Extinction (EXT)

Brief Introduction
Extinction refers to an applied behavior analysis (ABA) procedure whereby a behavior that was formerly reinforced is no longer reinforced. Extinction can occur when teachers withhold identified reinforcers for a target behavior that was previously reinforced. This strategy is used to reduce or eliminate a challenging behavior. The extinction procedure relies on accurately identifying the function of the behavior and the consequences, or responses to the target behavior, which may be reinforcing its occurrence.

Description
The consequence that is believed to reinforce the occurrence of the target challenging behavior is removed or withdrawn, resulting in a decrease of the target behavior. An initial increase in the challenging behavior (often called an “extinction burst”) is common before the behavior is eventually extinguished. Extinction should not be used in isolation. Other practices that are often used in combination with extinction include differential reinforcement and functional behavior assessment.

EXT meets evidence-based criteria with 11 single-case design studies. According to the evidence-based studies, this intervention has been effective for preschoolers (3–5 years) to high school-age learners (15–18 years) with ASD. EXT can be used effectively to address communication, behavior, school-readiness, and adaptive skills.

Brief Adapted from


Matrix of EXT by Outcome and Age (years)

Extinction (EXT) Research Summary

<table>
<thead>
<tr>
<th>Ages</th>
<th>Skills/Intervention Goals</th>
<th>Settings</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>2–54 years</td>
<td>Behavior, social</td>
<td>School, clinic, home, residential facility</td>
<td>EBP</td>
</tr>
</tbody>
</table>

*The information found in the Research Summary table is updated yearly following a literature review of new research and this age range reflects information from this review.
Extinction (EXT)

Research


Extinction (EXT)


Extinction (EXT)

References


Extinction (EXT)


Extinction (EXT)
Steps for Implementation
Adapted from the NPDC

Step 1. Identifying the Interfering Behavior

A. Define problem behavior by focusing on:
   i. What the behavior looks like (topography),
   ii. How often the behavior occurs (frequency),
   iii. How intense the behavior is (intensity),
   iv. Where the behavior occurs (location), and
   v. How long the behavior lasts (duration).

Step 2. Identifying Data Collection Measures/Collecting Baseline Data

A. Identify data collection measures to assess the interfering behavior before implementing the intervention.

B. Gather baseline data on the interfering behavior.

Step 3. Determining the Function of the Behavior

A. Interview team members to identify the function of the interfering behavior.

B. Use direct observation methods to hypothesize the function of the interfering behavior. These may include:
   i. Completing A-B-C data charts (antecedent, behavior, consequence)
   ii. Describing anecdotal observations (running log of behavior)
   iii. Completing functional analysis to test the proposed function of the behavior

C. Identify the function of the behavior as one of the following:
   i. Securing attention,
   ii. Accessing tangible items,
   iii. Escaping/avoiding a task or situation, and/or
   iv. Sensory reinforcement

Step 4. Creating an Intervention Plan

A. Clearly write out extinction procedures (when the student does __X__, we will respond by doing __Y__) by:
   i. preparing a list of possible learner responses to the intervention
   ii. determining appropriate teacher/staff responses

B. Describe other procedures that will be incorporated with the extinction procedure.
Extinction (EXT)

C. Define extinction procedures to be used, such as:
   i. ignoring the behavior,
   ii. removing reinforcing items or activities,
   iii. disallowing escape from non-preferred situations, or
   iv. preventing sensory feedback from occurring.

D. Make a safety plan in case of extinction burst (when behaviors get worse before they get better).

E. Discuss the intervention with all adults who are with the learner with ASD on a regular basis.

F. Explain the intervention procedures to other students who are in close proximity to the learner with ASD.

Step 5. Implementing the Intervention

A. Wait for the behavior to occur and respond by:
   i. planned ignoring,
   ii. denied access,
   iii. escape extinction, and/or
   iv. sensory extinction.

B. Promote a replacement behavior using a complementary intervention approach.

C. Continue to respond as planned for the duration of behavior.

Step 6. Collecting Outcome Data

A. Collect outcome data that focus on:
   i. what the behavior looks like (topography),
   ii. how often the behavior occurs (frequency),
   iii. where the behavior occurs (location),
   iv. how intense the behavior is (intensity), and
   v. how long the behavior lasts (duration).

B. Collect data in the setting where the behavior occurs.

C. Compare intervention data to baseline data to determine the effectiveness of the intervention.
Extinction (EXT)

Step 7. Reviewing the Intervention

A. Discuss results with all team members to determine its effectiveness.

B. Modify the intervention plan if the learner continues to exhibit the interfering behavior by:
   i. changing the way team members respond,
   ii. changing the length of time they ignore or respond,
   iii. expanding the plan to other settings,
   iv. having other team members implement the intervention plan, and/or
   v. adapting the plan to new behaviors that may have arisen.

C. Continue to collect data at least weekly to determine the effectiveness of the intervention.

D. Identify new interfering behaviors as they arise.