

# UNDERSTANDING ABA

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# What is ABA

# What is ABA

- Applied Behavior Analysis (ABA) is the science of systematically applying interventions based upon the principles of behavior to improve socially significant behaviors to a meaningful degree
- Interventions are based on the function of the behavior (why they occur)
- Approach is different from other social sciences

Simply.....

**It's a science of understanding how behaviors are formed, established, and how they can be changed**

# Lets break it down

- [https://www.youtube.com/watch?v=avUsS9EKyq0&index=18&list=PLDXZ\\_pa-Pmkc0TByJH5Sv0EhRem2Qszp1](https://www.youtube.com/watch?v=avUsS9EKyq0&index=18&list=PLDXZ_pa-Pmkc0TByJH5Sv0EhRem2Qszp1)

# What's going on in this video...

- Child cries to get access to mom's attention
- Mom gives attention
- Child continues to cry

# Another example

- [https://www.youtube.com/watch?v=ZbYI1pBDylw&list=PLDXZ\\_pa-Pmkc0TByJH5Sv0EhRem2Qszp1&index=17](https://www.youtube.com/watch?v=ZbYI1pBDylw&list=PLDXZ_pa-Pmkc0TByJH5Sv0EhRem2Qszp1&index=17)

# Example of ABA (cont'd)

- With ABA, we first identify the behavior
- What is the behavior in this example

\*Crying

- Then what?
- We identify the function of the behavior through assessment procedures
- To know why the behavior is occurring

Once we know why it is occurring, there is a lot that we can do

# With ABA we can do.....

- Teach the child that the crying behavior won't work
- Teach the child that appropriate way to ask for attention
- Teach the child to wait for attention
- Teach the child that attention is not available

**What is a behavior**

# Behavior

- Is what an organism does
- Verb
- Objective, not subjective
- Specific
- Observable
- Measurable

# Behavior examples

- Raising arms
- Hitting
- walking
- Crying
- eating
- Saying “ school is bad”
- studying



# Non-Behavior examples

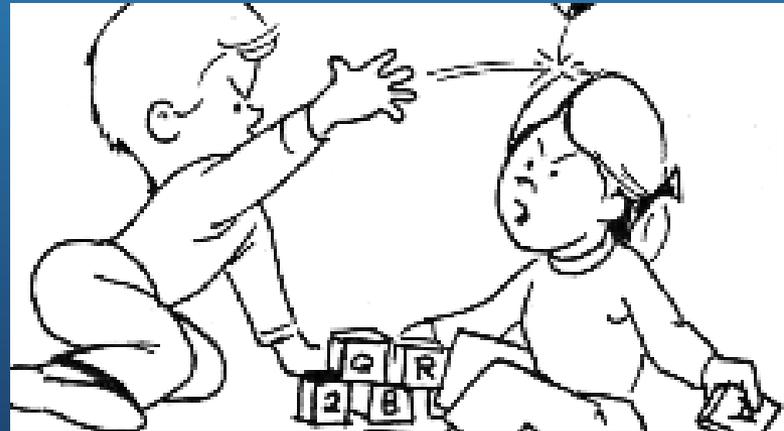
- Laziness
- Anxiety
- Anger
- Depression

# Non-Behavior examples

- Does being angry is a behavior?
- No
- Why not?

# Non-behavior example (cont'd)

Being mad is subjective



# Non-behavior example (cont'd)

- How can we define being mad behaviorally

## Examples

- Throwing items against the wall
- Loud vocalizations
- Sitting quietly
- Walk away
- Any others?

# If something we are not sure about it.....

- Dead person test
- If a dead person can do it, it is not a behavior

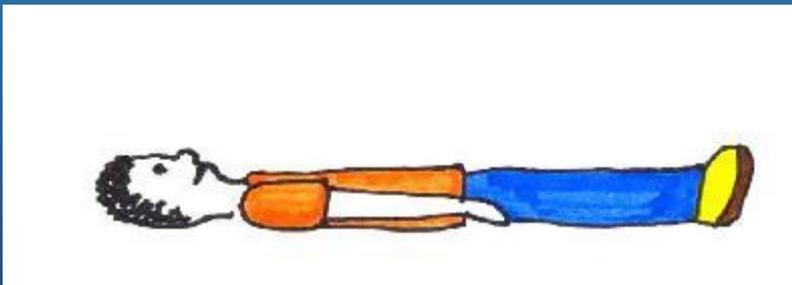


# Dead Man

## Yes

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- Lay in bed
- Be quiet
- Non-compliance



## No

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- Sleeping
- Raise his hands
- Line up at the door



Other behaviors are not easy to observe (**Private Behavior**)



# Next step

- Now that we have identified the behavior
- We need to know the “Why”
- Does anyone know what we call “the why”?

# Functions of the behavior

- **Access to tangibles**

Items in the immediate environment ex :Ipad, toy car, candy



- **Escape**

Removal of a demand



- **Access to attention**

Mom, dad, peers, siblings



- **Sensory**

Automatically reinforced behavior (Stimming)

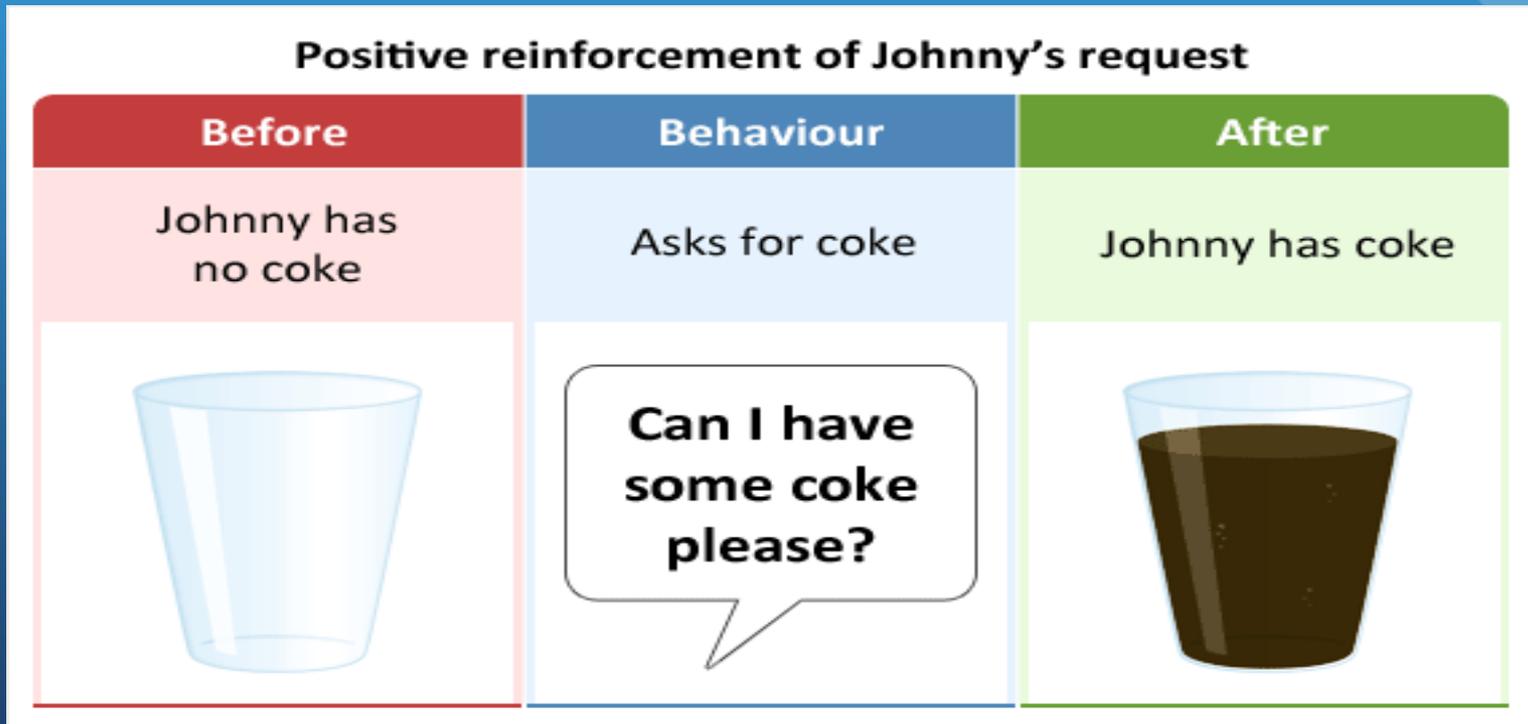


# Once we identified the function, there is a lot that we can do....

- We create procedures to teach appropriate behavior to replace the problem behavior
- We teach functionally equivalent behaviors which meet the same needs

# Example

- A child hits to get coke, we can teach him to ask for coke appropriately



# Teaching alternative behaviors which are socially significant

- Behaviors that are important to the individual
- Focusing on improving the behavior to a meaningful level
- Skills which will maximize their life and help them successfully function in their current environment

# Socially significance

## Examples:

- Extinguish SIB
- Request (Mands)
- Increase compliance
- Using utensils (fork,knife)
- Attending to someone's speaking

## Non-examples:

- Reducing a behavior because it is bothering another person.
- Teaching a new language the person will not use it in his environment

# Applied Behavior Analysis as a science

- Everything is based on data
- We are not guessing or assuming
- Used to identify that our intervention is responsible for the change



**What are the principles of  
behavior**

# Principles of behavior

- Stimulus control
- Motivation
- Reinforcement
- Punishment
- Extinction

# Principles of behavior

## Stimulus control

- Does mom reinforce the behavior by giving candy, while dad does not.
- Mom signals that the candy is available



Dad<sup>TM</sup>

# Principles of behavior

## Motivation



- Is it something more valuable

## Example

- 8 hours without eating
- Food is valuable

# Principles of behavior

## Reinforcement



- You're doing something to increase a behavior

### Example

- A child cries, he gets mom attention. He will likely cry in the future to get mom's attention

# Principles of behavior

## Punishment

- You're doing something to decrease a behavior

### Example

- A student pushes his peer, teacher take away recess time, behavior decreases in the future



# Principles of behavior

## Extinction

- The behavior is no longer gets reinforced (withhold reinforcement)

### Example

- husband did not provide attention to his wife's complaining behavior
- Not the wife

It's not that I am not listening,  
I am just simply putting  
your complaining  
on extinction



someecards  
user card

# Different Approaches

Psychology vs Applied Behavior  
Analysis

# Psychology

- Focus on counseling
- Talk therapy
- Teach parents to accept all feelings
- Help the child to move on

# Applied Behavior Analysis

- Behavior analyst identify behavior first
- Identify the function or the reason
- Put treatment plans to teach
- Let's say that the child hits to get attention
- Teach alternative behavior to get access to attention
- Use consequence based strategies to put problem behavior on extinction

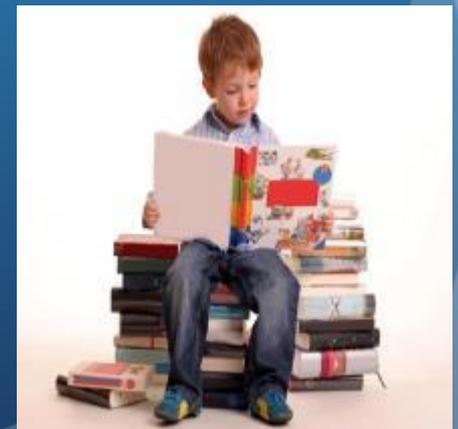
# Applied Behavior Analysis (cont'd)

- Problem behavior decreases, alternative behavior increases
- Teach waiting skills
- Accepting No procedures
- Teaching socially significant behaviors (improve the quality of life)

# Applied Behavior Analysis (cont'd)

## Increasing Behaviors

- Social behavior: Sharing
- Academic behavior: Reading
- Verbal behavior: Talking



# Applied Behavior Analysis

## Autism

- Behavioral Excesses
- Behavioral Deficits



**ABA**

**In everyday life**

What do you do when you  
get a headache?

Example 1

# Take Panadol or Brufen

- Why?
- Get rid of the pain
- In the future... When you get more headache, you will probably take Panadol (Negative reinforcement)





**What do you do when you  
see a stop sign?**

Example 2

# Press the brakes

- Why?
- To avoid getting crushed or gets a ticket
- Your behavior is under stimulus control
- Mentalistic term: You're a good driver



# ABA for children under ASD

# Typical parent approach

- Behavior: Child throws his toy to get mom's attention



- Consequence: Mom said "do not throw"



# Typical parent approach (cont'd)

- Behavior is decreases, but we did not teach the child how to get his mother attention appropriately
- ABA is typically based on teaching new skills, rather than using punishment based procedures

# ABA approach

Example: Child throws his toys to get mom's attention



# ABA approach



- We create a strategy so mom can provide attention outside the problem behavior
- Ignore the problem behavior
- Problem behavior will decrease, appropriate behavior will increase. Skill is learned, improves child life

So, what is the primary  
focus of ABA?

# Primary focus of ABA .....

- Decrease challenging behavior
- Increase appropriate behavior
- Improve an individual quality of life

# What an ABA program may look like.....

- Once an assessment is done, a child program is created

## Examples

- Programs made for manding
- Programs made for play skills
- Programs to reduce problem behaviors
- Programs to teach social skills

# ABA clinic setting

- Treatment is in the clinical setting
- Therapist works with the child from 5-20 hours weekly (depends on the child)
- Environment is controlled
- Therapists supervised by BCaBA, or BCBA

# ABA clinic setting



# ABA clinical setting

- **Advantages**

- Supervision is more quick

- Adjustments to program are more quick

- **Disadvantages**

- Travel

- Social stigma (going to a clinic)

# Home based services

- Treatment in the home environment
- Therapists will work with the child from 5-20 hours per week (it depends on the child)
- More opportunities to work in the natural environment

# Home based services



# Home based services

## Advantages

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- No travel (No stigma)
- Opportunities to work on programming within the home

## Disadvantages

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- Lack of opportunities to generalize the skill
- No immediate supervision from BCaBA, or BCBA they are not there.

# Group Homes

- Private residence
- For individuals with ASD
- Cannot live with their families
- Challenging behavior
- Cannot be managed by families
- 24 hour a day caregivers

# Group homes



# Group Homes

## **Advantages**

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- Challenging behaviors are managed 24/7
- Supervision is more intense
- Services/implementation are more intense

## **Disadvantages**

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- Your child is not living with you at home
- Cost

# School consultation services

- Conduct observation for problem behavior
- Meet with the teachers, staff
- Create BIP
- Train teachers, assistants, and others

# School consultation services

## Advantages

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- Fade out quickly
- Our role is training
- Exposure to different service providers

## Disadvantages

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- Do not work directly with the child/student
- Can be seen as combative relationship

# Tele-health ABA services

- Extension of home based therapy
- Provides remote ABA supervision
- Supervise behavior technician remotely (provide feedback)

# Tele-health ABA services



# Tele-health ABA services

## Advantages

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- Serve people who do not have ABA services in their place
- Maximize time to observe children

## Dis-advantages

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- Training challenges
- Hard to understand full dynamics of the environment remotely

# Other areas where ABA utilized

- Parent training
- Problem behaviors of Neuro-typical individuals
- Toilet training in toddlers
- Mental health
- Self-management
- Geriatric population
- OBM

# Criticism of ABA

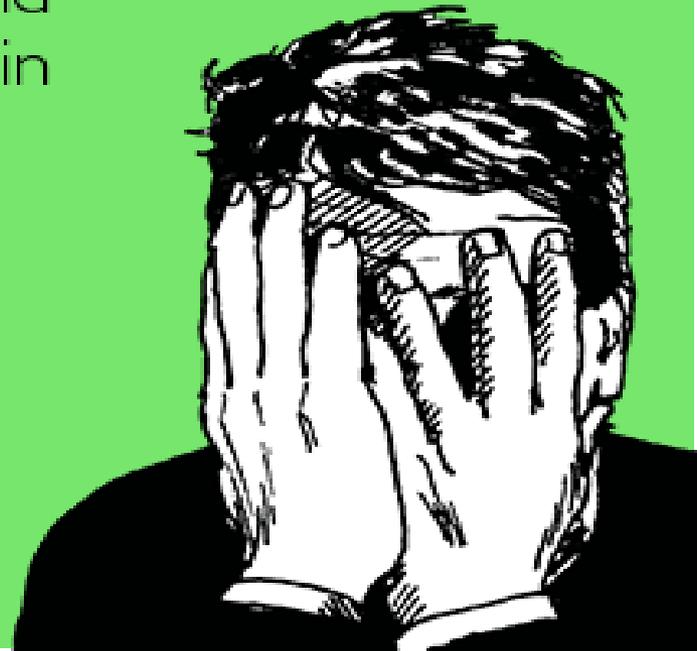
# Criticism of ABA

- Why do some parents say “ you will teach my child to be robotic”?
- Skills are not generalized
- Misconceptions about ABA
- ABA is not widely known
- Still people see it as experimental

# Believe it or not....

- ABA is like gravity

Not again! They said they don't believe in applied behavior analysis!



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user card

## Just be careful.....

- From the people that say “we cure autism”
- As for right now, there is no cure
- The Focus has to be on teaching skills

# Non-evidence based therapies

- Cupping therapy
- Hyperbaric oxygen chamber
- Chelation therapy
- Vitamins therapy
- Horse back riding therapy
- IVIG

# Non-evidence based therapies



# Non-evidence based programs

- No scientific evidence
- Parents use them because they were told by other providers
- Parents are looking for any therapies to help their children

# Guidelines for effective ABA approach

- Certified professionals

- \*BCBA

- \*BCaBA

- \*RBT

- Parent training for generalization
- Multidisciplinary approach (it depends on the child needs)

So, next time when  
someone is asking

What is Applied Behavior Analysis?

What are you going to say?

# ABA is....

- A science that is devoted to the understanding and improvement of human behavior.



# Websites

- <https://bacb.com>
- <http://www.asatonline.org>
- <https://www.autismspeaks.org>

