Worksheet

Professional Version | US English

ABC Model

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Description

ABC is an acronym for Antecedents, Behavior, Consequences. The ABC Model is used as a tool for the assessment and formulation of problem behaviors. It is useful when clinicians, clients, or carers want to understand the 'active ingredients' for a problem behavior (Yomans, 2008). The ABC model helps practitioners and clients to carefully consider what happens in the individual and the environment before a target behavior (the Antecedents) and afterwards (the Consequences): these are also known as the contingencies that shape the behavior. Once these contingencies are understood, interventions can be designed to shape or modify the target behavior.

"Individuals are typically unaware of the contingencies controlling their behaviour"

(p.43, Persons)

One powerful feature of the ABC Model is that it focuses on the relationship between an observable behavior and the environment in which it occurs. This moves the focus away from an individual's particular diagnosis or history, and toward making changes that can address a problem behavior in the here and now. By providing concrete descriptions of what triggers or reinforces a behavior, the ABC model can be used to help clients or their carers understand what is happening, why a behavior occurs, and how the consequences of (or reactions to) a behavior may be serving to maintain a problem (Kuyken, Padesky & Dudley, 2009). Ultimately, the ABC Model can be used to develop interventions that change or modify the antecedents and consequences of a problem behavior in order to treat it (Carr & LeBlanc, 2003; Kuyken, Padesky & Dudley, 2009; Yoman, 2008).

The ABC technique is used across a wide variety of settings. These include clinicians working with verbally capable adult clients, carers working in residential settings, parents who want to better understand their child's behavior, and teachers trying to understand problem behavior in the classroom. It can be a useful starting point when there isn't enough evidence for a treatment intervention, when working with clients who are unresponsive or resistant to manualized treatment, have multiple diagnoses, limited verbal skills, or are unable to reflect on their own behavior (e.g. young people, clients with acquired brain injuries, learning disabilities, or dementia).

When working with clients who are able to engage with talking therapies and reflect on their behavior, the ABC Model is a helpful tool for building the client's awareness of the triggers for their behavior (the antecedents), and the short and long-term consequences of their behavior. When working more cognitively, some clinicians choose to adapt the model slightly to explore the sequence: *Antecedents* > *Beliefs (Thoughts)* > *Consequences*. Conceptually, this mirrors other techniques such as the CBT Appraisal Model or Cross-Sectional Formulation, which can achieve similar results.

Description

Theoretical background

The ABC Model originated from approaches applying the principles of behaviorism to the assessment and treatment of problem behaviors (Haynes & Hayes O'Brien, 2000; Carr & LeBlanc, 2003). Behavioral approaches focus on how an individual's behavior is shaped by their environment as they associate objects, events, and experiences (stimuli) with their behavior. Classical and operant conditioning offer a means to understand how behavior is supported and maintained by its antecedents, and how consequences work to reinforce and maintain the behavior (Yoman, 2008; Haynes & Hayes O'Brien, 2000). The ABC model allows psychologists to determine what makes a particular stimulus an effective trigger (antecedent), and which consequences effectively reinforce and maintain the behavior (Haynes & Hayes O'Brien, 2000).

Classical conditioning explains how things that normally don't evoke a response (objects or occurences with no emotional significance, e.g. shoes) can become linked to an already existing trigger for a certain response or behavior (such as a family member leaving home). For example, a child may become upset every time their parent puts on shoes. This is because they have come to associate the shoes with the parent leaving. The shoes have become a *conditioned stimulus* that triggers the same behavior as the parent actually leaving.

"Organisms learn not only what behaviours bring rewarding consequences, but they also learn something about the conditions, or stimuli, that indicate a reward is available"

(Persons, 2008)

Operant conditioning explains how voluntary behavior is affected by its consequences. Operant conditioning provides the theoretical grounding for functional analysis (Carr & LeBlanc, 2003; Iwata et al, 1994). Behavior that is reinforced becomes more likely to be repeated. Reinforcement could be something positive – a reward (e.g. eating chocolate after tidying) or the removal of something aversive or negative (e.g. a feeling of anxiety that goes away once you have tidied). Voluntary behavior that is punished becomes less likely to be repeated. Punishment can be the presence of something unpleasant or bad (e.g. being berated for breaking the rules) or the removal of something positive (e.g. being grounded for throwing food). Thus, the consequences following the behavior make the future occurrence of the behavior more or less likely.

Functional analysis has its origins in work treating problem behavior in people with developmental disabilities. In 1977, Carr hypothesized that self-injury in these clients may be a learned behavior that is maintained through reinforcement – for example, receiving attention from other people following the behavior, or as a means to escape an activity or stimulus that they found aversive. Iwata and colleagues (e.g. 1994; Lerman & Iwata, 1993) used single-subject experiments to test whether self-injury could be modified by changing these hypothesized reinforcers.

Description

Functional analysis then developed into a systematic method for investigating problem behaviors – usually with client groups who had limited verbal abilities and/or cognitive impairments (Carr & LeBlanc, 2003). It takes its name from the focus on understanding the *function* that the behavior performs (Persons, 2008). There is an emphasis on psychometrically valid measures or at the least, *quantitative* measures (Haynes & Hayes O'Brien, 2000) that can include the frequency of a behavior, its strength or intensity, and its duration. Wherever possible, behaviors are measured through multiple means such as therapist observation, client observation and report, or observations from a multidisciplinary team. Repeated measurements are encouraged in order to gather more reliable data to understand the contingencies that trigger, reinforce, and maintain the behavior of interest. When working with non or low-verbal client groups, ABC is completed by direct observation of the client by a trained professional. For clients able to reliably report on their internal states, covert behaviors (behaviors that are hidden from others, but which are nonetheless sensed by, and observable to, the individual experiencing them - including thoughts, feelings, and physiological changes) can be documented and monitored using the ABC model.

The ABC Model worksheet can be used to identify the triggers for a behavior by monitoring environmental (e.g. location, company, time of day, visual & auditory stimuli) and internal circumstances (e.g. emotions, body states, thoughts, memories) which occur before the behavior. Attention is also then drawn toward the consequences of the behavior: both short-term and long-term, intended and unintended. Clinicians should ask "what is the function of the behavior?", "What does it achieve?", and "How is it rewarded?".

Instructions

Suggested Question

When we want to know more about a particular problem, we can use a tool called the ABC model to understand more about it. First, we will think about the behavior we want to know more about, and then we will think about some specific times that it has happened.

1. **Identify the target behavior** about which you want to understand more. This behavior might be something the client finds problematic or distressing. Where the client is a young child or has reduced mental capacity, it can be a behavior that is problematic for their carers, loved ones, or those around them.

   Identifying the target behavior is not always straightforward, and it is common for there to be multiple related problem behaviors. The behaviors targeted should be a high priority for the client rather than the symptoms defined by their diagnosis. The behavior can be effectively selected using a prioritization process that focuses on 'ultimate outcomes': what kind of long-term goals or consequences does the client (or their carer) want? When long term outcomes are established, discussions can begin to identify what behaviors will work positively toward those outcomes and what behaviors might be preventing them.

   Target behaviors should be described in concrete terms, ideally with a specific definition of the selected behaviors so that they can be measured (e.g. "Child's yelping behavior", or "Strong feeling of anxiety that is self-rated to be 8 out of 10 or higher"). As well as identifying the problem behavior that is targeted to be reduced, it is helpful to identify adaptive behaviors that could be increased.

   Each ABC form should focus on one target behavior. Helpful categories for behaviors might include:

   - Observable behaviors, e.g. eating, hitting, seeking reassurance, using substances, self-harm.
   - Inhibiting or suppressing an urge or a feeling or a thought, e.g. distracting oneself so as to avoid an urge to self-harm, suppressing an intrusive thought.
   - Thoughts or cognitions that the client is able to report or record, e.g. worry, rumination, self-criticism, self-distraction, compulsive counting or post-morteming, reviewing memories in an attempt to be certain.
   - Feelings that can be reported and rated, e.g. anxiety, sadness, anger.
   - Physiological responses that can be reported and rated, e.g. heart racing, nausea, temperature change, dry mouth.

2. **Explore the antecedents** to develop an awareness of triggers for a behavior. The ABC model focuses in on the behavior itself and the immediate antecedents. It is useful to think about antecedents in the broadest possible sense: as contingencies in the environment or the person. Antecedents can be internal (feelings, thoughts) or external (environmental changes, social interactions, events). It can help to train clients and to record as many details as possible when the behavior occurs. When designing an intervention, this can aid both the reduction of the problem behavior (by changing or removing antecedents) and the increase of adaptive behaviors (by introducing new antecedents that will make a different, helpful behavior more likely).

Helpful prompts are given below.

Environment:

- What is the setting?
- What has happened in their environment?
- Who are they with?
- Who else is present?
- What interactions have taken place?
- Time of day, month, year, or special dates/days.
- Sensory stimulation: Consider ambient temperature, light, noise.
- Events: what has just happened?

Person:

- What is happening for the individual just prior to the behavior?
- What might they be thinking and feeling?
- Consider unmet needs, for example, hunger, thirst, cold, lack of connection, anxiety-soothing, boredom.
- Thoughts: verbal or mental images. You may have already worked on catching 'hot thoughts' and making links to feelings and behavior.
- Feelings or absence of feelings.
- Memories (voluntary & involuntary).

3. **Explore the consequences** to develop an awareness of what might be acting to maintain the behavior, and the impact that the behavior has over the short and long term. Helpful lenses through which to view consequences are:
   - Timescale: short term and long term.
   - Utility: helpful and unhelpful.
   - Intention: intended and unintended.

   It is often the case that short-term changes immediately after the behavior are intended: a need may be met, or the client may experience a positive feeling. This consequence then acts as a reinforcer for the behavior. Longer term consequences of the behavior are often unintended and unhelpful, because they do nothing to address the root cause of the problem and they can lead to additional problems. Some prompts to consider consequences are given below.

Short term

Environment and people:

- Does the person change their place or location due to the behavior? What is the significance of this if so?
- What happens to the people present? Does the person attract attention to themselves through the behavior?
- Ambient temperature, light, noise, sensory stimulation. Are these changed, improved, or avoided?
- Are particular events or interactions initiated or interrupted by the behavior?

Person:

- Is an unmet need resolved in the short term? (hunger, thirst, cold, lack of connection, anxiety-soothing, boredom and so on)
- What thoughts and mental images occur immediately after the behavior?
- What body feelings occur immediately after the behavior?
- What emotions occur immediately after the behavior?
- Are any memories triggered by the behavior?

Long term

A central question for the long term is "How do the short-term consequences affect the likelihood of similar situations happening in the future?"

Consider the days, weeks, and months following the behavior.

Environment and people:

- Are there any long-term changes or does the environment stay the same? (e.g. triggers that are not addressed or resolved)
- Does the environment get worse because of the problem behavior?
- What impact does the behavior have on key relationships?
- How are friends, family, carers, and colleagues affected?

Person

- What are the long-term impacts on the individual's health and wellbeing?
- When they reflect on the behavior, what do they feel?
- What thoughts do they have about the behavior?

Future antecedents – maintenance

- Are there consequences of the behavior that make the same behavior more likely in the future? Consequences can become future antecedents in another round/chain of ABC. For example, binge eating may mean the client is more likely to restrict eating the next day, leading to hunger and another round of binge eating.

4. **Developing interventions.** The ABC Model will be most useful when used repeatedly to monitor the behavior to gain a baseline, and alongside more general event logs and diaries to create a detailed picture of antecedents and consequences. The therapist's goal is to create a formulation for the behavior that gives a description of its function and answers the questions "What does this behavior achieve?" and "How is it being maintained?".

   Once a behavior is understood in these terms, interventions can be generated which focus on changing the ABCs. Helpful prompts include:

   - Can antecedents be replaced or removed?
   - Can helpful behavior be triggered instead?
   - What helpful behaviors can be substituted for the problem behavior?
   - Can reinforcing consequences be replaced or removed?
   - Can helpful behavior be reinforced instead?

   Experiments can be devised where changes to the ABCs are implemented, and the frequency, intensity, and duration of the behavior can then be monitored. If some of these are successful in reducing the problem behavior, intervention can then focus on maintaining these changes.

References

Carr, E. G. (1977). The origins of self-injurious behavior: A review of some hypotheses. *Psychological Bulletin*, 84, 800–816.

Carr, J.E. & LeBlanc, L.A. (2003) Functional Analysis of Problem Behaviour, Ch. 28 in W. O'Donohue, J.E. Fisher, S.C.Hayes (Eds) *Cognitive Behaviour Therapy: Applying Empirically Supported Techniques in Your Practice*. John Wiley & Sons, New Jersey.

Haynes, S.N. & Hayes O'Brien, W. (2000) *Principles and Practice of Behavioural Assessment*. Kluwer Academic / Plenum Publishers: Applied Clinical Psychology Series, London.

Iwata, B. A., Pace, G. M., Dorsey, M. F., Zarcone, J. R., Vollmer, T. R., Smith, R. G., et al. (1994). The functions of self-injurious behavior: An experimental epidemiological analysis. *Journal of Applied Behavior Analysis*, 27, 215–240.

Kuyken, W., Padesky, C.A., Dudley, R. (2009) *Collaborative Case Conceptualization: Working Effectively with Clients in Cognitive-Behavioral Therapy*. The Guildford Press, London.

Lerman, D. C., & Iwata, B. A. (1993). Descriptive and experimental analyses of variables maintaining self-injurious behavior. *Journal of Applied Behavior Analysis*, 26, 293–319.

Persons, J.B. (2008) *The Case Formulation Approach to Cognitive-Behavior Therapy*. The Guildford Press, New York.

Yoman, J. (2008) A Primer on Functional Analysis. *Cognitive and Behavioural Practice*, 15, 325-340.

ABC Model

Antecedents

Describe what was happening before the behavior occurred:

Antecedents can be external (e.g. events, other people's behavior) or internal (e.g. thoughts, memories, body sensations).

Behavior

Describe the problematic behavior:

The behavior could be something you do that is observable by others, or it could be something you do in your mind, such as worry or self-criticize.

Consequences

Describe what happened after the behavior:

Does the behavior (appear to) meet a need? Describe short-term and long-term effects.

ABC Model

Background

Client has previously been through drug rehab and has now presented to addiction services following a relapse.

Antecedents

Describe what was happening before the behavior occurred:

I was feeling lonely so I went to a party with my old friends.
I was having fun and dancing and enjoying myself, not wanting it to stop.
They started cutting lines.
I felt urges to use.
They offered me some, and encouraged me.

Antecedents can be external (e.g. events, other people's behavior) or internal (e.g. thoughts, memories, body sensations).

Behavior

Describe the problematic behavior:

Relapsing and using cocaine at a party.

The behavior could be something you do that is observable by others, or it could be something you do in your mind, such as worry or self-criticize.

Consequences

Describe what happened after the behavior:

Initially it felt good. It felt nice to be high. I felt accepted and part of the group.

I went on a binge and didn't stop or sleep for three days. I felt awful and regretted it. I spent money I didn't have. My ex-partner reported me to social services so I can't see my children.

Does the behavior (appear to) meet a need? Describe short-term and long-term effects.

Follow-up questions

If you're faced with similar circumstances again in the future, what would be some other ways of responding?
What might be some other ways of meeting that need?

ABC Model

Background

Non-verbal adult with learning disability has been attending a day center for three months.

Staff have reported instances of the client eating non-food items.

Antecedents

Describe what was happening before the behavior occurred:

11 am. Client sitting in a chair in a communal area during a singing session. Sitting on left side of the room, about 20 other clients.
Quite a noisy room. Brighly lit.
Normal temperature.
Group attention, not one to one.
Staff ratio of 1 to 5.
Client not the most engaged that we have seen her.

Antecedents can be external (e.g. events, other people's behavior) or internal (e.g. thoughts, memories, body sensations).

Behavior

Describe the problematic behavior:

Removes and eats her incontinence pad. Pulling it out and shredding pieces into smaller pieces, then eating the pieces.

The behavior could be something you do that is observable by others, or it could be something you do in your mind, such as worry or self-criticize.

Consequences

Describe what happened after the behavior:

Distractable, but returns to the behavior if attention not one to one.
Hypothesis: behavior positively reinforced by sensory stimulation, taste, texture, noise, distraction from noisy room.

Client sometimes constipated.
Staff concerned. Not sure how to manage behavior. Concern about health consequences of ingesting non-food.

Does the behavior (appear to) meet a need? Describe short-term and long-term effects.

Follow-up questions

Having observed the situation, what are your best guesses about what is triggering and/or reinforcing the behavior?

Given your hypothesis about the client's needs, how else might those needs be met?

ABC Model

Background

Client has a history of experiencing many years of domestic violence. She is engaged with a local mental health team who are concerned about her self-harming behavior.

Antecedents

Describe what was happening before the behavior occurred:

Argument with my partner triggered a flashback of my abusive ex-partner screaming at me before he beat me.

Felt scared and overwhelmed.

Flashback made me feel ashamed.

Feeling was so intense I felt like I couldn't cope.

Antecedents can be external (e.g. events, other people's behavior) or internal (e.g. thoughts, memories, body sensations).

Behavior

Describe the problematic behavior:

Ran away from partner and locked myself in the bathroom.

Started self-harming by cutting my thighs with a razor.

The behavior could be something you do that is observable by others, or it could be something you do in your mind, such as worry or self-criticize.

Consequences

Describe what happened after the behavior:

my need was to feel safe.

Short-term: It felt better to get out of that room and distract myself from the flashback – I felt relief. Pain gave me something else to focus on.

Long-term: This keeps happening and I don't know what to do. It makes me think there's something really wrong with me. my mental health nurse says I won't get trauma therapy until I show I'm ready by not cutting any more. my partner doesn't know why I ran and so he thinks I'm angry with him.

Does the behavior (appear to) meet a need? Describe short-term and long-term effects.

ABC Model

Background

Client has disclosed concern with episodes of 'comfort eating' but has found it difficult to describe the context for these episode and has little insight into why they might be happening.

Antecedents

Describe what was happening before the behavior occurred:

Friday 6pm.
At home alone. I had no plans and nothing to do.
Felt lonely and bored.
Walked through the kitchen on the way to the living room.

Antecedents can be external (e.g. events, other people's behavior) or internal (e.g. thoughts, memories, body sensations).

Behavior

Describe the problematic behavior:

Comfort eating – eating junk food all evening while I watch TV.

The behavior could be something you do that is observable by others, or it could be something you do in your mind, such as worry or self-criticize.

Consequences

Describe what happened after the behavior:

Short-term: food tastes good; I feels good while I'm eating it; it distracts me from feeling lonely.

Long-term: feel disgusted with myself; gain weight; feel awful; it makes me feel like there's no point in exercising.

Does the behavior (appear to) meet a need? Describe short-term and long-term effects.

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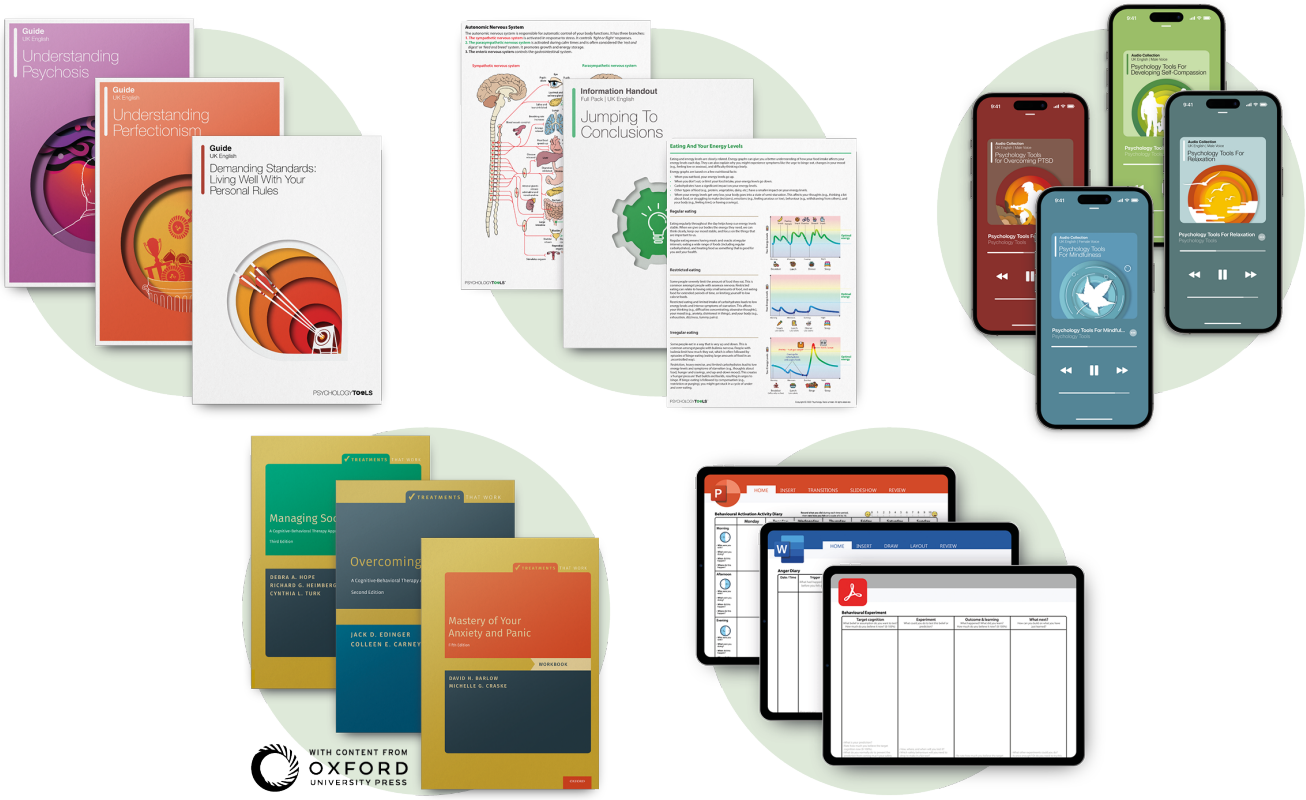

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