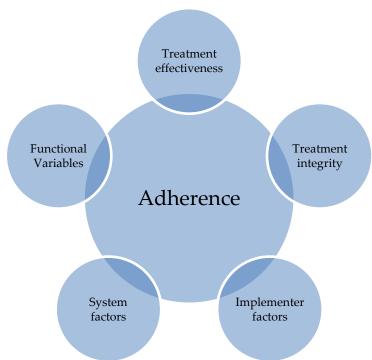
# Increasing Stakeholder Commitment to Behavior Change: ACT for "Non-Adherence"

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A Behavioral Model of Adherence



Factor	Summary
Treatment effectiveness	Use evidence based principles, procedures, and techniques identified by practice guidelines (e.g., BACB Task List) and the professional literature.
Treatment integrity	Ensure that you are delivering the treatment with high fidelity. Consider documenting procedural integrity, using a treatment manual, and tracking process variables.
Implementer factors	Various demographic (e.g., age, gender, ethnicity, education, marital status, social economic status) and other factors can influence adherence. Pay particular attention to education level, socio-economic status, physical and psychological limitations, social support, and previous experience with interventions. Adapt you treatment plan to account for these factors.
System factors	Your relationship with the implementer (e.g., staff member vs. parent) as well as the scope and intensity of services can also influence adherence. Identify what is feasible in your context and be sure to take into account cultural factors as well.

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# Intervening on Functional Adherence Variables (adapted and expanded from Allen & Warzak, 2000)

Factor	Summary
Establishing operations	<ul> <li>Establish intermediate outcomes as reinforcers: Our culture expects quick fixes to problems in our society, so we may need to establish smaller outcomes as reinforcers with stakeholders.</li> <li>Disestablish competing social approval as a reinforcer: Our culture is disapproving of tantrums and other problem behaviors, so we may need to prepare stakeholders to be met with disapproval as they implement our plans</li> </ul>
Stimulus generalization	<ul> <li>Train sufficient exemplars: Train behavior change procedures across various response topographies and consider providing training in general principles of behavior change.</li> <li>Train across a broad range of settings: When feasible, provide training across multiple settings, including in the community. Consider providing salient discriminative stimuli (e.g., note card, app) to evoke appropriate treatment behaviors and self-management training.</li> <li>Strengthen effective rule following: If possible, lead with simple interventions with immediate effects to establish a history of correspondence between your intervention plan and the outcomes specified by your plan. Use language that works (i.e., non-technical) and be prepared to talk about private events. Use language that links behavioral interventions to valued cultural constructs (e.g., freedom, independence, responsibility; Bailey, 1991) and values of stakeholder.</li> <li>Disrupt ineffective rule following: Stakeholders can acquire ineffective rule-governed repertoires regarding behavior change (e.g., "he has to want to change," "time out would hurt his feelings so it won't work," "I tried reinforcement and it doesn't work for her"). Disrupt these ineffective tracks by getting the stakeholder in touch with the direct contingences of the behavior change plan. That is, don't argue or try to "change their minds," instead collaborate to test out an intervention to see if it works.</li> </ul>
Response acquisition	<ul> <li>Decrease skill complexity: Choose the simplest intervention and least intensive observation techniques possible to obtain desired outcomes. Shape more complex intervention responses when possible, and focus on simple antecedent manipulations before implementing more complex consequence based procedures.</li> <li>Use effective instructional techniques: e.g., competency based training programs and behavior skills training that incorporate instruction, modeling, rehearsal, feedback, and ongoing monitoring. A written plan alone is rarely, if ever, sufficient to generate sustainable intervention behaviors.</li> <li>Establish an effective teaching environment: Ensure that stakeholders can attend to training by minimizing distractions. Avoid instructional training while stakeholder is engaged in other work/home</li> </ul>

	responsibilities.
Consequent events	<ul> <li>Identify and intervene on competing contingencies that punish</li> <li>adherence: Get ahead of the "parenting-trap" by informing stakeholders</li> <li>of the possibility that coercive problem behaviors may initially increase.</li> <li>Ensure a rich density of reinforcers for plan adherence early in treatment</li> <li>and monitor stakeholder responses to client behavior.</li> <li>Identify and intervene on competing contingencies that reinforce</li> <li>incompatible behaviors: Stakeholders often have access to environments</li> <li>rich with competing reinforcers to behavior plan adherence. The natural</li> <li>reinforcers for adherence are often delayed, so efforts should be made to</li> <li>establish intermediate social reinforcement (e.g., public commitment,</li> <li>social praise and clinician "rapport") and streams of reinforcers that are</li> <li>not reliant on immediate desired changes in behavior.</li> </ul>
Social Validity	Are the <b>goals</b> , <b>procedures</b> , and <b>effects</b> (both intended and unintended) of the behavior plan acceptable to the client, all stakeholders, and society. Nonadherence may be a functional way of communicating the absence of social validity.

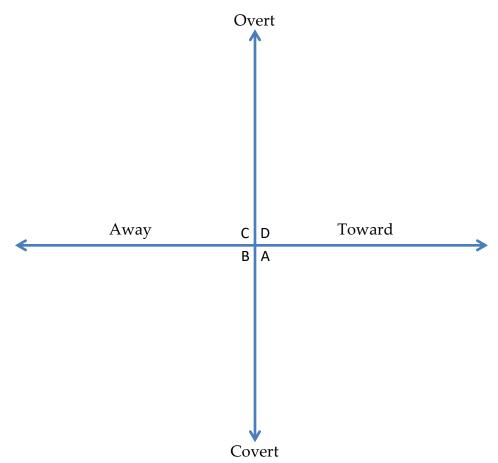
ACT Process (mid-level terms)	Brief Conceptual Summary	Application Examples
Present Moment	<ul> <li>Improve an individual's ability to flexibly attend to his/her current environment and experiences.</li> <li>Individuals can often become lost in the content of or in evaluating their private events</li> <li>Goal is to increase awareness of when one is focusing on private events to the exclusion of valued action, and then redirect attention toward current environmental contingencies.</li> </ul>	<ul> <li>Focus one's attention between the 5 senses, thoughts, and feelings without dwelling on any one for too long in formal and informal mindfulness exercises.</li> <li>Gently identify when a stakeholder may be responding to private events and redirect to valued action.</li> </ul>
Self	<ul> <li>Help an individual recognize that she is not her thoughts, but the context in which her thoughts occur (i.e. thoughts come and go while the basic person remains).</li> <li>Cultivate flexible perspective taking regarding person, place, and time.</li> </ul>	<ul> <li>Remind individuals that thoughts and feelings, while occasionally intense, don't last forever.</li> <li>Discuss with the stakeholder how another individual might respond to the behavior, or how he would respond to it in a different context.</li> </ul>
Acceptance	Being willing to experience     unwanted private events in the	• Identify and discuss when a stakeholder may be

# **Core ACT Processes Applied to Adherence**

	<ul> <li>service of valued action</li> <li>Not resignation.</li> <li>Acknowledging one's current experience, and then working to move in a valued direction anyway.</li> <li>Opposite is experiential avoidance, or focusing one's behavior on trying not to think or feel a certain way, usually at the expense of attending to and engaging in valued action.</li> </ul>	<ul> <li>trying to control her thoughts or feelings.</li> <li>Ask the stakeholder what trying to control their thoughts and feelings might cost them.</li> <li>Ask the individual if it is possible to have these thoughts and feelings, and still engage in valued action.</li> </ul>
Defusion	<ul> <li>When an individual believes that private events are "true" and reflect reality, he can become "fused" or hyper- focused on the content and subsequent judgments about private events and what that means about himself.</li> <li>Defusion focuses on helping an individual to recognize that thoughts are just thoughts, and do not necessarily control behavior or one's life.</li> <li>Goal is to help an individual distance herself from the evaluation of private events in order to facilitate redirection to valued action.</li> </ul>	<ul> <li>Mindfulness exercises can also function as defusion in that once an individual is aware of a thought; they can learn to continue attending to the variety of other present moment experiences rather than continuing to respond to said thought.</li> <li>Help the stakeholder to label thoughts as evaluations, predictions, memories, or "mind-reading."</li> </ul>
Values	<ul> <li>"Freely chosen, verbally constructed consequences of ongoing, dynamic, evolving patterns of activity, which establish predominant reinforcers for that activity that are intrinsic in engagement in the valued behavioral pattern itself" (Wilson &amp; DuFrene, 2009).</li> </ul>	<ul> <li>Ask the individual what he would be able to do if these difficulties or struggles disappeared. Then do those behaviors even when difficulties are present.</li> <li>Link the behavior change plan to what the stakeholder cares about.</li> </ul>
Committed Action	<ul> <li>Ongoing and dynamic pattern of action that is consistent with one's personal beliefs and values</li> <li>Engagement in valued life activities even when accompanied by unwanted private experiences.</li> </ul>	• Remind the stakeholder that regardless of mistakes, each new moment is another opportunity to do the next effective action given what she cares about.

### The Modified Acceptance and Commitment Therapy (ACT) Matrix

Material adapted from Polk & Schoendorff (2014)



A. What are the core values of the stakeholder? What are you trying to accomplish by working together to support the client and what are the values underlying those goals?

B. What are some of the private events (i.e., thoughts and feelings) that get in the way of the stakeholder realizing their values with regard to working with the client? (e.g., fears about being criticized, feeling overwhelmed, believing that they are not supported)

C. What are some of the actions that follow from negative private events (i.e. behavior-behavior relations), that interfere with the progress of the client? (e.g., failure to implement plan, inconsistent implementation, bargaining with client)

D. What are some actions that the stakeholder could take that might move him or her towards her valued goals?

#### Case 1: Sally

Sally is a 41-year-old mother of three. Her youngest son Jake (age 5) was diagnosed with ASD last year and he has been receiving 35 hours a week of EIBI for the past six months. Jake has limited augmented communication (i.e., some PECS use and sign language) and no verbal communication. His problem behaviors include frequent tantrums, physical aggression towards parents and sibling, inappropriate toileting, and elopement. You are tasked with providing home behavior programing for the mother to implement in the evening and on weekends. You have noticed that Jake's problem behaviors have recently increased at home and suspect that Sally may not be adhering to your program.

"Fudges data"	Ov Cancels sessions	Follows behavior plan
Bargains for	Argues with provider $^2$	Attends sessions
compliance	Gives Jake an iPad when he	Family Music Time Keeps accurate data
"Vacation" days	misbehaves	Uses plan Asks for help consistently
Yell at Jake	Over-prompts	s
Away Give	s in to tantrums	Plans for respitecare TowARD
<		
√ Helpless	Wanting a "normal" kid	Harmonyathome
Overwhelmed		Autonomy- not having to rely on others
	l'm a failure as a mom	"I want the best for Jake."
Judged by other	s as a morn	Loving parent
Tired Lov	/e Sadness	Being creative (Drawing and Music)
Not connected with other		
These strangers better than me		Spending quality time with family

**Interventions:** 

#### Case 2: Ms. Smith

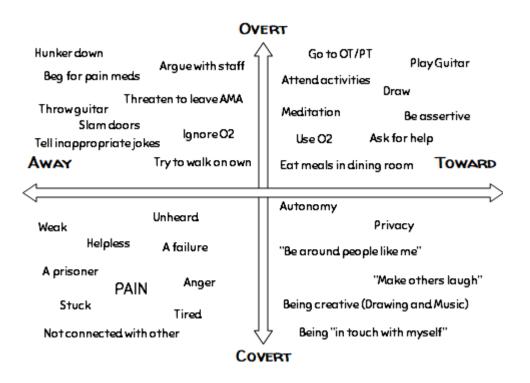
Ms. Smith is a 27-year-old special education teacher in an elementary school. She has seven students in her second grade class with a variety of developmental, learning, and emotional disabilities. You are working with Ms. Smith to provide a consistent home and school environment for your client, James (age 9). In particular, you are working on planned ignoring of inappropriate vocalizations, escape extinction for task demands, visual activity schedules, and a token/response cost system for physical aggression. Ms. Smith was initially receptive to your program but you notice that James' problem behaviors appear to be getting worse and he is making limited academic progress.

otherstu Make updata "Modify" plan Remov Give James iPad to Ignore James when I	idents Argue with or ignore BCBA e James from class "shut him up"	Accurate data collection Discuss plan concerns and collaborate Take "ownership" of Be open about parts of plan setbacks Identify successes Ask for help Consistent implementation TOWARD
"I have a degree too! "It's my classroom"	, Unvalued Disrespected	Autonomy & Professional Identity Making a difference "Helping every student in the class"
This isn't working "I'm a failure" "I have to stick to the	Frustrated "Talked down to"	"Being respected" Being innovative Being an effective teacher
lesson plan"		VERT

#### **Interventions:**

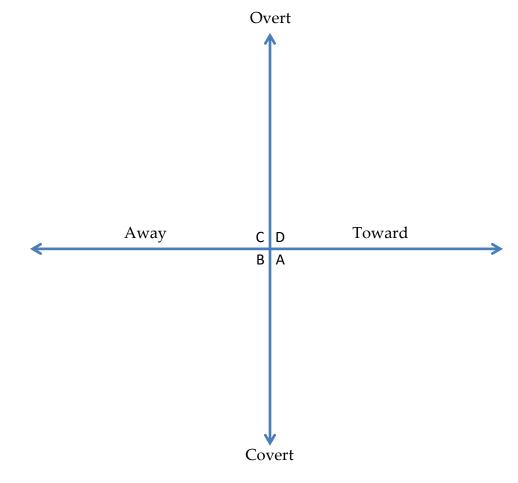
#### Case 3: Keith

Keith is a 62-year-old male admitted to a long-term care facility after being hospitalized for pneumonia. He has a history of traumatic brain injury (TBI) and chronic pain. You have been asked to work with him due to his non-compliance with medical orders (i.e., ignoring fall risk procedures and oxygen use), aggression towards staff (primarily verbal but some property destruction and physical aggression), and frequent engagement in attention seeking behaviors, especially regarding pain medication. Keith reports that he is depressed, in constant physical pain, and that he wants to leave the long-term care facility.



**Interventions:** 

## Your Own Case:



Interventions:

#### **Key Resources**

- Allen, K. D., & Warzak, W. J. (2000). The problem of parental nonadherence in clinical behavior analysis: Effective treatment is not enough. *Journal of Applied Behavior Analysis*, 33, 373-391. doi: 10.1901/jaba.2000.33-37
- Hayes, S.C, Strosahl, K.D., & Wilson, K.G. (2012). *Acceptance and commitment therapy: The process and practice of mindful change* (2<sup>nd</sup> ed,). New York, NY: The Guilford Press.
- Polk, K. L., & Schoendorff, B. (2014). *The ACT Matrix: A new approach to building psychological flexibility across settings and populations*. Reno, NV: Context Pres.

#### References

- Castro, M., Rehfeldt, R. A., & Root, W. B. (2016). On the role of values clarification and committed actions in enhancing the engagement of direct care workers with clients with severe developmental disorders. *Journal of Contextual Behavioral Science*, 5, 201-207. doi: 10.1016/j.jcbs.2016.09.003
- Codding, R. S., Feinberg, A. B., Dunn, E. K., & Pace, G. M. (2005). Effects of immediate performance feedback on implementation of behavior support plans. *Journal of Applied Behavior Analysis*, 38, 205-219. doi: 10.1901/jaba.2005.98-04
- Cohrs, C. M., Shriver, M. D., Burke, R. V., & Allen, K. D. (2016). Evaluation of increasing antecedent specificity in goal statement on adherence to positive behavior-management strategies. *Journal of Applied Behavior Analysis*, 49, 1-12. doi:0.1002/jaba.321
- Collins, S. Higbee, T. S., & Salzberb, C. L. (2009). The effects of video modeling on staff implementation of a problem-solving interventions with adults with developmental disabilities. *Journal of Applied Behavior Analysis*, 42, 849-854. doi: 10.1901/jaba.2009.42-849
- Carroll, R. A., Kodak, T., & Fisher, W. W. (2013). An evaluation of programmed treatment-integrity errors during discrete-trial instruction. Journal of Applied Behavior Analysis, 46, 379-394. doi: 10.1002/jaba.49
- Hayes, S. C. (Ed.). (1989). Rule-governed behavior: Cognition, contingencies, and instructional control. New York: Plenum.
- Hayes, S. C., & Brownstein, A. J. (1986). Mentalism, behavior-behavior relations, and a behavior-analytic view of the purposes of science. *The Behavior Analyst*, 9, 175-190.
- Jackson, M. L., Williams, W. L., Hayes, S. C., Humphreys, T., Gauthier, B., & Westwood, R. (2016). Whatever gets your heart pumping: The impact of implicitly selected reinforce-focused statements on exercise intensity. *Journal of Contextual Behavioral Science*, 5, 48-57. doi: 10.1016/j.jcbs.2015.11.002
- Kahana, S., Drotar, D., Frazier, T. (2008). Meta-analysis of psychological interventions to promote adherence to treatment in pediatric chronic health conditions. *Journal of Pediatric Psychology*, 33, 590-611. doi:10.1093/jpepsy/jsm128
- McIntyre, L. L., Gresham, F. M., DiGennaro, F. D., & Reed, D. D. (2007). Treatment integrity of school-based intervention with children in the journal of applied behavior analysis 1991-2005. *Journal of the Applied Behavior Analysis*, 40, 659-672. doi:10.1901/jaba.2007.659–672
- Miller, W. R., & Rollnick, S. (2013). Motivational interviewing: Helping people change. New York, NY: Guilford Press.
- Moore, T. R., & Symons, F. J. (2009). Adherence to behavioral and medical treatment recommendations by parents of children with autism spectrum disorders. Journal of Autism and Developmental Disorders, 39, 1173-1184. doi:10.1007/s10803-009-0729-0
- Nicholson, E., & Barnes-Holmes, D. (2012). The implicit relational assessment procedure (IRAP) as a measure of spider fear. *The Psychological Record*, *62*, 263-278.
- Parsons, M. B., Rollyson, J. H., & Reid, D. H. (2012). Evidence-based staff training: A guide for practitioners. *Behavior Analysis in Practice*, 5, 2-11.
- Reed, F. D. D., Reed, D. D., Baez, C. N., & Maguire, H. (2011). A parametric analysis of errors of commission during discrete-trail training. *Journal of Applied Behavior Analysis*, 44, 611-615.
- Roscoe, E. M., & Fisher, W, W. (2008). Evaluation of an efficient method for training staff to implement stimulus preference assessments. *Journal of Applied Behavior Analysis*, 41, 249-254. doi: 10.1901/jaba.2008.41-249
- Roscoe, E. M., Fisher, W. W., Glover, A. C., & Volkert, V. M. (2006). Evaluating the relative effects of feedback and contingent money for staff training of stimulus preference assessments. *Journal of Applied Behavior Analysis*, 39, 63-77. doi: 10.1901/jaba.2006.7-05
- Shimoff, E., Catania, A. C., & Matthews, B. A. (1981). Uninstructed human responding: Sensitivity of low-rate performance to schedule contingencies. *Journal of the Experimental Analysis of Behavior*, *36*, 207-220.
- Skinner, B. F. (1945). The operational analysis of psychological terms. Psychological Review, 52, 270-277.
- Skinner, B. F. (1969). Contingencies of reinforcement: A theoretical analysis. New York: Appleton-Century-Crofts.
- Skinner, B. F. (1974). About behaviorism. New York: Knopf
- Törneke, N., Luciano, C., & Salas, S. V. (2008). Rule-governed behavior and psychological problems. *International Journal of Psychology and Psychological Therapy*, 8, 131-156.
- Wolf, M. M. (1978). Social validity: the case for subjective measurement or how applied behavior analysis is finding its heart. *Journal* of Applied Behavior Analysis, 11, 203-214.
- Wilson, K. G., & DuFrene, T. (2009). *Mindfulness for two: An acceptance and commitment therapy approach to mindfulness in psychotherapy*. Oakland, CA: New Harbinger.