Behavior Analysis and the Therapeutic Alliance

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Therapeutic Alliance

Massive Literature in Clinical and related Psychology fields

Is perceived to be important for treatment adherence and effectiveness

Is now widely defined by three separate but inter-related components

(Muran & Barber, 2010)
Therapeutic Alliance Defined

1. Agreement on goals

2. Agreement on treatment process

3. The quality of the relationship between the clinician and client
Behavior Analysis and Treatment Adherence

Treatment adherence is typically examined with respect to the actual implementation of the treatment components (e.g., Kupzyk & Shriver, 2016)

- what is the clinician or client supposed to do
- measurement of whether the clinician or client did what they were supposed to do
- behavioral skills training largely on how to teach treatment components

Behavior Analysis has minimal empirical literature related to how the interaction between the clinician and client might affect treatment adherence and effectiveness

Yet, as part of our practice, we all typically set goals with clients, come to agreement on treatment process or procedures, and seek to have a “good” relationship. This is considered good and “ethical” practice.
Behavior Analysis of the Therapeutic Alliance

Goal Setting

Agreement on Treatment Process and Procedures

Quality Relationships
Goal Setting

Goal statements may be best conceptualized as:

Rule-governed behavior
   Antecedent specifying behavior and consequence
   also termed a contingency specifying stimulus

Motivating Operation rather than a Discriminative Stimulus

“These functional relationships are under the control of past and present context of the listener to the rule, and they may be analyzed in terms of how antecedent and consequential functions of events change as a result of derived relational responding” (Ramnero & Torneke, 2014)
Goal setting in behavior analysis is probably most frequently addressed in the field/profession of OBM (O'hora & Maglieri, 2006).

Some empirical literature in behavioral education also (e.g., Martens et al., 1997).

The empirical literature in behavior analysis on goal setting has largely focused on goal setting with performance feedback/consequences NOT goal setting as a stand alone variable.
Agreement on Treatment Process and Procedures

Agreement has at least two topographical behaviors associated with it to be observed in the client:

1. ****Client stating acceptance of the treatment process/procedures
   - Social validity measures

2. Client stating they will do what is recommended (intention or goal)
   - “say-do” correspondence

And for the clinician; the other half of the relationship in which the clinician also needs to accept and/or agree to client’s values, needs, suggestions. (e.g. evidence-based practice).
Behavior Analysis of Treatment Acceptance

Tenet of ABA is addressing problems of social significance; hence need to address social validity (Baer, Wolf, Risley, 1968)

Literature that we need to change our language to increase acceptability (e.g., Bailey, 1991; Freedman, 2016)

Expectation that use of lay language is important (BACB Task List, BACB Ethics code) to improve adherence (e.g., Jarmolowizcz, et al., 2008)

Literature on how we train to increase treatment adherence (e.g., BST)

Not much (any?) research in behavior analysis on how or whether treatment acceptance is functionally related to treatment adherence or how social validity and treatment acceptance are related, similar/different, or how what we do or say as clinicians is functionally related to agreement, acceptance, adherence…
Quality Relationships

In Psychology, relationship variables are also referred to as common factors or unspecified or nonspecific factors.

Examples include:
- Warm, listens, accepting, positive, empathetic, client-directed, experienced (education or clinical expertise)

Evidence that clients are willing to give up (discount) treatment efficacy for these types of common variables (Swift & Callahan, 2010; Chadwell, et al., 2016)

How are these variables defined in behavior analysis?
Quality Relationships

In Behavior analysis, Behavioral therapy, FAP and ACT have probably focused most on the clinician-client relationship (e.g., Follette et al., 1996; Patterson & Chamberlain, 1994; Sweet, 1984; Tsai et al., 2010).

A couple of recent studies for individuals working with clients with severe disabilities (McLauugin & Carr, 2015; Parsons et al., 2016)

Emphasis on use of social attention (reinforcer) verbal behavior (motivating operations, CSS, derived relations, contacting direct contingencies)

Minimal empirical literature on how a clinician behavior comes to function as a reinforce or punisher (or MO, SD, CSS, etc…) for client behavior

Minimal empirical literature on functional relation between clinician behavior and client behavior and subsequent treatment acceptance, adherence…
Behavior Analysis and Treatment Alliance

Need for behavior analysts to attend to treatment alliance variables of goal setting, treatment process/procedure agreement (acceptance?), and relationship behaviors
Two Studies

Goal Setting (Cohrs, Shriver, Burke, Allen, 2016)

Therapist Language and Treatment Acceptance (Banks, Shriver, Chadwell, Allen, manuscript in prep)
Goal Statements Study

Purpose:

Based on previous social cognition research that demonstrated efficacy of “implementation intentions” in improving goal attainment using group designs we sought to

Examine goal attainment with varying forms of antecedent specificity in goal statements, including implementation intentions, without performance feedback, and using repeated-measures single-subject design

2 studies in 2 different educational settings
Goal Statements Study 1

Participants

4 teachers
All female, 1-2 years teaching experience, 20-28 years-old

Setting

After-school program at an elementary school in a large metropolitan public school district

2nd and 3rd grade classes of 12 to 20 students

30 minutes of group instruction in academic material (reading, writing)
Dependent Variable and Research Design

All teachers expected to be using “positive behavior management” strategies in the classroom, including behavior specific praise

**Dependent variable** was frequency of behavior specific praise during 10 minute observation

**Research Design** was a concurrent multiple baseline across participants
Procedure and Goal Statement Conditions

Immediately before each observation, the program supervisor issued a goal statement to the teacher...

**Baseline:**

“Remember, one of the program goals is to use positive behavior management strategies”

**Goal Specificity 1:**

“Remember, one of the goals of positive behavior management is to praise more often”
Goal Statement conditions

Goal Specificity 2:

The program supervisor asked the teacher to read the following statement:

“To help me praise more often, when I see a student engaging in active participation, such as following rules and directions or working on an assigned task, I will provide a positive description of what they are doing such as ‘good job following directions!’ or ‘I like how you are sharing!’”

Goal Specificity 3:

The program supervisor asked the teacher to read the following statement:

““To help me praise more often, when I see a student engaging in active participation, such as following rules and directions or working on an assigned task, I will provide a positive description of what they are doing such as ‘good job following directions!’ or ‘I like how you are sharing!’”

“My goal for today is ________”
Figure 1
Results

Use of behavior specific praise (or general praise for that matter) was typically low

Goal statements in the form of implementation intentions (GS-2 condition) did not improve teacher adherence or attainment of using more praise statements contrary to previous research

Adding a specific frequency to the goal statement did improve 3 out of 4 teachers use of praise statements

Increasing antecedent specificity of goal statements even without any performance feedback may improve goal attainment/treatment adherence

Goals set by participants were variable and low, and they did not meet goals

We do not know if sequence of conditions contributed to change observed
Goal Statements Study 2

Purpose:
Further examine antecedent specificity aspects of goal setting without performance feedback by specifying range of praise frequency and time for participants to set goals

Participants
1 teacher
2 staff

Setting
Level 3 elementary school serving students with emotional/behavioral disorders in a rural public school district
One classroom with 10-15 students; summer programming
Morning focused on small group academic instruction
Dependent Variable and Design

Same at study 1; Frequency of behavior specific praise (10 minute observations) and concurrent multiple baseline across participants
Procedure and Goal Statement Conditions

**Baseline**: observation in classroom of participant use of behavior specific praise without any reminder

**Goal Specificity 4**: Prior to observation, program director asked participant to read aloud goal statement:

“To help me praise more often, when I see a student engaging in active participation, such as following rules and directions or working on an assigned task, I will provide a positive description of what they are doing such as ‘good job following directions!’ or ‘I like how you are sharing!’

“My goal for the next 10 minutes is _____”

The choice of frequency was determined by the program director to be at one more than highest baseline number up to a max of 10 more so that participant who had max of 4 in baseline would have a choice for goal of 5,6,7,8,9,10,11,12,13,14
Figure 2
Results

Across all 3 participants, noticeable increase in behavior specific praise with introduction of GS-4 condition (no noticeable change in general praise)

Higher frequency of behavior specific praise observed when higher goals set based on previous participants performance (not performance feedback)

Participants met their stated goal more frequently (compared to participants in Study 1) when goal options were specified
Discussion

Goal statements can evoke behavior change *without performance feedback*; albeit change may be minimal and duration is questionable

How we specify goals is important to goal attainment/treatment adherence

More research on how and why goals affect behavior change is needed in behavior analysis
Behavior Language Study

As noted earlier, it has long been suggested by many in behavior analysis that how we speak to others affects the acceptability of our treatments and subsequently may affect adherence.

There is actually very little research directly on this topic (~ 8 studies between 1977-2008).

What research has been conducted has largely been with undergraduate students or with teachers and results have been mixed.
Purpose of Study

(1) does the language a behavior therapist uses when describing an intervention to a parent affect perceived acceptability of the intervention,

(2) does the language a behavior therapist uses when describing an intervention to a parent affect parents’ perception about therapist characteristics, and

(3) does the language a behavior therapist uses when describing an intervention to a parent affect parents’ comprehension of the intervention?
Participants and Setting

75 Parents of children receiving services in outpatient behavioral pediatric health clinics in urban, suburban, and rural areas of a Midwestern state.

49 parents between 30 – 50 years-old, 12 over 50 years-old, 12 under 30 years-old

63 Caucasian

40 of the children between 7-12 years-old, 13 were 13 or over, and 19 were 6 or younger

Parents completed measures in the waiting area of the clinic or a nearby room with additional privacy of waiting area was full
Measures and Design

Independent Variable

3 Descriptions of time-out intervention presented via Video by a clinician

- Technical (behavioral jargon)
- Non-technical (lay language)
- Popular (terms from popular press parenting books)

Dependent Variables

- Treatment Evaluation Inventory-Short Form (TEI-SF)
- Therapist Evaluation Inventory (modification of TEI-SF)
- Therapist Characteristics Rating Scale
- Time-Out Comprehension Measure

Randomized Group Design
Procedures

Parents approached in waiting area for informed consent

Provided an Ipad and Viewed video

Completed survey items via Qualtrics
## Results

Table 5  
**Descriptive Statistics for Rating Scales by Condition**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Acceptability</th>
<th>Therapist Acceptability</th>
<th>Therapist Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Technical</td>
<td>24</td>
<td>32.67</td>
<td>6.60</td>
</tr>
<tr>
<td>Non-Technical</td>
<td>26</td>
<td>33.69</td>
<td>5.15</td>
</tr>
<tr>
<td>Popular</td>
<td>25</td>
<td>34.36</td>
<td>6.40</td>
</tr>
</tbody>
</table>

Table 6  
**Descriptive Statistics for Comprehension by Condition**

<table>
<thead>
<tr>
<th>Reason for Intervention</th>
<th>Description of Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Technical</td>
<td>22</td>
</tr>
<tr>
<td>Popular</td>
<td>22</td>
</tr>
<tr>
<td>Non-technical</td>
<td>22</td>
</tr>
</tbody>
</table>

*Note:* Mean values for reasons could range from 0-2 while mean values for descriptions could range from 0-8.
Discussion

For parents seeking services for their children, language used to describe treatment did not affect their acceptability of the treatment or the therapist.

Parents were able to better describe time-out procedure when lay language is used.

When examining language and acceptability, it may be important to consider the population being targeted (i.e., politics, marketing).

When considering the language we use, we need to consider the population targeted and our reasons (acceptability, comprehension).

Still need for research to better define our terms (acceptability, comprehension, adherence) and relations between these constructs and treatment language.
Considerations for Future Research on Treatment Alliance for Behavior Analysts

Behavior analysis has always been interested in social behavior/relationships (Skinner, 1953)

Applied behavior analysis has not attended to or examined clinician-client relationships

Need to acknowledge potential importance of therapeutic alliance for treatment adherence and efficacy

Need to define variables of interest, particularly with respect to clinician-client relationships, but also goal statements and treatment acceptability

Need to develop and disseminate conceptual models of functional relations of variables of interest

Need to develop and disseminate empirical examinations of these variables
References


