
  - Provide information to the student
    - You are getting this because…..

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(jeffreysprague@gmail.com)

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Fade use from

- Tangible to social
- Least artificial to most natural
- Adult- to self-managed
- Frequent to infrequent
- Predictable to unpredictable

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(jeffreysprague@gmail.com)

Guidelines

- Build toward "intrinsic motivation" by increasing
    - Academic success
    - Acknowledging both academic & social success
    - Teaching self-management
        - Self-assessment
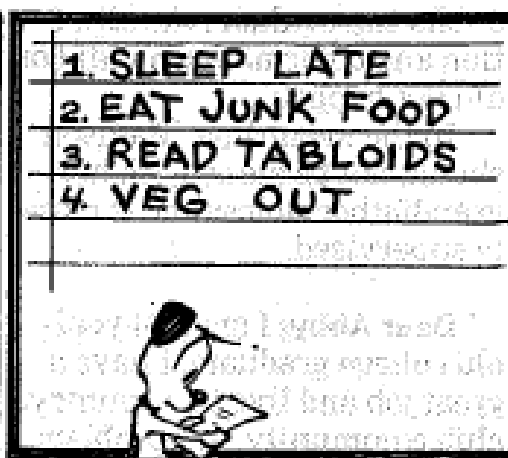   - Self-evaluation
        - Self-delivery of consequences

What is self-management?

• Identify problem behaviors

• Identify replacement behaviors

• Arrange contingencies to change those behaviors
    • Self-monitor
    • Self-record
    • Self-evaluate

  • Self-instruct

  • Self-deliver reinforcement

Why Teach Self-Management?

- It's Practical

- An effective curriculum adaptation

- A way to make "thinking" overt

- A way to replace adult mediated behavior

- Promotes independence and positive behavior now and in the future

- Can minimize interactions during home or classroom routines

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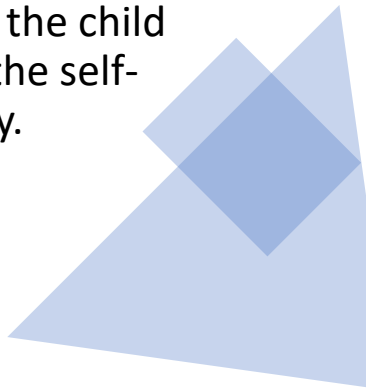(jeffreysprague@gmail.com)

Self-management components

- Self-monitoring

- Self-recording

- Self-evaluation

- Self-delivery of reinforcement

Implementation Steps

- Identify what observable behaviors you want the child to learn to self-manage.
  - Each step should clearly describe what the child should do

- Visually display the target behaviors using photographs or drawings on a poster, on a sheet of paper, or in a booklet.

- Provide a way for the child to monitor his/her behavior (e.g., a check mark, smiley face, thumbs up/thumbs down)

- Provide positive attention to the child when he/she correctly completes the steps to successful completion of the target behavior.

- Provide positive attention to the child when he/she correctly uses the self-monitoring system accurately.

Daily Self Monitoring Chart

Student Name:_____   **Date:**_____

Behaviors	Period 1				Period 2				Period 3				Period 4				Period 5				Period 6			
	Time 1		Time 2		Time 1		Time 2		Time 1		Time 2		Time 1		Time 2		Time 1		Time 2		Time 1		Time 2	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
hand to ask ~on or get out of seat																								
~ands and feet to																								
~d on class ~ments																								
~ed teacher ~tions																								

Goal (number of total "yes" to "no"):_____

Jeffrey Sprague, Ph.D.
(jeffreysprague@gmail.com)

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![A+]

_____ School-Home Note

	Classroom						Name:_____
	Before Lunch			After Lunch			
Behaviors	Needs Work	Okay	Excellent	Needs Work	Okay	Excellent	Date:_____
Respected other students							Teacher comments:
Worked on class assignments							_____
Followed Teacher Instructions		On the Yard					_____
	Morning Recess			Afternoon Recess			_____
Target Behavior: **Behaviors**	Needs Work	Okay	Excellent	Needs Work	Okay	Excellent	Teacher Signature:_____
Interacted well with others							
Yard rules							Describe how you responded to
Target Behavior:							your child's performance today

(e.g., praised child, earned activity, loss of privilege, extra chore):

Jeffrey Sprague, Ph.D.
(jeffreysprague@gmail.com)

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HAWK Report

Date _____ **Student** _____ **Teacher** _____

0 = No 1= Good 2= Excellent	Be Safe		Be Respectful		Be Your Personal Best				Teacher initials
	Keep hands, feet, and objects to self		Use kind words and actions		Follow directions		Working in class		
Class	0 1 2		0 1 2		0 1 2		0 1 2		
Recess	0 1 2		0 1 2		0 1 2				
Class	0 1 2		0 1 2		0 1 2		0 1 2		
Lunch	0 1 2		0 1 2		0 1 2				
Class	0 1 2		0 1 2		0 1 2		0 1 2		
Recess	0 1 2		0 1 2		0 1 2				
Class	0 1 2		0 1 2		0 1 2		0 1 2		
Total Points = **Points Possible =** 50			Today _____%				Goal _____%		

My Day in Pictures

Wake Up

Eat Breakfast

Feed the Dogs

Brush Teeth

Wrestle Marley

Go to School

Play with Zoe

Play at School

Big Ideas

- Design reinforcement for desired behaviors so it is ***more efficient, effective, and robust*** than the target or problem behavior

- ***Match*** the reinforcement to the function of the target behavior

- Consider child development when using rewards and setting expectations for success

- Lather, rinse, repeat!

Jeffrey Sprague, Ph.D.
(jeffreysprague@gmail.com)

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Some references

- ## Human Behavior is Learned
  - Skinner, B. F. (1974). *About behaviorism. New York: Alfred A Knopf.*
  - Skinner, B. F. (1953). *Science and human behavior. New York: Macmillan.*

- ## Functional Behavior Assessment
  - O'Neill, R. E., Albin, R. W., Storey, K., Horner, R. H., & Sprague, J. R. (2014). *Functional assessment and program development for problem behavior, 3rd Edition. Independence, KY: Cengage Learning.*

- ## Self management and CICO
  - Sprague, J. R., & Golly, A. (2013). *Best Behavior: Building positive behavior supports in schools (2nd Ed.). Longmont, CO: Cambium Learning Group.*
  - Crone, D. A., Hawken, L., & Horner, R. H. (2010). *Responding to Problem Behavior in Schools: The Behavior Education Program (2nd ed). New York, NY: Guilford Press.*