CONSIDERING OUR ETHICAL STANDARDS OF CULTURAL COMPETENCE IN THE DESIGN OF TRAINING FOR PARENTS AND PROFESSIONALS IN CHENNAI, INDIA

Tara A. Fahmie

California State University, Northridge
BACB ETHICS CODE

• 1.05(c)
  • Where differences of age, gender, race, culture, ethnicity, national origin, religion, sexual orientation, disability, language, or socioeconomic status significantly affect behavior analysts’ work concerning particular individuals or groups, behavior analysts obtain the training, experience, consultation, and/or supervision necessary to ensure the competence of their services, or they make appropriate referrals.
WHY IT MATTERS

• United States becoming increasingly diverse
  • Families receiving care
  • Students in universities

• Global dissemination of behavior analysis
  • BACB Global Mission: "Protect consumers of behavior analysis services worldwide by systematically establishing, promoting, and disseminating professional standards”
  • BACB Global Vision: "Solve a wider variety of socially significant problems by increasing the availability of qualified behavior analysts around the world.”
WHAT WE (DON’T) KNOW

Culture

Services
• Children may join the therapy experience with vastly different habits and identities based on different cultural histories
• Culture may change what the child and family find rewarding or punishing
• Culture may dictate how the family is willing to respond to their child’s behavior
• Availability and access to services may be influenced by culture
• Culture may alter the probability of accepting services or particular recommendations

Special thanks to Dr. Michele Traub @ SCSU
• Different cultures describe the consequences of behavior differently (e.g., religious consequences)
• Language differences across cultures change the way individuals of that culture respond to the world
• Culture defines “normal”
• Cultural values place different priorities on deficits
• A family may presume a reason (perhaps incompatible with science) for the disorder that limits their buy-in
• Cultural influences change treatment expectations

Special thanks to Dr. Michele Traub @ SCSU
ENNA, SICILY

8th annual European Association for Behavior Analysis

Networking
Maithri Sivaraman

CHENNAI, INDIA
Tendrils Centre for Autism Research and Intervention
BEHAVIOR ANALYSIS IN INDIA

- **1.19 billion** residents
- CDC estimates 1-2% of children with ASD
  - >25,000 individuals with ASD in Chennai city
- 25 total BCBAs in India
  - 1 BCBA, 1 BCaBA in Chennai
ADDITIONAL BARRIERS

• Punishment-based procedures
  • e.g., physical restraints, reprimands
• Non-evidence-based practices
  • e.g., sensory integration, weighted vests
• Overreliance on occupational therapists
ADDITIONAL BARRIERS

- Punishment-based procedures
  - e.g., physical restraints, reprimands
- Non-evidence-based practices
  - e.g., sensory integration, weighted vests
- Overreliance on occupational therapists
- Lack of research in this region
  - e.g., Kaur & Roy (2017)
Training

Mueller et al., 2003
Sarokoff & Sturmey, 2004
Shepis, Reid, Ownbey, & Parsons, 2001
Wallace et al., 2004

Social validity

Fong et al., 2016
Bernal, Bonilla, Bellido, 1995
DeGarmo & Martinez, 2006
Grote et al., 2009
Kayrouz et al., 2016

Cultural adaptations

Efficacy
PHASES OF PROJECT

• Pre-pilot
• Pilot
• Study 1
• Study 2
• Continued trainings and meetings with stakeholders
STUDY 1

• 46 individuals in Chennai, India
  • 72% parents; 9% Spec. Ed.; 13% SLP; 7% OT

• No prior training in behavior analysis
  • 48% Bachelors; 37% Masters; 11% High school; 4% PhD
  • 80% no knowledge of FA; 20% read about FA; 0% used FA
  • 72% never developed or implemented a BIP

• Low-resourced

• All currently working with children with disabilities
  • ASD, ADHD, ADD, Aspergers, Communication, LD, GDD, Other
FUNCTIONAL BEHAVIOR ASSESSMENT & INTERVENTION
“FBAI Manual”

1. The basics of behavior and its functions
2. A task analysis for designing a function-based behavior intervention plan
3. Procedures to teach functionally equivalent alternative behaviors
4. Proactive and reactive strategies to handle problematic behaviors maintained by attention, escape, access to tangibles, and automatic reinforcement
5. Tips on data collection
6. Caveats about handling dangerous behaviors
7. Methods to locate and seek professional guidance from a certified behavior analyst

Special thanks to CSUN MS ABA c/o 2018!
Consider the following example –

Amrita, a 4-year old girl with autism engaged in several problem behaviours such as screaming and throwing things. This prevented Amrita’s family from going on family outings, Amrita had no friends and her parents were very concerned about her behaviour. They were keen to modify her behaviour - they tried explaining to her that screaming and throwing were “bad” things, they tried scolding her and taking away her toys when she screamed, they tried teaching her to say “sorry” after she had thrown things. Nothing really seemed to work.

The first step - Identify the ABCs
Using interviews with the parent and direct observation of Amrita in the home setting, more information about the behaviour was collected. The antecedents and consequences were identified and recorded. It was observed that Amrita was likely to scream and throw things whenever her mother had other things to attend to - answer a phone call, cook in the kitchen or watch television.

Further, when Amrita screamed or threw things, her mother would walk towards her and reprimand her for misbehaving, or explain to her why screaming was a bad thing to do.

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Behaviour</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amrita’s mother watches TV/cooks</td>
<td>Amrita screams and throws things</td>
<td>Her mother comes towards her and scolds her for misbehaving/Her mother comes towards her and explains to her that throwing is bad</td>
</tr>
</tbody>
</table>
• 1 hour introductory session
• 2 hour face-to-face training session
  • In-vivo and video demonstrations
  • Practice with data collection, hypothesizing function, identifying and teaching alternative behaviors, implementation of reinforcement & extinction
  • Role plays
  • Descriptive feedback
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language</td>
<td>Culturally appropriate; culturally syntonic language</td>
</tr>
<tr>
<td>Persons</td>
<td>Role of ethnic/racial similarities and differences between client and therapist in shaping therapy relationship</td>
</tr>
<tr>
<td>Metaphors</td>
<td>Symbols and concepts shared with the population</td>
</tr>
<tr>
<td>Content</td>
<td>Cultural knowledge: values, customs, and traditions; uniqueness of groups</td>
</tr>
<tr>
<td>Concepts</td>
<td>Treatment concepts consonant with culture and context: dependence vs. interdependence vs. independence; emic over etic</td>
</tr>
<tr>
<td>Goals</td>
<td>Transmission of positive and adaptive cultural values; support adaptive values of culture of origin</td>
</tr>
<tr>
<td>Methods</td>
<td>Development and/or cultural adaptation of treatment methods</td>
</tr>
<tr>
<td>Context</td>
<td>Consideration of changing contexts in assessment during treatment or intervention; social supports and relationship to country of origin</td>
</tr>
<tr>
<td>Parameter</td>
<td>Examples of Elements</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Language</td>
<td>Training manual available in English and Tamil</td>
</tr>
</tbody>
</table>
| Persons   | Trainer matched in ethnicity with participants  
            | Actors in video models were matched in ethnicity |
| Metaphors | Role play scenarios chosen were relevant to the area |
| Content   | Easy data collection systems akin to the cards used to track milk purchase (used in every household in the region) |
| Concepts  | The trainer provided ABA strategies as a treatment, in addition to the existing practices in the region |
| Goals     | Focus on the child to becoming eligible to access regular schooling |
| Methods   | Flyers distributed at a pediatrician’s office who are often revered for their experience and expertise |
| Context   | Face-to-face Training was conducted in a general education preschool to make it more accessible and less stigmatizing |
DEPENDENT VARIABLES

• Knowledge Test
  • Multi-choice: Identify ABCs, Hypothesize Function, Match Function to Intervention

- Attributing cause to hypothetical constructs
- Attributing symptoms to diagnosis
- Assumptions that could not be tested
- Occupational Therapy as treatment
DEPENDENT VARIABLES

• Knowledge Test
  • Multi-choice: Identify ABCs, Hypothesize Function, Match Function to Intervention

• Participant Approach to Function-based Intervention Survey (PAFIS)
  • Self-reported use of evidence-based strategies

• Treatment Acceptability Rating Form-Revised (TARF-R) Reimers & Wacker (1992)
  • Acceptability of training, length of manual, ease of use, etc.
IMMEDIATE TRAINING

Knowledge Test & PAFIS

Training

~Two weeks~

Knowledge Test, PAFIS, Social Validity

N= 22

WAITLIST CONTROL

Knowledge Test & PAFIS

Training

~Two weeks~

Knowledge Test, PAFIS, Social Validity

N= 24
KNOWLEDGE TEST ADMINISTRATIONS

Immediate Training Group

Wait-list Control Group
SOCIAL VALIDITY

• I found this training to be an acceptable way to acquire the skills necessary to address my child’s problem behavior. (4.5)

• I believe that the face-to-face training and the manual will likely be effective in helping me identify the factors causing my child’s behavior. (4.0)

• I liked the face-to-face training. (4.4)

• The examples and videos provided with the manual were relevant to my child’s problems. (4.4)

• I experienced difficulty understanding the concepts covered in the manual. (4.3)
SOCIAL VALIDITY CONT.

• I believe it would be acceptable to use this training with people who do not have access to one-on-one ABA intervention. (4.3)

• I believe that my training is likely to result in a permanent improvement in my child’s challenging behavior. (4.2)

• Overall, I had a positive reaction to this training. (4.6)

• The training helped me familiarize myself with ABA principles. (4.0)
SOCIAL VALIDITY CONT.

• I found it easy to read the training manual. (2.1)
• I found the manual too lengthy. (2.5)
• I am considering getting myself certified as a behavior analyst (RBT/BCaBA/BCBA) (3.5)
  • 62% and 67% of the immediate treatment and waitlist control group agreed or strongly agreed that they were considering getting certified as an RBT®, BCaBA®, or a BCBA®.
STUDY 2

• 10 individuals in Chennai, India
  • Similar demographic characteristics to Study 1

• Dependent variables
  • Knowledge tests and social validity
  • Structured FBAI form
    • Watched videos of multiple instances of problem behavior
    • Completed a form to indicate target behavior observed, select the best operational definition, collect ABC data on each occurrence of problem behavior, identify a potential function of problem behavior, and select a replacement behavior

• Direct implementation fidelity
  • Extinction and DRA procedures via video tape
Culturally-adapted training was effective and socially valid.

Assess the impact of cultural adaptation. Most relevant to social/eco validity?
ADDITIONAL OUTCOMES

• Many additional requests for training (>500 professionals and parents trained to date)
  • Invitation to present to a team of top professionals at the National Institute of Empowerment for Persons with Multiple Disabilities (NIEPMD)
• Meetings with key stakeholders at NIEPMD and Vidya Sagar Center
  • Pinpoint barriers to behavior analysis in India
  • Request to help develop the FIRST position statement on punishment and restriction
  • Interest in adding coursework to special education masters programs
WORLD HEALTH ORGANIZATION

- Caregiver Skills Training programme for autism and other developmental disorders
- Strength of recommendation: STRONG
- Quality of evidence: LOW
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• 1.01
  • Behavior analysts rely on professionally derived knowledge based on science and behavior analysis when making scientific or professional judgments in human service provision, or when engaging in scholarly or professional endeavors.
BEHAVIOR ANALYSIS IN PRACTICE
SPECIAL ISSUE: EQUITY & DIVERSITY

• Sex/gender: 5 articles
• Culture/religion: 7 articles
  • 4 articles empirical
  • 3 articles experimental
  • 2 articles comparative
• Other: 2 articles
• Kunze, Drew, Machalicek, Safer-Lichtenstein, & Crowe (2019)
  • Language Preference of a Multilingual Individual With Disabilities Using a Speech Generating Device

• Nava, Fahmie, Jin, & Kumar (2019)
  • Evaluating the Efficacy, Preference, and Cultural Responsiveness of Student-Generated Content in an Undergraduate Behavioral Course
CONCEPT ACQUISITION

• **Concept Identification:** Selecting correct concept when given example
  - Overgeneralization: Learner identifies nonexamples as examples
  - Undergeneralization: Learner identifies examples as nonexamples

• **Topics:** Respondent conditioning, Reinforcement, Antecedent Control, Extinction/ Punishment
**DESIGN**

- Combination multiple probe and between-group design
  - Lecture – reading quiz + introduction to topic
  - Seminar – peer-generated examples + assessment

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Topic 2: Reinforcement
1. What is the behavior?
2. What is the consequence?
3. Does the consequence **increase** or **decrease** the future probability of behavior?

   - **Increase**
   - **Decrease**

   - Reinforcement

4. Was the consequence a discontinuation of a previous reinforcer for the behavior?

   - Yes
   - **No**

5. Was the consequence an **addition** or **removal** of a stimulus?

   - **Addition**
   - **Removal**

   - **Extinction**
   - **Positive Punishment**
   - **Negative Punishment**
PREFERENCE ASSESSMENT

- Concurrent chains arrangement
  - Three new topics (shaping, chaining, and schedules of reinforcement)
  - Three initial links per topic
    - textbook, peer-generated example, peer-generated example + flowchart
SOCIAL VALIDITY

• Survey following preference assessment
  • *Please rate the extent to which you find examples...*
THANK YOU!

- Behavior Analysis Certification Board
- CSUN’s College of Social and Behavioral Sciences
- National Institutes of Health and the Diversity Program Consortium

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