



Autism Focused Intervention
Resources & Modules

EXT

EBP BRIEF PACKET: EXTINCTION

UNC Frank Porter Graham Child Development Institute
Autism Focused Intervention Resources & Modules
Morin, K., & AFIRM Team, Updated 2024



**The National Professional
Development Center** on Autism



**FRANK PORTER GRAHAM
CHILD DEVELOPMENT INSTITUTE**

OVERVIEW OF CONTENT

1. **Table of EXT Contents:** This list details the specific EXT resources that apply to Extinction.
2. **What is EXT:** A quick summary of salient features of Extinction, including what it is, who it can be used with, what skills it has been used with, and settings for instruction.
3. **Evidence-base:** The evidence-base details the National Clearinghouse on Autism Evidence and Practice (NCAEP) criteria for inclusion as an evidence-based practice and the specific studies that meet the criteria for Extinction.
4. **Planning Checklist:** This checklist details the steps for planning for Extinction, including what prerequisite learning of practices are needed, collecting baseline data of the interfering behavior if needed, and what materials/resources are needed.
5. **Other Resources:** Other resources may include decision trees, checklists, and/or template forms that will support the use of Extinction.
6. **Step-by-Step Guide:** Use this guide as an outline for how to plan for, use, and monitor Extinction. Each step includes a brief description as a helpful reminder while learning the process.
7. **Implementation Checklist:** Use this checklist to determine if Extinction are being implemented as intended.
8. **Monitoring Progress Checklist:** Use this form as a method for collecting and analyzing data to determine if the learner on the spectrum is making progress towards the interfering behavior.
9. **Tip Sheet for Professionals:** Use this tip sheet, intended for professionals working with learners on the spectrum, as a supplemental resource to help provide basic information about Extinction.
10. **Parent Guide:** Use this guide intended for parents or family members of learners on the spectrum to help them understand basic information about Extinction and how it is being used with their child.
11. **Additional Resources:** This list provides additional information for learning more about Extinction as well as resources.
12. **CEC Standards:** This list details the specific CEC standards that apply to Extinction.
13. **Glossary:** This glossary contains key terms that apply specifically to Extinction.
14. **References:** This list details the specific references used for developing this EXT module in numerical order.



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EXTINCTION

WHAT IS EXT?

Extinction is used to decrease or eliminate interfering behaviors by withholding the consequences that are maintaining them. The maintaining consequences are identified through a functional behavior assessment which identifies the function of the interfering behavior and the consequences that are serving to reinforce it.

Combination with Other Procedures: Extinction's effectiveness is usually maximized when it is combined with other procedures, such as Antecedent-Based Intervention (ABI) or Differential Reinforcement of Alternative (DRA) behaviors. Using Extinction in combination with these procedures may also reduce the likelihood that the learner will experience some of the negative side effects that can be associated with extinction.

EVIDENCE-BASE:

Based upon the 2020 systematic review conducted by the National Clearinghouse on Autism Evidence and Practice (NCAEP), Extinction is a focused intervention that meets evidence-based practice criteria with 25 single case design studies. Extinction has been effective for early intervention (0-2), preschoolers (3-5 years), elementary school learners (6-11 years), middle school learners (12-14 years), and high schoolers (15-18 years) on the spectrum. Studies included in the 2020 EBP report (Steinbrenner et al., 2020) detail how Extinction can be used to effectively address the following outcomes for an interfering behavior: adaptive/self-help, behavior, communication, joint attention, school readiness, and social.

HOW IS EXT BEING USED?

Extinction can be used by a variety of professionals, including teachers, special educators, therapists, paraprofessionals, and early interventionists in educational and community-based environments. Parents and family members also can use Extinction in the home.

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EVIDENCE-BASE

The National Clearinghouse on Autism Evidence and Practice has adopted the following criteria to determine if a practice is evidence-based. The 2020 EBP report (Steinbrenner et al., 2020) provides more information about the systematic review process.

Efficacy must be established through high-quality, peer-reviewed research in scientific journals using:

- At least 2 randomized or quasi-experimental group design studies, or
- At least 5 single subject/case design studies, or a
- Combination of evidence of 1 randomized or quasi-experimental group design study and 3 single subject/case design studies

OVERVIEW:

Based upon the 2020 systematic review conducted by the National Clearinghouse on Autism Evidence and Practice (NCAEP), Extinction is a focused intervention that meets evidence-based practice criteria with 25 single case design studies. Extinction has been effective for early intervention (0-2), preschoolers (3-5 years), elementary school learners (6-11 years), middle school learners (12-14 years), and high schoolers (15-18 years) on the spectrum. Studies included in the 2020 EBP report (Steinbrenner et al., 2020) detail how Extinction can be used to effectively address the following outcomes for an interfering behavior: adaptive/self-help, behavior, communication, joint attention, school readiness, and social.

In the table below, the instructional outcomes identified by the evidence base are shown by age of participants.

Age	Adaptive	Behavior	Comm- unication	Joint Attention	School Readiness	Social
0-2	Yes					
3-5		Yes	Yes		Yes	Yes
6-11		Yes	Yes		Yes	Yes
12-14		Yes	Yes	Yes	Yes	Yes
15-18		Yes	Yes			

EARLY INTERVENTION (0-2 YEARS):

Bui, L. T. D., Moore, D. W., & Anderson, A. (2014). Using escape extinction and reinforcement to increase eating in a young child with autism. *Behaviour Change*, 30(1), 48-55.
<https://doi.org/10.1017/bec.2013.5>

PRESCHOOL (3-5 YEARS):

- *Chezan, L., Drasgow, E., Legg, J., & Hollborn, A. (2016). Effects of conditional discrimination training and choice opportunities on manding for two young children with Autism Spectrum Disorder and language delays. *Journal of Developmental and Physical Disabilities*, 28(4), 557-579.
<https://doi.org/10.1007/s10882-016-9493-1>
- Drasgow, E., Martin, C. A., Chezan, L. C., Wolfe, K., & Halle, J. W. (2016). Mand training: An examination of response-class structure in three children with autism and severe language delays. *Behavior Modification*, 40(3), 347-76. <https://doi.org/10.1177/0145445515613582>
- Gale, C. M., Eikeseth, S., & Rudrud, E. (2011). Functional assessment and behavioural intervention for eating difficulties in children with autism: A study conducted in the natural environment using parents and ABA tutors as therapists. *Journal of Autism and Developmental Disorders*, 41(10), 1383-1396.
<https://doi.org/10.1007/s10803-010-1167-8>
- *Kodak, T., Paden, A., & Dickes, N. (2012). Training and generalization of peer-directed mands with non-vocal children with autism. *The Analysis of Verbal Behavior*, 28(1), 119-24.
- Kuhn, S. A. C., Lerman, D. C., Vorndran, C. M., & Addison, L. (2006). Analysis of factors that affect responding in a two-response chain in children with developmental disabilities. *Journal of Applied Behavior Analysis*, 39(3), 263-280. <https://doi.org/10.1901/jaba.2006.118-05>
- *Reeves, L. M., Umbreit, J., Ferro, J. B., & Liaupsin, C. J. (2017). The role of the replacement behavior in function-based intervention. *Education and Training in Autism and Developmental Disabilities*, 52(3), 305-316. <https://doi.org/10.2307/26420402>
- Rispoli, M., Camargo, S., Machalicek, W., Lang, R., & Sigafos, J. (2014). Functional communication training in the treatment of problem behavior maintained by access to rituals. *Journal of Applied Behavior Analysis*, 47(3), 580-93. <https://doi.org/10.1002/jaba.130>
- *Seiverling, L., Williams, K., Sturmey, P., & Hart, S. (2012). Effects of behavioral skills training on parental treatment of children's food selectivity. *Journal of Applied Behavior Analysis*, 45(1), 197-203.
<https://doi.org/10.1901/jaba.2012.45-197>
- Valentino, A. L., Shillingsburg, M. A., Call, N. A., Burton, B., & Bowen, C. N. (2011). An investigation of extinction-induced vocalizations. *Behavior Modification*, 35(3), 284-298. <https://doi.org/10.1177/0145445511398412>

ELEMENTARY SCHOOL (6-11 YEARS):

- *Chezan, L., Drasgow, E., Legg, J., & Hollborn, A. (2016). Effects of conditional discrimination training and choice opportunities on manding for two young children with Autism Spectrum Disorder and language delays. *Journal of Developmental and Physical Disabilities*, 28(4), 557-579.
<https://doi.org/10.1007/s10882-016-9493-1>
- Falcomata, T. S., Hoffman, K. J., Gainey, S., Muething, C. S., & Fienup, D. M. (2013). A preliminary evaluation of reinstatement of destructive behavior displayed by individuals with autism. *The Psychological Record*, 63(3), 453-466. <https://doi.org/10.11133/j.tpr.2013.63.3.004>
- *Grow, L. L., Kelley, M. E., Roane, H. S., & Shillingsburg, M. A. (2008). Utility of extinction-induced response variability for the selection of mands. *Journal of Applied Behavior Analysis*, 41(1), 15-24.
<https://doi.org/10.1901/jaba.2008.41-15>
- *Hagopian, L. P., Kuhn, S. A. C., Long, E. S., & Rush, K. S. (2005). Schedule thinning following communication training: Using competing stimuli to enhance tolerance to decrements in reinforcer density. *Journal of Applied Behavior Analysis*, 38(2), 177-193. <https://doi.org/10.1901/jaba.2005.43-04>
- *Kodak, T., Paden, A., & Dickes, N. (2012). Training and generalization of peer-directed mands with non-vocal children with autism. *The Analysis of Verbal Behavior*, 28(1), 119-24.



- Leon, Y., Lazarchick, W. N., Rooker, G. W., & DeLeon, I. G. (2013). Assessment of problem behavior evoked by disruption of ritualistic toy arrangements in a child with autism. *Journal of Applied Behavior Analysis*, 46(2), 507-11. <https://doi.org/10.1002/jaba.41>
- Patel, M. R., Piazza, C. C., Kelly, M. L., Ochsner, C. A., & Santana, C. M. (2001). Using a fading procedure to increase fluid consumption in a child with feeding problems. *Journal of Applied Behavior Analysis*, 34(3), 357-360. <https://doi.org/10.1901/jaba.2001.34-357>
- Reeves, L. M., Umbreit, J., Ferro, J. B., & Liaupsin, C. J. (2013). Function-based intervention to support the inclusion of students with autism. *Education and Training in Autism and Developmental Disabilities*, 48(3), 379-391.
- *Reeves, L. M., Umbreit, J., Ferro, J. B., & Liaupsin, C. J. (2017). The role of the replacement behavior in function-based intervention. *Education and Training in Autism and Developmental Disabilities*, 52(3), 305-316. <https://doi.org/10.2307/26420402>
- Schmidt, J. D., Bednar, M. K., Willse, L. V., Goetzel, A. L., Concepcion, A., Pincus, S. M., Hardesty, S. L., & Bowman, L. G. (2017). Evaluating treatments for functionally equivalent problem behavior maintained by adult compliance with mands during interactive play. *Journal of Behavioral Education*, 26(2), 169-187. <https://doi.org/10.1007/s10864-016-9264-1>
- *Seiverling, L., Williams, K., Sturmey, P., & Hart, S. (2012). Effects of behavioral skills training on parental treatment of children's food selectivity. *Journal of Applied Behavior Analysis*, 45(1), 197-203. <https://doi.org/10.1901/jaba.2012.45-197>
- Tereshko, L., & Sottolano, D. (2017). The effects of an escape extinction procedure using protective equipment on self-injurious behavior. *Behavioral Interventions*, 32(2), 152-159. <https://doi.org/10.1002/bin.1475>
- Thompson, R. H., Fisher, W. W., Piazza, C. C., & Kuhn, D. E. (1998). The evaluation and treatment of aggression maintained by attention and automatic reinforcement. *Journal of Applied Behavior Analysis*, 31(1), 103-116. <https://doi.org/10.1901/jaba.1998.31-103>
- Waters, M. B., Lerman, D. C., & Hovanetz, A. N. (2009). Separate and combined effects of visual schedules and extinction plus differential reinforcement on problem behavior occasioned by transitions. *Journal of Applied Behavior Analysis*, 42(2), 309-313. <https://doi.org/10.1901/jaba.2009.42-309>

MIDDLE SCHOOL (12-14 YEARS):

- Banda, D. R., McAfee, J. K., & Hart, S. L. (2009). Decreasing self-injurious behavior in a student with autism and Tourette syndrome through positive attention and extinction. *Child & Family Behavior Therapy*, 31(2), 144-156. <https://doi.org/10.1080/07317100902910604>
- *Hagopian, L. P., Kuhn, S. A. C., Long, E. S., & Rush, K. S. (2005). Schedule thinning following communication training: Using competing stimuli to enhance tolerance to decrements in reinforcer density. *Journal of Applied Behavior Analysis*, 38(2), 177-193. <https://doi.org/10.1901/jaba.2005.43-04>
- *Lalli, J. S., Casey, S., & Kates, K. (1995). Reducing escape behavior and increasing task completion with functional communication training, extinction and response chaining. *Journal of Applied Behavior Analysis*, 28(3), 261-268. <https://doi.org/10.1901/jaba.1995.28-261>
- Mace, F. C., Pratt, J. L., Prager, K. L., & Pritchard, D. (2011). An evaluation of three methods of saying "no" to avoid an escalating response class hierarchy. *Journal of Applied Behavior Analysis*, 44(1), 83-94. <https://doi.org/10.1901/jaba.2011.44-83>
- *Reeves, L. M., Umbreit, J., Ferro, J. B., & Liaupsin, C. J. (2017). The role of the replacement behavior in function-based intervention. *Education and Training in Autism and Developmental Disabilities*, 52(3), 305-316. <https://doi.org/10.2307/26420402>
- *Tiger, J. H., Fisher, W. W., Toussaint, K. A., & Kodak, T. (2009). Progressing from initially ambiguous functional analyses: Three case examples. *Research in Developmental Disabilities*, 30(5), 910-926. <https://doi.org/10.1016/j.ridd.2009.01.005>



HIGH SCHOOL (15-18 YEARS):

- *Grow, L. L., Kelley, M. E., Roane, H. S., & Shillingsburg, M. A. (2008). Utility of extinction-induced response variability for the selection of mands. *Journal of Applied Behavior Analysis*, 41(1), 15-24. <https://doi.org/10.1901/jaba.2008.41-15>
- Kuhn, D. E., Hardesty, S. L., & Sweeney, N. M. (2009). Assessment and treatment of excessive straightening and destructive behavior in an adolescent diagnosed with autism. *Journal of Applied Behavior Analysis*, 42(2), 355-360. <https://doi.org/10.1901/jaba.2009.42-355>
- *Lalli, J. S., Casey, S., & Kates, K. (1995). Reducing escape behavior and increasing task completion with functional communication training, extinction and response chaining. *Journal of Applied Behavior Analysis*, 28(3), 261-268. <https://doi.org/10.1901/jaba.1995.28-261>
- *Tiger, J. H., Fisher, W. W., Toussaint, K. A., & Kodak, T. (2009). Progressing from initially ambiguous functional analyses: Three case examples. *Research in Developmental Disabilities*, 30(5), 910-926. <https://doi.org/10.1016/j.ridd.2009.01.005>

Notes: * denotes the study has participants in at least two age ranges
Bold denotes new studies since 2011 (2012 till 2017)



FUNCTIONAL BEHAVIOR ASSESSMENT

Learner's Name: _____ **Date/Time:** _____

Observer(s): _____

Interfering Behavior: _____

Directions: Complete this checklist to determine the function of the interfering behavior.

DEFINE THE INTERFERING BEHAVIOR:

1. Where does the behavior occur?
2. With whom does the behavior occur?
3. When does the behavior occur?
4. What activity is the learner participating in when the behavior occurs?
5. How long has the behavior been interfering with the learner's development and learning?
6. Does the behavior involve aggression or damage to property?
7. What are other students and adults doing when the behavior occurs?
8. What is the proximity of other students and adults when the behavior occurs?
9. What is the noise level of in the environment when the behavior occurs?
10. Number of individuals in the area:
11. Other environmental conditions:
12. Does the behavior occur because the learner is being asked to demonstrate a skill that he/she cannot perform (e.g., talking with peer, completing a difficult math assignment
13. Does the learner exhibit other behaviors immediately before the behavior occurs (antecedents)?
14. What happens immediately after the interfering behavior occurs (consequences)?



DETERMINE THE FUNCTION OF THE BEHAVIOR:

15. To get or obtain:

- ☐ Attention
- ☐ Food
- ☐ Toys
- ☐ Hugs
- ☐ Sensory stimulation
- ☐ Other: _____

To escape or avoid:

- ☐ Attention
- ☐ Difficult task/activity
- ☐ Undesirable activity
- ☐ Social stimulation
- ☐ Sensory stimulation
- ☐ Other: _____

DEVELOP HYPOTHESIS STATEMENT:

16. Antecedents & Consequences:

17. Interfering behavior:

18. Function of behavior:

HYPOTHESIS STATEMENT:



DATA COLLECTION: A-B-C

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Interfering Behavior: _____

Directions: Collect data what happens directly before the behavior (antecedent), describe the behavior, and determine what happens directly after the behavior (consequence).

Date	Start Time	Stop Time	Antecedent	Behavior	Consequence

ANECDOTAL NOTES: _____



PROMPTING HIERARCHY

Learner's Name: _____ **Date/Time:** _____

Observer(s): _____

Interfering Behavior: _____

Directions: Use this checklist to determine order of prompts based on the learner's needs and the target skill.

PROMPTS:

- **Gestural** – a physical movement that provides the learner with information about how to perform the target skill/behavior
- **Independent** – the learner can perform the target skill/behavior without assistance or support from others
- **Model** – demonstrating the correct way to perform the target skill/behavior for the learner
- **Physical** – hands-on assistance given to the learner to support them to perform the target skill/behavior
- **Verbal** – any spoken words direct to the learner to help them perform the target skill/behavior
- **Visual** – a picture, icon, or physical object used to provide the learner with information on how to perform the target skill/behavior

Level	Prompt	Instructions
Level 1	Independent	
Level 2		
Level 3		
Level 4		
Level 5		
Level 6		



CRISIS PLAN

Learner's Name: _____ **Date/Time:** _____

Observer(s): _____

Interfering Behavior: _____

Directions: Complete this worksheet to develop a crisis plan for the learner. Have a safe place ready to bring other students if the learner becomes aggressive towards their peers (e.g., another classroom, a specials room, the library, etc.). Ensure at least one person in the room is certified in crisis intervention. ***Be sure to check with your organization for specific policies on developing a crisis plan.***

DEFINE THE INTERFERING BEHAVIOR:

Define the interfering behavior:

What are the setting events?

What are the antecedents (triggers for the learner)?

PROCEDURE TO FOLLOW IF BEHAVIOR OCCURS:

1.

2.

3.

4.

5.



WHO WILL DO WHAT IF BEHAVIOR OCCURS (BE SPECIFIC):

1.

2.

3.

4.

5.

LEARNER'S RESPONSIBILITY:

1.

2.

3.

IF NEEDED, REPORTING PROCEDURE:

1.

2.

3.



VARIABLES THAT MAY AFFECT EXT

Learner's Name: _____ **Date/Time:** _____

Observer(s): _____

Interfering Behavior: _____

Directions: Identify which variables are present to determine if using Extinction will be effective. You may need to use extinction for a longer period of time before the interfering behavior is reduced or eliminated.

REINFORCEMENT SCHEDULE:

Behaviors are either reinforced on a continuous basis (i.e., every time the behavior occurs it is reinforced) or on an intermittent basis (i.e., sometimes the behavior is reinforced and sometimes it is not reinforced). Behaviors that are reinforced on an intermittent basis will usually take longer to extinguish than those that are reinforced on a continuous basis.

Brad spits on his teacher whenever she tries to help him write his name. Every time he spits, she stops helping him and he no longer has to write his name. After deciding to implement an extinction procedure, she puts on a rain poncho over her clothes and ignores his spitting. Brad quickly realizes that his spitting no longer results in escape from work, and he stops engaging in the behavior.

REINFORCEMENT HISTORY:

Behaviors that have been reinforced for a long time will generally take longer to extinguish than those that have just started receiving reinforcement.

Omar is just beginning third grade, and he has a habit of yelling out answers in class. His third-grade teacher would rather he raise his hand to speak but none of his previous teachers have ever required him to engage in this behavior. As a result of being reinforced for yelling out answers for the past several years, it takes several weeks for this behavior to be extinguished once his current teacher implements an extinction procedure.

EXTINCTION HISTORY:

Sometimes an extinction procedure is attempted but is later discontinued. When this happens and the interfering behavior continues to be reinforced, the behavior will be more resistant to extinction in the future. The more times extinction is attempted unsuccessfully, the more resistant the behavior will be to extinction.

Liam often grabs toys out of his peers' hands when he wants to play with them. His previous teachers have tried using extinction to reduce this behavior, but they have always had to discontinue the procedure because Liam would start hitting the other students in the class when he wasn't allowed access to the toy he wanted. His current teacher would like to use an extinction procedure again, but she realizes that it will take a while for his behavior to be extinguished given that extinction was attempted unsuccessfully several times in the past.

RESPONSE EFFORT:

Interfering behaviors that require more effort to emit may be easier to extinguish than those that take less effort to emit.

Mrs. Thompson is implementing an extinction procedure with her student, Alana, who frequently runs from Mrs. Thompson in order to gain attention. Because running requires a higher level of effort, Mrs. Thompson found that the behavior was extinguished quickly.



PLANNING CHECKLIST

Learner's Name: _____ **Date/Time:** _____

Observer(s): _____

Interfering Behavior: _____

Directions: Complete this checklist to determine if this is an appropriate practice to use with the learner on the spectrum as well as if EXT is ready to be implemented.

INTERFERING BEHAVIOR:

Define the interfering behavior:

☐ Has baseline data and/or a functional behavior assessment been collected through direct observation of the learner?

DETERMINE THE FUNCTION OF THE BEHAVIOR:

To get or obtain:

- ☐ Attention
- ☐ Food
- ☐ Toys
- ☐ Hugs
- ☐ Sensory stimulation
- ☐ Other: _____

To escape or avoid:

- ☐ Attention
- ☐ Difficult task/activity
- ☐ Undesirable activity
- ☐ Social stimulation
- ☐ Sensory stimulation
- ☐ Other: _____

What are the maintaining consequences?

DETERMINE IF APPROPRIATE:

☐ Is this selected practice appropriate for the learner's interfering behavior?

☐ Is the behavior to be extinguished one that is likely to be imitated by other learners in the class?

☐ Does the student engage in self-injurious, destructive, or aggressive behavior when frustrated or angry?



- ☐ Are there times when it will not be feasible to withhold the maintaining consequence for the behavior?
- ☐ Are there people in the learner's environment who are not willing to implement extinction?

If you checked off any of the above questions, then Extinction may not be appropriate in your situation. Please select a different evidence-based practice to use.

- ☐ Has the behavior been reinforced on an intermittent basis (i.e., sometimes the behavior is reinforced and sometimes it is not reinforced)?
- ☐ Has the behavior been reinforced for a long time (e.g., months or years)?
- ☐ Has extinction been attempted unsuccessfully in the past for this behavior?
- ☐ Is the behavior relatively easy for the learner to emit?

If you checked off any of the above questions, you may need to use Extinction for a longer period of time before the interfering behavior is reduced or eliminated.

SELECT REPLACEMENT BEHAVIOR:

SELECT ADDITIONAL EBPS:

- ☐ Antecedent-Based Interventions
- ☐ Differential Reinforcement
- ☐ Functional Communication Training
- ☐ Reinforcement (non-contingent)
- ☐ Response Interruption & Redirection
- ☐ Visual Supports
- ☐ Other: _____



EXT SPECIFIC PLANNING:

- ☐ Has a Functional Behavior Assessment been conducted to determine the function of the behavior?
- ☐ Has a replacement behavior been selected?
- ☐ Has a prompting plan been developed?
- ☐ Have additional EBPs been selected?
- ☐ Have variables been identified that may affect using Extinction?
- ☐ Has a crisis plan been developed?
- ☐ Are all team members trained?

ANECDOTAL NOTES:



DATA COLLECTION: BEHAVIOR

Learner's Name: _____ **Date/Time:** _____

Observer(s): _____

Interfering Behavior: _____

Replacement Behavior: _____

Directions: Each time the behavior occurs, enter the date and place a check mark under "Frequency." If taking duration data, record how long the behavior occurs under "Duration." For intensity, circle a number that corresponds to the intensity level of the behavior. Also, check 'Yes' to indicate if Reinforcement (R) was withheld and if the learner used the replacement behavior (RB). Circle the prompt that was used to encourage the learner to use the replacement behavior.

Date	Frequency	Duration	Intensity	Withheld R?	Used RB?	Prompt Level
			1 2 3	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	P V M G I
			1 2 3	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	P V M G I
			1 2 3	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	P V M G I
			1 2 3	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	P V M G I
			1 2 3	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	P V M G I
			1 2 3	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	P V M G I
			1 2 3	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	P V M G I
			1 2 3	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	P V M G I
			1 2 3	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	P V M G I
			1 2 3	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	P V M G I

Prompt Key: V = Verbal Prompt; G = Gestural Prompt; M = Model; P = Physical Prompt; I = Independently

Intensity Scale Key:

3 = behavior is so severe that it significantly interferes with teaching and learning; the teacher is unable to deliver instruction due to the behavior and/or the behavior results in harm to self or others

2 = the behavior is distracting to others, but the teacher is still able to deliver instruction

1 = the behavior has a minimal effect on learning and isn't distracting to others



MONITORING PROGRESS CHECKLIST

Learner's Name: _____ **Date/Time:** _____

Observer(s): _____

Interfering Behavior: _____

Replacement Behavior: _____

Directions: Complete this checklist to determine if the learner is making progress with using the replacement behavior with Extinction.

MONITORING PROGRESS:

- ☐ Is the interfering behavior measurable and observable? Does it clearly state what the interfering behavior is and when it occurs?
- ☐ Did a Functional Behavior Assessment (FBA) indicate all the functions of the behavior?
- ☐ Is the use of Extinction addressing the function of the interfering behavior?
- ☐ Are team members, or peers if applicable, withholding reinforcement for interfering behaviors?
- ☐ Has the replacement behavior been selected?
- ☐ Does the function of the replacement behavior match the function of the interfering behavior?
- ☐ Are team members providing the learner with reinforcement for using the replacement behavior?
- ☐ Has data been collected to determine if the learner is making progress?
- ☐ Is the learner displaying an extinction burst?
- ☐ Has the interfering behavior spontaneously recovered?
- ☐ Has enough time been devoted to using Extinction (frequency, intensity, and/or duration)?
- ☐ Was Extinction implemented with fidelity?
- ☐ Does the learner require additional adaptations/modifications/supports? Such as visual supports or a communication device?

STEP-BY-STEP GUIDE

This step-by-step practice guide outlines how to plan for, use, and monitor Extinction.

BEFORE YOU BEGIN...

Each of the following points is important to address so that you can be sure Extinction is likely to address the interfering behavior of your learner on the spectrum.



HAVE YOU FOUND OUT MORE INFORMATION ABOUT...?

- ☐ Identifying the interfering behavior...?
- ☐ Collecting baseline data through direct observation...?
- ☐ Establishing a target goal or outcome that clearly states when the behavior will occur, what the target goal or outcome is, and how team members and/or observers will know when the skill is mastered...?

If the answer to any of the above questions is 'No,' review the process of how to select an appropriate EBP (<https://afirm.fpg.unc.edu/selecting-EBP>).

For more information about Extinction, please visit <https://afirm.fpg.unc.edu/>.

Keep in mind that **Extinction** can be used to decrease inappropriate behaviors and increase appropriate behaviors when combined with other evidence-based practices.

STEP 1: PLANNING FOR EXT

The planning step details the initial steps and considerations involved to prepare for using Extinction with a learner on the spectrum.

1.1 Conduct a Functional Behavior Assessment

Before implementing extinction, it is critically important to first determine the function of the interfering behavior and the maintaining consequence(s) by conducting a functional behavior assessment (FBA).

Note: Check out the FBA module for more information about Functional Behavior Assessment.

Use the **Functional Behavior Assessment** sheet to help you determine the function of an interfering behavior.

1.2 Identify response interruption and redirection procedures

Extinction is not appropriate in all cases. Before implementing extinction, ask yourself the following questions:

- Is the behavior to be extinguished one that is likely to be imitated by other learners in the class?
- Does the student engage in self-injurious, destructive, or aggressive behavior when frustrated or angry?
- Are there times when it will not be feasible to withhold the maintaining consequence for the behavior?
- Are there people in the learner's environment who are not willing to implement extinction?

If the answer is "yes" to any of these questions, then extinction may not be appropriate in your situation. Please select a different evidence-based practice to use.

1.3 Select an appropriate replacement behavior

Teaching the learner, a replacement behavior can increase the effectiveness of extinction and reduce the likelihood that some of the negative side effects of extinction, such as extinction-induced aggression, will occur. To be effective, it is important that the replacement behavior selected serve the same function as the interfering behavior.

Note: For more information, check out the Differential Reinforcement and Functional Communication Training modules.

1.4 Select prompt type for replacement behavior

Prompts are used to teach the learner to use the replacement behavior. The prompting hierarchy includes physical prompts, modeling, gestural prompts, and verbal prompts, with physical prompts typically being the most intrusive and verbal prompts being the least intrusive. While the type of prompt used to teach the replacement behavior will vary depending on several variables, generally it is advisable to start with the most intrusive prompt that is appropriate and tolerated by the learner to minimize errors. Once the learner begins using the skill, the prompts should be faded to promote independence.

1.5 Identify additional EBPs

Depending on the interfering behavior, it may be necessary to use other evidence-based practices when implementing extinction. Some evidence-based practices that are appropriate include the following:

- Non-contingent reinforcement (NCR): Reinforcement is delivered at specified intervals independent of the learner's behavior.
- Response Interruption & Redirection: The behavior is interrupted and/or redirected to a more appropriate behavior.
- Visual Supports: Cues that provide the learner with information about a routine, activity, behavioral expectation, or skill demonstration.

Note: For more information, check out the Reinforcement, Response Interruption/Redirection, and Visual Supports modules.

1.6 Identify variables that affect EXT

Certain variables may influence how long it takes for an extinction procedure to cause a reduction in behavior. Identifying which variables are present in your own situation can provide some information about whether the behavior you are trying to reduce will be resistant to extinction. The variables to consider include:

- Reinforcement schedule: Behaviors that are reinforced on an intermittent basis (i.e., sometimes the behavior is reinforced and sometimes it is not reinforced) will usually take longer to extinguish than those that are reinforced on a continuous basis (i.e., every time the behavior occurs it is reinforced).
- Reinforcement history: Behaviors that have been reinforced for a long time will generally take longer to extinguish than those that have just started receiving reinforcement.
- Extinction history: The more times extinction is attempted unsuccessfully, the more resistant the behavior will be to extinction.
- Response effort: Interfering behaviors that require more effort to emit may be easier to extinguish than those that take less effort to emit.

1.7 Create a crisis plan

Sometimes extinction will cause the learner to engage in aggressive behaviors towards him/herself or others. To prepare for the possibility of extinction-produced aggression, teachers should consider the following:

- Plan to have additional staff present to help if extinction-produced aggression occurs.
- Have a safe place ready to bring other students to if the target student becomes aggressive towards his or her peers. Examples include another classroom, a specials room, or the library.
- Ensure at least one person in the room is certified in crisis intervention.
- Identify which behaviors are not acceptable or that pose a safety threat and stop the extinction procedure if these behaviors occur.

1.8 Identify train team members and others

When implementing extinction, it is very important that reinforcement for the interfering behavior is withheld from everyone in the learner's environment. The following is a list of people who may need to be taught how to implement the extinction procedure:

- Teachers, including special education, general education, physical education, and specials teachers (e.g., music, library, computer, etc.)
- Related service personnel, including speech, occupational, and physical therapists.
- Other staff, including lunchroom workers, custodians, and others
- Paraprofessionals
- Peers

STEP 2: USING EXT

This step details the process of implementing Extinction with a learner on the spectrum.

2.1 Describe the intervention plan to the learner, if appropriate

If the learner is verbal and able to understand the intervention plan, including the extinction procedure and any other EBPs identified, sometimes it is helpful to describe this plan to the learner. Doing so may increase the effectiveness of the intervention.

2.2 Consistently withhold all reinforcers and maintaining reinforcers.

For extinction to be effective, it is important to withhold all sources of reinforcement for the interfering behavior. This means that all maintaining consequences identified through an FBA will need to be consistently withheld by all adults and peers in the learner's environment.

2.3 Prompt and reinforce the use of the replacement behavior

Use the prompt that was selected in Step 2 to prompt the use of the replacement behavior and provide reinforcement by giving the learner the consequence that was requested. For example, if the replacement behavior is raising a hand to request attention, then provide the learner with attention when he or she raises a hand.

Note: For more information on the different types of prompts and how to use them, see the Prompting module.

2.4 Gradually fade the use of prompts

After the learner begins to use the replacement behavior consistently, it is important to fade the use of prompts to promote independence. When fading prompts, continue to prompt the learner using the next to least intrusive prompt on the prompting hierarchy. While there is no set amount of time that should pass before a prompt is faded, it is important to fade prompts gradually.

Note: For more information on time delay and fading prompts, see the Prompting and Time Delay modules.

2.5 Expect extinction bursts, but do not reinforce them

Extinction bursts are an increase in the frequency, intensity, and/or duration of a behavior following the implementation of an extinction procedure. They occur very soon after an extinction procedure is implemented, and they are a sign that the function of the behavior was correctly identified. When extinction bursts occur, it is VERY important not to reinforce them. By continuing to withhold the reinforcement that is maintaining the behavior, the learner will eventually realize that the behavior no longer results in reinforcement and he or she will stop engaging in the behavior.

STEP 3: MONITORING EXT

The following step details how to monitor the use of Extinction with a learner on the spectrum and how to determine next steps based on the data.

3.1 Collect and analyze data

Collect and analyze the following data to determine if the learner is making progress:

- dimensions of the interfering behavior, including frequency, duration, and/or intensity
- use of the replacement behavior, including the prompting level needed

Use the **Behavior Data Collection** form to collect the frequency, duration, and intensity of behaviors.

3.2 Monitor the learner for signs of spontaneous recovery

Spontaneous recovery is the resurgence of an interfering behavior after the behavior has decreased or stopped occurring altogether. Like an extinction burst, the interfering behavior occurs even though it is not being reinforced, although the frequency, duration, and intensity of the behavior are usually much lower during spontaneous recovery. Additionally, these behaviors are also typically short-lived, if the extinction procedure remains in effect.

3.3 Continue to reinforce the use of the replacement behavior

In order to ensure the replacement behavior maintains over time, it is important to continue to reinforce the replacement behavior when the learner uses it; however, when the learner is using the replacement behavior independently, a delay to reinforcement can be introduced to teach the learner to wait. When introducing the delay to reinforcement, it is important to gradually increase the delay in order to decrease the possibility that the learner will engage in the interfering behavior again.

3.4 Determine next steps based on learner progress

If a learner is making progress based upon data collected, team members should continue to use the selected strategies.

If team members determine that the learner is not making progress, consider the following:

- Is the behavior well defined?
- Is the behavior measurable and observable?
- Did a functional behavior assessment (FBA) identify all functions and maintaining consequences of the behavior?
- Are the EBP strategies addressing the function of the interfering behavior?
- Are all adults and peers in the learner's environment withholding reinforcement for the interfering behaviors?
- Are team members providing the learner with reinforcement for engaging in the replacement behavior?
- Does the function of the replacement behavior match the function of the interfering behavior?

If these issues have been addressed and the learner on the spectrum continues not to show progress, consider selecting a different evidence-based practice to use with the learner on the spectrum.



IMPLEMENTATION CHECKLIST

BEFORE YOU START, HAVE YOU...?

- ☐ Identifying the interfering behavior...?
- ☐ Collecting baseline data through direct observation...?
- ☐ Establishing a target goal or outcome that clearly states when the behavior will occur, what the target goal or outcome is, and how team members and/or observers will know when the skill is mastered...?

If the answer to any of the above questions is 'No,' review the process of how to select an appropriate EBP (<https://afirm.fpg.unc.edu/selecting-EBP>).

Observation:		1	2	3	4	5
Date:						
Observer's Initials:						
STEP 1: PLANNING						
1.1	Conduct a functional behavior assessment					
1.2	Determine if EXT is appropriate					
1.3	Select an appropriate replacement behavior					
1.4	Select prompt for the replacement behavior					
1.5	Identify additional evidence-based practices					
1.6	Identify variables that may affect EXT					
1.7	Create and have a crisis plan in place in the event of learner aggression					
1.8	Identify and train team members and others					
STEP 2: USING						
2.1	Describe the plan to the learner, if appropriate					
2.2	Consistently withhold reinforcers and maintaining consequences					
2.3	Prompt and reinforce use of the replacement behavior					
2.4	Gradually fade prompts					
2.5	Give reinforcement					
STEP 3: MONITORING						
3.1	Collect and analyze data on interfering behavior and prompting					
3.2	Look for signs of spontaneous recovery					
3.3	Continue to reinforce use of the replacement behavior					
3.4	Determine next steps based on learner progress					

TIP SHEET FOR PROFESSIONALS

EXTINCTION ...

- Is an evidence-based practice for children and youth on the spectrum from 0-18 years old that can be implemented in multiple settings.
- Involves the following steps:
 - Identify an interfering behavior
 - Conduct a functional behavior assessment (FBA) to determine the function of the interfering behavior and the maintaining consequences
 - Consistently withhold the consequence that is maintaining the interfering behavior



TIPS:

- Conduct a FBA to identify the function of the identified interfering behavior and the consequences that are maintaining it.
- Select a replacement behavior to teach the learner using additional evidence-based practices.
- Withhold the consequences maintaining the interfering behavior and provide reinforcement for the alternative behavior.

WHY USE WITH LEARNERS ON THE SPECTRUM?

- EXT is designed to decrease or eliminate interfering behaviors.
- Team members can use extinction in conjunction with other evidence-based practices to teach learners a replacement behavior to obtain desired attention, objects, or activities in a more socially acceptable manner.
- EXT is cost-effective, efficient, easy to implement, and non-intrusive.

INSTRUCTIONAL OUTCOMES:

The evidence-base for Extinction supports its use to address the following outcomes, according to age range, in the table below:

Age	Adaptive	Behavior	Comm- unication	Joint Attention	School Readiness	Social
0-2	Yes					
3-5		Yes	Yes		Yes	Yes
6-11		Yes	Yes		Yes	Yes
12-14		Yes	Yes	Yes	Yes	Yes
15-18		Yes	Yes			

STEPS FOR IMPLEMENTING:

1. PLAN

- Conduct a functional behavior assessment
- Determine if EXT is appropriate
- Select an appropriate replacement behavior
- Select a prompt for the replacement behavior
- Identify additional evidence-based practices
- Identify variables that may affect EXT
- Create and have a crisis plan in place in the event of learner aggression
- Identify and train team members and others

2. USE

- Describe the plan to the learner, if appropriate
- Consistently withhold reinforcers and maintaining consequences
- Prompt and reinforce use of the replacement behavior
- Gradually fade prompts
- Expect extinction burst, but do not reinforce

3. MONITOR

- Collect data and analyze on interfering behavior and prompting
- Look for signs of spontaneous recovery
- Continue reinforcing use of the replacement behavior
- Determine next steps based on learner progress



Extinction EXT

This sheet was designed as a supplemental resource to provide basic information about Extinction for professionals working with learners on the spectrum.

For more information about this selected evidence-based practice, please visit <https://afirm.fpg.unc.edu/>.

PARENT'S GUIDE

WHAT IS EXT?

- Extinction is an evidence-based practice for children and youth on the spectrum from 0-18 years old.
- EXT involves (a) identifying an interfering behavior (e.g., a behavior that interferes with the learner's ability to interact and learn), (b) determining why the interfering behavior is occurring, and (c) consistently withholding any attention, object, or activity that the learner is trying to obtain when they engage in the interfering behavior.



WHY USE THIS EXT WITH MY CHILD?

- EXT can be used to decrease or eliminate interfering behaviors and, when used with other evidence-based practices, can be an effective way to teach learners how to obtain desired attention, objects, or activities in a more socially acceptable manner.
- Research studies have shown that extinction has been used effectively with early intervention, preschool, elementary, middle, and high school learners to address outcomes related to communication, behavior, school readiness, and adaptive skills.

Extinction EXT

This parent introduction to EXT was designed as a supplemental resource to help answer questions about Extinction.

To find out more about how this EXT is being used with your child, please talk with:

For more information about this selected evidence-based practice, please visit <https://afirm.fpg.unc.edu/>.

WHAT ACTIVITIES CAN I DO AT HOME?

- When your child engages in an interfering behavior, think of the events that happened immediately before and after the behavior occurred to try to determine why the child engaged in that behavior and what may be causing the behavior to reoccur in the future.
- Teach your child an appropriate behavior that would help him or her gain access to the same attention, object, or activity that they were trying to gain access to by engaging in the interfering behavior.
- Remember to praise your child and provide reinforcement when they engage in the more appropriate behavior. For example, if your child asks for a toy (appropriate behavior) rather than hitting to gain access to the toy (interfering behavior), then provide your child with the toy to reinforce the use of the appropriate behavior.



ADDITIONAL RESOURCES

BOOKS:

Tarbox, J., & Bermudex, T. L. (2017). Treating feeding challenges in autism: Turning the tables on mealtime. London: Elsevier/Academic Press

WEBSITES:

Educate Autism. (2017). Extinction Procedures. <http://www.educateautism.com/applied-behaviour-analysis/extinctionprocedure-aba.html>



CEC STANDARDS

INITIAL PRACTICE-BASED STANDARDS FOR EARLY INTERVENTIONISTS/EARLY CHILDHOOD (0-5 YEARS; CEC, 2020)

Standard 4: Assessment Processes

- 4.1 Understand the purposes of formal and informal assessment, including ethical and legal considerations, and use this information to choose developmentally, culturally, and linguistically appropriate, valid, reliable tools and methods that are responsive to the characteristics of the young child, family, and program.
- 4.2 Develop and administer informal assessments and/or select and use valid, reliable formal assessments using evidence-based practices, including technology, in partnership with families and other professionals.

Standard 6: Using Responsive and Reciprocal Interactions, Interventions, and Instruction

- 6.3 Engage in ongoing planning and use flexible and embedded instructional and environmental arrangements and appropriate materials to support the use of interactions, interventions, and instruction addressing developmental and academic content domains, which are adapted to meet the needs of each and every child and their family.
- 6.4 Promote young children's social and emotional competence and communication, and proactively plan and implement function-based interventions to prevent and address challenging behaviors.
- 6.7 Plan for, adapt, and improve approaches to interactions, interventions, and instruction based on multiple sources of data across a range of natural environments and inclusive settings.

INITIAL PRACTICE-BASED STANDARDS FOR (GRADES K-12; CEC, 2020):

Standard 4: Using Assessment to Understand the Learner and the Learning Environment for Data-based Decision Making

- 4.1 Collaboratively develop, select, administer, analyze, and interpret multiple measures of student learning, behavior, and the classroom environment to evaluate and support classroom and school-based systems of intervention for students with and without exceptionalities.
- 4.2 Develop, select, administer, and interpret multiple, formal and informal, culturally and linguistically appropriate measures and procedures that are valid and reliable to contribute to eligibility determination for special education services.
- 4.3 Assess, collaboratively analyze, interpret, and communicate students' progress toward measurable outcomes using technology as appropriate, to inform both short- and long-term planning, and make ongoing adjustments to instruction.

Standard 6: Supporting Social, Emotional, and Behavioral Growth

- 6.1 Use effective routines and procedures to create safe, caring, respectful, and productive learning environments for individuals with exceptionalities.



- 6.2 Use a range of preventive and responsive practices documented as effective to support individuals' social, emotional, and educational well-being.
- 6.3 Systematically use data from a variety of sources to identify the purpose or function served by problem behavior to plan, implement, and evaluate behavioral interventions and social skills programs, including generalization to other environments.

ADVANCED PRACTICE-BASED STANDARDS (CEC, 2012):

Standard 1: Assessment

- 1.1 Minimize bias in assessment.
- 1.2 Design and implement assessments to evaluate the effectiveness of practices and programs.



GLOSSARY

A-B-C data charts - help team members determine what happens before the behavior (the antecedent), when the behavior that occurs (behavior), and what happens directly after the behavior (the consequence)

Access to a tangible or activity (function of behavior) - occurs when a learner engages in a behavior to obtain a tangible or activity.

Access to attention (function of behavior) - occurs when a learner engages in a behavior to obtain attention.

Alternative behavior - an appropriate behavior that replaces the interfering behavior.

Antecedent-Based Interventions (ABI) - arrangement of events or circumstances that precede an activity or demand in order to increase the occurrence of a behavior or lead to the reduction of the interfering behaviors.

Augmentative & Alternative Communication (AAC) - interventions using and/or teaching the use of a system of communication that is not verbal/vocal which can be aided (e.g., device, communication book) or unaided (e.g., sign language)

Automatic reinforcement - reinforcement that occurs regardless of the social mediation of others (e.g., scratching an itch)

Baseline data - data collected on current performance level prior to implementation of intervention.

Baseline - information gathered from multiple sources to better understand the target behavior, before using an intervention or practice

Behavior intervention plan - developed by a multidisciplinary team to address an interfering behavior and should include strategies for preventing the occurrence of the interfering behavior, teaching or increasing the replacement behavior, and increasing learning opportunities and social engagement.

Complex communication needs - occurs when learners have significant speech or language impairments that result in an inability or limited ability to engage in functional communication using conventional methods, such as speech.

Consequence - feedback/reinforcement provided by teachers and practitioners.

Differential Reinforcement of Alternative (DRA) - a systematic process that increases desirable behavior or the absence of an undesirable behavior by providing positive consequences for demonstration/non-demonstration of such behavior. These consequences may be provided when the learner is engaging in a specific desired behavior other than undesirable behavior.

Differential reinforcement procedure - the application of reinforcement designed to reduce or eliminate the occurrence of interfering behaviors (e.g., tantrums, aggression, self-injury, stereotypic behavior), resulting in a positive and teaching environment to facilitate learning.

Duration data - Records how long a learner engages in a particular behavior or skill.

Echolalia - nonsensical repetition of words or phrases; at times echolalia can be communicative at times or also (potentially) used as a tool for processing.

Escape (function of behavior) - occurs when a learner engages in a behavior to get out of doing something they do not want to do.

Extinction (EXT) - the removal of reinforcing consequences of a challenging behavior in order to reduce the future occurrence of that behavior.

Extinction burst - an increase in the frequency, intensity, and/or duration of a behavior following the implementation of an extinction procedure.



Extinction history - a person's prior experience with extinction procedures

Frequency data - used to measure how often the learner engages in the target skill or behavior.

Function of behavior - the reason a behavior occurs; the four main functions of behavior include escape/avoidance, access to attention, access to a tangible/activity, and automatic reinforcement.

Functional Behavioral Assessment (FBA) - a systematic way of determining the underlying function or purpose of a behavior so that an effective intervention plan can be developed.

Functional Communication Training (FCT) - a set of practices that replace an interfering behavior that has a communication function with more appropriate and effective communication behaviors or skills.

Gestural prompt - a gesture/movement provides the learner information about how to use a target skill or complete a task.

Intensity - refers to how severe the behavior is (e.g., the learner's punch gave the teacher a black eye or the bite was forceful enough to break through the skin).

Interfering behavior - is a behavior that interferes with the learner's ability to learn.

Maintaining consequence - behaviors or events that occur immediately after an interfering behavior is emitted and that serve to increase the likelihood that the interfering behavior will occur again in the future.

Model prompts - involve demonstrating the target skill and are used when verbal or visual prompts are not sufficient in helping the learner use the target skill correctly.

Most-to-least prompting hierarchy - involves starting at the most intrusive level of prompting needed for the learner to successfully use a skill and then fading those prompts.

Non-contingent reinforcement (NCR) - reinforcement that is delivered independent of a learner's behavior.

Peer - classmate of the learner.

Physical prompts - useful when teaching motor behaviors and when the learner does not respond to less restrictive prompts.

Picture Exchange Communication System (PECS) - behaviorally based intervention that teaches the learner to use visual-graphic symbols to communicate with others.

Positive reinforcement - refers to the presentation of a reinforcer after a learner uses a target skill/behavior, therefore encouraging them to perform that behavior again.

Prompt - any help provided that will assist the learner in using specific skills. Prompts can be verbal, gestural, or physical.

Prompting (PP) - verbal, gestural, or physical assistance given to learners to support them in acquiring or engaging in a targeted behavior or skill.

Prompting hierarchy - a continuum of prompts defined by the amount of intrusion or assistance that is needed for the learner to emit the correct response.

Punishment - occurs when a consequence results in a decrease in the future frequency of the behavior that preceded the consequence in similar situations.

Reinforcement (R) - the application of a consequence following a learner's use of a response or skills that increases the likelihood that the learner will use the response/skills in the future.

Reinforcement delay - a separation of time between a learner's response and the delivery of a reinforcer

Reinforcement history - a learner's prior exposure to various schedules or contingencies of reinforcement

Reinforcement schedule - continuous or intermittent patterns in timing for the delivery of reinforcers



Reinforcers - increase the likelihood that the target skill/behavior will be used again in the future.

Replacement behavior - a chosen behavior that is used to replace an interfering behavior.

Response effort - the amount of effort a learner must put forth to engage in a behavior.

Response Interruption & Redirection (RIR) - the introduction of a prompt, comment, or other distractors when an interfering behavior is occurring that is designed to divert the learner's attention away from the interfering behavior and results in its reduction.

Response interruption - stop interfering behavior through verbal or physical blocking.

Ritualistic behavior - behavior that is repetitive and rule-driven.

Self-stimulatory behavior - behavior that is repetitive, stereotypical, and does not have a socially mediated function.

Speech-generating device - a device with speech output that is used to supplement or supplant speech or writing for learners with complex communication needs.

Spontaneous recovery - the resurgence of an interfering behavior after the behavior has decreased or stopped occurring altogether.

Stereotypy - behavior that is repetitive, rigid, or invariant and usually inappropriate in nature.

Tangible reinforcers - objects that the learner can acquire.

Target behavior - the behavior or skill that is the focus of the intervention. Behavior may need to be increased or decreased.

Team members - includes the parents, other primary caregivers, IEP/IFSP team members, teachers, therapists, early intervention providers, and other professionals involved in providing services for the learner on the spectrum.

Time Delay (TD) - a practice used to systematically fade the use of prompts during instructional activities by using a brief delay between the initial instruction and any additional instructions or prompts.

Verbal prompts - includes any verbal assistance provided to learners to help them use a target skill correctly. Verbal cues range in intensity level from least to most restrictive.

Visual Supports (VS) - a visual display that supports the learner engaging in a desired behavior or skills independent of additional prompts.

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